DOCKET NO. 45866

Submit seven (7) copies of the application and all attachments supporting the application. If the application is being filed pursuant to P.U.C. SUBST. R. 25.101(b)(3)(D) or P.U.C. Subst. R. 25.174, include in the application all direct testimony. The application and other necessary documents shall be submitted to:

Public Utility Commission of Texas
Attn: Filing Clerk
1701 N. Congress Ave.
Austin, Texas 78711-3326

Note: As used herein, the term "joint application" refers to an application for proposed transmission facilities for which ownership will be divided. All applications for such facilities should be filed jointly by the proposed owners of the facilities.

Applicant (Utility) Name: LCRA Transmission Services Corporation (LCRA TSC) 1.

Certificate Number:

30110

Street Address:

3700 Lake Austin Boulevard

Austin, TX 78703

Mailing Address:

P.O. Box 220

Austin, TX 78767-0220

2. Please identify all entities that will hold an ownership interest or an investment interest in the proposed project but which are not subject to the Commission's jurisdiction.

LCRA TSC will hold the sole ownership interest in the project that is the subject of this Application. No entities will hold an ownership or investment interest in the project that are not subject to the jurisdiction of the Public Utility Commission of Texas (PUC or Commission).

3. **Person to Contact:** **Christian Powell**

Title/Position:

Sr. Regulatory Case Manager

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(512) 578-4454

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christian.powell@lcra.org

Alternate Contact:

Lance Wenmohs

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Manager, Siting & Certification

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Enoch Kever PLLC

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Austin, TX 78701

Email Address:

krasmussen@enochkever.com

4. Project Description:

Name or Designation of Project

Leander to Round Rock 138-kV Transmission Line Project in Williamson County, Texas (the Proposed Project).

Provide a general description of the project, including the design voltage rating (kV), the operating voltage (kV), the CREZ Zone(s) (if any) where the project is located (all or in part), any substations and/or substation reactive compensation constructed as part of the project, and any series elements such as sectionalizing switching devices, series line compensation, etc. For HVDC transmission lines, the converter stations should be considered to be project components and should be addressed in the project description.

If the project will be owned by more than one party, briefly explain the ownership arrangements between the parties and provide a description of the portion(s) that will be owned by each party. Provide a description of the responsibilities of each party for implementing the project (design, Right-Of-Way acquisition, material procurement, construction, etc.).

If applicable, identify and explain any deviation in transmission project components from the original transmission specifications as previously approved by the Commission or recommended by a PURA §39.151 organization.

General Description of Project

The Proposed Project is a new 138-kilovolt (kV) transmission line located in southwestern Williamson County. The Proposed Project consists of constructing two new substations (Substation 1 and Substation 2) and a new 138-kV transmission line connecting the new substations to the electric grid at the existing Pedernales Electric Cooperative, Inc. (PEC) Leander and Oncor Electric Delivery Company LLC (Oncor) Round Rock substations. Substation 1 will be in the general area near the intersection of Parmer Lane/Ronald Reagan Boulevard and FM 1431. Substation 2 will be in the general area near the intersection of Ronald Reagan Boulevard and Crystal Falls Parkway. Substation 1 will directly connect to Substation 2 and Oncor's Round Rock Substation, while Substation 2 will directly connect to Substation 1 and PEC's Leander

Substation. The transmission line will be approximately 12 to 21 miles long, depending on the route selected.

The Proposed Project will be constructed on double-circuit capable structures with one circuit to be installed initially and the second circuit to be installed on the double-circuit structures at a later date.¹ LCRA TSC is seeking certification and PUC approval for both 138-kV circuits in this application.

Please see Figure 2-1 in the Leander to Round Rock 138-kV Transmission Line Project Environmental Assessment and Alternative Route Analysis Williamson County, Texas (EA), incorporated herein by reference for all purposes and included as Attachment 1 to this Application, which shows the general siting areas of Substation 1 and Substation 2, and the location of the Proposed Project end points.

The Proposed Project is not located, all or in part, within a CREZ Zone. No substation reactive compensation and no series elements such as sectionalizing switching devices or series line compensation will be constructed as part of the Proposed Project.

Ownership Arrangements

LCRA TSC will design, operate, maintain, and own all transmission line facilities including conductors, wires, structures, hardware, and easements. LCRA TSC will also design, operate, maintain, and own the two new proposed electric load-serving substations (Substation 1 and Substation 2).

To connect each end of the new transmission line to the existing electric grid, PEC will expand its 138-kV electrical bus and LCRA TSC will install and own a circuit breaker in the existing PEC Leander Substation. Oncor will install and own a circuit breaker in its existing Round Rock Substation.

Deviation from original PURA §39.151 organization (ERCOT)

There are no deviations from the original Electric Reliability Council of Texas (ERCOT) recommendation for the transmission line or the connecting end points (i.e., Leander and Round Rock substations). However, only one of the two new substations associated with the Proposed Project was in the original ERCOT-recommended project scope. The need for and impact of the second new substation was factored in the ERCOT recommendation but not defined in the scope of the project as it was anticipated for being installed at a later year. As the electric load projected for the area increased at a higher pace than

April 28, 2016

Note that for some segments (I3, G3, E3, C3, X2, and a portion of K5), LCRA TSC could rebuild its existing Round Rock-Chief Brady (T378) and Chief Brady-Georgetown (T355) 138-kV electric transmission lines located in the eastern portion of the study area. If these existing 138-kV transmission lines are rebuilt, triple circuit H-frame structures would be required.

originally anticipated, LCRA TSC communicated to ERCOT the need for the second substation as part of the initial energization of the project and ERCOT concurred. See Attachment 3 to this Application for details on this minor scope change.

5. Conductor and Structures:

Conductor Size and Type:

795 Kcmil 26/7 ACSR "Drake"

Number of conductors per phase:

Two (2) conductors per phase

Continuous Summer Static Current Rating (A):

1866

Continuous Summer Static Line Capacity

at Operating Voltage (MVA):

446

Continuous Summer Static Line Capacity

at Design Voltage (MVA):

446

Type and Composition

of Structures:

LCRA TSC proposes to use 138-kV double-circuit capable steel and/or concrete pole structures for typical tangent, angle, and deadend structures. Note that for some segments (I3, G3, E3, C3, X2, and a portion of K5), LCRA TSC could rebuild its existing Round Rock-Chief Brady (T378) and Chief Brady-Georgetown (T355) 138-kV electric transmission lines located in the eastern portion of the study area. If these existing 138-kV transmission lines are rebuilt, triple circuit H-frame structures would be required.

Height of Typical Structures:

The typical heights of all structures range from

80- to 140-feet above ground.

Explain why these structures were selected; include such factors as landowner preference, engineering considerations, and costs comparisons to alternate structures that were considered. Provide dimensional drawings of the typical structures to be used in the project.

LCRA TSC considered and evaluated single pole, H-frame, and lattice tower type structures for this project. For each alternative structure type, the following factors were considered:

- Engineering constraints
- Construction and maintenance issues
- Right-of-way (ROW) requirements
- Potential environmental impacts
- Cost
- Public input
- Nominal distance between structures (i.e., span length)
- Potential land use impacts
- Schedule

LCRA engineers selected single poles as the proposed structure type for this project. Single poles are the least cost structure alternative and, because at many segment and node locations limited space is available for the transmission line, they are the best engineering alternative because poles have a smaller footprint than H-frame and lattice tower structures. The determination of material type (pre-stressed concrete or steel) will be made during the detailed design phase of the project, considering factors such as engineering constraints, cost, schedule, and other factors. For a detailed discussion of the proposed typical structures and their requirements please refer to Section 1.4.2 of the EA.

Some route segments, including segments I3, G3, E3, C3, X2, and a portion of K5, would require rebuilding an existing LCRA TSC single-circuit electric transmission line (T378 Round Rock to Chief Brady and T355 Chief Brady to Georgetown, depending upon the specific route segment) primarily within an existing easement. Utilizing an existing transmission line ROW requires that the structures be capable of holding three electric circuits, the existing circuit (T378 and/or T355) and the two new circuits for this project. Therefore, these segments will require the use of triple-circuit capable H-frame structures.

Please refer to Figures 1-2 through 1-6 in the EA for drawings of the structures proposed to be used in this project.

For joint applications, provide and separately identify the above-required information regarding structures for the portion(s) of the project owned by each applicant.

This is not a joint application.

6. Right-of-way:

Miles of Right-of-Way: Approximately 11.8 to 21.3 miles

Miles of Circuit: Approximately 11.8 to 21.3 miles of circuit will

be installed for the first circuit of the Proposed Project and approximately 11.8 to 21.3 additional miles of circuit will be installed on

the structures at a future date.

Width of Right-of-Way: ROW width for the Proposed Project will vary

from an estimated minimum ROW width of 60 feet to an estimated maximum ROW width of 100 feet in long spans. The typical ROW width

is estimated to be 80 feet.

Percent of Right-of-Way Acquired: The percent of ROW acquired for the Proposed

Project at this time varies from as much as 27% for Route 4 to as little as 0% for Routes 8, 9, 10, 11, 12, 15, 16, 17, 23 and 24. The existing ROW available for use for some alternate routes on this project corresponds with existing LCRA TSC ROW located along its Round Rock-Chief Brady (T378) and Chief Brady-Georgetown (T355) 138-kV

transmission lines.

For joint applications, provide and separately identify the above-required information for each route for the portion(s) of the project owned by each applicant.

This is not a joint application.

Provide a brief description of the area traversed by the transmission line. Include a description of the general land uses in the area and the type of terrain crossed by the line.

The Proposed Project area is located within Williamson County, Texas, and includes portions of the cities of Austin, Cedar Park, Georgetown, Leander, and Round Rock.

The Proposed Project area has a variety of land uses including commercial and residential development, transportation facilities, parks and recreation areas, rural agricultural areas, and a significant rock quarry.

The Proposed Project area is situated within the Edwards Plateau physiographic region of Texas. The region's topography is characterized by flat upper surfaces, interspersed by drainages that open up into larger draws or box canyons. Elevations in the Edwards Plateau range between 3,000 feet above mean sea level (amsl) within the western and northern portions, to 450 feet amsl as you move towards the Gulf coast. Elevations in the study area range between approximately 720 feet amsl along the lower portions of Brushy Creek to approximately 1,050 feet on the hilltops in the northern portion of the study area.

Specific discussion regarding natural, human, and cultural resources in the Proposed Project area is set forth in the EA, Section 2.0.

7. Substations or Switching Stations:

List the name of all existing HVDC converter stations, substations or switching stations that will be associated with the new transmission line. Provide documentation showing that the owner(s) of the existing HVDC converter stations, substations and/or switching stations have agreed to the installation of the required project facilities.

The existing electric load-serving substations listed below are associated with the Proposed Project.

- 1. PEC's Leander Substation
- 2. Oncor's Round Rock Substation

These two existing substations are the connecting points for the new transmission line to the existing electric grid. There are no HVDC converter stations associated with the Proposed Project.

Attachment 2 to this Application provides documentation demonstrating that PEC and Oncor are aware of the Proposed Project and have agreed to the installation of the required facilities associated with the interconnection of the Proposed Project in the Leander and Round Rock substations, respectively.

8. Estimated Schedule:

Estimated Dates of:	<u>Start</u>	Completion
Right-of-way and Land Acquisition	May 2017	August 2018
Engineering and Design	July 2017	August 2018
Material and Equipment Procurement	March 2018	October 2018
Construction of Facilities	January 2019	October 2019
Energize Facilities	December 2019	December 2019

9. Counties:

For each route, list all counties in which the route is to be constructed.

All of the routes and route segments proposed in association with the Proposed Project are located within Williamson County, Texas.

Please refer to Figures 4-26a, 4-26b, 4-27 and 5-1 in the EA for the location of alternative route segments.

10. Municipalities:

For each route, list all municipalities in which the route is to be constructed.

If approved, some portion of each alternate route proposed in association with the Proposed Project would be constructed within the city limits of Leander and Round Rock.

If approved, some portion of Routes 2, 6, 8, 9, 10, 11, 12, 15, 16, 17, 20, 23, 24, and 31 would be constructed within the city limits of Cedar Park.

If approved, some portion of Routes 3, 4, 5, and 6 would be constructed within the city limits of Georgetown.

For each applicant, attach a copy of the franchise, permit or other evidence of the city's consent held by the utility, if necessary or applicable. If franchise, permit, or other evidence of the city's consent has been previously filed, provide only the docket number of the application in which the consent was filed. Each applicant should provide this information only for the portion(s) of the project which will be owned by the applicant.

Authority for LCRA TSC to provide transmission service within Williamson County, and within the municipalities therein, is contained in, among other dockets, Docket Nos. 17, 59 and 24419.

11. Affected Utilities:

Identify any other electric utility served by or connected to facilities in this application.

PEC owns the existing Leander Substation, which is one of the project end points and will be served by, and connected to, the facilities proposed for construction in this application.

Oncor owns the existing Round Rock Substation, which is one of the project end points and will therefore be connected to the facilities proposed for construction in this application.

Describe how any other electric utility will be affected and the extent of the other utilities' involvement in the construction of this project. Include any other electric utilities whose existing facilities will be utilized for the project (vacant circuit positions, ROW, substation sites and/or equipment, etc.) and provide documentation showing that the owner(s) of the existing facilities have agreed to the installation of the required project facilities.

In the existing Leander Substation, PEC will expand its 138-kV electrical bus and LCRA TSC will install one circuit breaker to connect the initial circuit of the Proposed Project to the existing electric grid. PEC will also install low voltage (distribution) load-serving facilities at each of the two new substations.

Electric service requirements for a large number of current and future end-use customers within the project area will be met by PEC with the installation of the two new electric load-serving substations associated with the Proposed Project. The two new substations will provide the electrical source to supply existing and future electrical loads in the project area. The two new electric load-serving substations will also increase the reliability of service to the broader area.

In the existing Round Rock Substation, Oncor will install one circuit breaker for interconnection of the initial circuit of the Proposed Project to the existing electric grid.

Electric service reliability for end-use customers served by Oncor out of the Round Rock Substation will be improved with the connection of an additional transmission circuit at the Round Rock Substation.

Attachment 2 to this Application provides documentation demonstrating that the owners of facilities associated with this Proposed Project collaborated and worked with ERCOT to assess the need and define the scope and responsibilities associated with the Proposed Project.

12. Financing:

Describe the method of financing this project. For each applicant that is to be reimbursed for all or a portion of this project, identify the source and amount of the reimbursement (actual amount if known, estimated amount otherwise) and the portion(s) of the project for which the reimbursement will be made.

LCRA TSC will finance the facilities associated with this Application in a manner similar to that which has been used for projects previously constructed by LCRA TSC. That is, it will be financed initially with a combination of tax-exempt commercial paper, tax-exempt private revolving note, and subsequently with fixed-rate debt. Interest on the debt may be capitalized until the project is in service, at which point it is intended that both the principal and interest will be serviced with LCRA TSC's Transmission Cost of Service revenues.

LCRA TSC is the sole applicant, and, therefore, no other party will be reimbursed for any portion of the project.

13. Estimated Costs: Provide cost estimates for each route of the proposed project using the following table. Provide a breakdown of "Other" costs by major cost category and amount. Provide the information for each route in an attachment to this application.

	Transmission Facilities *	Substation Facilities *
Right-of-way and Land Acquisition		
Engineering and Design (Utility)		
Engineering and Design (Contract)		
Procurement of Material and Equipment (including stores)		
Construction of Facilities (Utility)		
Construction of Facilities (Contract)		
Other (all costs not included in the above categories)		
Estimated Total Cost	See Attach. 4	See Attach. 4

^{*}Please refer to Attachment 4 to this Application for Transmission and Substation Facilities estimated costs for each alternative route presented in this Application.

14. Need for the Proposed Project:

For a standard application, describe the need for the construction and state how the proposed project will address the need. Describe the existing transmission system and conditions addressed by this application. For projects that are planned to accommodate load growth, provide historical load data and load projections for at least five years. For projects to accommodate load growth or to address reliability issues, provide a description of the steady state load flow analysis that justifies the project. For interconnection projects, provide any documentation from a transmission service customer, generator, transmission service provider, or other entity to establish that the proposed facilities are needed. For projects related to a Competitive Renewable Energy Zone, the foregoing requirements are not necessary; the applicant need only provide a specific reference to the pertinent portion(s) of an appropriate commission order specifying that the facilities are needed. For all projects, provide any documentation of the review and recommendation of a PURA §39.151 organization.

Retail electric service to the area in southwestern Williamson County, generally between Austin and Leander along US Highway 183 and west of Interstate Highway 35 transportation corridors, is served by PEC primarily through eight electric load-serving substations: Avery Ranch, Balcones, Kent Street, Buttercup, Whitestone, Blockhouse, Leander and Seward Junction substations. The total electric load served by PEC in this specific area exceeded 397 megawatts in 2014. Most of the capacity at these eight substations was installed in the last 20 years to be able to keep pace with the rapidly increasing demand for electricity in the area. The end-use customers include but are not limited to residential, small and large commercial, public offices, emergency response, urgent care facilities, churches, schools, ranch and farm operations, communications towers and systems, and water treatment plants.

LCRA TSC and PEC have an established planning and operating relationship for the delivery of safe, reliable, and cost-effective electric service. As its Transmission Operator, LCRA TSC assists PEC in ensuring the electric delivery requirements of its end-use customers and is the filing party in this Application for constructing the Proposed Project as supported in the response to Questions 1, 2, 4 and 5 of this Application.

Describe the need for the construction and state how the proposed project will address the need.

Electric service from the existing eight substations (listed above) to the area's end-use customers is presently limited by the existing remote transmission network to the west of the Proposed Project area. In order to construct new substations that will reliably provide retail electric service to customers in southwestern Williamson County, a new transmission line must be constructed.

The purpose and need for the Proposed Project is driven by two key factors for adequately and reliably serving local area electric load requirements. These factors are summarized as follows:

- 1. The existing and forecasted electric demand has been increasing at a steady pace in the Williamson County area due to increased demand from existing customers as well as increased numbers of new customers in the area. This area is one of the most rapidly growing areas in Texas and includes the areas in and around the cities of Leander, Cedar Park, Austin, and Round Rock as well as unincorporated areas of Williamson County.
- 2. The Proposed Project supports distribution-level electric service reliability and operational requirements, including maintaining electric service during emergency restoration events. The local distribution system reliability and operational needs cannot be addressed with or by only expanding existing distribution facilities in the area.

In light of these two factors, PEC, LCRA TSC, and ERCOT, the stakeholders tasked with the obligatory accountability to serve electric needs in a reliable and safe manner, developed the Proposed Project as the most effective solution of 13 alternatives considered. One substation (Substation 1) is required near the general area where Ronald Reagan Boulevard and FM 1431 intersect and the other substation (Substation 2) is required near the general area of the intersection of Ronald Reagan Boulevard and East Crystal Falls Parkway. The primary objective of the Proposed Project is to provide a transmission connection to these two new load-serving substations from the existing high voltage electric grid. In addition to cost-effectively meeting its primary objective, the Proposed Project provides secondary benefits in that it strengthens the transmission system service to the broader area and increases transmission service reliability to both the existing Leander and Round Rock substations.

An engineering study conducted for PEC revealed that continuing to serve the electrical needs of this growing area from the existing load-serving substations results in the following reliability risks:

- Loss of electric service to a large amount of end-use customers in this area;
- Loading levels exceeding equipment capacity, leading to widespread outages;
- Voltage levels falling below acceptable operational limits, leading to widespread outages;
- Decreased electric system efficiencies due to increased electric system losses;
 and
- Possible large monetary penalties for not meeting federal, state and local electric system service reliability standards.

Thus, continuing to serve the project area's electric load without the Proposed Project will result in potential electric service degradation impacting a large number of end-use customers and could significantly limit the continued healthy economic development of the broader area. Furthermore, PEC's ability to meet its obligations for providing cost-effective electric service and to respond to emergencies will be severely limited without the Proposed Project. Lastly, without the Proposed Project, other large transmission line projects will be required to mitigate future transmission issues that impact an even broader area.

In summary, the present electric system's capability to reliably and adequately serve the electric load of the project area is near its limits and will be soon exceeded.

The addition of the two substations and 138-kV transmission line associated with the Proposed Project will effectively and efficiently support the forecasted electric load levels. An LCRA TSC-conducted assessment revealed that the Proposed Project will support and accommodate existing and forecasted electric load as follows:

- Electric loading of area substation transformers will be maintained within acceptable levels;
- Electric loading of area distribution lines will be maintained within acceptable levels;
- Electric losses will be maintained within acceptable levels; and
- Voltage out of area substations will be maintained within acceptable limits.

In addition to cost-effectively meeting its primary objective, the Proposed Project provides secondary benefits in that it strengthens the transmission system to the broader area and it also increases transmission service reliability to both the Leander and Round Rock substations.

Describe the existing transmission system and conditions addressed by this application.

Attachment 7, included in response to Question 16 of this Application, illustrates the transmission system presently in place in and around the project area. As may be observed from this electric system area map, existing transmission system availability is limited to the 138-kV transmission paths that parallel US Highway 183 between Austin and Leander and Interstate Highway 35 between Austin and Georgetown. The distance between these transmission paths ranges between 7.5 and 9 miles.

Development within the geographic area between these two 138-kV transmission paths has been growing at a fast pace in recent years and this type of growth is forecasted to continue. The two existing transmission paths are becoming too remote from the high density, growing, and developing area where two load-serving substations are required.

The lack of a transmission source results in operating limitations that, if left unaddressed, will negatively impact electric service to the area as discussed above.

In order to provide a transmission source to the two new substations, a new 138-kV transmission line is needed. The connecting end points for the new transmission line were defined through a comprehensive planning process that involved PEC and LCRA TSC electric system planning staff, area electric providers, and the ERCOT stakeholder process. The addition of the two substations and 138-kV transmission line associated with the Proposed Project will effectively and efficiently support the forecasted electric load levels. An LCRA TSC-conducted assessment revealed that the Proposed Project supports reliable electric service to existing and forecasted electric load as follows:

- Electric loading of area substation transformers will be maintained within acceptable levels;
- Electric loading of area distribution lines will be maintained within acceptable levels;
- Electric losses will be maintained within acceptable levels; and
- Voltage out of area substations will be maintained within acceptable limits.

For projects that are planned to accommodate load growth, provide historical load data and load projections for at least five years.

The area's historical and projected electric load data is shown in Table 1 and graphed in Figure 1 below.

Table 1 - Historical and Projected Peak Electric Load

<u>Year</u>	Historical Peak Electric Load (kW)	Year	Projected Peak Electric Load (kW)
2006	288,145	2016	409,991
2007	276,767	2017	424,992
2008	319,689	2018	440,687
2009	328,849	2019	457,111
2010	359,807	2020	486,020
2011	410,519	Most recent electric l	
2012	384,074	area that includes the Avery Ranch, Balcones, Blockhouse, Buttercup, Kent Street, Leander, Seward Junction, and	
2013	415,315		
2014	397,007	Whitestone substations.	
2015	452,297		

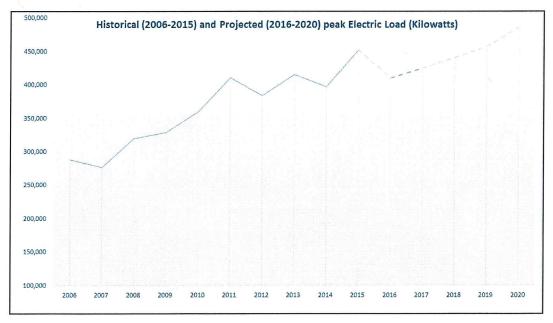


Figure 1 - Historical and Projected Peak Electric Load (Avery Ranch, Balcones, Blockhouse, Buttercup, Kent Street, Leander, Seward Junction, and Whitestone substations)

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For projects to accommodate load growth or to address reliability issues, provide a description of the steady state load flow analysis that justifies the project.

The Proposed Project is primarily required to address electric load growth and consists of constructing two new electric load-serving substations. Because these substations are required in an area where there is presently no transmission infrastructure, a new 138-kV transmission line is required. In adherence to requirements set forth in the North American Electric Reliability Corporation (NERC) Reliability Standards on planning assessments, the electric system impact of the new 138-kV transmission line was assessed by both LCRA TSC and ERCOT. Descriptions of the steady state power flow analysis used to justify the need for the project and evaluate how the Proposed Project is integrated into the existing electric grid are provided in Attachments 2 and 5 to this Application.

For interconnection projects, provide any documentation from a transmission service customer, generator, transmission service provider, or other entity to establish that the proposed facilities are needed.

The purpose and need for the Proposed Project are <u>not</u> associated with the interconnection of a transmission service customer, generator, transmission service provider, or another entity.

For projects related to a Competitive Renewable Energy Zone, the foregoing requirements are not necessary; the applicant need only provide a specific reference to the pertinent portion(s) of an appropriate commission order specifying that the facilities are needed.

The purpose and need for the Proposed Project are <u>not</u> associated with a Competitive Renewable Energy Zone.

For all projects, provide any documentation of the review and recommendation of a PURA §39.151 organization.

The documentation of the review and recommendation of a PURA § 39.151 organization (ERCOT) is included as Attachment 2 to this Application.

15. Alternatives to Project:

For a standard application, describe alternatives to the construction of this project (not routing options). Include an analysis of distribution alternatives, upgrading voltage or bundling of conductors of existing facilities, adding transformers, and for utilities that have not unbundled, distributed generation as alternatives to the project. Explain how the project overcomes the insufficiencies of the other options that were considered.

Alternatives to the construction of this project (not routing options)

There were 13 alternatives studied during the electric system planning phase of the proposed project. All 13 alternatives described in the table below included a new 138-kV transmission line in the project study area. In each of the two independent studies, one conducted by LCRA TSC and the other conducted by ERCOT, the alternative labeled number 11 below was selected as the most effective solution to address the electric load growth-driven deficiencies.

No.	Description of Study Alternative	Scope of Study Alternative
1	Chief Brady - Parmer - Whitestone 138 kV transmission line	Construct a new Parmer 138 kV Substation in Williamson County.
		Construct a new single circuit 138 kV line (approximately 14.8 miles) on a double circuit capable structure that connects the existing Chief Brady and Whitestone substations to the new Parmer Substation with an emergency rating of at least 446 MVA.
		Add terminal equipment at the Chief Brady and Whitestone substations for new transmission line.
i		Upgrade the existing Round Rock to Chief Brady 138 kV transmission line to achieve an emergency rating of at least 446 MVA.
2	Chief Brady - Parmer - Avery Ranch 138 kV transmission line	Construct a new Parmer 138 kV Substation in Williamson County.
		Construct a new single circuit 138 kV line (approximately 14.8 miles) on a double circuit capable structure that connects the existing Chief Brady and Avery Ranch substations to the new Parmer Substation with an emergency rating of at least 446 MVA.
		Add terminal equipment at the Chief Brady and Avery Ranch substations for new transmission line.
	,	Upgrade the existing Round Rock to Chief Brady 138 kV transmission line to achieve an emergency rating of at least 446 MVA.
3	Chief Brady - Parmer - Jollyville 138 kV	Construct a new Parmer Substation in Williamson County.
	transmission line	Construct a new single circuit 138 kV line (approximately 15.8 miles) on a double circuit capable structure that connects the existing Chief Brady and Jollyville substations to the new Parmer Substation with an emergency rating of at least 446 MVA.
		Add terminal equipment at the Chief Brady and Jollyville substations for new transmission line.

4	Seward Junction - Parmer - Avery Ranch 138 kV transmission line	Construct a new Parmer Substation in Williamson County.
		Construct a new single circuit 138 kV line (approximately 14.1 miles) on a double circuit capable structure that connects the
		existing Seward Junction and Avery Ranch substations to the
		new Parmer Substation with an emergency rating of at least 44 MVA.
		Add terminal equipment at the Seward Junction and Avery Ranch substations for new transmission line.
5	Seward Junction - Parmer - Jollyville 138 kV	Construct a new Parmer Substation in Williamson County.
	transmission line	Construct a new single circuit 138 kV line (approximately 15.1
		miles) on a double circuit capable structure that connects the existing Seward Junction and Jollyville substations to the new
		Parmer Substation with an emergency rating of at least 446
		MVA.
		Add terminal equipment at the Seward Junction and Jollyville substations for new transmission line.
6	Seward Junction - Parmer - Round Rock 138 kV transmission line	Construct a new Parmer Substation in Williamson County.
	transmission fine	Construct a new single circuit 138 kV line (approximately 16.5
		miles) on a double circuit capable structure that connects the existing Seward Junction and Round Rock substations to the
		new Parmer Substation with an emergency rating of at least 44
		MVA.
		Add terminal equipment at the Seward Junction and Round Rock substations for new transmission line.
7	Leander - Parmer - Avery Ranch 138 kV	Construct a new Parmer Substation in Williamson County.
	transmission line	Construct a new single circuit 138 kV line (approximately 10.3
		miles) on a double circuit capable structure that connects the
		existing Leander and Avery Ranch substations to the new Parmer Substation with an emergency rating of at least 446 MVA.
		Add terminal equipment at the Leander and Avery Ranch substations for new transmission line.
8	Leander - Parmer - Jollyville 138 kV transmission line	Construct a new Parmer Substation in Williamson County.
		Construct a new single circuit 138 kV line (approximately 11.4 miles) on a double circuit capable structure that connects the existing Leander and Jollyville substations to the new Parmer Substation with an emergency rating of at least 446 MVA.
		Add terminal equipment at the Leander and Jollyville substations for new transmission line.
9	Leander - Parmer - Chandler 138 kV	Construct a new Parmer Substation in Williamson County.
	transmission line	Construct a new Chandler Substation along the existing Chief Brady to Round Rock 138 kV transmission line.
		Construct a new single circuit 138 kV line (approximately 13.5 miles) on a double circuit capable structure that connects the existing Leander Substation and new Chandler Substation to the new Parmer Substation with an emergency rating of at leas
		446 MVA. Add terminal equipment at the Leander Substation for new
		transmission line.
		Upgrade the existing Round Rock to Chief Brady 138 kV

10	Leander - Parmer - Round Rock South 138 kV	Construct a new Parmer Substation in Williamson County.
	ime	Construct a new single circuit 138 kV line (approximately 15.4 miles) on a double circuit capable structure that connects the existing Leander and Round Rock South substations to the new Parmer Substation with an emergency rating of at least 446 MVA.
		Add terminal equipment at the Leander and Round Rock South substations for new transmission line.
11	Leander - Parmer - Round Rock 138 kV line (LCRA TSC proposed Option)	Construct a new Parmer Substation in Williamson County. Construct a new single circuit 138 kV line (approximately 12.6 miles) on a double circuit capable structure that connects the existing Leander and Round Rock substations to the new Parmer Substation with an emergency rating of at least 446 MVA. Add terminal equipment at the Leander and Round Rock
	21.02.1.10011	substations for new transmission line.
12	Leander - Parmer - Chief Brady 138 kV transmission line	Construct a new Parmer Substation in Williamson County. Construct a new single circuit 138 kV line (approximately 14.8 miles) on a double circuit capable structure that connects the existing Leander and Chief Brady substations to the new Parmer Substation with an emergency rating of at least 446 MVA.
		Add terminal equipment at the Leander and Chief Brady substations for new transmission line.
		Upgrade the existing Round Rock to Chief Brady 138 kV transmission line to achieve an emergency rating of at least 446 MVA.
13	Leander - Parmer - Westinghouse South 138 kV transmission line	Construct a new Parmer Substation in Williamson County. Construct a new Westinghouse South Substation along the existing Westinghouse to Westinghouse Tap 138 kV transmission line.
		Construct a new single circuit 138 kV line (approximately 13.5 miles) on a double circuit capable structure that connects the existing Leander Substation and new Westinghouse South Substation to the new Parmer Substation with an emergency rating of at least 446 MVA.
		Add terminal equipment at the Leander Substation for new transmission line.

Analysis of distribution alternatives, upgrading voltage or bundling of conductors of existing facilities, adding transformers, and for utilities that have not unbundled, distributed generation as alternatives to the project.

• Analysis of distribution alternatives, upgrading voltage or bundling of conductors of existing facilities, and adding transformers as alternatives to the project.

PEC commissioned an electric system study for portions of its distribution system located in high growth areas, including its retail service area within Williamson

County. The study was conducted by SAIC Energy, Environment, and Infrastructure, LLC (SAIC) and completed in 2012. Based on the deficiencies identified in the distribution system, and with appropriate consideration given to solutions consisting of distribution alternatives, upgrading voltage or bundling of conductors of existing facilities and adding transformers, SAIC recommended a plan to PEC that includes the two new substations that are part of this Application. The SAIC study report is included as Attachment 6 to this Application.

• Analysis of (for utilities that have not unbundled), distributed generation as alternatives to the project.

LCRA TSC is subject to the unbundling requirements of PURA § 39.051. Regardless, the defined need for the Proposed Project requires grid-scale solutions by 2019 that provide large amounts of electric power to adequately serve existing and developing end-use customers over a broad area as well as to efficiently provide sufficient capacity for emergency support during emergency restoration efforts over an even wider area. Thus, distributed generation would not adequately address the need for the Proposed Project.

Explain how the project overcomes the insufficiencies of the other options that were considered.

In its 2012 study, SAIC concluded that the new substations were superior to distribution level solutions because the two new substations would provide long-term increased reliability in both normal and contingency conditions, allowed for shorter low voltage distribution lines to serve the area, and resulted in reduced electric system losses.

In its 2013 study, LCRA TSC concluded that the Proposed Project was the most effective solution of the 12 alternatives considered. Specifically, in its study, LCRA TSC determined that the Proposed Project addresses 10 violations (voltage and thermal) identified in the 2022 Base Case during single contingency (N-1) conditions and that other alternatives do not address the 2022 violations. LCRA TSC further found additional benefits provided by the Proposed Project as follows:

- 1. Adds a 138-kV transmission source into an area of Williamson County that is forecasted to experience high electric load growth;
- 2. Provides the transmission infrastructure needed to reliably serve the two substations PEC identified for the area north of Highway 620 between Highway 183 and Interstate Highway 35;
- 3. Addresses all criteria violations (identified for this evaluation) in 2018 and 2022 during single contingency (N-1) conditions;
- 4. Reduces the risk of electric load loss under NERC P6 contingency conditions;
- Addresses multiple transmission line overloads during NERC P6 contingency conditions;

- 6. Reduces east-to-west power flows on transmission facilities in the Austin area, as it is a direct parallel path for the Howard Lane-Jollyville line that also supports the area of study from the south; and
- 7. Has a lower cost than other alternatives with similar benefits.

The LCRA TSC study is included as Attachment 5 to this Application.

Lastly, in its 2014 recommendation, ERCOT concluded that the Proposed Project was the most effective solution of the 13 different alternatives it considered. The Proposed Project "cost effectively met all of the reliability criteria." The ERCOT report is included as Attachment 2 to this Application.

16. Schematic or Diagram:

For a standard application, provide a schematic or diagram of the applicant's transmission system in the proximate area of the project. Show the location and voltage of existing transmission lines and substations, and the location of the construction. Locate any taps, ties, meter points, or other facilities involving other utilities on the system schematic.

A map of the transmission system in the vicinity of the project is provided as Attachment 7 to this application.

17. Routing Study:

Provide a brief summary of the routing study that includes a description of the process of selecting the study area, identifying routing constraints, selecting potential line segments, and the selection of the routes. Provide a copy of the complete routing study conducted by the utility or consultant. State which route the applicant believes best addresses the requirements of PURA and P.U.C. Substantive Rules.

LCRA TSC retained POWER Engineers, Inc. (POWER) to prepare the EA, included as Attachment 1 to the Application. The objective of the EA was to provide information in support of this Application in addressing the requirements of Section 37.056 (c)(4)(A)-(D) of the Texas Utilities Code, the PUC Certificate of Convenience and Necessity (CCN) Application form, and PUC Substantive Rule 25.101. By examining existing environmental conditions, including the human and natural resources that are located in the area of the Proposed Project, the EA evaluates the environmental effects that could result from the construction, operation, and maintenance of the Proposed Project. The EA will also be used in support of any additional local, state, or federal permitting activities that may be required for the Proposed Project.

To assist POWER in its evaluation, LCRA TSC provided information regarding the project endpoints, the need for the project, engineering and design requirements, construction practices, and ROW requirements for the Proposed Project.

Selecting the Study Area

POWER, with input and assistance from LCRA TSC, delineated the study area within which to review the existing environment and eventually to locate geographically diverse alternative routes. The boundaries of the study area were determined by the existing project endpoints (Leander and Round Rock substations), the new substation (Substation 1 and Substation 2) siting areas, other existing ROW (e.g., roadways and existing transmission lines), and existing cultural and land use features across the study area.

The study area, shown in Figure 2-1 of the EA, is approximately 9 miles long by 6 miles wide, and encompasses an area of approximately 52 square miles (33,000 acres).

Routing Constraints

Once the study area was defined, data related to land use, aesthetics, ecology, and cultural resources were collected by POWER through: conducting ground reconnaissance; reviewing available maps and aerial photography; reviewing previous studies conducted in the area; contacting a variety of local, state, and federal agencies; and considering criteria established in Section 37.056(c)(4)(A)-(D) of the Texas Utilities Code, the PUC's CCN Application form, PUC Substantive Rule 25.101, and input from the public open house meetings. Using this information, the locations of sensitive features and other constraints were identified.

Selection of Potential Routing Segments

Preliminary alternative route segments were identified by evaluation of the constraints mapped for the study area and then by identifying routing opportunity areas such as existing corridors and other linear features. Through application of the PUC's routing criteria, as described above, 160 preliminary alternative route segments were identified and developed into potentially viable preliminary alternative routes for comparative purposes. These preliminary alternative route segments were further evaluated based on information received from government agencies, the public meetings, and additional public input. Ultimately, 31 primary alternative routes were identified for comparison. These routes were evaluated using 53 land use and environmental criteria. Impacts were evaluated by POWER for each identified primary alternative route. Additional forward progressing alternate routes may also be formed by configuring the various segments in different ways.

Specific discussion regarding selection of the study area, identification of constraints, the selection of potential preliminary alternative route segments, and the alternative route analysis is set forth in the EA.

Selection of the alternative route the applicant believes best addresses the requirements of PURA and P.U.C. Substantive Rules

LCRA TSC identified Route 31 as the primary alternative route that best addresses the requirements of PURA and the PUC Substantive Rules for the Proposed Project. LCRA TSC initially reviewed the EA, followed by a review of each alternative route. This review included the consideration of all of the factors and criteria listed in PURA and the PUC Substantive Rules, including potential environmental, cultural, and land use impacts, engineering constraints, public input and community values, estimated costs, system planning, and landowner, agency, and utility concerns and preferences. LCRA TSC's identification of Route 31 as the route that best addresses the requirements of PURA and the PUC Substantive Rules is based on the considerations that Route 31:

- Is generally consistent with the route preferences indicated by the cities of Leander, Cedar Park, and Round Rock in resolutions passed by the three municipalities primarily burdened by the Proposed Project (an expression of community values);
- Uses or is parallel and adjacent to existing transmission line ROW for approximately 20 percent of its length (2.7 miles);
- Is parallel and adjacent to other existing compatible ROW for approximately 60 percent of its length (8.2 miles);
- Has the fourth lowest estimated cost (\$72,627,400) and is only approximately seven percent more expensive than the least expensive route;
- Has the seventh fewest number of newly affected habitable structures within 300 feet of the route centerline (146);
- Has over 200 fewer newly affected habitable structures within 300 feet of the route centerline than the three least expensive routes;
- Does not cross U.S. Fish and Wildlife Service (USFWS) critical habitat for Jollyville Plateau Salamander;
- Does not impact the Brushy Creek environmentally sensitive areas; and
- Does not cross Bone Cave Harvestman recovery preserve area.

Apart from identifying Route 31 as the route that best meets the PUC's routing criteria, LCRA TSC did not rank the alternative routes.

18. Public Meeting or Public Open House:

Provide the date and location for each public meeting or public open house that was held in accordance with P.U.C. PROC. R. 22.52. Provide a summary of each public meeting or public open house including the approximate number of attendants, and a copy of any survey provided to attendants and a summary of the responses received. For each public meeting or public open house provide a description of the method of notice, a copy of any notices, and the number of notices that were mailed and/or published.

LCRA TSC held two open house meetings for the Proposed Project. The open house meetings were held on October 13 and 14, 2015, from 6:00 p.m. to 8:00 p.m. at the Austin Sports Center of Cedar Park in Cedar Park, Texas, and Wiley Middle School in Leander, Texas. LCRA TSC mailed written notices of the meeting to all owners of property within approximately 350 feet of each preliminary alternative route segment centerline. Additional letters were sent to elected officials and other interested parties. This resulted in the mailing of 2,558 meeting notices. In addition, a public notice was published on the listed dates in the following four newspapers having circulation within the project area counties:

- Austin American-Statesman October 5 & October 12, 2015
- Hill Country News October 1 & October 8, 2015
- Round Rock Leader October 1 & October 8, 2015
- Williamson County Sun September 30 & October 7, 2015

The public notices announced the location, time, and purpose of the meeting. A copy of the published newspaper notice is located in Appendix B of the EA.

The meetings were intended to solicit comments from interested persons and public officials concerning the Proposed Project. The meetings had the following objectives:

- Promote a better understanding of the proposed project including the purpose, need, potential benefits and impacts, and PUCT certification process;
- Inform the public with regard to the routing procedure, schedule, and route approval process; and
- Gather the values and concerns of the public and community leaders.

The meetings were configured in an informal information station format rather than a formal speaker/audience format, with each station assigned to a particular aspect of the project or routing process and staffed with LCRA or POWER staff. Each station included maps, illustrations, photographs, or text explaining each particular topic. Three GIS computer stations were available to show the extent of the project, the proposed preliminary alternative route segments, Williamson Appraisal District parcel boundaries, and recent aerial photography of the project area. The GIS stations were also available to

answer detailed questions such as the approximate distance from a proposed preliminary route segment centerline to the nearest corner of a habitable structure. Interested persons were encouraged to visit each station in order so that the entire process could be explained in the logical sequence of project development. The information station format is typically advantageous because it allows attendees to process information in a more relaxed manner and also allows them to focus on their particular area of interest and ask specific questions. Furthermore, the one-to-one discussions with LCRA or POWER personnel typically encourage more interaction from those persons who might be hesitant to participate in a more formal speaker-audience format.

A total of 615 people signed in as attending the public open house meetings. In some cases, only one spouse or family member signed in when more than one may have been present. All attendees were offered a questionnaire, a preliminary route segment map, and a frequently asked questions document (see Appendix B of the EA). Some attendees handed in completed questionnaires at the meetings (totaling 255), while others took questionnaires with them, acquired questionnaires from neighbors, or accessed questionnaires from the LCRA Project website. A total of 1,433 additional completed questionnaires were sent to LCRA TSC following the open house meetings. Thus, a total of 1,688 questionnaires were received by LCRA TSC at or following the October 2015 public open house meetings. Additionally, thousands of comments were also received in the form of letters or emails.

Additional information concerning the public involvement program and discussion summarizing the questionnaire results is located in Section 4.2.2 pages 4-2 through 4-7 of the EA. A representative copy of the questionnaire provided for the Proposed Project is included in Appendix B of the EA.

19. Routing Maps:

Base maps should be a full scale (one inch = not more than one mile) highway map of the county or counties involved, or other maps of comparable scale denoting sufficient cultural and natural features to permit location of all routes in the field. Provide a map (or maps) showing the study area, routing constraints, and all routes or line segments that were considered prior to the selection of the routes. Identify the routes and any existing facilities to be interconnected or coordinated with the project. Identify any taps, ties, meter points, or other facilities involving other utilities on the routing map. Show all existing transmission facilities located in the study area. Include the locations of radio transmitters and other electronic installations, airstrips, irrigated pasture or cropland, parks and recreational areas, historical and archeological sites (subject to the instructions in Question 27), and any environmentally sensitive areas (subject to the instructions in Question 29).

Provide aerial photographs of the study area displaying the date that the photographs were taken or maps that show (1) the location of each route with each route segment identified, (2) the locations of all major public roads including, as a minimum, all federal and state roadways, (3) the locations of all known habitable structures or groups of habitable structures (see Question 19 below) on properties directly affected by any route, and (4) the boundaries (approximate or estimated according to best available information if required) of all properties directly affected by any route.

For each route, cross-reference each habitable structure (or group of habitable structures) and directly affected property identified on the maps or photographs with a list of corresponding landowner names and addresses and indicate which route segment affects each structure/group or property.

Base Maps

Figure 4-27 of the EA (Appendix D), titled *Primary Alternative Routes*, produced at a scale of 1 inch = 800 feet, is provided in map pockets in the EA. These maps were produced using a USGS topographic base. They depict the study area for the project, locations of radio transmitters and other electronic installations, airports/airstrips, parks and recreational areas, historical sites, environmentally sensitive areas and other constraints. The maps also contain the alternative routes for the project. For their protection, locations of archaeological sites are not shown on the maps.

Figure 5-1 of the EA (Appendix E), titled *Habitable Structures and Other Land Use Features in the Vicinity of the Primary Alternative Routes*, which consists of aerial photography produced at a scale of 1 inch = 800 feet, is provided in a map pocket in the EA. The aerial photo-based maps include parcel boundaries identified from a review of the tax appraisal district records and combined, as appropriate, to reflect instances where

multiple parcels are owned by a single individual or group in the study area. The locations of all known habitable structures located within 300 feet of the centerline of primary alternative routes on properties directly affected by the project are also identified on Figure 5-1. The habitable structures and other land use features map (Figure 5-1, Appendix E of the EA) was produced using aerial imagery flown in September 2015.

Base maps include sufficient cultural and natural features to permit location of the alternative routes in the field, and they depict existing electric transmission lines (based on information available to POWER), and major public roads located within the study area, as applicable.

Maps showing the study area and all preliminary route segments in a format similar to EA Figures 4-27 and 5-1 were presented at the public open house meetings. Figure 4-1 depicts the preliminary route segments presented at the open houses.

Directly Affected Property Maps

Attachment 8 to this Application includes 17 maps (utilizing aerial photography) titled Location of Directly Affected Properties, that identify directly affected properties, tract IDs, and the location of habitable structures (including labels) within approximately 300 feet of the centerline of the transmission line alternatives and approximate parcel boundary lines (based on tax appraisal district records). These maps show the location of each proposed alternative route with each route segment identified, and the locations of all major public roads, including all federal and state roadways.

Attachment 9 to this Application is a list that cross-references each habitable structure, or group of habitable structures, and directly affected properties identified on the maps provided in Attachment 8 with a list of tract IDs and corresponding landowner names and addresses. Landowner names and addresses were obtained by review of information obtained from the Williamson Appraisal District.

20. Permits:

List any and all permits and/or approvals required by other governmental agencies for the construction of the proposed project. Indicate whether each permit has been obtained.

Upon approval of the Application by the PUC, the following permits/approvals would be required and obtained prior to the commencement of construction:

 Where the approved route of the transmission line crosses a state-maintained road or highway, LCRA TSC will obtain a permit from the Texas Department of Transportation (TxDOT). If any portion of the transmission line will be accessed from a state-maintained road or highway, LCRA TSC will obtain a permit from TxDOT.

- Where the transmission line crosses a state-owned riverbed or navigable stream, LCRA TSC will obtain a Miscellaneous Easement (ME) from the General Land Office (GLO).
- Since more than one acre will be disturbed during construction of the project, a Storm Water Pollution Prevention Plan (SWPPP) will be necessary. Further, because more than five acres will be disturbed, a Notice of Intent (NOI) will be prepared by LCRA TSC for the Texas Commission on Environmental Quality (TCEQ). The controls specified in the SWPPP will be monitored in the field.
- The TCEQ's Edwards Aquifer rules (Title 30 Texas Administrative Code Chapter 213) apply to construction and other ground-disturbing activities on the recharge, transition, or contributing zone as mapped by TCEQ. When constructing on the Edwards Aquifer, preparation of an Edwards Aquifer Protection Plan (EAPP), including a water pollution abatement plan (WPAP), may be required. The installation of electrical transmission lines is a regulated activity that is exempt from the EAPP requirements. However, proposed substations on the recharge, transition, or contributing zone are subject to the rules. Such permits or regulatory approvals will be obtained by LCRA TSC prior to construction.
- Upon approval of the Application and prior to construction, a detailed Natural Resources Assessment (NRA) and Cultural Resources Assessment (CRA) will be performed on the approved route. Depending on the results of these assessments, permits or regulatory approvals may be required from the U.S. Army Corps of Engineers (USACE), USFWS, TCEQ, or Williamson County. Such permits or regulatory approvals will be obtained by LCRA TSC prior to construction.
- After alignments and structure locations/heights are designed and engineered, LCRA TSC will make a final determination of the need for Federal Aviation Administration (FAA) notification, based on structure locations and designs. In some areas, if necessary, LCRA TSC could use lower-than-typical structure heights and could add marking and/or lighting to certain structures to avoid or accommodate FAA requirements.
- LCRA TSC will report the status of the Proposed Project to the PUC on LCRA
 TSC's Monthly Construction Progress Report, beginning with the first report
 following the filing of a CCN application, and in each subsequent monthly
 progress report until construction is completed and actual project costs have been
 reported. As required by the PUC, LCRA TSC will submit locational and
 attribute data for the approved route after it is constructed.

21. Habitable structures:

For each route list all single-family and multi-family dwellings and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches, hospitals, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the centerline if the proposed project will be constructed for operation at 230kV or less, or within 500 feet of the centerline if the proposed project will be constructed for operation at greater than 230kV. Provide a general description of each habitable structure and its distance from the centerline of the route. In cities, towns or rural subdivisions, houses can be identified in groups. Provide the number of habitable structures in each group and list the distance from the centerline of the route to the closest and the farthest habitable structure in the group. Locate all listed habitable structures or groups of structures on the routing map.

The locations of habitable structures within 300 feet of the centerline of each route segment are listed and described with the approximate distance from the route segment centerline in Appendix C, Tables 5-3 through 5-33 of the EA and are shown on Figure 5-1, Sheet Nos. 1 and 2 in Appendix E of the EA. The total numbers of habitable structures for the 31 primary alternative routes are provided in the table below. Column two designates the number of habitable structures within 300 feet of the ROW centerline, while column three contains relevant information related to newly affected habitable structures within 300 feet of the ROW centerline. For a more detailed explanation of the relationship between these two metrics, see Section 5.2.3.1 of the EA.

Primary Alternative Route	Total number of habitable structures within 300 feet of the centerline	Number of newly affected habitable structures within 300 feet of the centerline
1	501	269
2	376	146
3	306	71
4	425	105
5	312	77
6	473	241
7	580	263
8	254	247
9	272	259
10	281	269

11	306	291
12	186	173
13	827	532
14	557	262
15	299	286
16	267	255
17	270	263
18	669	354
19	582	267
20	388	161
21	411	96
22	401	83
23	115	105
24	336	324
25	663	348
26	576	261
27	596	369
28	509	282
29	583	266
30	511	282
31	461	146

22. Electronic Installations:

For each route, list all commercial AM radio transmitters located within 10,000 feet of the center line of the route, and all FM radio transmitters, microwave relay stations, or other similar electronic installations located within 2,000 of the center line of the route. Provide a general description of each installation and its distance from the center line of the route. Locate all listed installations on a routing map.

There are no known commercial AM radio transmitters located within 10,000 feet of any of the primary alternative routes. There are 16 known communication towers (FM radio transmitters, microwave towers, or other electronic communications towers) that are located within 2,000 feet of any of the primary alternative routes. A listing, description, and approximate distance from the centerline of each of the primary alternative routes are presented in Table 5-36 and in Appendix C, Tables 5-3 through 5-33 of the EA, and the locations of these electronic installations are shown on Figures 4-27 and 5-1, Page Nos. 1 and 2 in Appendix D and E of the EA.

For additional information on electronic installations, see Section 2.8.5 and Section 5.2.6 of the EA. None of the routes filed in this Application are anticipated to have any impact on the existing communication towers.

23. Airstrips:

For each route, list all known private airstrips within 10,000 feet of the center line of the project. List all airports registered with the Federal Aviation Administration (FAA) with at least one runway more than 3,200 feet in length that are located within 20,000 feet of the center line of any route. For each such airport, indicate whether any transmission structures will exceed a 100:1 horizontal slope (one foot in height for each 100 feet in distance) from the closest point of the closest runway. List all listed airports registered with the FAA having no runway more than 3,200 feet in length that are located within 10,000 feet of the center line of any route. For each such airport, indicate whether any transmission structures will exceed a 50:1 horizontal slope from the closest point of the closest runway. List all heliports located within 5,000 feet of the center line of any route. For each such heliport, indicate whether any transmission structures will exceed a 25:1 horizontal slope from the closest point of the closest landing and takeoff area of the heliport. Provide a general description of each listed private airstrip, registered airport, and heliport; and state the distance of each from the center line of each route. Locate and identify all listed airstrips, airports, and heliports on a routing map.

POWER's review of federal and state aviation/airport maps and directories, aerial photo interpretation and reconnaissance surveys, as well as information received from the TxDOT Division of Aviation, identified no registered heliports located within 5,000 feet of the centerline of any of the primary alternative routes, no FAA registered public or military airports with runways longer than 3,200 feet identified within 20,000 feet of the routes, and no FAA registered public or military airports with runways shorter than 3,200 feet identified within 10,000 feet of the routes. Three private airstrips were identified within 10,000 feet of the centerline of one or more primary alternative routes.

Each airport/airstrip is listed and described with the approximate distance from the centerline of each of the primary alternative routes in Table 5-34 and Appendix C, Tables 5-3 through 5-33 of the EA. These facilities are shown on Figures 4-27 and 5-1, Page Nos. 1 and 2 in Appendix D and E of the EA.

For additional information on airports/airstrips, see Section 2.8.4 and Section 5.2.4 of the EA. No significant impacts to these airports/airstrips are anticipated from construction of the Proposed Project.

24. Irrigation Systems:

For each route identify any pasture or cropland irrigated by traveling irrigation systems (rolling or pivot type) that will be traversed by the route. Provide a description of the irrigated land and state how it will be affected by each route (number and type of structures etc.). Locate any such irrigated pasture or cropland on a routing map.

Based on POWER's review of aerial photography and field reconnaissance, no primary alternate route of the Proposed Project crosses any known cropland or pastureland irrigated by traveling irrigation systems, either rolling or pivot type.

25. Notice:

Notice is to be provided in accordance with P.U.C. PROC. R. 22.52.

A. Provide a copy of the written direct notice to owners of directly affected land. Attach a list of the names and addresses of the owners of directly affected land receiving notice.

A copy of the written notice, with attachments, mailed to owners of directly-affected land is included as Attachment 10 to this Application. A list of the names and addresses of those owners of directly-affected land to whom notice was mailed by first-class mail is included as Attachment 9 to this Application. Landowners of record and their mailing addresses were determined by review of information obtained from the Williamson Appraisal District.

B. Provide a copy of the written notice to utilities that are located within five miles of the routes.

A copy of the written notice sent to utilities located within five miles of the Proposed Project is included as Attachment 11 to this Application. The names and addresses of utilities to whom the written notices were sent are included in Attachment 12, page 1 to this Application.

C. Provide a copy of the written notice to county and municipal authorities.

A copy of the written notice sent to county and municipal authorities is included as Attachment 11 to this Application. The names and addresses of county and municipal authorities to whom the written notices were sent are included in Attachment 12, pages 2 and 3 to this Application. The same notice was sent to utilities, counties, and municipal authorities. LCRA TSC additionally sent notification of the application to the Texas Office of Public Utility Counsel (Attachment 12, page 1), independent school districts (Attachment 12, page 4), and state and federal elected officials (Attachment 12, page 5).

D. Provide a copy of the notice that is to be published in newspapers of general circulation in the counties in which the facilities are to be constructed. Attach a list of the newspapers that will publish the notice for this application. After the notice is published, provide the publisher's affidavits and tear sheets.

A copy of the public notice that will be published in the *Hill Country News, Williamson County Sun, Austin American-Statesman,* and *Round Rock Leader* (newspapers of general circulation in Williamson County where the transmission facilities are to be constructed) once for one week after the Application is filed with the PUC is included as Attachment 13 to this Application. Publisher's affidavits will be filed with the PUC showing proof of notice as soon as available after filing of this Application.

For a CREZ application, in addition to the requirements of P.U.C. PROC. R. 22.52 the applicant shall, not less than twenty-one (21) days before the filing of the application, submit to the Commission staff a "generic" copy of each type of alternative published and written notice for review. Staff's comments, if any, regarding the alternative notices will be provided to the applicant not later than seven days after receipt by Staff of the alternative notices, Applicant may take into consideration any comments made by Commission staff before the notices are published or sent by mail.

26. Parks and Recreation Areas:

For each route, list all parks and recreational areas owned by a governmental body or an organized group, club, or church and located within 1,000 feet of the center line of the route. Provide a general description of each area and its distance from the center line. Identify the owner of the park or recreational area (public agency, church, club, etc.). List the sources used to identify the parks and recreational areas. Locate the listed sites on a routing map.

POWER reviewed U.S. Geological Survey topographic maps, TxDOT county highway maps, recent aerial photography, and field reconnaissance as well as information received from the cities of Cedar Park, Georgetown, Leander, and Round Rock and Williamson County to identify parks and recreation areas within the study area. Based on this review, POWER identified 63 parks or recreation areas located within 1,000 feet of the centerline of one or more of the primary alternative routes.

For more information on parks and recreational areas see Section 2.8.6 and Section 5.2.5 of the EA. No significant impacts to the use of the parks and recreation facilities located within the study area are anticipated from any of the primary alternative routes.

27. Historical and Archeological Sites:

For each route, list all historical and archeological sites known to be within 1,000 feet of the center line of the route. Include a description of each site and its distance from the center line. List the sources (national, state or local commission or societies) used to identify the sites. Locate all historical sites on a routing map. For the protection of the sites, archeological sites need not be shown on maps.

POWER conducted a literature review and records search at the Texas Historical Commission and The Texas Archeological Research Laboratory at the University of Texas at Austin to identify known historical and archaeological sites located within 1,000 feet of the centerline of each of the primary alternative routes. For more information regarding site descriptions and the evaluation of the historical and archaeological sites located within the study area, see Section 2.11 and Section 5.3 of the EA.

Based on POWER's review, 82 recorded archeological sites are located within 1,000 feet of the centerline of one or more of the primary alternative routes. Twenty-three of the identified sites are crossed by primary alternative route ROWs. Fifty-five of the sites are recorded as prehistoric sites, 13 are recorded as historic sites, 10 sites have both prehistoric and historic components, and no site forms are available on the Texas Archeological Site Atlas for four sites. These sites are listed and described with the approximate distance from the centerline for each of the primary alternative routes in Table 5-37 and Appendix C, Tables 5-3 through 5-33 of the EA. For the protection of these sites, they are not shown on the routing maps.

28. Coastal Management Program:

For each route, indicate whether the route is located, either in whole or in part, within the coastal management program boundary as defined in 31 T.A.C. §503.1. If any route is, either in whole or in part, within the coastal management program boundary, indicate whether any part of the route is seaward of the Coastal Facilities Designation Line as defined in 31 T.A.C. §19.2(a)(21). Using the designations in 31 T.A.C. §501.3(b), identify the type(s) of Coastal Natural Resource Area(s) impacted by any part of the route and/or facilities.

No part of any primary alternative route is located within the Coastal Management Program boundary, as defined in 31 T.A.C. §503.1.

29. Environmental Impact:

Provide copies of any and all environmental impact studies and/or assessments of the project. If no formal study was conducted for this project, explain how the routing and construction of this project will impact the environment. List the sources used to identify the existence or absence of sensitive environmental areas. Locate any environmentally sensitive areas on a routing map. In some instances, the location of the environmentally sensitive areas or the location of protected or

endangered species should not be included on maps to ensure preservation of the areas or species. Within seven days after filing the application for the project, provide a copy of each environmental impact study and/or assessment to the Texas Parks and Wildlife Department (TPWD) for its review at the address below. Include with this application a copy of the letter of transmittal with which the studies/assessments were or will be sent to the TPWD.

Wildlife Habitat Assessment Program
Wildlife Division
Texas Parks and Wildlife Department
4200 Smith School Road
Austin, Texas 78744

The applicant shall file an affidavit confirming that the letter of transmittal and studies/assessments were sent to TPWD.

The EA describes the natural resources, cultural resources, land uses, and other sensitive areas that may occur within the study area. The EA also describes how the Proposed Project may impact such resources. Specifically, the EA includes data obtained from TPWD, including the Texas Natural Diversity Database (TXNDD) and a list of Ecologically Significant Stream Segments (ESSS) in the study area.

LCRA TSC will provide a copy of the EA to TPWD within seven days after the Application is filed. A copy of the letter of transmittal of the EA to TPWD is provided as Attachment 14 to this Application. An affidavit confirming that the letter of transmittal and a copy of the EA were sent to TPWD will be filed with the PUC.

30. Affidavit

Attach a sworn affidavit from a qualified individual authorized by the applicant to verify and affirm that, to the best of their knowledge, all information provided, statements made, and matters set forth in this application and attachments are true and correct.

A sworn affidavit is attached below.

AFFIDAVIT OF CHRISTIAN POWELL

STATE OF TEXAS

Before me, the undersigned authority, Christian Powell, being first duly sworn, deposes and states:

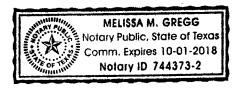
"My name is Christian Powell. I am a Senior Regulatory Case Manager for the Lower Colorado River Authority. I am over the age of twenty-one, and am competent to make the following affidavit:

On behalf of LCRA Transmission Services Corporation (LCRA TSC) and in my capacity as Senior Regulatory Case Manager on the Leander-Round Rock 138-kV Transmission Line Project, I am authorized to file and verify the CCN Application for LCRA TSC. I am personally familiar with the documents filed with this application, and I have complied with all the requirements contained in the application; furthermore, all such statements made and matters set forth herein with respect to LCRA TSC are true and correct."

Christian Powell

Affiant

SUBSCRIBED AND SWORN TO BEFORE ME, a Notary Public in and for the State of Texas, this 27th day of April 2016.



Notary Public

ENVIRONMENTAL ASSESSMENT (EA)

(LOOSE)



Taylor 2705 West Lake Drive Taylor, Texas 76574 T: 512.248.3000 F: 512.248.3095 Austin Page 1 of 19
7620 Metro Center Drive
Austin, Texas 78744
T: 512.225.7000
F: 512.225.7020

ATTACHMENT 2



June 18, 2014

Mr. Ross Phillips Vice President and Chief Operating Officer Lower Colorado River Authority P.O. Box 220 Austin, TX 78767-0220

Mr. Kenneth A. Donohoo Director, System Planning Oncor Electric Delivery 2233-B Mountain Creek PKWY Dallas, TX 75211-6716

Mr. Robert A. Peterson Senior Director, Engineering Pedernales Electric Cooperative, Inc P.O. Box 1 Johnson City, TX 78636-0001

RE: Leander-Parmer-Round Rock project

On June 10, 2014 the Electric Reliability Council of Texas (ERCOT) Board of Directors recommended the following Tier 1 transmission project as needed to support the reliability of the ERCOT Regional transmission system:

Leander-Parmer-Round Rock project:

- Construct a new Parmer 138 kV Substation
- Construct a new single circuit 138 kV line (approximately 12.6 miles) on a double circuit capable structure that connects the existing Leander and Round Rock substations to the new Parmer Substation with an emergency rating of approximately 446 MVA
- Add terminal equipment at the Leander and Round Rock substations for the new transmission line
- Upgrade the 138 kV bus at the Leander Substation

Additional details on this project are included in the Attachment A to this letter.

This project was supported throughout the ERCOT planning process, which included participation of all market segments through the ERCOT RPG. ERCOT's recommendation to the Board was reviewed by the ERCOT Regional Planning Group and the ERCOT Technical Advisory Committee (TAC). ERCOT staff looks forward to the successful completion of the work and is ready to assist you with any planning and operations related activities.

Should you have any questions please contact me at any time.

Sincerely,

Warren Lasher

Director System Planning

cc:

Shawnee Claiborn-Pinto, PUCT Trip Doggett, ERCOT

Ken MyIntyre, ERCOT Jeff Billo, ERCOT



ERCOT Independent Review of the Leander – Parmer – Round Rock Project

Version 1.0

Document Revisions

Date	Version	Description	Author(s)	
		Final	Ying Li	
05/22/2014	1.0	Review ed by	Prabhu Gnanam, Jeff Billo	

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1. Introduction

Electric load in western Williamson County, that includes the cities of Leander and Cedar Park, is projected to experience significant growth. From 2002 to 2012, the summer peak load in the area has grown from approximately 183 MW to 360 MW. The summer peak load is forecasted to be 575 MW in 2022 which is an increase of 59% from the actual 2012 load. According to Pedernales Electric Cooperative (PEC) assessments, the existing distribution system cannot serve the forecasted load growth in the area since substation transformers and feeders will overload and distribution-only upgrades are not feasible solutions to address this reliability of service problem. PEC has identified a need to create two new transmission-to-distribution substations to serve the growing load in the area. One substation, which is needed by 2019, is to be located near the intersection of Parmer Lane and Highway 1431 and is referred to as Parmer substation in this report. The other substation, which is needed by 2020, is to be located near the intersection of East Crystal Falls Parkway and Ronald Reagan Boulevard. The existing transmission system surrounding the locations of these two load areas consist of a 138 kV transmission line that parallels Highway 183, a 138 kV line that parallels Highway 45, and a 138 kV line that parallel Interstate 35. There are no transmission sources near these locations to serve the new substations needed in this area. Figure 1 shows the map of the existing transmission system in the study area.

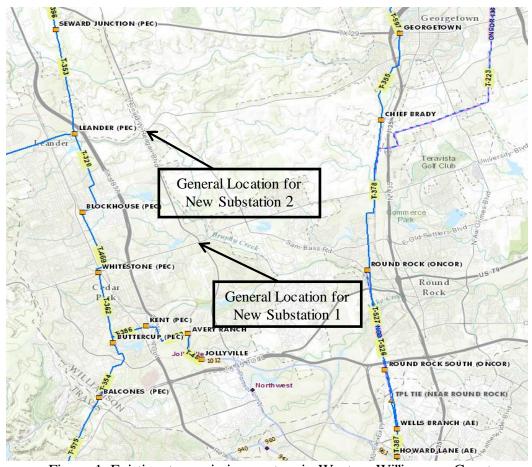


Figure 1: Existing transmission system in Western Williamson County

To meet the significant load growth in the area, Parmer Substation needs to be created by 2019. Accordingly, new transmission lines have to be added to serve the load at Parmer Substation by 2019. Additionally, the LCRA Transmission Services Corporation (LCRA) identified thermal overload and voltage criteria violations on the existing transmission system in the area.

In an effort to serve the new substations and relieve the reliability criteria violations in the western Williamson County area, LCRA and PEC proposed the following transmission improvements:

- Construct a new Parmer Substation.
- Construct a 138 kV transmission line (approximately 12.6 miles) with an emergency rating of approximately 440 MVA connecting the existing Leander and Round Rock substations to the new Parmer Substation.
- Add terminal equipment at the existing Leander and Round Rock substations for the new transmission line.
- Upgrade the 138 kV bus at the Leander Substation.

This project was submitted as a Tier 1 project with an estimated cost of \$50.9 million. ERCOT analyzed the system needs and reviewed the proposed project along with several other alternative projects. The need for the addition of a new load serving substation in an area near the intersection of East Crystal Falls Parkway and Ronald Reagan Boulevard was not analyzed in this review since the decision to proceed with the construction of this facility does not need to be made at this time.

2. Study Approach

2.1 Study Base Case

ERCOT used the 2018 SE summer peak case built for the 2013 Regional Transmission Plan (RTP) in order to create a study base case for 2019. The 2019 load forecast from LCRA for the substations in the study area was applied to the case. Based on the result of the 2013 RTP, two new Tier 4 transmission upgrades in the study area were modeled to create the study case:

- Avery Ranch Jollyville 138 kV transmission line upgrade
- Marshall Ford Lago Vista 138 kV transmission line upgrade

ERCOT also analyzed 2022 conditions in the study area. For the 2022 load level study, ERCOT used the latest 2020 SSC summer peak case built for the 2014 RTP. The 2022 load forecast from LCRA for the substations in the study area was applied to the case. Table 1 summarizes the area substation loads.

Table 1: Summary of Loads in the study area

Bus Number	Substation	2019 Load (MW)	2022 Load (MW)
7524	Seward Junction	28.8	33.1
7525	Leander	61.8	58.0
7527	Blockhouse	54.9	62.4
7529	Whitestone	67.0	77.0
7530	Kent street	35.3	40.5
7531	Buttercup	66.3	75.4
7533	Balcones	90.7	102.4
7534	Avery Ranch	69.0	80.1
7367	Parmer	28.4	45.8
	Total Load	502	575

2.2 Study Criteria

The criteria applied for the AC power flow analyses are consistent with the ERCOT Planning Guide 4.1.1.2 and the 2013 RTP. For the reliability analysis, the following limits were enforced:

- Rate A under pre-contingency conditions for 60 kV and above transmission lines and transformers with a low side voltage of 60 kV and above
- Rate B under post-contingency conditions for 60 kV and above transmission lines and transformers with a low side voltage of 60 kV and above
- 0.95 pu voltage under pre-contingency conditions for 100 kV and above transmission lines and transformers with a low side voltage of 100 kV and above
- 0.90 pu voltage under post-contingency conditions for 100 kV and above transmission lines and transformers with a low side voltage of 100 kV and above

2.3 Tools

ERCOT utilized the following software tools for the independent review of the Leander - Parmer project:

- PowerWorld version 17 with SCOPF was used for AC power flow analysis
- VSAT and PSAT version 11 were used to perform power transfer analysis
- UPLAN version 8.12.0.9073 was used to perform security-constrained economic analysis

2.4 Base Case Study Results

Both thermal and voltage analyses were performed using the 2019 and 2022 study cases. No reliability issues were identified in 2019. Both thermal overloads and low voltages were identified in 2022 under G-1+N-1 contingency conditions as shown in table 2 and table 3 (under the G-1+N-1 condition for the loss of the largest Ferguson unit).

Table 2: Thermal overloads in 2022 forecasted peak load under G-1+N-1

Branch	Contingency	Loading in 2022
Lago Vista – Nameless 138 kV	Whitestone – Buttercup 138 kV	106.7%
Hutto – Round Rock NE 138 kV ckt 2	Techridge – Howard Lane 138 kV	103.4%

Table 3: Low voltages in 2022 forecasted peak load under G-1+N-1

Bus Name	Contingency	Bus Voltage in 2022
Whitestone 138 kV	Whitestone – Buttercup 138 kV	0.89 pu
Blockhouse 138 kV	Whitestone – Buttercup 138 kV	0.89 pu
Leander 138 kV	Whitestone – Buttercup 138 kV	0.89 pu
Seward Junction 138 kV	Whitestone – Buttercup 138 kV	0.89 pu
Round Rock NE 138 kV	Hutto – Round Rock NE 138kV ckt 1	0.89 pu

3. Description of Project Alternatives

To address the load growth and the reliability need in the area, thirteen project alternatives were studied, these options are discussed below.

A 32 MVar of capacitor bank was added at Seward Junction to during the evaluation of each study option to address the low voltage issues along the Andice, Seward Junction and Parmer substations.

Option 1 - Chief Brady - Parmer - Whitestone 138 kV transmission line

- Construct a new Parmer 138 kV Substation in Williamson County.
- Construct a new single circuit 138 kV line (approximately 14.8 miles) on a double circuit capable structure that connects the existing Chief Brady and Whitestone substations to the new Parmer Substation with an emergency rating of at least 446 MVA.
- Add terminal equipment at the Chief Brady and Whitestone substations for new transmission line.
- Upgrade the existing Round Rock to Chief Brady 138 kV transmission line to achieve an emergency rating of at least 446 MVA.

The estimated cost for Option 1 is \$ 62.3 million.

Option 2 - Chief Brady - Parmer - Avery Ranch 138 kV transmission line

- Construct a new Parmer 138 kV Substation in Williamson County.
- Construct a new single circuit 138 kV line (approximately 14.8 miles) on a double circuit capable structure that connects the existing Chief Brady and Avery Ranch substations to the new Parmer Substation with an emergency rating of at least 446 MVA.
- Add terminal equipment at the Chief Brady and Avery Ranch substations for new transmission line.

• Upgrade the existing Round Rock to Chief Brady 138 kV transmission line to achieve an emergency rating of at least 446 MVA.

The estimated cost for Option 2 is \$60.9 million.

Option 3 - Chief Brady - Parmer - Jollyville 138 kV transmission line

- Construct a new Parmer Substation in Williamson County.
- Construct a new single circuit 138 kV line (approximately 15.8 miles) on a double circuit capable structure that connects the existing Chief Brady and Jollyville substations to the new Parmer Substation with an emergency rating of at least 446 MVA.
- Add terminal equipment at the Chief Brady and Jollyville substations for new transmission line.

The estimated cost for Option 3 is \$63.6 million.

Option 4 – Seward Junction - Parmer - Avery Ranch 138 kV transmission line

- Construct a new Parmer Substation in Williamson County.
- Construct a new single circuit 138 kV line (approximately 14.1 miles) on a double circuit capable structure that connects the existing Seward Junction and Avery Ranch substations to the new Parmer Substation with an emergency rating of at least 446 MVA.
- Add terminal equipment at the Seward Junction and Avery Ranch substations for new transmission line.

The estimated cost for Option 4 is \$54.0 million.

Option 5 - Seward Junction - Parmer - Jollyville 138 kV transmission line

- Construct a new Parmer Substation in Williamson County.
- Construct a new single circuit 138 kV line (approximately 15.1 miles) on a double circuit capable structure that connects the existing Seward Junction and Jollyville substations to the new Parmer Substation with an emergency rating of at least 446 MVA.
- Add terminal equipment at the Seward Junction and Jollyville substations for new transmission line.

The estimated cost for Option 5 is \$56.8 million.

Option 6 - Seward Junction - Parmer - Round Rock 138 kV transmission line

- Construct a new Parmer Substation in Williamson County.
- Construct a new single circuit 138 kV line (approximately 16.5 miles) on a double circuit capable structure that connects the existing Seward Junction and Round Rock substations to the new Parmer Substation with an emergency rating of at least 446 MVA.
- Add terminal equipment at the Seward Junction and Round Rock substations for new transmission line.

The estimated cost for Option 6 is \$61.9 million.

Option 7 – Leander - Parmer - Avery Ranch 138 kV transmission line

- Construct a new Parmer Substation in Williamson County.
- Construct a new single circuit 138 kV line (approximately 10.3 miles) on a double circuit capable structure that connects the existing Leander and Avery Ranch substations to the new Parmer Substation with an emergency rating of at least 446 MVA.
- Add terminal equipment at the Leander and Avery Ranch substations for new transmission line.

The estimated cost for Option 7 is \$43.1 million.

Option 8 - Leander - Parmer - Jollyville 138 kV transmission line

- Construct a new Parmer Substation in Williamson County.
- Construct a new single circuit 138 kV line (approximately 11.4 miles) on a double circuit capable structure that connects the existing Leander and Jollyville substations to the new Parmer Substation with an emergency rating of at least 446 MVA.
- Add terminal equipment at the Leander and Jollyville substations for new transmission line.

The estimated cost for Option 8 is \$46.2 million.

Option 9 - Leander - Parmer - Chandler 138 kV transmission line

- Construct a new Parmer Substation in Williamson County.
- Construct a new Chandler Substation along the existing Chief Brady to Round Rock 138 kV transmission line.
- Construct a new single circuit 138 kV line (approximately 13.5 miles) on a double circuit capable structure that connects the existing Leander Substation and new Chandler Substation to the new Parmer Substation with an emergency rating of at least 446 MVA.
- Add terminal equipment at the Leander Substation for new transmission line.
- Upgrade the existing Round Rock to Chief Brady 138 kV transmission line between Round Rock and the new Chandler Substation to achieve an emergency rating of at least 446 MVA.

The estimated cost for Option 9 is \$54.4 million.

Option 10 - Leander - Parmer - Round Rock South 138 kV line

- Construct a new Parmer Substation in Williamson County.
- Construct a new single circuit 138 kV line (approximately 15.4 miles) on a double circuit capable structure that connects the existing Leander and Round Rock South substations to the new Parmer Substation with an emergency rating of at least 446 MVA.

• Add terminal equipment at the Leander and Round Rock South substations for new transmission line.

The estimated cost for Option 10 is \$77.5 million.

Option 11 – Leander - Parmer - Round Rock 138 kV line (LCRA proposed Option)

- Construct a new Parmer Substation in Williamson County.
- Construct a new single circuit 138 kV line (approximately 12.6 miles) on a double circuit capable structure that connects the existing Leander and Round Rock substations to the new Parmer Substation with an emergency rating of at least 446 MVA.
- Add terminal equipment at the Leander and Round Rock substations for new transmission line.

The estimated cost for Option 11 is \$50.9 million.

Option 12 – Leander - Parmer - Chief Brady 138 kV transmission line

- Construct a new Parmer Substation in Williamson County.
- Construct a new single circuit 138 kV line (approximately 14.8 miles) on a double circuit capable structure that connects the existing Leander and Chief Brady substations to the new Parmer Substation with an emergency rating of at least 446 MVA.
- Add terminal equipment at the Leander and Chief Brady substations for new transmission line.
- Upgrade the existing Round Rock to Chief Brady 138 kV transmission line to achieve an emergency rating of at least 446 MVA.

The estimated cost for Option 12 is \$63.7 million.

Option 13 – Leander - Parmer - Westinghouse South 138 kV transmission line

- Construct a new Parmer Substation in Williamson County.
- Construct a new Westinghouse South Substation along the existing Westinghouse to Westinghouse Tap 138 kV transmission line.
- Construct a new single circuit 138 kV line (approximately 13.5 miles) on a double circuit capable structure that connects the existing Leander Substation and new Westinghouse South Substation to the new Parmer Substation with an emergency rating of at least 446 MVA.
- Add terminal equipment at the Leander Substation for new transmission line.

The estimated cost for Option 13 is \$52.4 million.

Table 4: Summary of the Options studied

Option	From Bus of New Line	To Bus of New Line	Project Cost (\$ Million)	Approximate Length (miles)
1	Chief Brady	Whitestone	62.3	14.8
2	Chief Brady	Avery Ranch	60.9	14.8
	•	•		
3	Chief Brady	Jollyville	63.6	15.8
4	Avery Ranch	Seward Junction	54.0	14.1
5	Jollyville	Seward Junction	56.8	15.1
6	Round Rock	Seward Junction	61.9	16.5
7	Avery Ranch	Leander	43.1	10.3
8	Jollyville	Leander	46.2	11.4
9	Chandler	Leander	54.4	13.5
10	Round Rock S	Leander	77.5	15.4
11	Round Rock	Leander	50.9	12.6
12	Chief Brady	Leander	63.7	14.8
13	Westinghouse S	Leander	52.4	13.5

4. Evaluation of Study Options

4.1 Reliability Analysis

All the analysis was performed under the G-1+N-1 contingency conditions. The loss of a Ferguson unit constitutes to the most limiting G-1 contingency condition in the study area. Table 5 and Table 6 show the transmission line loadings in 2019 and 2022. The full contingency analysis results for 2019 and 2022 are provided in Appendix A and B respectively.

Table 5: Top Transmission Line Loadings in 2019 under G-1+N-1

Option	From Bus of New	To Bus of New	Hutto – Round	Lago Vista –
	Line	Line	Rock NE 138 kV	Nameless 138 kV
Base Case			< 92%	92.7%
1	Chief Brady	Whitestone	< 92%	< 92%
2	Chief Brady	Avery Ranch	< 92%	< 92%
3	Chief Brady	Jollyville	93.3%	< 92%
4	Avery Ranch	Seward Junction	< 92%	< 92%
5	Jollyville	Seward Junction	< 92%	< 92%
6	Round Rock	Seward Junction	96.8%	< 92%
7	Avery Ranch	Leander	< 92%	< 92%
8	Jollyville	Leander	< 92%	< 92%
9	Chandler	Leander	96.9%	< 92%
10	Round Rock S	Leander	93.9%	< 92%
11	Round Rock	Leander	98.9%	< 92%
12	Chief Brady	Leander	95.0%	< 92%
13	Westinghouse S	Leander	94.2%	< 92%

Table 6: Top Transmission Line Loadings in 2022 under G-1+N-1

Option	From Bus of New Line	To Bus of New Line	Hutto – Round Rock NE 138 kV	Lago Vista – Nameless 138 kV	Howard Lane – Jollyville 138 kV	MarshallFord – Bullick Hollow138 kV
Base						
Case			103.4%	106.7%	88.7%	96.0%
1	Chief Brady	Whitestone	108.5%	< 92%	< 92%	< 92%
2	Chief Brady	Avery				
		Ranch	108.6%	95.1%	< 92%	< 92%
3	Chief Brady	Jollyville	105.4%	94.7%	< 92%	< 92%
4	Avery Ranch	Seward				
		Junction	105.2%	< 92%	92.9%	92.8%
5	Jollyville	Seward				
		Junction	103.1%	< 92%	93.0%	< 92%
6	Round Rock	Seward				
		Junction	111.4%	< 92%	< 92%	< 92%
7	Avery Ranch	Leander	103.8%	< 92%	92.1%	93.2%
8	Jollyville	Leander	103.1%	< 92%	93.8%	< 92%
9	Chandler	Leander	110.5%	< 92%	< 92%	< 92%
10	Round Rock S	Leander	107.9%	< 92%	< 92%	< 92%
11	Round Rock	Leander	113.7%	< 92%	< 92%	< 92%
12	Chief Brady	Leander	108.2%	< 92%	< 92%	< 92%
13	Westinghouse S	Leander	101.2%	< 92%	< 92%	< 92%

As shown in Table 6, Hutto – Round Rock NE 138 kV circuit # 2 overloads under the contingency loss of the Techridge – Howard Lane 138 kV line and Lago Vista – Nameless 138 kV overloads for the contingency loss of Whitestone – Buttercup 138 kV line in 2022 in the base case. None of the options studied would resolve the overload on the Hutto – Round Rock NE 138 kV circuit # 2 in 2022. Therefore, it was assumed that the Hutto – Round Rock NE 138 kV circuit # 2 needs to be upgraded by 2022 regardless of this project.

All the thirteen options effectively resolve the Lago Vista – Nameless 138 kV overload in 2022. Under Option 2 and Option 3, the loading on Lago Vista – Nameless 138 kV is relatively high (close to 95%) under the contingency loss of Whitestone – Buttercup 138 kV line in 2022 and any load increase in the area could overload the Lago Vista – Nameless 138 kV beyond 2022.

The study results also showed that the alternatives that terminate at Jollyville and Avery Ranch (Option 4, Option 5, Option 7 and Option 8) would result in an increase in the loading on the Howard Lane - Jollyville 138 kV line by about 4% under the contingency loss of Williamson – Northwest 138 kV line. While the alternatives that terminate near Round Rock would reduce the loading on the Howard Lane - Jollyville 138 kV line by about 15%.

Under Option 4 and Option 7, the Marshall Ford – Bullick Hollow 138 kV line would be overloaded under the contingency loss of Avery Ranch – Jollyville 138 kV line if the area loads increase to around 640 MW.

A power transfer analysis was conducted for each option to evaluate the capability to support the future load growth in the study area. For transfer analysis, load in the study area was incrementally scaled up to simulate the continued load growth in the region. Table 7 shows the power transfer analysis results at the point thermal overload observed.

Table 7: Power Transfer Analysis Results under G-1+N-1

			Max	Transfer Limit		
Option	From Bus of New Line	To Bus of New Line	Transfer (MW)	Violation	Contingency	
1	Chief Brady	Whitestone	730	Blockhouse – Whitestone 138 kV	Gabriel – Glasscock 138 kV	
2	Chief Brady	Avery Ranch	635	Lago Vista – Nameless 138 kV	Buttercup – Whitestone 138 kV	
3	Chief Brady	Jollyville	630	Lago Vista – Nameless 138 kV	Buttercup – Whitestone 138 kV	
4	Avery Ranch	Seward Junction	640	Marshall Ford – Bullick Hollow 138 kV	Avery Ranch – Jollyville 138 kV	
5	Jollyville	Seward Junction	668	Howard Lane – Jollyville 138 kV	Williamson - Northwest 138 kV	
6	Round Rock	Seward Junction	750	Seward Junction – Leander 138 kV	Avery Ranch – Jollyville 138 kV	
7	Avery Ranch	Leander	640	Marshall Ford – Bullick Hollow 138 kV	Avery Ranch – Jollyville 138 kV	
8	Jollyville	Leander	666	Howard Lane – Jollyville 138 kV	Williamson - Northwest 138 kV	
9	Chandler	Leander	702	Leander – Blockhouse 138 kV	Avery Ranch – Jollyville 138 kV	
10	Round Rock S	Leander	690	Leander – Blockhouse 138 kV	Avery Ranch – Jollyville 138 kV	
11	Round Rock	Leander	660	Leander – Blockhouse 138 kV	Avery Ranch – Jollyville 138 kV	
12	Chief Brady	Leander	750	Leander – Blockhouse 138 kV	Avery Ranch – Jollyville 138 kV	
13	Westinghouse	Leander	645	Round Rock – Round Rock WH 138 kV	Avery Ranch – Jollyville 138 kV	

Based on the transfer capability analysis, it is concluded that all three least cost options (Option 7, Option 8, and Option 11) would provide similar transfer capability in the area under G-1+N-1 contingency conditions.

ERCOT also performed the system loss analysis using the 2019 study base case (summer peak case) to capture the benefit of transmission efficiency improvement for each option. The amount of loss reduction is shown in Table 8 indicating loss reduction realized for each of the select options during the peak hour.

Table 8: Transmission System loss reduction in 2019

Option	From Bus of New Line	To Bus of New Line	Transmission System Loss reduction (MW)
1	Chief Brady	Whitestone	20.9
2	Chief Brady	Avery Ranch	0.4
3	Chief Brady	Jollyville	20.0
4	Avery Ranch	Seward Junction	19.4
5	Jollyville	Seward Junction	1.4
6	Round Rock	Seward Junction	21.8
7	Avery Ranch	Leander	19.6
8	Jollyville	Leander	20.0
9	Chandler	Leander	2.8
10	Round Rock S	Leander	22.3
11	Round Rock	Leander	21.7
12	Chief Brady	Leander	21.2
13	Westinghouse S	Leander	20.6

4.2 Sensitivity Study

LCRA indicated that some of the options might need to consider the paralleling of the new transmission line with portions of existing 138 kV circuits in the area. This would create the potential for new double circuit contingencies; specifically for options 4, 5, 6, 7, 8 and 11. These options were further evaluated to determine the impact to system reliability resulting from the potential new double contingency conditions. The potential double circuit contingencies were as follows for each of these options:

- Option 4: Buttercup Whitestone and Parmer Avery Ranch 138 kV lines
- Option 5: Buttercup Whitestone and Parmer Jollyville 138 kV lines
- Option 6: Round Rock Chief Brady and Round Rock Parmer 138 kV lines
- Option 7: Buttercup Whitestone and Parmer Avery Ranch 138 kV lines
- Option 8: Buttercup Whitestone and Parmer Jollyville 138 kV lines
- Option 11: Round Rock Chief Brady and Round Rock Parmer 138 kV lines

Table 9 shows the reliability study results in 2022 for the evaluated options considering the new double circuit contingencies. For Option 5 and Option 8, Lago Vista – Nameless 138 kV line would overload under the contingency loss of Buttercup – Whitestone and Parmer – Jollyville 138 kV double circuit in 2022. For Option 4 and Option 7, Lago Vista – Nameless 138 kV line would overload under the contingency loss of Buttercup – Whitestone and Parmer – Avery Ranch 138 kV double circuit in 2022. The potential double circuit contingency loss of Round Rock – Chief Brady and Round Rock – Parmer 138 kV line did not impact the results of Option 6 and Option 11 in 2022.

Table 9: Top Transmission Line Loadings in 2022 under G-1+N-1 for Sensitivity Study

Option	From Bus of New Line	To Bus of New Line	Hutto – Round Rock NE 138 kV	Lago Vista – Nameless 138 kV	Howard Lane – Jollyville 138 kV	Marshall Ford – Bullick Hollow 138 kV
Base						
Case			103.4%	106.7%	88.7%	96.0%
4	Avery Ranch	Seward				
		Junction	105.2%	108.8%	92.9%	92.8%
5	Jollyville	Seward				
		Junction	103.1%	109.0%	93.0%	< 92%
6	Round Rock	Seward				
		Junction	111.4%	< 92%	< 92%	< 92%
7	Avery Ranch	Leander	103.8%	110.5%	92.1%	93.2%
8	Jollyville	Leander	103.1%	110.7%	93.8%	< 92%
11	Round Rock	Leander	113.7%	< 92%	< 92%	< 92%

4.3 Economic Analysis

Although the RPG project in this report is driven by a load-growth related reliability need, ERCOT also conducted an economic analysis to compare the relative performance of each selected option in terms of production cost savings.

Using the 2018 economic case built for the 2013 RTP, ERCOT modeled each selected option and performed production cost simulations for the year 2018 (the 2018 economic model was the latest year available at the time of the analysis). The annual production cost simulation results indicate that all the options would produce relatively similar production cost savings with no measurable impact on congestion.

5. Conclusion and Recommendation

Based on the review, ERCOT selected Option 11 as the preferred option to meet the projected load growth and reliability need in the area. Option 11 cost effectively met all of the reliability criteria and includes the following additional benefits:

- Provides a 138-kV transmission source into an area of Williamson County which has no transmission service and is forecasted to experience high load growth
- Will effectively reduce the east-to-west flows in the Austin Energy area as it is a direct parallel path for the Howard Lane Jollyville line that also supports the area
- Allows for the flexibility of creating a Round Rock Chief Brady, Round Rock Parmer 138 kV double circuit if determined to be necessary for corridor utilization purposes

The following facilities constitute the preferred option:

- Construct a new Parmer Substation.
- Construct a new single circuit 138 kV line (approximately 12.6 miles) on a double circuit capable structure that connects the existing Leander and Round Rock substations to the new Parmer Substation with an emergency rating of approximately 446 MVA.
- Add terminal equipment at the Leander and Round Rock substations for the new transmission line.
- Upgrade the 138 kV bus at the Leander Substation.

6. Designated Provider of Transmission Facilities

In accordance with ERCOT Protocol Section 3.11.4.8, ERCOT staff is to designate transmission providers for projects reviewed in the RPG. The default providers will be those that own the end points of the new projects. These providers can agree to provide or delegate the new facilities or inform ERCOT if they do not elect to provide them. If different providers own the two ends of the recommended projects, ERCOT will designate them as co-providers and they can decide between themselves what parts of the recommended projects they will each provide.

PEC owns the Leander Substation and Oncor Electric Delivery owns the Round Rock Substation. PEC has delegated the 138 kV portion of the new Parmer Substation to LCRA Transmission Services Corporation. Therefore ERCOT designates PEC, LCRA Transmission Services Corporation and Oncor Electric Delivery as co-providers for the project scope recommended in this report.

7. Appendix

Appendix A : AC Contingency Analysis Result of 2019 Case (G-1+N-1 analysis)	Contingency analysis results 2019.xlsx
Appendix B : AC Contingency Analysis Result of 2022 Case (G-1+N-1 analysis)	Contingency analysis results 2022.xlsx

From:

Billo, Jeffrey <Jeff.Billo@ercot.com> Monday, July 27, 2015 3:35 PM

Sent: To:

Charles DeWitt; Gnanam, Gnanaprabhu

Cc:

Sergio Garza

Subject:

[External] RE: Leander to Round Rock Transmission Line

Charles,

Thank you for the information. I have reviewed the update, and I do not believe it represents a significant change to the project.

Regards,

Jeff Billo

Sr. Manager, ERCOT Transmission Planning Phone: 512-248-6334 Mobile: 512-905-4064

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From: Charles DeWitt [mailto:Charles.DeWitt@LCRA.ORG]

Sent: Monday, July 06, 2015 2:08 PM **To:** Billo, Jeffrey; Gnanam, Gnanaprabhu

Cc: Garza, Sergio

Subject: Leander to Round Rock Transmission Line

***** EXTERNAL email. Please be cautious and evaluate before you click on links, open attachments, or provide credentials. *****

Jeff and Prabhu,

You will find a letter attached to this email providing an update for the Leander to Round Rock Project. We will send you the original in the mail.

Please call or email if you have any questions.

Sincerely,

Charles M. DeWitt, P.E. Manager, Transmission Planning Lower Colorado River Authority P.O. Box 220

Austin, TX 78767-0220

email: charles.dewitt@lcra.org

Phone: 512-578-4199



July 6, 2015

Jeff Billo Sr. Manager, ERCOT Transmission Planning Electric Reliability Council of Texas 2705 West Lake Drive Taylor, TX 76574

Subject: Leander to Round Rock Transmission Line

Dear Mr. Billo,

In the time that has passed since the Leander to Round Rock transmission line was endorsed by the ERCOT Board of Directors in 2014, Pedernales Electric Cooperative (PEC) has determined that the new substation referred to as SE Leander in the 2015 ALDR is needed by 2020. The location of the substation is in the general proximity of a future substation that was incorporated into ERCOT's Independent Assessment of the Leander to Round Rock Project. The name of the future substation was New Substation 2 in ERCOT's Independent Assessment report. LCRA TSC is notifying you of this situation to keep you informed of developments although we do not believe that it constitutes a significant change as contemplated by ERCOT Nodal Protocols Section 3.11.4.10 Modifications to ERCOT Endorsed Projects.

Background

You may recall that the scope analyzed in ERCOT's Independent Assessment, dated 22 May 2014, included a future substation (New Substation 2) to be located near the intersection of East Crystal Falls Parkway and Ronald Regan Boulevard. The Independent Assessment evaluated years 2019 and 2022, considered that the load at New Substation 2 would be realized before the summer peak in 2022, and considered New Substation 2 as being common to all alternatives studied. Informed by this assessment, the ERCOT Board of Directors voted to endorse the project. ERCOT sent a letter to LCRA TSC dated 18 June 2014 informing LCRA TSC of the endorsement. New Substation 2 is referenced in the letter through inclusion of the Independent Assessment as Attachment A to the letter.

In its March 2015 ALDR filing, PEC provided load information for New Substation 2 beginning in 2020. The new substation is named SE Leander in the ALDR filing. The estimated cost allocated to transmission cost of service associated with New Substation 2 is \$1.65 Million and is common to all alternatives considered in the ERCOT Independent Assessment.

Mr. Jeff Billo July 6, 2015 Page 2

Our review of the load provided in the ALDR shows that it is consistent with the load level provided in LCRA TSC's project submittal and the load used by ERCOT in its independent assessment for the year 2022.

Conclusion

Through ERCOT power flow cases and TPIT database updates, LCRA TSC will ensure this project's revised scope is communicated for appropriate modeling.

eWX, P.E. 67705

Sincerely,

Charles M. DeWitt, P.E.

Manager, Transmission Planning

Leander to Round Rock CCN Application, Attachment 4 Estimated Costs for Transmission Line and Substation Facilities

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	Other	\$1 192 000		\$2,438,000		-					\$2,551,000	\$1,922,000	\$2,057,000		NA.		188					\$2,800,000	\$2,942,000	\$3,337,000	\$3,141,000	\$1,964,000	\$2,031,000	\$1,637,000	\$1,704,000	\$1,376,000	\$1,153,000	_
	Construction of Facilities (Contract)	\$23.272.000	\$23,406,000	\$28,694,000	\$26,897,000	\$26,379,000	\$27,119,000	\$21,763,000	\$18,828,000	\$20,509,000	\$22,721,000	\$21,420,000	\$21,617,000	\$17,970,000	\$18,246,000	\$20,098,000	\$24,739,000	\$21,019,000	\$20,127,000	\$20,234,000	\$21,309,000	\$21,185,000	\$23,870,000	\$25,133,000	\$24,669,000	\$19,141,000	\$19,248,000	\$21,016,000	\$21,123,000	\$19,570,000	\$21,642,000	\$19,074,000
	Construction of Facilities (Utility)	\$4.073.700	\$4,542,400	\$4,206,100	\$4,745,800	\$4,558,900	\$4,562,500	\$4,449,200	\$4,913,200	\$4,392,500	\$4,392,500	\$4,542,400	\$4,542,400	\$4,572,900	\$4,572,900	\$4,618,900	\$4,493,600	\$4,710,200	\$4,761,900	\$4,761,900	\$4,761,900	\$4,761,900	\$4,761,900	\$4,609,100	\$4,609,100	\$4,293,100	\$4,293,100	\$4,293,100	\$4,293,100	\$4,293,100	\$4,293,100	\$3,753,400
sts	Procurement of Material & Equipment	\$18,185,700	\$16,444,000	\$19,968,200	\$19,815,900	\$17,943,100	\$18,938,800	\$16,998,000	\$16,187,400	\$16,144,600	\$16,348,600	\$15,551,000	\$15,653,000	\$14,874,100	\$15,017,100	\$16,994,700	\$17,180,000	\$16,746,500	\$15,987,000	\$16,017,000	\$16,104,000	\$16,149,000	\$17,062,000	\$17,981,100	\$17,762,100	\$17,244,700	\$17,274,700	\$17,484,700	\$17,514,700	\$17,578,700	\$18,026,700	\$17,341,000
1: Transmission and Substation Facilities Total Estimated Costs	Engineering & Design (Contract)	\$682,000	\$680,000	\$722,000	\$734,000	000'869\$	\$742,000	\$702,000	000'899\$	\$672,000	\$675,000	\$666,000	\$663,000	\$684,000	000'229\$	\$656,000	\$728,000	\$660,000	\$698,000	\$694,000	\$687,000	\$696,000	\$692,000	\$700,000	\$698,000	\$677,000	\$673,000	\$694,000	000'069\$	\$702,000	\$694,000	\$684,000
ion Facilities Tot	Engineering & Design (Utility)	\$6,461,000	\$6,321,800	\$6,871,600	\$6,941,100	\$6,882,200	\$7,025,100	\$6,615,500	\$6,460,000	\$6,289,100	\$6,220,100	\$6,233,800	\$6,223,800	\$6,689,600	\$6,674,600	\$6,564,000	\$6,677,900	\$6,535,800	\$6,412,400	\$6,404,400	\$6,390,400	\$6,464,400	\$6,475,400	\$6,569,000	\$6,576,000	\$6,452,700	\$6,444,700	\$6,464,700	\$6,456,700	\$6,506,700	\$6,504,700	\$6,422,200
ion and Substat	Right-of-Way & Land Acquisition	\$35,604,000	\$27,011,000	\$30,802,800	\$25,898,900	\$36,644,000	\$37,911,600	\$34,607,000	\$26,487,900	\$27,256,300	\$26,963,300	\$25,466,000	\$27,475,000	\$22,722,600	\$33,240,600	\$31,078,600	\$39,056,000	\$29,925,000	\$20,198,900	\$27,271,900	\$27,915,900	\$26,924,900	\$26,179,900	\$30,394,300	\$26,517,300	\$18,013,900	\$25,086,900	\$23,506,900	\$30,579,900	\$32,723,900	\$38,392,900	\$23,767,800
Table 1: Transmiss	Estimated Total Cost	\$89,470,400	\$79,986,200	\$93,702,700	\$87,023,700	\$96,062,200	\$99,597,000	\$86,730,700	\$75,310,500	\$77,240,500	\$79,871,500	\$75,801,200	\$78,231,200	\$70,228,200	\$81,313,200	\$82,596,200	\$95,715,500	\$81,963,500	\$70,149,200	\$77,414,200	\$78,608,200	\$78,981,200	\$81,983,200	\$88,723,500	\$83,972,500			\$75,096,400	\$82,361,400	\$82,750,400	\$90,706,400	\$72,627,400
12	Length (miles)	14.97	13.85	20.01	21.44	19.67	21.27	16.12	12.85	13.48	12.55	12.04	11.93	14.65	14.47	13.83	16.22	12.88	15.12	15.02	14.45	15.53	15.66	14.83	14.92	14.63	14.53	14.88	14,78	15.38	15.50	13.74
	Sub 2	2-3	2-5	2-8	2-6	2-2	2-4	2-1	2-6	2-7	2-7	2-5	2-5	2-4	2-4	2-4	2-2	2-2	2-6	2-6	2-6	2-6	2-6	2-7	2-7	2-6	2-6	2-6	2-6	2-6	2-6	2-8
	Sub 1	1-7	1-8	1-6	1-6	1-8	1-4	1-6	1-3	1-5	1-5	1-8	1-8	1-2	1-2	1-1	1-5	1-3	1-8	1-8	1-8	1-8	1-8	1-3	1-3	1-7		1-7	L-L	1-7	2-1	1-7
	Route	1	2	က	7	ഹ	9	7	80 I	o	0	-	12	13	4	15	16	17	18	6)	20	21	22	23	74	25	26	27	28	29	30	31

\$1,637,000 \$1,922,000 \$2,800,000 \$2,551,000 \$2,586,000 \$1,596,000 \$2,962,000 \$1,964,000 \$1,964,000 \$1,585,000 \$2,031,000 \$1,766,000 \$1,977,000 \$2,057,000 \$1,581,000 \$2,367,000 \$2,942,000 \$1,704,000 \$1,376,000 \$3,141,000 \$1,991,000 \$3,337,000 \$1,192,000 \$2,841,000 \$3,298,000 \$2,715,000 \$2,031,000 \$1,440,000 \$2,885,000 \$1,153,000 \$2,438,000 Other \$19,074,000 \$20,127,000 \$21,016,000 \$20,234,000 \$21,309,000 \$21,185,000 \$18,246,000 \$23,870,000 \$24,669,000 \$28,694,000 \$24,739,000 \$26,379,000 \$27,119,000 Construction \$19,141,000 \$17,970,000 \$19,248,000 \$18,828,000 \$21,420,000 \$20,509,000 \$21,617,000 \$22,721,000 \$23,406,000 \$21,019,000 \$21,123,000 \$20,098,000 \$19,570,000 \$21,763,000 \$26,897,000 \$25,133,000 \$23,272,000 \$21,642,000 of Facilities (Contract) Construction of Facilities \$4,572,900 \$3,753,400 \$4,761,900 \$4,542,400 \$4,761,900 \$4,542,400 \$4,572,900 \$4,609,100 \$4,745,800 \$4,206,100 \$4,558,900 \$4,293,100 \$4,293,100 \$4,293,100 \$4,913,200 \$4,542,400 \$4,392,500 \$4,761,900 \$4,392,500 \$4,761,900 \$4,293,100 \$4,618,900 \$4,293,100 \$4,449,200 \$4,609,100 \$4,073,700 \$4,493,600 \$4,562,500 \$4,761,900 \$4,710,200 \$4,293,100 Table 2: Transmission and Substation Facilities Total Estimated Costs (Sorted Least to Most Expensive) of Material & \$15,987,000 \$14,874,100 \$17,484,700 \$17,244,700 \$17,341,000 \$17,274,700 \$16,187,400 \$15,551,000 \$16,144,600 \$16,017,000 \$16,104,000 \$16,444,000 \$17,514,700 \$17,578,700 \$16,998,000 \$19,815,900 \$18,026,700 \$19,968,200 \$17,943,100 \$18,938,800 \$15,653,000 \$16,149,000 \$16,348,600 \$15,017,100 \$16,746,500 \$17,062,000 \$17,762,100 \$17,981,100 \$17,180,000 Equipment \$16,994,700 \$18,185,700 Engineering (Contract) \$698,000 \$684,000 \$668,000 \$696,000 \$682,000 \$677,000 \$673,000 \$666,000 \$663,000 \$675,000 \$677,000 \$692,000 \$690,000 \$656,000 \$698,000 \$702,000 \$734,000 \$722,000 \$693,000 & Design \$684,000 \$694,000 \$672,000 \$694,000 \$687,000 \$680,000 \$660,000 \$702,000 \$700,000 \$694,000 \$728,000 \$742,000 Engineering \$7,025,100 \$6,422,200 \$6,233,800 \$6,464,400 \$6,321,800 \$6,674,600 \$6,475,400 \$6,456,700 \$6,576,000 \$6,941,100 \$6,882,200 \$6,412,400 \$6,689,600 \$6,444,700 \$6,464,700 \$6,460,000 \$6,289,100 \$6,404,400 \$6,223,800 \$6,390,400 \$6,220,100 \$6,535,800 \$6,564,000 \$6,506,700 \$6,615,500 \$6,569,000 \$6,461,000 \$6,504,700 \$6,871,600 \$6,677,900 \$6,452,700 & Design (Ctility) Right-of-Way \$26,963,300 \$20,198,900 \$23,767,800 \$25,086,900 \$26,487,900 \$27,256,300 \$27,271,900 \$27,915,900 \$33,240,600 \$26,179,900 \$30,579,900 \$26,517,300 \$35,604,000 \$30,802,800 \$22,722,600 \$23,506,900 \$27,475,000 \$26,924,900 \$27,011,000 \$29,925,000 \$32,723,900 \$34,607,000 \$30,394,300 \$38,392,900 \$39,056,000 \$36,644,000 \$37,911,600 \$18,013,900 \$25,466,000 \$31,078,600 \$25,898,900 Acquisition \$75,096,400 \$81,983,200 \$82,750,400 \$88,723,500 \$89,470,400 \$78,608,200 \$79,871,500 \$79,986,200 \$82,361,400 \$83,972,500 \$87,023,700 \$93,702,700 \$96,062,200 \$99,597,000 \$70,149,200 \$70,228,200 \$72,627,400 \$75,310,500 \$75,801,200 \$77,240,500 \$77,414,200 \$78,231,200 \$78,981,200 \$81,313,200 \$81,963,500 \$82,596,200 \$86,730,700 \$90,706,400 \$95,715,500 \$67,786,400 \$75,051,400 **Estimated Fotal Cost** Length (miles) 14.63 16.12 15.12 14.65 13.74 14.53 14.88 12.85 12.04 13.48 15.02 11.93 14.45 15.53 12.55 13.85 12.88 15.66 14.78 13.83 15.38 14.92 14.97 15.50 19.67 14.47 21.44 14.83 20.01 16.22 21.27 Sub 2 2-5 2-8 2-6 2-6 2-5 2-7 2-6 2-6 2-7 2-5 2-4 2-2 2-6 2-6 2-4 2-6 2-7 2-6 2-7 2-8 2-4 2-1 Sub 1 1-5 5 1-2 1-3 1-8 5 , ^ 19 1 / 7.5 1.3 1 1-7 1-3 4 -9 7.3 1-6 1-5 -9 1-7 1-7 1-7 1-7 1-7 4 Ξ 1-7 Route 18 9 5 16 5 33 26 7 20 10 4 7 22 28 28 24 23 S & ω Ξ თ 7 7 / 4 ည ဖ

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	Sub 2	Length (miles)	Estimated Total Cost	Right-of-Way & Land Acquisition	Engineering & Design (Utility)	Engineering & Design (Contract)	Procurement of Material & Equipment	Construction of Facilities (Utility)	Construction of Facilities (Contract)	Other
Ì	2-3	14.97	\$72,471,000	\$33,354,000	\$3,739,000	\$682,000	\$10,232,000	\$0	\$23.272.000	\$1,192,000
11197	2-5	13.85	\$63,790,000	\$24,508,000	\$3,655,000	\$680,000	000'096'6\$	\$0	\$23,406,000	\$1,581,000
- 1	2-8	20.01	\$77,299,000	\$28,568,000	\$4,129,000	\$722,000	\$12,748,000	\$0	\$28,694,000	\$2.438,000
SUPE I	2-6	21.44	\$70,689,000	\$23,899,000	\$4,234,000	\$734,000	\$12,934,000	0\$	\$26,897,000	\$1.991.000
- 13	2-2	19.67	\$79,573,000	\$34,141,000	\$4,113,000	\$693,000	\$11,285,000	\$0	\$26,379,000	\$2,962,000
1858	2-4	21.27	\$83,378,000	\$35,561,000	\$4,243,000	\$742,000	\$12,415,000	0\$	\$27,119,000	\$3,298,000
- 1	2-1	16.12	\$70,361,000	\$32,104,000	\$3,806,000	\$702,000	\$10,390,000	\$0	\$21,763,000	\$1,596,000
0.000	2-6	12.85	\$58,205,000	\$24,488,000	\$3,636,000	\$668,000	\$8,819,000	\$0	\$18,828,000	\$1,766,000
- 1	2-7	13.48	\$62,324,000	\$25,668,000	\$3,683,000	\$672,000	\$9,815,000	\$0	\$20,509,000	\$1,977,000
10000	2-7	12.55	\$64,955,000	\$25,375,000	\$3,614,000	\$675,000	\$10,019,000	80	\$22,721,000	\$2,551,000
	2-5	12.04	\$59,605,000	\$22,963,000	\$3,567,000	\$666,000	\$9,067,000	\$0	\$21.420,000	\$1.922,000
1000	2-5	11.93	\$62,035,000	\$24,972,000	\$3,557,000	\$663,000	\$9,169,000	\$0	\$21,617,000	\$2,057,000
	2-4	14.65	\$53,699,000	\$20,372,000	\$3,718,000	\$684,000	\$8,240,000	\$0	\$17,970,000	\$2,715,000
60.559	2-4	14.47	\$64,784,000	\$30,890,000	\$3,703,000	\$677,000	\$8,383,000	- 80	\$18,246,000	\$2,885,000
	2-4	13.83	\$66,137,000	\$28,728,000	\$3,684,000	\$656,000	\$10,385,000	\$0	\$20,098,000	\$2,586,000
	2-2	16.22	\$79,364,000	\$36,553,000	\$3,920,000	\$728,000	\$10,583,000	- \$0	\$24,739,000	\$2.841,000
	2-2	12.88	\$64,562,000	\$27,422,000	\$3,630,000	\$660,000	\$9,464,000	\$0	\$21,019,000	\$2,367,000
	2-6	15.12	\$53,956,000	\$18,199,000	\$3,725,000	\$698,000	\$9,243,000	- \$0	\$20,127,000	\$1,964,000
- 1	2-6	15.02	\$61,221,000	\$25,272,000	\$3,717,000	\$694,000	\$9,273,000	\$0	\$20,234,000	\$2,031,000
000 Per 2	2-6	14.45	\$62,415,000	\$25,916,000	\$3,703,000	\$687,000	\$9,360,000	- \$0	\$21,309,000	\$1,440,000
	2-6	15.53	\$62,788,000	\$24,925,000	\$3,777,000	000'969\$	\$9,405,000	\$0	\$21,185,000	\$2,800,000
	2-6	15.66	\$65,790,000	\$24,180,000	\$3,788,000	\$692,000	\$10,318,000	\$0	\$23,870,000	\$2,942,000
- 1	2-7	14.83	\$72,757,000	\$28,806,000	\$3,815,000	\$700,000	\$10,966,000	\$0	\$25,133,000	\$3,337,000
4.516	2-7	14.92	\$68,006,000	\$24,929,000	\$3,822,000	\$698,000	\$10,747,000	0\$	\$24,669,000	\$3.141.000
- 1	2-6	14.63	\$50,790,000	\$16,267,000	\$3,710,000	\$677,000	\$9,031,000	\$0	\$19,141,000	\$1.964,000
	2-6	14.53	\$58,055,000	\$23,340,000	\$3,702,000	\$673,000	\$9,061,000	\$0	\$19,248,000	\$2,031,000
	2-6	14.88	\$58,100,000	\$21,760,000	\$3,722,000	\$694,000	\$9,271,000	\$0	\$21,016,000	\$1,637,000
216.5	2-6	14.78	\$65,365,000	\$28,833,000	\$3,714,000	000'069\$	\$9,301,000	\$0	\$21,123,000	\$1.704,000
- 13	2-6	15.38	\$65,754,000	\$30,977,000	\$3,764,000	\$702,000	\$9,365,000	\$0	\$19,570,000	\$1,376,000
	2-6	15.50	\$73,710,000	\$36,646,000	\$3,762,000	\$694,000	\$9,813,000	\$0	\$21,642,000	\$1,153,000
	2-8	13.74	\$55,562,000	\$21,786,000	\$3,644,000	\$684,000	\$8,789,000	\$0	\$19,074,000	\$1,585,000

Table 4: Substation 1 Facilities Estimated Total Costs

Sub Site	Estimated Total Cost	Right-of-Way & Land Acquisition	Right-of-Way Engineering & Land & Design Acquisition (Utility)	Engineering Procurement Construction Construction & Design of Material & of Facilities of Facilities (Contract) Equipment (Utility) (Contract)	Construction of Facilities (Utility)	Construction of Facilities (Contract)	Other
1-1	\$9,257,500	\$1,251,500	\$1,502,300	\$3,896,500	\$2,607,200		
= 1-2	\$9,327,500	\$1,251,500	\$1,593,900	\$3,920,900	1919		
1-3	\$10,103,700	\$1,251,500	\$1,556,900	\$4,525,200	\$2,770,100		
1.4	\$9,017,300	\$1,251,500 \$1,404,400	\$1,404,400	\$3,810,600	152323		
1-5	\$9,053,700	\$1,251,500	\$1,409,000	\$3,839,700	i		
1-6	\$9,332,900	\$1,251,500	\$1,440,000	\$4,038,700	\$2,602,700		
1-7	\$9,994,600	\$998,500	\$1,475,600	\$5,370,500	\$2,150,000		
1-8	\$9,191,400	\$1,251,500 \$1,420,300	\$1,420,300	\$3,900,800	\$2,618,800	(III)	

		œ.	ble 5: Substation	n 2 Facilities Esti	Table 5: Substation 2 Facilities Estimated Total Costs	sts		
Tap Site	Estimated Total Cost	Right-of-Way & Land Acquisition	Right-of-Way Engineering & Land & Design Acquisition (Utility)	Engineering & Design (Contract)	& Design of Material & of Facilities (Contract)	Procurement Construction of Material & of Facilities Equipment	Construction of Facilities	Other
2-1	\$7,036,800	\$1,251,500	\$1,369,500		\$2,569,300	\$1,846,500		
2-2	\$7,297,800	\$1,251,500	\$1,348,900		\$2,757,300	\$1,940,100		511
2-3	\$7,004,800	\$1,251,500	\$1,246,400		\$2,583,200	\$1,923,700		
2-4	\$7,201,700	38.85	\$1,099,100 \$1,377,700		\$2,713,200	\$2,011,700		
2-5	\$7,004,800	\$1,251,500	\$1,246,500		\$2,583,200	\$1,923,600		
2-6	\$7,001,800	\$748,400	\$1,267,100		\$2,843,200	\$2,143,100		
2-7	\$5,862,800	\$336,800	\$1,197,100		\$2,489,900	\$1,839,000		
2-8	\$7,070,800		\$983.300 \$1.302.600		\$3 181 500	\$3 181 500 \$1 603 400		

LEANDER - PARMER - ROUND ROCK

Transmission Line Addition

RECOMMENDATION

This a proposed joint project plan developed by LCRA Transmission Services Corporation (LCRA TSC) and Pedernales Electric Cooperative (PEC). Oncor facilties are directly impacted and Oncor provided information associated with this proposed project.

With the objective of providing a transmission source to a new load-serving substation, the project consists of constructing a new 138-kV transmission line connecting the existing Leander and Round Rock substations to serve the new Parmer Substation.

The recommended project (Alternative 11) completion date is December 31, 2018. The total project funding requirement is estimated at \$50,957,000.

This project requires an amendment to LCRA TSC's Certificate of Convenience and Necessity (CCN) from the Public Utility Commission.

PROJECT SCOPE

- Construct a 138-kV transmission line (approximately 13 miles) using bundled 795
 ACSR Drake (446 MVA) conductor with OPGW and double-circuit capable
 structures that connects the existing Leander and Round Rock substations to the
 new Parmer Substation.
- Construct a new Parmer Substation.
- Add terminal equipment at the existing Leander and Round Rock substations for the new transmission line.
- Upgrade the 138-kV bus at the Leander Substation.

NEED FOR PROJECT

Electric load in western Williamson County that includes the cities of Leander and Cedar Park areas is served in part by the PEC-owned Avery Ranch, Balcones, Blockhouse, Buttercup, Kent Street, Leander, Seward Junction, and Whitestone substations and these loads have experienced and are projected to experience significant load growth as shown below in Table 1. From 2002 to 2012 the summer peak load served by these substations has grown by 96 percent from 183.8 MW to 360.1 MW. Over 380 MW of power transformer capacity, combined, has been added at these substations to serve the load growth in this area. These transformer capacity additions have been completed without the addition of a new transmission line. The most recent transmission line addition in this immediate area specifically to add a substation was completed in 2000 (Buttercup-Jollyville 138-kV transmission line). PEC has forecasted these substations to serve 572.2 MW in 2022 which is an increase of 59 percent from the actual 2012 summer peak load

served by these substations. The composition of the load growth forecasted for the area served by these substations is mainly residential and commercial.

Table 1: Actual (2002 and 2012) and Forecasted (2019 and 2022) Summer Peak Load without the Parmer Lane Addition

Substation	2002 Load (MW)	2012 Load (MW)	2019 Load (MW)	2022 Load (MW)
Avery Ranch	0	70	85	98
Balcones	49	68	91	104
Blockhouse	0	38	55	63
Buttercup	45	48	66	76
Kent Street	0	16	36	41
Leander	34	53	73	84
Seward Junction	0	20	29	33
Whitestone	55	48	67	76
Parmer	0	0	0	0
TOTAL LOAD	183	361	502	575

Based on PEC assessments, the existing distribution system cannot serve the forecasted load growth in western Williamson County since substation transformers and feeders will overload and distribution-only upgrades are not acceptable solutions to address this reliability of service problem. Specifically, PEC identified two high load growth areas between Highway 183 and Interstate 35 and north of Highway 620 which are projected to experience significant continued load growth. One area is the area near the intersection of Parmer Lane and Highway 1431, and the second is the area near the intersection of East Crystal Falls Parkway and Ronald Reagan Boulevard. The existing substations in the Leander and Cedar Park areas in western Williamson County (area substation sources) are remote (approximately three miles) from these growing areas. PEC's assessment indicates that serving this load density from the existing substations and feeders will lead to longer and more distribution feeders in a congested region, increase losses, and decrease reliability. The distribution system needed to supply this amount of load from remote substations would be very expensive, unreliable, and inefficient. Severe degradation of the power quality due to increased losses over longer feeders and extreme distribution system reliability degradation due to increased line exposure would be a direct result of such a distribution-only alternative.

Based on PEC assessments, the addition of new substations near two areas which are projected to experience significant growth between Highway 183 and Interstate 35 and north of Highway 620 is needed to reliably serve the forecasted load in western Williamson County. The location of one substation is the area near the intersection of Parmer Lane and Highway 1431, and PEC needs a substation by 2018 in this location. The location of the other substation is the area near the intersection of East Crystal Falls Parkway and Ronald Reagan Boulevard, and PEC needs a substation by 2020 in this location.

As shown in Figures 1 and 2 below, the existing transmission system surrounding the locations of these two load areas consist of a 138-kV transmission line that parallels Highway 183, a 138-kV transmission line that parallels Highway 45, and 138-kV

transmission line that parallels Interstate 35. There are no transmission sources near these locations to serve the new substations needed in this area.

In addition to the PEC-projected deficiencies on the lower voltage delivery system, recent ERCOT-conducted assessments indicate transmission limitations in this high load, high growth area under category C and category D contingency conditions. Based on these assessments, these contingency conditions could lead to the loss of over 250 MW of load to resolve overloads of existing transmission circuits in the near-term.

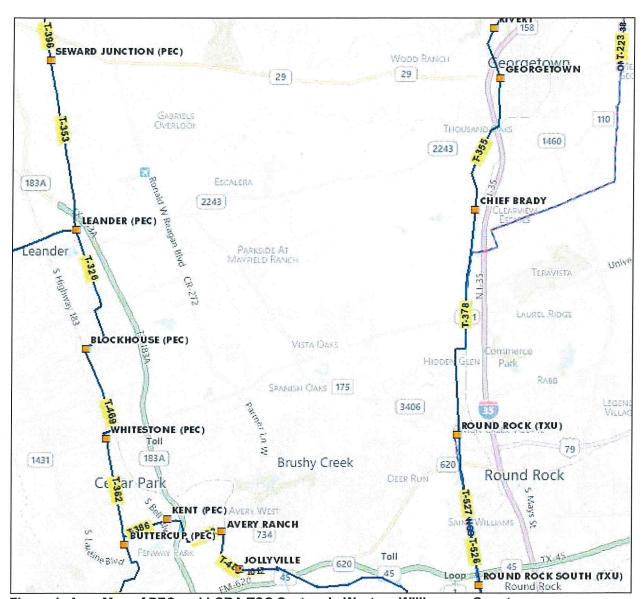


Figure 1: Area Map of PEC and LCRA TSC System in Western Williamson County

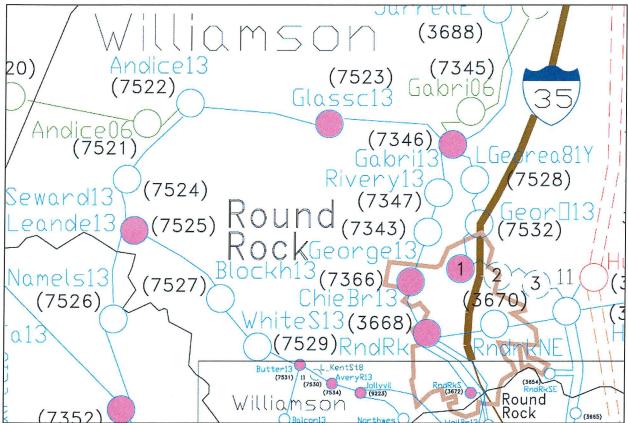


Figure 2: Map of ERCOT System in the Project Area

AVAILABLE ALTERNATIVES

Twelve alternatives for providing transmission service to two new substations near the forecasted load areas and meeting the increased area load growth in western Williamson County are included in this project plan. These alternatives were selected for further assessment because they provide the transmission infrastructure needed to serve the two substations PEC is planning for the area north of Highway 620 between Highway 183 and Interstate 35. Table 2 below summarizes the scope and cost for each alternative.

Table 2: Summary of Scope and Cost for Each Alternative

Alternative	Upgrades	Cost (\$000,000)
Alternative 1	 Construct a Parmer Substation in Williamson County. Construct a 14.8-mile Chief Brady to Parmer to Whitestone 138-kV transmission line with bundled 795 ACSR Drake (446 MVA). Add terminal equipment at the Chief Brady, Parmer, and Whitestone substations for new transmission line. 	\$62.3
Alternative 2	 Construct a Parmer Substation in Williamson County. Construct a 14.8-mile Chief Brady to Parmer to Avery Ranch 138-kV transmission line with bundled 795 ACSR Drake (446 MVA). Add terminal equipment at the Chief Brady, Parmer, and Avery Ranch substations for new transmission line. 	\$60.9
Alterative	Construct a Parmer Substation in Williamson County.	
3	,	\$63.6

	2. Construct a 15.8-mile Chief Brady to Parmer to Jollyville 138-kV transmission line with bundled 795 ACSR Drake (446 MVA).	
	3. Add terminal equipment at the Chief Brady, Parmer, and Jollyville substations for new transmission line.	
Alternative	 Construct a Parmer Substation in Williamson County. Construct a 14.1-mile Seward Junction to Parmer to Avery Ranch 138-kV transmission line with bundled 795 ACSR Drake (446 MVA). 	
4	3. Add terminal equipment at the Seward Junction, Parmer, and Avery Ranch substations for new transmission line.	\$54.0
Alternative	 Construct a Parmer Substation in Williamson County. Construct a 15.1-mile Seward Junction to Parmer to Jollyville 138-kV transmission line with bundled 795 ACSR Drake (446 MVA). 	
5	3. Add terminal equipment at the Seward Junction, Parmer, and Jollyville substations for new transmission line.	\$56.8
Alternative	 Construct a Parmer Substation in Williamson County. Construct a 16.5-mile Seward Junction to Parmer to Round Rock 138-kV transmission line with bundled 795 ACSR Drake (446 MVA). 	
6	 Add terminal equipment at the Seward Junction, Parmer, and Round Rock substations for new transmission line. 	\$61.9
Alternative	 Construct a Parmer Substation in Williamson County. Construct a 10.3-mile Leander to Parmer to Avery Ranch 138-kV transmission line with bundled 795 ACSR Drake (446 MVA). 	
7	3. Add terminal equipment at the Leander, Parmer, and Avery Ranch substations for new transmission line.	\$43.1
Alternative 8	 Construct a Parmer Substation in Williamson County. Construct an 11.4-mile Leander to Parmer to Jollyville 138-kV transmission line with bundled 795 ACSR Drake (446 MVA). 	
	3. Add terminal equipment at the Leander, Parmer, and Jollyville substations for new transmission line.	\$46.2
	 Construct a Parmer Substation in Williamson County. Construct a Chandler Substation along the existing Chief Brady to Round Rock 138-kV transmission line. 	
Alternative 9	 Construct a 13.5-mile Leander to Parmer to Chandler 138-kV transmission line with bundled 795 ACSR Drake (446 MVA). Add terminal equipment at the Leander, Parmer, and Chandler substations 	
	for new transmission line. 5. Upgrade the existing Round Rock to Chief Brady transmission line between	
	Round Rock and the new Chandler Substation to 446 MVA capacity. 1. Construct a Parmer Substation in Williamson County. 2. Construct a 15.4-mile Leander to Parmer to Round Rock South 138-kV	\$54.4
Alternative 10	transmission line with bundled 795 ACSR Drake (446 MVA). 3. Add terminal equipment at the Leander, Parmer, and Jollyville substations	
	for new transmission line.	\$77.5
Altomotive.	Construct a Parmer Substation in Williamson County. Construct a 12.6-mile Leander to Parmer to Round Rock 138-kV transmission line with hundled 705 ACSP Brake (446 MVA).	
Alternative 11	transmission line with bundled 795 ACSR Drake (446 MVA). 3. Add terminal equipment at the Leander, Parmer, and Round Rock substations for new transmission line.	654.0
	 Upgrade the 138-kV bus at the Leander Substation. Construct a Parmer Substation in Williamson County. 	\$51.0
A 14 a C	2. Construct a 14.8-mile Leander to Parmer to Chief Brady 138-kV	
Alternative 12	transmission line with bundled 795 ACSR Drake (446 MVA). 3. Add terminal equipment at the Leander, Parmer, and Chief Brady substations for new transmission line.	
	4. Upgrade the 138-kV bus at the Leander Substation.	\$63.7

The construction of a new line from Leander to Parmer to Chief Brady was also studied but is not listed as an alternative because it is similar to Alternative 9 in performance but would increase the length of the new transmission line to be constructed and require that the Round Rock to Chief Brady line that be upgraded. Thus the results of a Leander to Parmer to Chief Brady alternative would be similar in performance to the alternatives studied but at a higher cost.

RESULTS

The evaluation of the transmission alternatives consisted of comparing the number of transmission criteria violations in the immediate area in 2017 and 2022 before and after the addition of each alternative and the cost of each alternative. Transmission violations are based on the LCRA TSC transmission criteria for thermal (greater than 100% on a post-contingency basis) and voltage (less than 0.92 per unit on a post-contingency basis) during single contingency (N-1) conditions.

PEC's plan to serve load from existing substations and the Parmer Substation, shown in Table 3, are the loads used to evaluate performance of the alternatives.

Table 3: Summary of Area Loads with Parmer Lane In-Service

Bus Number	Substation	2019 Load (MW)	2022 Load (MW)
7534	Avery Ranch	69	80
7533	Balcones	91	103
7527	Blockhouse	55	62
7531	Buttercup	66	75
7530	Kent Street	35	41
7525	Leander	62	58
7524	Seward Junction	29	33
7529	Whitestone	67	77
7367	Parmer	28	33
7368	Future Station	0	13
	TOTAL LOAD	502	575

Table 4: Summary of 2019 and 2022 Thermal Violations

Alternative	From Bus of New Line	To Bus of New Line	2019 # of lines loading above 100%	# of lines loading above 100%
Base	Base Case		0	1
1	Chief Brady	Whitestone	0	0
2	Chief Brady	Avery Ranch	0	1
3	Chief Brady	Jollyville	0	0
4	Avery Ranch	Seward Junction	0	2
5	Jollyville	Seward Junction	0	0
6	Round Rock	Seward Junction	0	0

7	Avery Ranch	Leander	0	1
8	Jollyville	Leander	0	0
9	Chandler	Leander	1	1
10	Round Rock S.	Leander	0	0
11	Round Rock	Leander	0	0
12	Chief Brady	Leander	1	1

The stations listed in Table 3 were monitored for voltage and the number of criteria violations for each alternative is reported in Table 5.

Table 5: Summary of 2019 and 2022 Voltage Violations

Alternative	From Bus of New Line	To Bus of New Line	2019 # of buses with voltage <0.92 Per Unit	2022 # of buses with voltage <0.92 Per Unit
Base	Base Case	Carried Co. Mr. No. 100	4	9
1	Chief Brady	Whitestone	1	3
2	Chief Brady	Avery Ranch	4	7
3	Chief Brady	Jollyville	4	8
4	Avery Ranch	Seward Junction	1	10
5	Jollyville	Seward Junction	0	7
6	Round Rock	Seward Junction	0	4
7	Avery Ranch	Leander	1	10
8	Jollyville	Leander	1	3
9	Chandler	Leander	1 -	2
10	Round Rock S.	Leander	1	1
11	Round Rock	Leander	1	1
12	Chief Brady	Leander	1	8

Post-contingency voltage at Seward Junction was below 0.92 per unit in every Alternative except Alternatives 4, 5, and 6. Post-contingency voltage at Parmer Substation was below 0.92 per unit in Alternatives 4, 5, 6, and 7. Therefore, the impact of adding a capacitor at Seward Junction was evaluated. No criteria violations (voltage or thermal) result for Alternatives 6, 9, 10, and 11 after adding the capacitor bank at Seward Junction (see Table 7).

Table 6: Summary of 2019 and 2022 Thermal Violations (With Seward Junction Capacitor)

·				
Alternative	From Bus of New Line	To Bus of New Line	2019 # of lines loading above 100%	2022 # of lines loading above 100%
Base	Base Case		0	1
1	Chief Brady	Whitestone	1	0
2	Chief Brady	Avery Ranch	1	10
3	Chief Brady	Jollyville	0	10
4	Avery Ranch	Seward Junction	0	0
5	Jollyville	Seward Junction	0	1

6	Round Rock	Seward Junction	0	0
7	Avery Ranch	Leander	0	1
8	Jollyville	Leander	0	1
9	Chandler	Leander	0	0
10	Round Rock S.	Leander	0	0
11	Round Rock	Leander	0	0
12	Chief Brady	Leander	0	0

Table 7: Summary of 2019 and 2022 Voltage Violations (with Seward Junction Capacitor)

Alternative	From Bus of New Line	To Bus of New Line	2019 # of buses with voltage <0.92 Per Unit	2022 # of buses with voltage <0.92 Per Unit
Base	Base Case		2	9
1	Chief Brady	Whitestone	0	0
2	Chief Brady	Avery Ranch	0	5
3	Chief Brady	Jollyville	0	8
4	Avery Ranch	Seward Junction	0	9
5	Jollyville	Seward Junction	0	1
6	Round Rock	Seward Junction	0	0
7	Avery Ranch	Leander	0	10
8	Jollyville	Leander	0	0
9	Chandler	Leander	0	0
10	Round Rock S.	Leander	0	0
11	Round Rock	Leander	0	0
12	Chief Brady	Leander	0	3

Table 8: Summary of 2019 and 2022 Criteria Violations and Cost (with Seward Junction Capacitor)

Alternative	From Bus of New Line	To Bus of New Line	2019	2022	Cost* (\$000,000)
Base	Base Case		2	10	0
1	Chief Brady	Whitestone	1	1	\$62.3
2	Chief Brady	Avery Ranch	1	6	\$60.9
3	Chief Brady	Jollyville	0	9	\$63.6
4	Avery Ranch	Seward Junction	0	10	\$54.0
5	Jollyville	Seward Junction	0	2	\$56.8
6	Round Rock	Seward Junction	0	0	\$61.9
7	Avery Ranch	Leander	0	11	\$43.1
8	Jollyville	Leander	0	1	\$46.2
9	Chandler	Leander	1	1	\$54.4
10	Round Rock S.	Leander	0	0	\$77.5

11	Round Rock Leander	0	0	\$51.0
12	Chief Brady Leander	1	4	\$63.7

^{*} Cost does not include Seward Junction Capacitor which is common to all alternatives

The Leander-Round Rock transmission line (Alternative 11) addresses 10 violations (voltage and thermal) identified in the 2022 Base Case during single contingency (N-1) conditions. Alternatives 7 and 8 cost less than Alternative 11 but these two alternatives do not address the 2022 violations summarized in Table 8.

BENEFITS OF THE PROPOSED PROJECT (Alternative 11)

- 1. Adds a 138-kV transmission source into an area of Williamson County which is forecasted to experience high load growth;
- 2. Provides the transmission infrastructure needed to reliably serve the two substations PEC identified for the area north of Highway 620 between Highway 183 and Interstate 35;
- 3. Supports findings in the 2012 ERCOT Long-term System Assessment describing the need to upgrade the existing 138-kV transmission path between the IH35 corridor and counties west of Austin;
- 4. Addresses all criteria violations (indentified for this evaluation) in 2018 and 2022 during single contingency (N-1) conditions (see Table 8);
- 5. Reduces the risk of load loss under Category C and Category D contingency conditions;
- 6. Addresses multiple transmission line overloads during ERCOT Category C and Category D contingency conditions;
- 7. Austin Energy assessments concluded that this project reduces east-to-west flows in the Austin Energy area as it is a direct parallel path for the Howard Lane-Jollyville line that also supports the area of study from the south; and,
- 8. Has similar system impact to Alternatives 6, 9, and 10 at a lower cost.

SUPPORTING INFORMATION

Steady State case files and idevs supporting this study are listed below.

Cases: 14DSB_2019_SUM1_Final_10152013.sav

14DSB 2020 SUM1 Final 10152013.sav

Load Changes: 2019BaseCaseLoad.idv

2022BaseCaseLoad.idv

2019withParmerLaneAddition.idv 2022withParmerLaneAddition.idv

Alternative 1: Alt 1_Chief Brady-Whitestone.idv Alternative 2: Alt 2_Chief Brady-Avery Ranch.idv Alternative 3: Alt 3_Chief Brady-Jollyville.idv

Alternative 4: Alt 4 Avery Ranch-Seward Junction.idv

Alternative 5: Alt 5_Jollyville-Seward Junction.idv **Alternative 6:** Alt 6_Round Rock-Seward Junction.idv

Alternative 7: Alt 7_Avery Ranch-Leander.idv Alternative 8: Alt 8_Jollyville-Leander.idv Alternative 9: Alt 9_Leander-Chandler.idv

Alternative 10: Alt 10 Leander-Round Rock South.idv

Alternative 11: Alt 11_Leander-Round Rock.idv **Alternative 12:** Alt 12_Leander-Chief Brady.idv



P.O. Box 1 Johnson City, Texas 78636-0001 (830) 868-7155 • 1-888-554-4732 www.pee.coop

Se habla español.

July 12, 2013

Mr. Sergio Garza Manager, System Planning and Protection LCRA P.O. Box 220 Austin, Texas 78767-0220

Dear Mr. Garza:

The SAIC study, completed June, 2012, considered a distribution solution as an option for serving load between RM1431 and Highway 29 along the 183A and the Parmer Lane/Ronald Reagan Blvd corridor. Based on dispersed load growth, the 20 year study life, the limited availability of feeder routes fed from substations on the edge of the study area, and PEC's experience and history of growth in the area, a "Distribution Only" solution is not an option.

The estimated density along the existing US Hwy 183 corridor is 1,290 meters/mi² or 7.6 MVA/ mi² (Based on a 8.7 mi² area, with a total load of 66.3 MVA and a meter count of 11,228, served by feeders BH20, BH40, BH130, BH140, WS60, and LA110). Assuming this same density along the Parmer Lane/183A corridor which has an area of 49.3 mi², this would equate to 374.7 MVA of load or a meter count of 63,597. Currently there are a total of 6 feeders from existing substations (Avery Ranch, Leander and Seward Junction) that serve the area. The present total load on these 6 feeders is 52.7 MVA. Also, one additional feeder from Leander is in the planning process for 2014 to serve load in the area. The total capacity of these 7 feeders will be 91 MVA. In order to pick up the remaining projected 283.7 MVA of load, two more substations (eight 46.7 MVA transformers) and approximately 21 feeders will be needed in the area to adequately serve the projected load.

Initial plans are that two additional feeders will be constructed from Seward Junction. Also, existing feeders from Avery Ranch, Whitestone and Blockhouse will be used to pick up some of the load in the area. This will equate to 39 MVA of load or the equivalent of 3 feeders. As a result, the two requested substations will have approximately 18 feeders serving from them.

PEC is also very concerned about reliability of service. In order to prevent large extended outages, PEC tries to limit load on each feeder to 10-13 MVA. This ensures that adjacent feeders have the capability to provide contingency back feeds and will allow smart grid options to switch loads automatically or remotely between feeders.

July 12, 2013

Along the existing 183 corridor, substations are located on average 2.2 miles apart. In the respective area east of 183A, the proposed substations will be approximately 4.0 miles apart and 2.5 miles from existing substations along the 183 corridor. The "Distribution Only" option would lead to much longer distances between substations and between substations and the load. In order to maintain high reliability for the PEC feeders in these densely loaded areas and to provide contingency back feeds, two to four miles between sources is preferred.

Another concern not addressed in the SAIC study is the City of Leander's arnbition and continued promotion to bring industrial load into the respective area. In the last few years, PEC has received numerous inquiries about the possibility of serving large industrial loads along the proposed transmission route east of the Leander substation. According to the City of Leander, they have responded to 92 business leads within the past 24 months for large loads being installed in the Leander area. The proposed transmission line would greatly enhance PEC's ability to serve the forecasted load that will likely materialize in the future.

In summary, due to the present high load growth and the forecasted future load in the area, the long distribution feeders that would be required to serve the projected load, the inability to acquire needed feeder routes from existing substations, the inability to provide adequate contingency ties, and the inability to maintain PEC's obligation to provide high reliability, the "Distribution Only" proposal in the SAIC study is not a viable plan.

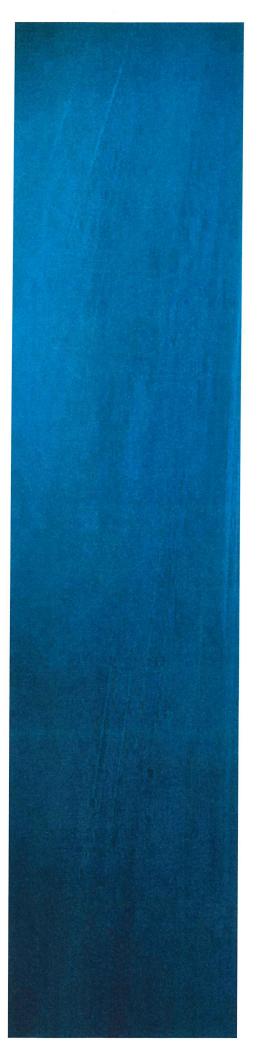
If you have any questions, please call me at (830) 868-4928 or Paul Lochte at (830) 868-5154.

Sincerely,

Robert A. Peterson, PE Sr. Director, Engineering

Moto A feat

RP:PL:rs



Final Report

Transmission & Distribution System Study

Pedernales Electric Cooperative, Inc. Johnson City, TX



June 2012



Final Report

Transmission & Distribution System Study

Pedernales Electric Cooperative, Inc. Johnson City, TX



June 2012



This report has been prepared for the use of the client for the specific purposes identified in the report. The conclusions, observations and recommendations contained herein attributed to SAIC constitute the opinions of SAIC. To the extent that statements, information and opinions provided by the client or others have been used in the preparation of this report, SAIC has relied upon the same to be accurate, and for which no assurances are intended and no representations or warranties are made. SAIC makes no certification and gives no assurances except as explicitly set forth in this report.

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Transmission & Distribution System Study Pedernales Electric Cooperative, Inc.

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EXECUTIVE SUMMARY

Purpose of Report

The SAIC Energy, Environment & Infrastructure, LLC (SAIC) project team's scope of work summarized in this report includes a substation and distribution assessment of two high growth areas, including the Cedar Park/Leander area and the IH 35/US HWY 130 Corridors in and east of Kyle, Texas. Additionally, a 2011 Load Forecast Report was completed for the entire distribution system including twenty-year peak load projections for summer and winter. From the system level load forecast, a substation and feeder forecast was developed to project peak loading down to the distribution feeder level for entire distribution system. During the project, the project team, in collaboration with Pedernales Electric Cooperative (PEC) staff, identified a portfolio of proposed capital improvement projects along main arterial distribution lines and at substations to address the projected growth those areas.

Summary of Analysis, Conclusions, and Recommendations

The PEC system was analyzed to serve a projected ten-year system summer peak demand of 1,827 MW. The system load was allocated to the targeted areas based on PEC staff's knowledge of the area.

Section 3 of this report provides details of substation capacity and distribution circuit deficiencies at the existing and projected loads. The findings were based on PEC's planning and operating criteria in Section 2. A summary of the identified deficiencies for the targeted area studied are given below based on this analysis:

- Twenty-seven substation transformers are expected to exceed the planning capacity during the ten-year planning horizon
- Sections of 39 distribution circuits are expected to exceed planning criteria for conductor loading
- Sections of 19 distribution circuits are expected to experience low voltage, based on planning criteria limits

Based on these analyses, the Ten-Year Electric System Plan includes the following:

- Load Level 1
 - Upgrade Kent St Substation transformer, T1, to a 46.7-MVA transformer
 - Construct one new Kent St 24.9-kV distribution feeder
 - Convert the 12.5-kV distribution served from Balcones Substation transformers T1 and T2 to 24.9 kV
 - Upgrade the Balcones Substation transformers T1 and T2 to 46.7-MVA transformers (converting T1 and T2 to 24.9 kV)



- Upgrade Buttercup Substation transformer T3 to a 46.7-MVA transformer
- Construct a new Seward Junction 24.9-kV distribution feeder
- Upgrade Blockhouse Substation transformer T1 to a 46.7-MVA transformer
- Construct a new Blockhouse 24.9-kV distribution feeder
- Upgrade Manchaca Substation transformers T1 and T2 to 46.7-MVA transformers
- Install a new 46.7-MVA transformer at Lehigh Substation
- Construct a new Lehigh 24.9-kV distribution feeder
- Upgrade Buda Substation transformers T1 and T2 to 46.7-MVA transformers
- Upgrade Go Forth Substation transformers T1 and T2 to 46.7-MVA transformers
- Install a new 46.7-MVA transformer at Canyon Substation
- Construct a new Canyon 24.9-kV distribution feeder
- Purchase land and construct new Alternative 1 Substation with (1) 138-24.9 kV,
 46.7-MVA transformer T1
- Construct new Alternative 1 feeder NEW1 and transfer load from Balcones feeder BL340 and BL330 to the new feeder
- Construct new Alternative 1 feeder NEW2 and transfer load from Balcones feeder BL230 to the new feeder

■ Load Level 2

- Purchase land for Alternative 2 new substation site
- Purchase land for Alternative 4 new substation site

■ Load Level 3

- Upgrade Whitestone Substation transformers T1 and T2 to 46.7-MVA transformers
- Install a new 46.7-MVA transformer at Blockhouse Substation
- Upgrade Turnersville Substation transformer T1 to a 46.7-MVA transformer
- Install a new 46.7-MVA transformer at Lehigh Substation
- Install new Alternative 2 138-24.9 kV, 46.7-MVA transformers T1 and T2.
- Construct new Alternative 2 feeder NEW1 and transfer load from Avery Ranch feeder AR250 and AR30 to the new feeder
- Construct new Alternative 2 feeder NEW3 and transfer load from Avery Ranch feeders AR240 and AR250
- Construct new Alternative 2 feeder NEW5 and transfer load from Avery Ranch feeder AR250 to the new feeder

- Construct new Alternative 2 feeder NEW6 and transfer load from Avery Ranch feeder AR30 to the new feeder
- Purchase land for Alternative 3 new substation site
- Construct new Alternative 4 Substation with (2) 138-24.9 kV, 46.7-MVA transformers T1 and T2
- Construct new Alternative 4 feeder NEW2 and transfer load from Whitestone feeder WS20 and Nameless feeder NL10 to the new feeder
- Construct new Alternative 4 feeder NEW1 and transfer load from Whitestone feeder WS50 to the new feeder
- Construct new Alternative 4 feeder NEW3 and transfer load from Buttercup feeder BR210 to the new feeder

■ Load Level 4

- Construct new Alternative 3 Substation with (1) 138-24.9 kV, 46.7-MVA transformer T1
- Construct new Alternative 3 feeder NEW1 and transfer load from Leander feeder LA230 to the new feeder
- Construct new Alternative 3 feeder NEW4 and transfer load from Leander feeder LA110 to the new feeder
- Construct new Alternative 3 feeder NEW5 and transfer load from Leander feeder LA250 and Seward Junction feeder SJ20 to the new feeder

Construct new Alternative 3 feeder NEW6 and transfer load from Leander feeders LA10 and LA130 to the new feeder

■ Load Level 5

- Install new Alternative 2 138-24.9 kV, 46.7-MVA transformer T3
- Construct new Alternative 2 feeder NEW8 and transfer load from Avery Ranch feeder AR30 to the new feeder
- Construct new Alternative 2 feeder NEW4 and transfer load from Avery Ranch feeder AR250 and Leander feeder LA230 to the new feeder
- Install new Alternative 3 138-24.9 kV, 46.7-MVA transformers T2 and T3
- Construct new Alternative 3 feeder NEW2 and transfer load from Leander feeder LA250 to the new feeder

■ Load Level 6

- Construct a new Balcones 24.9-kV distribution feeder
- Construct a new Blockhouse 24.9-kV distribution feeder
- Construct a new Go Forth 24.9-kV distribution feeder
- Construct new Alternative 4 feeder NEW5 and transfer load from Whitestone feeder WS60 to the new feeder

EXECUTIVE SUMMARY

■ Load Level 7

- Upgrade Lehigh Substation transformer T1 to a 46.7-MVA transformer
- Construct a new Lehigh 24.9-kV distribution feeder
- Install new Alternative 2 138-24.9 kV, 46.7-MVA transformer T4.
- Construct new Alternative 2 feeder NEW7 and transfer load from Avery Ranch feeder AR240 to the new feeder.
- Install new Alternative 4 138-24.9 kV, 46.7-MVA transformer T3
- Construct new Alternative 4 feeder NEW4 and transfer load from Whitestone feeder WS20 to the new feeder

■ Load Level 8

 Construct new Alternative 3 feeder NEW3 and transfer load from Leander feeder LA230 and LA210 to the new feeder

■ Load Level 10

■ Construct new Alternative 2 feeder NEW2 and transfer load from Avery Ranch feeder AR250 and Leander feeder LA230 to the new feeder

■ Load Levels 1 -10:

 Various distribution improvements to relieve loading and improve conditions for contingency switching To determine the cost of system improvements for the PEC electric system over the next ten years, expenditures required to serve projected loads as a result of customer growth were estimated for each year. The projected capital requirements are as follows:

Table ES-1
Ten-Year Electric System Plan Capital Requirements

Load Level	Estimated Year¹	Capital Requirements (2011 Dollars)
1	2011	\$44,516,600
2	2012	\$1,395,200
3	2013	\$23,697,700
4	2014	\$4,328,500
5	2015	\$5,561,500
6	2016	\$2,491,100
7	2017	\$8,121,300
8	2018	\$379,600
9	2019	\$59,400
10	2020	\$51,700
	Total	\$90,602,600

Note: (1) Calendar Year

Section 1 INTRODUCTION

Sound system planning is essential to provide management with guidance to economically develop the electric system for Pedernales Electric Cooperative (PEC) to ensure adequate and reliable service at the lowest cost to customers. The planning should provide for an orderly development of the system such that the new investment in facilities is in step with load growth and revenue. System planning should include the following:

- Improvement of the quality of service to customers as improvement opportunities occur
- Expansion of the existing system to meet future load growth beyond the present design requirements
- Economic evaluation of the construction of new facilities to meet the required capacity

By using this approach, interim changes and system additions will be compatible with the capacity level needs as system load growth occurs. To maintain a reasonable economic balance in system planning, the three main components of the system – power supply, transmission, and distribution – should be evaluated.

Expected growth in the service area will create a greater peak load demand for PEC. Along with maintaining existing customers, this anticipated growth has led PEC to desire an assessment of their long-term system requirements based on a ten-year planning horizon. Included in this report are the following:

- Summary of the basic data, criteria, and assumptions used to evaluate the system
- Analysis of the existing electric system to determine current and future deficiencies
- Development and comparison of alternative solutions to meet long-term system requirements
- Development of a Ten-Year Electric System Plan
- Cost estimates for the ten-year capital requirements to achieve the construction plan

Section 2 lists planning criteria based on PEC's system reliability and performance goals. SAIC, in collaboration with PEC, analyzed the targeted areas of the existing PEC electric system at the ten-year load level of 1827.0 MW and the five-year load level of 1486.3 MW.

Section 3 contains the analysis findings. Alternatives to serve the future planning load can be found in Section 4. The project team evaluated the long-range alternatives to determine the preferred Ten-Year Electric System Plan presented in Section 5.



To keep the Electric System Plan aligned with long-range system goals, SAIC recommends that PEC update the Ten-Year Electric System Plan at intervals no longer than five years apart or whenever major changes occur in:

- The economy
- Local Growth/Development
- Power Supply
- Physical Plant

Annually or bi-annually, it will be necessary to perform studies with a short-range planning horizon in order to amend current plans or accommodate system changes or problems. Short-range studies should align with the concepts and intent of the Ten-Year Electric System Plan.

1.1 General Basis of Study

The projected system peak load and number of customers served used in the report were based on the 2011 Load Forecast prepared by R. W. Beck, Inc., now SAIC. A copy of the system forecast is given in Appendix A.

An analysis was performed on two fast growing areas of the substations, distribution lines, and major equipment of the existing system using as a basis the design criteria herein of conductor loading, voltages, physical conditions, and reliability. Cooper Power Systems CymDIST engineering analysis version 5 software was used to analyze the distribution circuits. The criteria given in Section 2 form the basis of this analysis.

In the preparation of this Report, including the opinions contained herein, we have made certain assumptions and used certain considerations with respect to conditions that may occur in the future. While we believe these considerations and assumptions are reasonable and attainable based on conditions known to us as of the date of this Report, they are dependent on future events. Actual conditions may differ from those assumed herein or from the assumptions provided by others; therefore, the actual results will vary from those estimated. In addition, field conditions encountered during design may impact some of the projects.

Section 2 BASIC DATA AND ASSUMPTIONS

2.1 Operating System Statistics

Pedernales Electric Cooperative (PEC) provides service to approximately 232,335 customers located in South Central Texas. The service area is a rapidly growing area because of its proximity to the Austin and San Antonio metropolitan areas to the east and south respectively. PEC headquarters resides in Johnson City and the service area is organized in eight operating districts.

PEC currently has 64 distribution substations that are supplied by 69-kV and 138-kV transmission lines owned by LCRA and others. These 64 substations supply 265 distribution feeder lines that are used to provide retail electric service to PEC members throughout its service area. The PEC distribution system is operated at two voltage levels, 12.47/7.2 kV and 24.9/14.4 kV.

The areas analyzed for this T&D System Study include the US 183 corridor in the Cedar Park District and the Interstate Highway 35 and US 130 corridors in the Kyle-Buda Districts. The targeted area contains 16 substations, all operated at 24.9/14.4 kV, with the exception of two transformers at Balcones Substation.

2.2 System Planning Load

SAIC, with the assistance of PEC's management and staff, prepared a 2011 Load Forecast (LF) with system-level peak load projections for four different load growth scenarios. The study involved an econometric forecasting method, which makes use of regression to establish historical relationships between energy consumption and various explanatory variables. Forecasts of seasonal peak demand were then developed from the resulting energy requirements and assumed load factors, generally based on recent historical averages.

The 2011 Load Forecast results include a Base Case that reflects a mid-range economic scenario utilizing economic projections provided by IHS Global Insight, a widely utilized provider of such projections in the utility industry. The Base Case results reflect projected growth rates for system net energy for load (NEL) of approximately 4.3 percent over 2011-2020 and 3.5 percent over 2021-2030. This compares to historical growth over 2001-2010 of approximately 4.8 percent.

Similarly, the Base Case results reflect projected growth rates for summer and winter peak demand of approximately 4.2 percent over 2011-2020 and 3.5 percent over 2021-2030. This compares to historical growth over 2001-2010 of approximately 5.3 percent for the summer peak demand.

PEC plans to construct and maintain an electric system that can provide adequate and reliable service during summer and winter peak load periods. To assist PEC in this effort, the load forecast is based on Load Levels (LL) with exact loads assigned to



specific years. In reality, loads may develop more quickly or more slowly than anticipated. If the actual load develops as projected in the load forecast, the year given would match the Load Level. To avoid the impression that facilities need to be constructed for a specific year versus a specific Load Level, the remainder of this report refers to Load Levels and the anticipated years.

The peak load projections from the Load Forecast include the addition of spot loads, or specific known developments, in certain areas of the PEC distribution system. Discussions between PEC and SAIC led to the following spot load additions:

- 12 MW served from Avery Ranch Substations by LL10
- 8 MW served from Blockhouse Substation by LL10, which increases to 20 MW by LL20
- 18 MW served from Leander Substation by LL10, which increases to 51 MW by LL20

The coincident summer peak projections for the Base Case and the three other cases developed are shown in Table 2-1 and Figure 2-1.

Table 2-1
Summer System Forecast Summary

			Peak Demand (MW)				
		Anticipated Year	Projected				
			Actual	Mid-range Economic Case		Normal Weather	
				Normal Weather	Severe Weather	Low Economic Case	High Economic Case
	0	2010	1,217.5	*****			
	1	2011		1,196.4	1,258.6	1,167.6	1,225.2
	2	2012		1,243.4	1,308.1	1,196.3	1,290.5
	3	2013		1,295.6	1,362.9	1,236.3	1,354.6
	4	2014		1,353.7	1,424.1	1,282.1	1,425.0
	5	2015		1,412.9	1,486.3	1,328.7	1,496.8
	6	2016		1,472.6	1,549.2	1,375.4	1,569.5
	7	2017		1,533.4	1,613.2	1,422.6	1,643.8
	8	2018		1,597.3	1,680.3	1,473.2	1,720.8
	9	2019		1,664.5	1,751.1	1,526.9	1,801.5
	10	2020		1,736.7	1,827.1	1,584.8	1,887.9

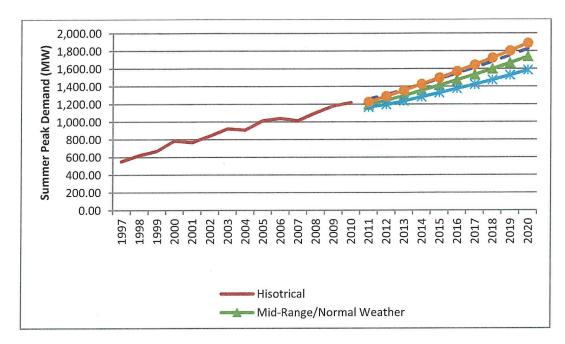


Figure 2-1. Summer System Forecast

Coincident peak (CP) summer and winter demand projections were developed for the study. Because the targeted areas of the PEC electric system studied are typically summer peaking, the peak load projections for the summer season were used in this study. The results of the load forecast using the *mid-range economic case and severe weather conditions* reflect that system energy requirements are expected to grow by approximately 4.2 percent, annually, during the 2011-2020 period. As a result, the load forecast projects a system peak load of 1,258.6 MW in 2011 and 1,827.1 MW in 2020.

2.3 Load Allocation

The service area was reviewed with PEC management and staff to determine potential load growth. Relative growth factors were calculated from projected growth percentages for each feeder and substation transformer, provided by PEC. They are included in the substation and feeder forecast and summarized in Table 2-2. The relative growth factor provides a sense of how substation transformers are projected to grow relative to each other. An average system growth was assigned a relative growth factor of 1.0.

Table 2-2
Relative Substation Transformer Growth Factors

Substation Transformer	Relative Growth Factor
Avery T1	1.12
Avery T2	1.21
Balcones T1	0.56
Balcones T2	0.93
BalconesT3	1.30
Balcones T4	0.93
Blockhouse T1	0.93
Blockhouse T2	1.12
Buda T1	1.12
Buda T2	1.12
Buttercup T1	0.93
Buttercup T2	1.12
Buttercup T3	1.12
Goforth T1	1.12
Goforth T2	1.12
Kent Street	1.12
Kyle	1.12
Leander T2	1.12
Leander T3	1.12
Leander T4	1.12
Lehigh	1.12
Manchaca T1	0.74
Manchaca T2	0.93
Nameless T1	0.74
Nameless T2	0.93
Rohr	0.00
Seward Junction T1	1.12
Seward Junction T2	1.12
Turnersville T1	1.12
Turnersville T2	1.12
Whitestone T1	1.12
Whitestone T2	1.12

Loads for known, upcoming commercial, and residential developments were estimated and added to the engineering model and substation and feeder forecast as "spot loads." The spot loads were assumed to be additional load to the total system growth. The projected system load was proportionately allocated to various areas based on the relative growth factors assigned, and the spot loads were added to specific feeders

based on the PEC's knowledge of the area. Exhibit 1 includes the allocated substation and feeder loads as well as the spot loads.

2.4 System Planning Criteria

PEC follows the planning guidelines described in the Lower Colorado River Authority (LCRA) & Association of Wholesale Customers (AWC) Distribution System Planning Criteria. In those guidelines, there are improvements to be considered prior to considering new substation construction. They are:

- Transfer of load to adjacent substation feeders where surplus capacity is available provided the transfer will not adversely affect system performance.
- Installation of voltage regulators.
- Installation of shunt capacitors as needed to maintain a minimum delivery point power factor of 97 percent lagging during on-peak loading conditions and a maximum delivery point power factor of 97 percent leading during off-peak loading conditions.
- Installation of sectionalizing devices and/or lightning arrestors.
- Reconductoring or multi-phasing of existing distribution lines.
- Construction of new feeders or distribution tie lines.
- Conversion of distribution lines to a higher operating voltage where such an upgrade is compatible with the multiple voltage operating environment of the distributor's system.
- Upgrading of power transformer capacity at existing substation sites.

The following set of criteria used to determine system improvements in this Transmission & Distribution System Study was developed through discussions with PEC and SAIC staff.

2.4.1 Substation Voltage Regulation

Voltage regulation was assumed for each substation such that a voltage drop could be experienced on the transmission system and, at peak loads, 126 volts could be supplied from the 24.9-kV substation secondary bus and 125 volts could be supplied form the 12.47-kV substation secondary bus, assuming a system base of 120 volts.

2.4.2 Distribution Voltage Drop

For the design load, a 5-percent drop was assumed to be the maximum allowable voltage drop from the substation secondary bus to the end of the distribution feeders. Corrective action shall be considered for voltages less than 120 volts, assuming a system base of 120 volts, under normal operating conditions. Voltage regulators are limited to two units in series on any given distribution circuit.

2.4.3 Distribution Line Routing

Existing distribution line routing was planned to be used where possible. In addition, where new or upgraded distribution lines are required, existing routes over new routes were selected to avoid any environmentally sensitive areas.

2.4.4 Reliability

Single-contingency planning is generally used to enhance reliability where appropriate. Such planning assumes that facilities can provide adequate service with any one substation transformer or transmission line out of service.

PEC plans for firm capacity, or N-1, to have capacity available for single-contingency planning. For substations with multiple transformers, loading is limited to 50 percent of the top 65°C MVA nameplate capacity. For single transformer substations, loading is limited to 90 percent of capacity.

PEC also depends on having reserve capacity available to transfer load through the distribution system in order to minimize the impact of a substation outage on customers. To allow for transfer capacity, estimated loading on distribution lines is flagged if it exceeds 65 percent of the summer rated capacity for the backbone conductor of each feeder. During contingency situations, conductors shall be allowed to reach 100 percent of capacity.

2.4.5 Distribution Line Ratings

The calculated rating for the distribution conductors and underground cables in Tables 2-3 and 2-4, respectively, were extracted from the PEC provided engineering model. To allow for load transfers between feeders in the distribution system, the maximum loading on three-phase tie lines was limited to 65 percent of the calculated rating. For emergency conditions, conductors are allowed to be loaded to 100 percent of capacity.

Table 2-3
Summer Overhead Conductor Ratings

Conductor	Calculated Rating (amps)	Planning Capacity (amps)
6 CU	120	78
4 ACSR	170	111
2 ACSR	200	130
1/0 ACSR	210	137
336 AAC	410	267
795 AAC	700	455

Table 2-4
Underground Conductor Ratings

Calculated Rating Planning Cotor (amps) (amp

Conductor	Calculated Rating (amps)	Planning Capacity (amps)
1/0 AL	211	137
1/0 CU	260	169
2/0 CU	295	192
4/0 CU	374	243
500 CU	596	387
1000 AL	680	442

2.5 Financial Criteria

2.5.1 Inflation

Table 2-5 presents recent construction cost trends for transmission, substation, and distribution plant according to The Handy-Whitman Index of Public Utility Construction Costs up to January 2010.

Table 2-5
Recent Cost Trends of Electric Utility Construction for the South Central Region

Construction and Equipment Type	2008 Cost Escalation	2009 Cost Escalation	2010 Cost Escalation
Transmission Plant	8.45%	6.98%	-3.40%
Substation Plant	6.30%	5.53%	3.37%
Distribution Plant	15.52%	2.69%	1.68%

The Blue Chip Economic Indicators (BCEI) projects an average long-term inflation rate of approximately 2.7 percent, which reflects the impacts of the current economic recession. Based on discussions between PEC staff and SAIC and uncertain future electric facility construction cost trends, for the study period, an inflation rate of 5.0 percent was chosen for distribution upgrades.

2.5.2 Cost of Capital

The interest rate, or cost of capital, is defined as the rate paid for long-term debt to finance capital improvements. Based on discussions with PEC staff, a discount rate of 6.51 percent was selected for the alternative present worth cost analysis.

2.5.3 Annual Fixed Charge Rates

The annual fixed charge rate, when applied to the initial plant investment, approximates the annual costs for operating and maintaining the system. The annual

fixed charge rate components include taxes, operation and maintenance (O&M), straight-line depreciation, and cost of capital. The annual depreciation rate is based on an equipment life of 40 years for transmission, 50 years for substation, and 33 years for distribution. Financial statements from PEC and discussions with PEC staff led to the breakdown of the fixed charge rates into the distribution plant as summarized in Table 2-6.

Table 2-6
Annual Fixed Charge Rates (%)

		Plant	***************************************
Item	Transmission	Substation	Distribution
Cost of Capital	6.51%	6.51%	6.51%
Depreciation	2.50%	2.00%	3.00%
Operation and Maintenance	2.13%	2.84%	3.56%
Taxes	0.50%	0.50%	0.50%
Total	11.64%	11.86%	13.58%

2.5.4 Cost of Power

The average cost of power between 2008 and 2010 was \$0.06966 per kWh, based on information provided by PEC. Trends for the current market are anticipating an increase in power costs during the planning period; therefore, power costs were assumed to increase at a rate of 5 percent per year over the long-term period.

2.5.5 Cost of Losses

The annual cost of load losses was calculated at \$148.40 per peak kW of loss, based on the existing power rates for calendar year 2010. A three-year average annual load factor of 45.12 percent included in the calculation of cost of losses was derived from monthly demand and energy information for 2008 – 2010 provided by PEC. The calculation of the cost of losses is given in Exhibit 2.

2.6 Construction Cost Estimates

The cost estimates presented in Table 2-7 were used to develop the estimated cost of improvements for proposed projects. PEC provided the estimated costs including engineering, construction administration, and owners' overhead expenses, based on recent actual project costs. Costs for new substations, substation transformer additions and upgrades, and distribution equipment were provided by PEC. They are presented in Table 2-8.

BASIC DATA AND ASSUMPTIONS

Table 2-7
Distribution Cost Estimates

Distribution (24.9/14.4 kV)	2011 Estimated Cost \$/Mile
New Lines	
1φ; OH, 4 ACSR	\$40,000
1φ; OH, 1/0 ACSR	\$48,000
1φ; UG 1/0 AL	\$50,000
3φ; OH, 4 ACSR	\$60,000
3φ; OH, 1/0 ACSR	\$78,000
3φ; OH, 336 AAC	\$125,000
3φ; UG 1/0 AL	\$150,000
2 ckt, 3φ; OH 336 AAC	\$200,000
3φ; OH, 795 AAC	\$206,000
2 ckt, 3φ; OH, 795 AAC	\$278,000
3φ; UG 1000 AL	\$680,000
2 ckt, 3φ; UG 1000 AL	\$918,000
3φ; UG 500 CU	\$400,000
Line Reconductor	
3φ; OH, 4 ACSR	\$30,000
1φ; OH, 1/0 ACSR	\$44,000
3φ; OH, 1/0 ACSR	\$50,000
3φ; OH, 1/0 ACSR	\$99,000
3φ; OH, 336 AAC	\$116,000
3φ; OH, 795 AAC	\$186,000
2 ckt, 3φ; OH, 795 AAC	\$311,000
Voltage Conversion	
12.47 kV to 24.9 kV Conversion	\$18,000

Table 2-8
Equipment Cost Estimates

Distribution Equipment & Substation	2011 Estimated Cost (\$)
Substation Upgrades and New Construction	
Upgrade to a 46.7-MVA transformer	\$2,480,000
Install a new 37.3-MVA transformer at an existing site	\$3,000,000
Install a new 46.7-MVA transformer at an existing site	\$3,080,000
New Substation with (1) 46.7 MVA transformer and a 24.9-kV distribution bus	\$4,100,000
New Substation with (3) 46.7 MVA transformers and a 24.9-kV distribution bus	\$5,600,000
New Substation with (4) 46.7 MVA transformers and a 24.9-kV distribution bus	\$8,600,000
Land Purchase for each substation site	\$120,000
Distribution Equipment	
Three-phase Overhead Air Break Switch	\$15,000
Three single-phase voltage regulators	\$60,000

2.7 Computer Model of System

PEC has provided the electric distribution system in Cooper Power Systems CymDIST version 5 software. Loading in the model is based on the capacity of the distribution transformer. PEC's staff provided these loads and the projected loads were entered at their specific locations in the model.

After kW loading of spot loads were established, the load flows for each feeder were prepared. The load flows provide information such as conductor loading, calculated line losses, power factor information, and voltage drop along line sections. The load flow information from the computer model was compared to the conductor loading and voltage drop criteria as outlined in this Transmission & Distribution System Study. Recommendations are based on these results.

Section 3 ANALYSIS OF EXISTING SYSTEM

The purpose of this section is to identify the system deficiencies at the existing and projected loads based on the Pedernales Electric Cooperative (PEC)'s planning and operating criteria defined in Section 2. The analysis will evaluate:

- Substation Capacity
- Distribution Circuit Performance

3.1 Existing Load Analysis

3.1.1 Substation Capacity

The targeted area of the PEC distribution system selected for this study is served by 16 substations. The transformers are equipped with load tap changers. The rated capacity and voltage of the substation transformers are listed in Table 3-1.

Table 3-1
Existing Substation Transformer Capacity Summary

	•	' '	•
Substation Name	Voltage (kV)	Configuration QtyPhase- Rating at 65°C (MVA)	Top Nameplate Rating (MVA)
Avery Ranch T1	138 – 24.9 kV	(1) 3Ø 22.4 / 29.8 / 37.3	37.3
Avery Ranch T2	138 - 24.9 kV	(1) 3Ø 22.4 / 29.8 / 37.3	37.3
Avery Ranch T3	138 – 24.9 kV	(1) 3Ø 28.0 / 37.3 / 46.7	46.7
Balcones T1	138 – 12.47 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4
Balcones T2	138 – 12.47 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4
BalconesT3	138 – 24.9 kV	(1) 3Ø 28.0 / 37.3 / 46.7	46.7
Balcones T4	138 – 24.9 kV	(1) 3Ø 22.4 / 29.8 / 37.3	37.3
Blockhouse T1	138 – 24.9 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4
Blockhouse T2	138 – 24.9 kV	(1) 3Ø 22.4 / 29.8 / 37.3	37.3
Buda T1	138 – 24.9 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4
Buda T3	138 – 24.9 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4
Buttercup T1	138 – 24.9 kV	(1) 3Ø 22.4 / 29.8 / 37.3	37.3
Buttercup T2	138 – 24.9 kV	(1) 3Ø 22.4 / 29.8 / 37.3	37.3
Buttercup T3	138 – 24.9 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4
Goforth T1	138 – 24.9 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4
Goforth T2	138 – 24.9 kV	(1) 3Ø 22.4 / 29.8 / 37.3	37.3
Kent Street	138 – 24.9 kV	(1) 3Ø 22.4 / 29.8 / 37.3	37.3
Kyle	138 – 24.9 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4



Substation Name	Voltage (kV)	Configuration QtyPhase- Rating at 65°C (MVA)	Top Nameplate Rating (MVA)
Leander T2	138 – 24.9 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4
Leander T3	138 – 24.9 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4
Leander T4	138 – 24.9 kV	(1) 3Ø 22.4 / 29.8 / 37.3	37.3
Lehigh	138 – 24.9 kV	(1) 3Ø 22.4 / 29.8 / 37.3	37.3
Manchaca T1	138 – 24.9 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4
Manchaca T2	138 – 24.9 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4
Nameless T1	138 – 24.9 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4
Nameless T2	138 – 24.9 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4
Rohr	138 – 24.9 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4
Seward Junction T1	138 – 24.9 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4
Seward Junction T2	138 – 24.9 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4
Turnersville T1	138 – 24.9 kV	(1) 3Ø 13.4 / 17.9 / 22.4	22.4
Turnersville T2	138 – 24.9 kV	(1) 3Ø 22.4 / 29.8 / 37.3	37.3
Whitestone T1	138 – 24.9 kV	(1) 3Ø 22.4 / 29.8 / 37.3	37.3
Whitestone T2	138 – 24.9 kV	(1) 3Ø 22.4 / 29.8 / 37.3	37.3
Total Capacity			981.5

For the selected area, the total existing substation transformer capacity is approximately 981.5 MVA. The 2010 metered peak loading, compared to the total substation transformer capacity, is given in Table 3-2. Based on the existing loading, 20 of the substation transformers are loaded above the planning criteria of 50 percent.

Table 3-2
Historical Substation Transformer Loading

Substation Name	2010 Summer Peak (MW)	Total Capacity (MVA)	2010 Power Factor at Peak (%)	Percent Loaded (%)
Avery T1	27.94	37.3	97.8%	76.6%
Avery T2	30.82	37.3	96.7%	85.4%
Balcones T1	9.66	22.4	96.4%	44.7%
Balcones T2	13.54 ⁵	22.4	96.1%	62.9%
BalconesT3	15.60	47.6	96.1%	34.1%
Balcones T4	26.89	37.3	97.3%	74.1%
Blockhouse T1	13.28	22.4	96.8%	61.2%
Blockhouse T2	23.87	37.3	95.0%	67.4%
Buda T1	21.23	22.4	94.8%	100.0%
Buda T3	18.34	22.4	97.6%	83.9%
Buttercup T1	13.50	37.3	99.3%	36.4%
Buttercup T2	17.32	37.3	97.9%	47.4%

Substation Name	2010 Summer Peak (MW)	Total Capacity (MVA)	2010 Power Factor at Peak (%)	Percent Loaded (%)
Buttercup T3	19.12	22.4	95.9%	89.0%
Goforth T1	13.37	22.4	97.9%	61.0%
Goforth T2	27.19	37.3	96.4%	75.6%
Kent Street	10.17	37.3	93.2%	29.3%
Kyle	19.40	22.4	99.1%	87.4%
Leander T2	18.27	22.4	96.9%	84.2%
Leander T3	11.66	22.4	97.9%	53.2%
Leander T4	26.50	37.3	95.3%	74.5%
Lehigh	10.30	37.3	95.5%	28.9%
Manchaca T1	16.61	22.4	96.0%	77.2%
Manchaca T2	12.12	22.4	99.2%	54.5%
Nameless T1	8.32	22.4	100.0%	37.1%
Nameless T2	10.87	22.4	97.2%	49.9%
Rohr	6.16	22.4	76.6%	35.9%
Seward Junction T1	13.69	22.4	99.9%	61.2%
Seward Junction T2	1.97	22.4	99.4%	8.8%
Turnersville T1	17.69	22.4	95.3%	82.9%
Turnersville T2	13.59	37.3	94.2%	38.7%
Whitestone T1	34.30	37.3	97.5%	94.3%
Whitestone T2	22.01	37.3	96.5%	61.1%

Note: Based on load and power factor data provided by PEC for the 2010 peak.

3.1.2 Distribution Circuit Performance

Voltage drop and load flow calculations were made with the engineering model, assuming the system normal configuration and load allocations based on the 2010 summer peak. The load flow results of the distribution system were completed for the existing and future peak loading conditions including: the existing 2010 load (LL0), the five-year load level (LL5), and the ten-year load level (LL10). A review of the results provides a comprehensive summary of capacity and voltage deficiencies anticipated on the existing distribution system at present and future loads. The voltage conditions are calculated on a 120-volt base.

For planning purposes, the conductor loading was limited to 65 percent of the calculated capacity and voltage was flagged at 120 V. The calculated load capacities for each conductor are given in Tables 2-3 and 2-4.

The computer analysis at LL0 revealed that:

- Sections of the following feeder(s) exceed a 5% volt drop:
 - Avery Ranch Feeder AR130; Balcones Feeders BL80 and BL330; Buda Feeder BD10; Kyle Feeders KY20, KY30, and KY50; Leander Feeders LA10, LA130,

LA230, and LA250; Nameless Feeders NL120 and NL20; Rohr Feeders RH20 and RH30; Seward Junction Feeders SJ150 and SJ20; Turnersville Feeders TV130 and TV50

- Sections on the following feeder(s) exceed 65% of the conductor ratings:
 - Avery Ranch Feeders AR30 and AR130; Balcones Feeders BL20, BL80, Bl90, BL330; Blockhouse Feeder BH130; Buda Feeder BD10; Buttercup Feeders BR20, BR210, and BR330; Goforth Feeder GF110; Kyle Feeders KY20 and KY30; Leander Feeders LA10, LA130, and LA250; Manchaca Feeder MC50; Nameless Feeders NL120 and NL20; Turnersville Feeder TV50; Whitestone Feeders WS40 and WS60

3.2 Projected Load Analysis

3.2.1 Substation Capacity

The projected system loads were allocated to the primary metered feeders as shown in Exhibit 1. The planning substation transformer capacity was compared to the projected feeder loads to identify the load level in which the load would exceed the capacity. All but four of the PEC substation transformers evaluated will exceed the planning criteria by LL10.

Table 3-3
LL10 Substation Transformer Loading

0.1.4.6. N	2020 Summer Peak	Total Capacity	2010 Power Factor at	Percent
Substation Name	(MW)	(MVA)	Peak (%)	Loaded (%)
Avery T1	55.9	37.3	97.8%	153.2%
Avery T2	49.6	37.3	96.7%	137.5%
Balcones T1	12.1	22.4	96.4%	56.0%
Balcones T2	19.6	22.4	96.1%	91.1%
BalconesT3	26.0	47.6	96.1%	56.8%
Balcones T4	38.8	37.3	97.3%	106.9%
Blockhouse T1	19.2	22.4	96.8%	88.5%
Blockhouse T2	45.2	37.3	95.0%	127.6%
Buda T1	33.0	22.4	94.8%	155.4%
Buda T3	28.5	22.4	97.6%	130.4%
Buttercup T1	19.5	37.3	99.3%	52.6%
Buttercup T2	26.9	37.3	97.9%	73.7%
Buttercup T3	29.7	22.4	95.9%	138.3%
Goforth T1	20.8	22.4	97.9%	94.8%
Goforth T2	42.2	37.3	96.4%	117.4%
Kent Street	15.8	37.3	93.2%	45.4%

Substation Name	2020 Summer Peak (MW)	Total Capacity (MVA)	2010 Power Factor at Peak (%)	Percent Loaded (%)
Kyle	30.1	22.4	99.1%	135.6%
Leander T2	28.4	22.4	96.9%	130.8%
Leander T3	18.1	22.4	97.9%	82.5%
Leander T4	60.3	37.3	95.3%	169.6%
Lehigh	16.0	37.3	95.5%	44.9%
Manchaca T1	22.3	22.4	96.0%	103.7%
Manchaca T2	17.5	22.4	99.2%	78.8%
Nameless T1	11.2	22.4	100.0%	50.0%
Nameless T2	15.7	22.4	97.2%	72.1%
Rohr	6.2	22.4	76.6%	36.1%
Seward Junction T1	21.2	22.4	99.9%	94.7%
Seward Junction T2	3.1	22.4	99.4%	13.9%
Turnersville T1	27.5	22.4	95.3%	128.8%
Turnersville T2	21.1	37.3	94.2%	60.1%
Whitestone T1	53.2	37.3	97.5%	146.3%
Whitestone T2	34.2	37.3	96.5%	95.0%

Note: Based on load data from the 2011 Load Forecast. Power factor provided and used from the 2010 peak.

3.2.2 Distribution Circuit Performance

The distribution deficiencies for the existing system at the five- and ten-year load levels are presented below.

In addition to the feeders listed from the LL0 analysis, at LL5:

- Sections on the following feeder(s) exceed 65% of the conductor ratings:
 - Balcones Feeders BL220 and BL320; Buda Feeder BD130; Goforth Feeder GF120; Leander Feeder LA210; Seward Junction Feeder SJ20

At LL10, in addition to the feeder deficiencies listed at LL0 and LL5:

- Sections of the following feeder(s) exceed a 5% volt drop:
 - Balcones Feeder BL90; Goforth Feeder GF120
- Sections on the following feeder(s) exceed 65% of the conductor ratings:
 - Blockhouse Feeders BH140 and BH40; Buda Feeder BD130; Buttercup Feeder BR10; Goforth Feeder GF20; Kent Street Feeder KS20; Kyle Feeder KY50; Seward Junction Feeder SJ30; Whitestone Feeders WS10, WS20, and WS50

Section 4 ALTERNATIVE OPTIONS

4.1 Exploratory Plans

Various system expansion plans can adequately serve the projected load. The purpose of this section is to detail the alternative plans investigated and to identify a recommended plan that will adequately serve the customers' present load, the load as the system expands, and the planning load selected. To identify the recommended plan, criteria were developed in Section 2 to select and economically compare the alternative expansion plans.

Several alternatives were identified to address substation and distribution system deficiencies and reliability issues. Each alternative that was considered corrected the identified system deficiencies and was evaluated on a 20-year present-worth cost basis. The Base Case solution includes upgrades to existing substations and distribution infrastructure. No new substations are recommended in the Base Case solution. The other four alternatives presented include construction of a new substation site in lieu of completing some of the recommended Base Case solutions.

The areas analyzed for this Transmission & Distribution System Study include the US 183 corridor in the Cedar Park District and the Interstate Highway 35 and US 130 corridors in the Kyle-Buda Districts. No new substation sites were evaluated for the Kyle-Buda Districts. The four alternatives include recommended new substations in the Cedar Park District only.

Alternatives were developed to serve the long-range planning load and include the following:

Base Case: Upgrades to existing facilities to correct substation and distribution system deficiencies at the projected load levels, including:

- Substation transformer upgrades at Kent St, Whitestone, Nameless, Balcones, Buttercup, Avery Ranch, Seward Junction, Leander, Blockhouse, Manchaca, Lehigh, Buda, Turnersville, and Go Forth Substations
- Substation transformer additions at Kent St, Avery Ranch, Leander, Blockhouse, Lehigh, and Canyon Substations
- New feeder additions at Kent St, Balcones, Avery Ranch, Seward Junction, Leander, Blockhouse, Lehigh, and Go Forth Substations
- Various distribution improvements including switching, the addition of voltage regulators, and reconductoring to relieve loading

Alternative 1 includes constructing a new substation southwest of Balcones on the edge of the PEC service territory. It is recommended to relieve substation transformer loading at Balcones and heavy feeder loading. The new substation location brings a



source closer to some of those customers who are as much as 6.5 miles from the substation that serve them.

Alternative 2 includes the construction of a substation northeast of Avery Ranch in an area with a significant amount of growth expected over the planning horizon. It is expected to relieve substation transformer and feeder loading at Avery Ranch Substation and feeder loading at Leander Substation.

Alternative 3 includes the construction of a new substation southeast of Leander Substation. This is also an area of expected high growth. It is recommended to relieve substation transformer loading at Leander and Seward Junction Substations and feeder loading at Leander Substation.

Alternative 4 recommends constructing a new substation west of Whitestone Substation to relieve substation transformer loading at Whitestone, Nameless, and Buttercup Substations, as well as feeder loading at Whitestone and Buttercup Substations.

4.2 Methodology

After the alternatives were identified through discussions among the PEC management and staff and SAIC, the analysis for each alternative was prepared as follows:

- Proposed improvements were modeled and computerized load-flow, voltage-drop, and loss calculations were prepared to determine whether each alternative provided adequate service to the customers.
- Substation, and distribution cost estimates were prepared for initial capital costs and cost of losses. Transmission costs are not included, but will be developed at a later time with the analysis of the transmission system performed by LCRA.
- The project descriptions and estimated construction costs are given in Exhibits 4 through 8 for the respective alternatives.
- A present-worth comparative cost summary was prepared for each alternative. The assumptions used in the present-worth analyses are summarized in Exhibit 3. The present-worth calculations are included in Exhibits 4 through 8 for the respective alternatives.

4.3 Base Case

The following is a brief summary of the Base Case Alternative. The projects included are shown in Exhibit 4.

- Load Level 1
 - Install a new 46.7-MVA transformer at Kent St Substation
 - Upgrade Kent St Substation transformer, T1, to a 46.7-MVA transformer
 - Construct one new Kent St 24.9-kV distribution feeder

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- Convert the 12.5-kV distribution served from Balcones Substation transformers T1 and T2 to 24.9 kV
- Upgrade the Balcones Substation transformers T1, T2, and T4 to 46.7-MVA transformers (converting T1 and T2 to 24.9 kV)
- Upgrade Buttercup Substation transformer T3 to a 46.7-MVA transformer
- Construct a new Seward Junction 24.9-kV distribution feeder
- Upgrade Blockhouse Substation transformer T1 to a 46.7-MVA transformer
- Construct a new Blockhouse 24.9-kV distribution feeder
- Upgrade Manchaca Substation transformers T1 and T2 to 46.7-MVA transformers
- Install a new 46.7-MVA transformer at Lehigh Substation
- Construct a new Lehigh 24.9-kV distribution feeder
- Upgrade Buda Substation transformers T1 and T2 to 46.7-MVA transformers
- Upgrade Go Forth Substation transformers T1 and T2 to 46.7-MVA transformers
- Install a new 46.7-MVA transformer at Canyon Substation
- Construct a new Canyon 24.9-kV distribution feeder

■ Load Level 2

- Upgrade Leander Substation transformer T2 to a 46.7-MVA transformer
- Construct a new Avery Ranch 24.9-kV distribution feeder
- Construct one new Kent St 24.9-kV distribution feeder
- Upgrade Seward Junction Substation transformer T2 to a 46.7-MVA transformer

■ Load Level 3

- Upgrade Leander Substation transformer T3 to a 46.7-MVA transformer
- Install a new 46.7-MVA transformer at Avery Ranch Substation
- Construct a new Avery Ranch 24.9-kV distribution feeder
- Upgrade Nameless Substation transformers T1 and T2 to 37.3-MVA transformers
- Install a new 46.7-MVA transformer at Kent St Substation
- Construct one new Kent St 24.9-kV distribution feeder
- Upgrade Whitestone Substation transformers T1 and T2 to 46.7-MVA transformers
- Install a new 46.7-MVA transformer at Blockhouse Substation

- Upgrade Turnersville Substation transformer T1 to a 46.7-MVA transformer
- Install a new 46.7-MVA transformer at Lehigh Substation
- Load Level 4
 - Upgrade Leander Substation transformer T4 to a 46.7-MVA transformer
 - Upgrade Seward Junction Substation transformer T1 to a 46.7-MVA transformer
 - Upgrade Buttercup Substation transformer T1 to a 46.7-MVA transformer
 - Construct a new Seward Junction 24.9-kV distribution feeder
- Load Level 6
 - Construct a new Balcones 24.9-kV distribution feeder
 - Upgrade Avery Ranch Substation transformer T1 to a 46.7-MVA transformer
 - Install a new 46.7-MVA transformer at Leander Substation
 - Construct a new Blockhouse 24.9-kV distribution feeder
 - Construct a new Go Forth 24.9-kV distribution feeder
- Load Level 7
 - Upgrade Lehigh Substation transformer T1 to a 46.7-MVA transformer
 - Construct a new Lehigh 24.9-kV distribution feeder
- Load Level 8
 - Upgrade Buttercup Substation transformer T2 to a 46.7-MVA transformer
- Load Level 9
 - Upgrade Avery Ranch Substation transformer T2 to a 46.7-MVA transformer
 - Construct a new Leander 24.9-kV distribution feeder
- Load Levels 1–10:
 - Various distribution improvements to relieve loading and improve conditions for contingency switching.

4.4 Alternative 1 – New Substation Southwest of Balcones

Alternative 1 includes the same improvements as the Base Case, with the following exceptions. The projects included are shown in Exhibit 5.

- Load Level 1
 - Purchase land and construct new Alternative 1 Substation with (1) 138-24.9 kV,
 46.7-MVA transformer T1

- Construct new Alternative 1 feeder NEW1 and transfer load from Balcones feeder BL340 and BL330 to the new feeder
- Construct new Alternative 1 feeder NEW2 and transfer load from Balcones feeder BL230 to the new feeder
- Load Level 6
 - Construct new Alternative 1 feeder NEW3 and transfer load from Balcones feeder BL220 to the new feeder

Alternative 1 does *not* require the upgrade of Balcones Substation transformer T4 in LL1 or the construction of a new feeder out of Balcones Substation along with a couple of reconductor projects.

The new substation in Alternative 1 will be directly located under an existing transmission line; therefore, transmission construction will be minimal. The new substation site provides back-up capacity for Balcones and brings a source closer to some of those customers who are quite a distance from their existing substation. Shorter feeders typically mean less exposure between protective devices and fewer customers impacted by an outage, which is an improvement in reliability compared to the Base Case. The new site is near the corner of the PEC service territory, and there is room for growth in that area in the future.

4.5 Alternative 2 – New Substation Northeast of Avery Ranch

Alternative 2 includes the same improvements as the Base Case, with the following exceptions. The projects included are shown in Exhibit 6.

- Load Level 2
 - Purchase land for new substation site
- Load Level 3
 - Install new Alternative 2 138-24.9 kV, 46.7-MVA transformers T1 and T2
 - Construct new Alternative 2 feeder NEW1 and transfer load from Avery Ranch feeder AR250 and AR30 to the new feeder
 - Construct new Alternative 2 feeder NEW3 and transfer load from Avery Ranch feeders AR240 and AR250
 - Construct new Alternative 2 feeder NEW5 and transfer load from Avery Ranch feeder AR250 to the new feeder
 - Construct new Alternative 2 feeder NEW6 and transfer load from Avery Ranch feeder AR30 to the new feeder
- Load Level 5
 - Install new Alternative 2 138-24.9 kV, 46.7-MVA transformer T3

- Construct new Alternative 2 feeder NEW8 and transfer load from Avery Ranch feeder AR30 to the new feeder
- Construct new Alternative 2 feeder NEW4 and transfer load from Avery Ranch feeder AR250 and Leander feeder LA230 to the new feeder
- Load Level 7
 - Install new Alternative 2 138-24.9 kV, 46.7-MVA transformer T4
 - Construct new Alternative 2 feeder NEW7 and transfer load from Avery Ranch feeder AR240 to the new feeder
- Load Level 10
 - Construct new Alternative 2 feeder NEW2 and transfer load from Avery Ranch feeder AR250 and Leander feeder LA230 to the new feeder

Alternative 2 does *not* require the following:

- A new substation transformer at Kent Street Substation in LL1
- A new substation transformer at Avery Ranch Substation in LL3
- Two new feeders at Avery Ranch in LL2 and LL3 and one at Kent St in LL2
- Upgrading transformer T2 at Seward Junction in LL2
- A new feeder at Seward Junction in LL4
- Upgrading transformer T1 at Avery Ranch in LL6
- Upgrading transformer T2 at Avery Ranch in LL9
- Various other conductor upgrades and construction

The new substation in Alternative 2 is located in an expected high growth region, the Cedar Park area. In the ten-year planning horizon, an estimated 82 MW of additional load is expected to develop in the area served from this proposed new substation, not including the additional load at surrounding substations.

Without this substation, a considerable amount of upgrades would be required at numerous substations, which also leads to longer and more distribution feeders in a congested region. Having a source closer to the load center should reduce distribution line losses and improve reliability. This new substation also provides back-up capacity for contingency situations.

4.6 Alternative 3 – New Substation Southeast of Leander

Alternative 3 includes the same improvements as the Base Case, with the following exceptions. The projects included are shown in Exhibit 7.

- Load Level 3
 - Purchase land for new substation site

Load Level 4

- Construct new Alternative 3 Substation with (1) 138-24.9 kV, 46.7-MVA transformer T1
- Construct new Alternative 3 feeder NEW1 and transfer load from Leander feeder LA230 to the new feeder
- Construct new Alternative 3 feeder NEW4 and transfer load from Leander feeder LA110 to the new feeder
- Construct new Alternative 3 feeder NEW5 and transfer load from Leander feeder LA250 and Seward Junction feeder SJ20 to the new feeder

Construct new Alternative 3 feeder NEW6 and transfer load from Leander feeders LA10 and LA130 to the new feeder

Load Level 5

- Install new Alternative 3 138-24.9 kV, 46.7-MVA transformers T2 and T3
- Construct new Alternative 3 feeder NEW2 and transfer load from Leander feeder LA250 to the new feeder

■ Load Level 8

 Construct new Alternative 3 feeder NEW3 and transfer load from Leander feeder LA230 and LA210 to the new feeder

Alternative 3 does *not* require the following:

- Upgrading transformer T1 at Seward Junction in LL4
- Upgrading transformers T2, T3, and T4 at Leander in LL2, LL3, and LL4
- Upgrading transformer T2 at Seward Junction in LL2
- A new feeder at Seward Junction in LL4
- Installing a new transformer at Leander in LL6
- A new feeder at Leander in LL9
- Various other conductor upgrades and construction

Similar to Alternative 2, Alternative 3 is also located in the expected high growth Cedar Park region. In the ten-year planning horizon, an estimated 48 MW of additional load is expected to develop in the area served from this proposed new substation, not including the additional load at surrounding substations.

Without this substation, quite a few upgrades at Leander and Seward Junction Substations would be required, which also leads to longer and more distribution feeders in a congested region. Having a source closer to the load center should reduce distribution line losses and improve reliability. This new substation also provides back-up capacity for contingency situations. Substation transformer losses are expected to be reduced with the selection of Alternative 3 because of the reduction in transformer capacity additions to serve the expected load growth.

4.7 Alternative 4 – New Substation West of Whitestone

Alternative 4 includes the same improvements as the Base Case, with the following exceptions. The projects included are shown in Exhibit 8.

- Load Level 2
 - Purchase land for new substation site
- Load Level 3
 - Construct new Alternative 4 Substation with (2) 138-24.9 kV, 46.7-MVA transformers T1 and T2
 - Construct new Alternative 4 feeder NEW2 and transfer load from Whitestone feeder WS20 and Nameless feeder NL10 to the new feeder
 - Construct new Alternative 4 feeder NEW1 and transfer load from Whitestone feeder WS50 to the new feeder
 - Construct new Alternative 4 feeder NEW3 and transfer load from Buttercup feeder BR210 to the new feeder
- Load Level 6
 - Construct new Alternative 4 feeder NEW5 and transfer load from Whitestone feeder WS60 to the new feeder
- Load Level 7
 - Install new Alternative 4 138-24.9 kV, 46.7-MVA transformer T3
 - Construct new Alternative 4 feeder NEW4 and transfer load from Whitestone feeder WS20 to the new feeder

Alternative 4 does *not* require the following:

- Installing a new transformer and constructing a new 24.9-kV distribution feeder at Kent St in LL3
- Upgrade transformers T1 and T2 at Nameless in LL3
- Upgrade transformer T1 at Buttercup in LL4
- Upgrade transformer T2 at Buttercup in LL8
- Various other conductor upgrades and construction

The new substation proposed in Alternative 4 would offset a transformer addition and several transformer upgrades as well as conductor upgrades and construction. Substation transformer losses are expected to be lower with this alternative than the Base Case.

The new Alternative 4 Substation is expected to serve 55 MW of load growth over the ten-year planning horizon, in addition to growth at the existing surrounding substations. There is quite a bit of room for even more growth in the future in the areas surrounding the proposed new substation. The new proposed substation site would improve reliability from the Base Case by shortening several distribution feeders and providing back-up capacity for nearby substations.

4.8 Plan Selection

4.8.1 Examination of the Transition

Each exploratory plan considers the major facilities required to provide a transition from the existing to the projected system planning load, solving the substation and feeder problems identified in Section 3. Although each exploratory plan may not have the same capacity each year of the study period, each alternative provides similar reliability and capacity at the long-range load level.

4.8.2 Economic Comparison

Present-worth cost analyses were prepared for each alternative. The basis of the economic criteria is presented in Section 2. The present-worth cost calculations and detailed cost estimates for distribution and substation improvements are presented in Exhibits 4 through 8.

A summary of each alternative's capital requirements in 2011 dollars and 20-year present-worth cost is presented in Table 4-1. Transmission construction costs are not included.

Table 4-1
Distribution Alternative Cost Summary

Alternative	Description	Estimated PW Cost	Total Capital Requirement s (2011 Dollars)	Percent of Base PW Cost
Base Case	Base Case	\$146,774,400	\$115,438,800	
Alternative 1	New Substation Southwest of Balcones	\$148,605,500	\$116,981,200	1.23%
Alternative 2	New Substation Northeast of Avery Ranch	\$133,472,800	\$104,342,800	-9.97%
Alternative 3	New Substation Southeast of Leander	\$133,412,000	\$103,960,400	-10.02%
Alternative 4	New Substation West of Whitestone	\$137,080,300	\$106,663,300	-7.07%
Alternative 1 & 2	Combined Alternatives	\$135,305,900	\$105,885,200	-8.48%
Alternative 1 & 3	Combined Alternatives	\$135,242,900	\$105,502,800	-8.53%
Alternative 1 & 4	Combined Alternatives	\$138,909,200	\$108,205,700	-5.66%
Alternative 2 & 3	Combined Alternatives	\$125,736,900	\$97,846,900	-16.73%
Alternative 2 & 4	ernative 2 & 4 Combined Alternatives		\$95,567,300	-18.30%

Alternative	Description	Estimated PW Cost	Total Capital Requirement s (2011 Dollars)	Percent of Base PW Cost
Alternative 3 & 4	Combined Alternatives	\$124,074,400	\$95,184,900	-18.30%
Alternative 1,2,3	Combined Alternatives	\$127,592,400	\$99,407,300	-15.03%
Alternative 1,2,4	Combined Alternatives	\$125,893,000	\$97,098,500	-16.59%
Alternative 1,3,4 Combined Alternatives		\$125,903,700	\$96,727,300	-16.58%
Alternative 2,3,4 Combined Alternatives		\$116,144,700	\$89,071,400	-26.37%
Alternative 1,2,3,4 Combined Alternatives		\$119,821,300	\$90,602,600	-22.49%

Note: Transmission costs not included.

4.9 The Preferred Plan

Based on the analysis outlined above, the system improvements for each of the Alternatives, 1-4, were selected as the Preferred Plan. The benefits of this plan are detailed in Section 5. The total 20-year present worth cost of the preferred plan is approximately \$119,821,300, and the capital requirements in 2011 dollars are \$90,602,600.

A summary of the estimated capital costs for the Preferred Plan and details of the present-worth analysis is provided in Exhibits 5, 6, 7, and 8. Detailed descriptions of the recommended substation and distribution improvements are presented in Section 5. A system map illustrating the Preferred Plan is given in Exhibit 9.

Section 5 SYSTEM PLAN

5.1 Benefits of the Preferred Plan

The preferred plan was selected based on a number of important considerations: costs, reliability, improvements in normal and contingency system operations, shorter distribution feeders, reduced electric system losses, etc. Each new substation proposed provides several of these benefits. Following are advantages of selecting the new substations in Alternatives 1, 2, 3, and 4 as the preferred plan.

- Alternative 1 includes constructing a new substation southwest of Balcones on the edge of the PEC service territory. It is recommended to relieve substation transformer loading at Balcones and heavy feeder loading.
 - The new substation in Alternative 1 will be directly located under an existing transmission line; therefore, transmission construction will be minimal. The new substation site provides back-up capacity for Balcones and brings a source closer to some of those customers who are currently as much as 6.5 miles from the substation that serve them. Shorter feeders typically mean less exposure between protective devices and fewer customers impacted by an outage, which is an improvement in reliability compared to the Base Case. The new site is near the corner of the PEC service territory, and there is room for growth in that area in the future.
- Alternative 2 includes the construction of a substation northeast of Avery Ranch in the Cedar Park area where a significant amount of growth is expected over the planning horizon. It is expected to relieve substation transformer and feeder loading at Avery Ranch Substation and feeder loading at Leander Substation.
 - In the ten-year planning horizon, an estimated 82 MW of additional load is expected to develop in the area served from this proposed new substation, not including the additional load at surrounding substations. Without this substation, a considerable amount of upgrades would be required at numerous substations, resulting in more long distribution feeders in a congested region. Having a source closer to the load center will reduce distribution line losses and improve reliability. This new substation also provides back-up capacity for contingency situations.
- Alternative 3 includes the construction of a new substation southeast of Leander Substation, also in the high growth Cedar Park region. In the ten-year planning horizon, an estimated 48 MW of additional load is expected to develop in the area served from this proposed new substation, not including the additional load at surrounding substations. It is recommended to relieve substation transformer loading at Leander and Seward Junction Substations and feeder loading at Leander Substation, avoiding upgrades and additional long feeders from these substations through congested areas.



Having a source closer to the load center will reduce distribution line losses and improve reliability by providing shorter feeders and back-up capacity for contingency situations. Substation transformer losses are also expected to be reduced with the selection of Alternative 3 because of the reduction in transformer additions required to serve the expected load growth.

Alternative 4 recommends constructing a new substation west of Whitestone Substation to relieve substation transformer loading at Whitestone, Nameless, and Buttercup Substations, as well as feeder loading at Whitestone and Buttercup Substations. The new substation proposed in Alternative 4 would offset a transformer addition and several transformer upgrades at these stations as well as conductor upgrades and construction. Substation transformer losses are expected to be lower with this alternative than the Base Case.

The new Alternative 4 Substation is expected to serve 55 MW of load growth over the ten-year planning horizon, in addition to growth at the existing surrounding substations. There is quite a bit of room for even more growth in the future in the areas surrounding the proposed new substation. The new proposed substation site would improve reliability from the Base Case by shortening several distribution feeders and providing back-up capacity for nearby substations.

5.2 Ten-Year Electric System Plan

The Ten-Year Electric System Plan was designed to serve a projected system peak demand of 1827.0 MW. The proposed projects assume that the following planned or in-progress PEC projects have been completed:

- T3 has been installed at Avery Ranch Substation along with two new feeders, AR230 and AR240. PEC worked with SAIC to include the associated switching in the CymDIST model, including some transfers between Avery Ranch, Whitestone, and Kent Street Substations.
- A load transfer was completed between Balcones feeders 230 and 330, with guidance from PEC.
- Reconductor 0.6 miles to 795 AAC and 0.4 miles to 1000 AL UG on Buda 10, which is a tie path to Lehigh Substation.

Recommended projects in the system plan should be considered as a proposed list that will require PEC staff's review in order to determine the overall feasibility of each project. Project timing did not account for resource or budget limitations, which PEC management and staff may wish to include when considering the feasibility of each proposed project. These considerations may result in modifications to the scope and schedule of recommended projects.

To keep the Electric System Plan aligned with long-range system goals, SAIC recommends that PEC update the Ten-Year Electric System Plan at intervals no longer than five years apart or whenever major changes occur in:

- The Economy
- Local Growth/Development
- Power Supply
- Physical Plant

Annually or bi-annually, it will be necessary to perform studies with a short-range planning horizon in order to amend current plans or accommodate system changes or problems. Short-range studies should align with the concepts and intent of the Ten-Year Electric System Plan. The plan includes the following substation and distribution improvements:

- Load Level 1
 - Upgrade Kent St Substation transformer, T1, to a 46.7-MVA transformer
 - Construct one new Kent St 24.9-kV distribution feeder
 - Convert the 12.5-kV distribution served from Balcones Substation transformers T1 and T2 to 24.9 kV
 - Upgrade the Balcones Substation transformers T1 and T2 to 46.7-MVA transformers (converting T1 and T2 to 24.9 kV)
 - Upgrade Buttercup Substation transformer T3 to a 46.7-MVA transformer
 - Construct a new Seward Junction 24.9-kV distribution feeder
 - Upgrade Blockhouse Substation transformer T1 to a 46.7-MVA transformer
 - Construct a new Blockhouse 24.9-kV distribution feeder
 - Upgrade Manchaca Substation transformers T1 and T2 to 46.7-MVA transformers
 - Install a new 46.7-MVA transformer at Lehigh Substation
 - Construct a new Lehigh 24.9-kV distribution feeder
 - Upgrade Buda Substation transformers T1 and T2 to 46.7-MVA transformers
 - Upgrade Go Forth Substation transformers T1 and T2 to 46.7-MVA transformers
 - Install a new 46.7 MVA transformer at Canyon Substation
 - Construct a new Canyon 24.9-kV distribution feeder
 - Purchase land and construct new Alternative 1 Substation with (1) 138-24.9 kV,
 46.7-MVA transformer T1
 - Construct new Alternative 1 feeder NEW1 and transfer load from Balcones feeder BL340 and BL330 to the new feeder

- Construct new Alternative 1 feeder NEW2 and transfer load from Balcones feeder BL230 to the new feeder
- Load Level 2
 - Purchase land for Alternative 2 new substation site
 - Purchase land for Alternative 4 new substation site
- Load Level 3
 - Upgrade Whitestone Substation transformers T1 and T2 to 46.7-MVA transformers
 - Install a new 46.7-MVA transformer at Blockhouse Substation
 - Upgrade Turnersville Substation transformer T1 to a 46.7-MVA transformer
 - Install a new 46.7-MVA transformer at Lehigh Substation
 - Install new Alternative 2 138-24.9 kV, 46.7-MVA transformers T1 and T2
 - Construct new Alternative 2 feeder NEW1 and transfer load from Avery Ranch feeder AR250 and AR30 to the new feeder
 - Construct new Alternative 2 feeder NEW3 and transfer load from Avery Ranch feeders AR240 and AR250
 - Construct new Alternative 2 feeder NEW5 and transfer load from Avery Ranch feeder AR250 to the new feeder
 - Construct new Alternative 2 feeder NEW6 and transfer load from Avery Ranch feeder AR30 to the new feeder
 - Purchase land for Alternative 3 new substation site
 - Construct new Alternative 4 Substation with (2) 138-24.9 kV, 46.7-MVA transformers T1 and T2
 - Construct new Alternative 4 feeder NEW2 and transfer load from Whitestone feeder WS20 and Nameless feeder NL10 to the new feeder
 - Construct new Alternative 4 feeder NEW1 and transfer load from Whitestone feeder WS50 to the new feeder
 - Construct new Alternative 4 feeder NEW3 and transfer load from Buttercup feeder BR210 to the new feeder

■ Load Level 4

- Construct new Alternative 3 Substation with (1) 138-24.9 kV, 46.7-MVA transformer T1
- Construct new Alternative 3 feeder NEW1 and transfer load from Leander feeder LA230 to the new feeder
- Construct new Alternative 3 feeder NEW4 and transfer load from Leander feeder LA110 to the new feeder

- Construct new Alternative 3 feeder NEW5 and transfer load from Leander feeder LA250 and Seward Junction feeder SJ20 to the new feeder
- Construct new Alternative 3 feeder NEW6 and transfer load from Leander feeders LA10 and LA130 to the new feeder

■ Load Level 5

- Install new Alternative 2 138-24.9 kV, 46.7-MVA transformer T3
- Construct new Alternative 2 feeder NEW8 and transfer load from Avery Ranch feeder AR30 to the new feeder
- Construct new Alternative 2 feeder NEW4 and transfer load from Avery Ranch feeder AR250 and Leander feeder LA230 to the new feeder
- Install new Alternative 3 138-24.9 kV, 46.7-MVA transformers T2 and T3
- Construct new Alternative 3 feeder NEW2 and transfer load from Leander feeder LA250 to the new feeder

■ Load Level 6

- Construct a new Balcones 24.9-kV distribution feeder
- Construct a new Blockhouse 24.9-kV distribution feeder
- Construct a new Go Forth 24.9-kV distribution feeder
- Construct new Alternative 4 feeder NEW5 and transfer load from Whitestone feeder WS60 to the new feeder

■ Load Level 7

- Upgrade Lehigh Substation transformer T1 to a 46.7-MVA transformer
- Construct a new Lehigh 24.9-kV distribution feeder
- Install new Alternative 2 138-24.9 kV, 46.7-MVA transformer T4
- Construct new Alternative 2 feeder NEW7 and transfer load from Avery Ranch feeder AR240 to the new feeder
- Install new Alternative 4 138-24.9 kV, 46.7-MVA transformer T3
- Construct new Alternative 4 feeder NEW4 and transfer load from Whitestone feeder WS20 to the new feeder

■ Load Level 8

 Construct new Alternative 3 feeder NEW3 and transfer load from Leander feeder LA230 and LA210 to the new feeder

■ Load Level 10

 Construct new Alternative 2 feeder NEW2 and transfer load from Avery Ranch feeder AR250 and Leander feeder LA230 to the new feeder

- Load Levels 1 10:
 - Various distribution improvements to relieve loading and improve conditions for contingency switching

The Ten-Year Electric System Plan map is presented in Exhibit 10.

To determine the cost of system improvements for the PEC electric system over the next ten years, expenditures required to serve projected loads as a result of customer growth were estimated for each year. The projected capital requirements are as follows:

Table 5-1
Ten-Year Electric System Plan Capital Requirements

Load Level	Estimated Year ¹	Capital Requirements (2011 Dollars)	
1	2011	\$44,516,600	
2	2012	\$1,395,200	
3	2013	\$23,697,700	
4	2014	\$4,328,500	
5	2015	\$5,561,500	
6	2016	\$2,491,100	
7	2017	\$8,121,300	
8	2018	\$379,600	
9	2019	\$59,400	
10	2020	\$51,700	
	Total	\$90,602,600	

Note: (1) Calendar Year

5.3 System Improvements

SAIC has prepared a description of the proposed system improvement projects for PEC's Ten-Year Electric System Plan, which is described in this section. The recommended load level of construction for proposed system improvements was based on the timing of the projected criteria violations. The estimated costs are given in 2011 dollars and are not inflated to represent the expected costs in the recommended construction year.

5.3.1 Kent Street/Whitestone Substation Projects

Project 1

Location: Kent Street

Estimated Cost: \$3,626,300

Load Level: 1

Description: Upgrade Kent St T1 from 37.3 MVA to 46.7 MVA and construct new feeder KS50 with 1000 AL for 8900 ft. Open both WS30 and WS40 at the substation and close at sections 418310 and 419094 to the new Kent St feeder. The transformer upgrade and feeder construction are recommended to relieve transformer loading on Whitestone T1 and T2 greater than 50%.

Project 1

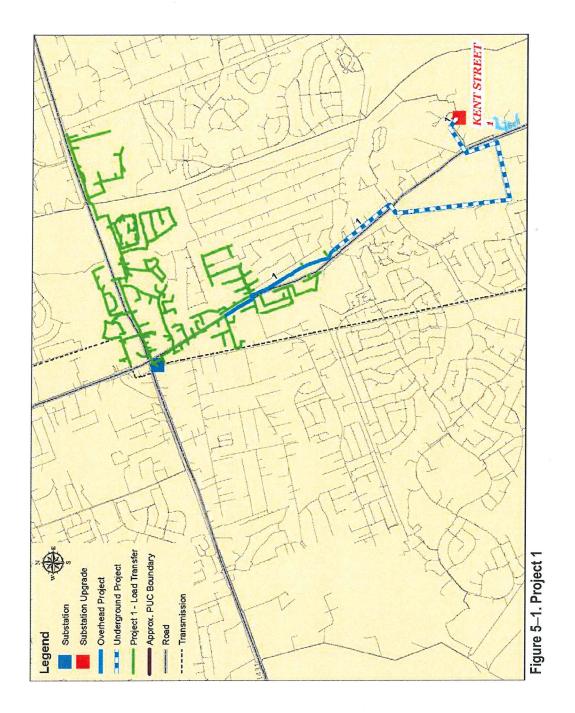
Location: Kent Street – KS50

Estimated Cost: \$140,900

Load Level: 4

Description: Reconductor on Kent St feeder KS50 from 336 AAC to 795 AAC for 4,000 ft between line sections 418528 and 418139. This project is recommended to relieve conductor loading greater than 65%.

See Figure 5-1 for a geographic representation of Project 1.



5.3.2 Nameless/Whitestone/Buttercup Substation Projects

Project 2

Location: New Alternative Substation 4 – West of Whitestone Substation

Estimated Cost: \$7,224,000

Load Level: 2 (Land Purchase)

3 (T1 & T2, new feeder 1)

7 (T3)

Description: Purchase land and construct new Alternative 4 Substation with (3) 138-24.9 kV, 46.7-MVA transformers. Construct new feeder 1 with 100 ft of 795 AAC to line section 442075607. Open the Whitestone feeder breaker WS50 at the Whitestone Substation, and transfer line section 442075607 from Whitestone feeder WS50 to new feeder 1. This project is recommended to relieve transformer loading greater than 50% on Whitestone T1.

Project 3

Location: New Alternative Substation 4 – West of Whitestone Substation

Estimated Cost: \$18,900

Load Level: 3

Description: Construct new feeder 2 with 100 ft of 795 AAC to line section - 1025607566, and transfer the line section to new feeder 2. Install and open a switch at line section -243870845, and close switch at line section 524420679 to transfer load from Nameless feeder NL10 to new feeder 2. Move Nameless feeder NL20 to Nameless Substation transformer T2 and Nameless feeder NL120 to Nameless Substation transformer T1. This project is recommended to relieve transformer loading greater than 50% on Nameless T1.

Project 4

Location: New Alternative Substation 4 – West of Whitestone Substation

Estimated Cost: \$386,100

Load Level: 2

Description: Construct 6,400 ft of double circuit 795 AAC between line sections 1648661079 and -1669020875 to prepare for the construction of new feeder 3 in LL3. Reconductor from three-phase 4 ACSR to 795 AAC for 1,400 ft from line sections 407159 to 407171 on Buttercup feeder BR210. This project is recommended to relieve transformer loading greater than 50% on Buttercup T1.

Location: New Alternative Substation 4 – West of Whitestone Substation

Estimated Cost: \$18,900

Load Level: 3

Description: Construct new feeder 3 with 100 ft of 795 AAC. Install open switch at 407189 and close switch at -1492233697 to transfer load from Buttercup feeder BR210 to new feeder 3. This project is recommended to relieve transformer loading greater than 50% on Buttercup T1.

Project 5

Location: Whitestone

Estimated Cost: \$4,960,000

Load Level: 3

Description: Upgrade Whitestone T1 and T2 from 37.3 MVA to 46.7 MVA. The transformer upgrades are recommended to relieve transformer loading on Whitestone T1 and T2 greater than 50%.

Project 6

Location: New Alternative Substation 4 – West of Whitestone Substation

Estimated Cost: \$671,000

Load Level: 6

Description: Construct new feeder 5 with 100 ft of 795 AAC and 10,000 ft of double circuit 795 AAC to line section 420576. Open switch at 1738713843 and back feed line section 420576 from Whitestone feeder WS60 to the new feeder 5. Reconductor 336 ACSR to 795 AAC for 4,000 ft from line section 419109 to 418390. This project is recommended to relieve transformer loading greater than 50% on Whitestone T1.

Project 7

Location: New Alternative Substation 4 – West of Whitestone Substation

Estimated Cost: \$103,400

Load Level: 7

Description: Construct new feeder 4 with 100 ft of 795 AAC to line section -104120060. Install open switch at 419759 and back feed line section -104120060 from Whitestone feeder WS20 to the new feeder 4. Reconductor 336 ACSR to 795 AAC for 2,400 ft from line section 410291 to 410251. This project is recommended to relieve transformer loading greater than 50% on Whitestone T1.

See Figure 5-2 for a geographic representation of Projects 2-7.

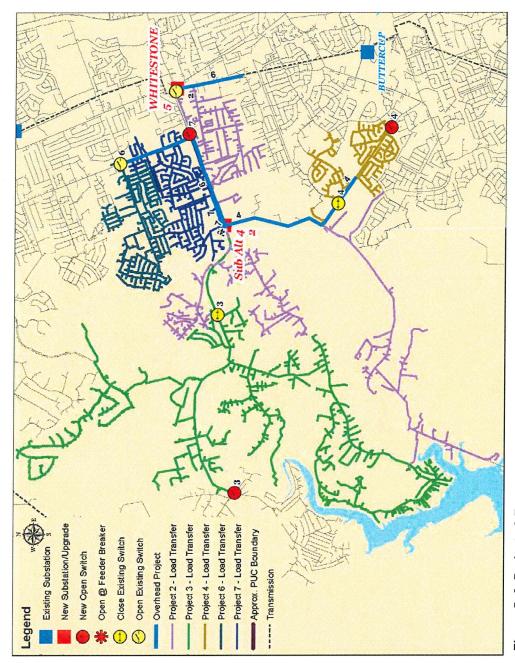


Figure 5-2. Projects 2-7

5.3.3 Buttercup/Balcones Substation Projects

Project 8

Location: Balcones

Estimated Cost: \$6,752,500

Load Level: 1

Description: Convert Balcones T1 and T2 to 24.9 kV and upgrade both transformers from 22.4 MVA to 46.7 MVA. Convert feeders 10, 20, 30, 80, and 90 to 24.9 kV. This project is recommended to relieve transformer loading on Balcones T1 and T2 greater than 50% and conductor loading greater than 65%.

Project 9

Location: Buttercup

Estimated Cost: \$2,480,000

Load Level: 1

Description: Upgrade Buttercup T3 from 22.4 MVA to 46.7 MVA. The transformer upgrade is recommended to relieve transformer loading on Buttercup T3 greater than 50%.

Project 10

Location: Buttercup – BR210 **Estimated Cost:** \$331,500

Load Level: 1

Description: Reconductor on Buttercup feeder BR210 from 336 AAC to 795 AAC for 6,300 ft from the substation to line section 1651227892. This project is recommended to relieve conductor loading greater than 65%.

Project 11

Location: Buttercup – BR340 **Estimated Cost:** \$590,600

Load Level: 1

Description: Construct new Buttercup feeder BR340 with 500 Cu for 500 ft from line section 120790219 and double circuit 1000 AL with Buttercup BR20 for 2,700 ft. Construct 1,100 ft of 500 Cu from the end of the double circuit with BR20 to line section 415245 and transfer taps 415245 and 414738 to the new construction. This project is recommended to relieve transformer loading on Buttercup T1.

Location: Balcones – BL320 **Estimated Cost:** \$373,400

Load Level: 1

Description: Reconductor on Balcones feeder BL320 from 336 AAC to 795 AAC for 10,600 ft from the substation to line section -446269090. This project is recommended to relieve conductor loading greater than 65%.

Project 13

Location: New Alternative Substation 1 – Southwest of Balcones Substation

Estimated Cost: \$4,238,900

Load Level: 1

Description: Purchase land and construct new Alternative 1 Substation with (1) 138-24.9 kV, 46.7-MVA transformer T1. Construct new feeder 1 with 100 ft of 795 AAC to the existing distribution circuit. Install open switch at -30126717 on Balcones BL330 and close switch at 412570 to back feed to the new construction. This project is recommended to relieve transformer loading greater than 50% on Balcones T4.

Project 14

Location: New Alternative Substation 1 – Southwest of Balcones Substation

Estimated Cost: \$3,900

Load Level: 1

Description: Construct new feeder 2 with 795 AAC to the existing distribution circuit. Open switch at -1868338012 on Balcones BL230 and back feed to the new construction. This project is recommended to relieve transformer loading greater than 50% on Balcones T3.

Project 15

Location: Buttercup – BR220

Estimated Cost: \$15,000

Load Level: 2

Description: Open from Buttercup feeder BR220 at line section 414698 by installing a switch and close at 414784 to transfer the load to Balcones feeder BL30. Move Buttercup feeder BL220 to Buttercup breaker BL340. This project is recommended to relieve transformer loading on Buttercup T2 greater than 50%.

Location: Buttercup – BR20 Estimated Cost: \$526,200

Load Level: 2

Description: Reconductor on Buttercup feeder BR20 from 336 AAC to 795 AAC for 10,000 ft from the substation to line section 415312. This project is recommended to relieve conductor loading greater than 65%.

Project 17

Location: Balcones

Estimated Cost: \$15,000

Load Level: 2

Description: Open switch at 415045 to transfer load from Balcones feeder BL30 and close switch at 413435 to move load to Balcones feeder BL90. Install an open switch at 413748 to transfer load from Balcones feeder BL30 and close switch at 414066 to move load to Balcones feeder BL90. Move Balcones feeder BL90 to Balcones T4 and Balcones Feeder BL320 to Balcones T2. This project is recommended to relieve transformer loading greater than 50% on Balcones T4.

Project 18

Location: Balcones

Estimated Cost: \$391,900

Load Level: 6

Description: Construct new Balcones feeder BL10 with 1,000 ft of 1000 AL, double circuit 5,000 ft of 1000 AL with Balcones feeder BL330. Transfer line section 417842 from Balcones feeder BL330 to the new Balcones feeder BL10. Reconductor Balcones feeder BL330 from 336 AAC to 795 AAC during double circuit construction with Balcones BL10. This project is recommended to relieve conductor loading greater than 65%.

Project 19

Location: New Alternative Substation 1 – Southwest of Balcones Substation

Estimated Cost: \$18,900

Load Level: 6

Description: Construct new feeder 3 with 100 ft of 795 AAC to the existing distribution circuit. Install open switch at 409445 on Balcones BL220 and back feed to the new construction. This project is recommended to relieve transformer loading greater than 50% on Balcones T3.

SYSTEM PLAN

Project 20

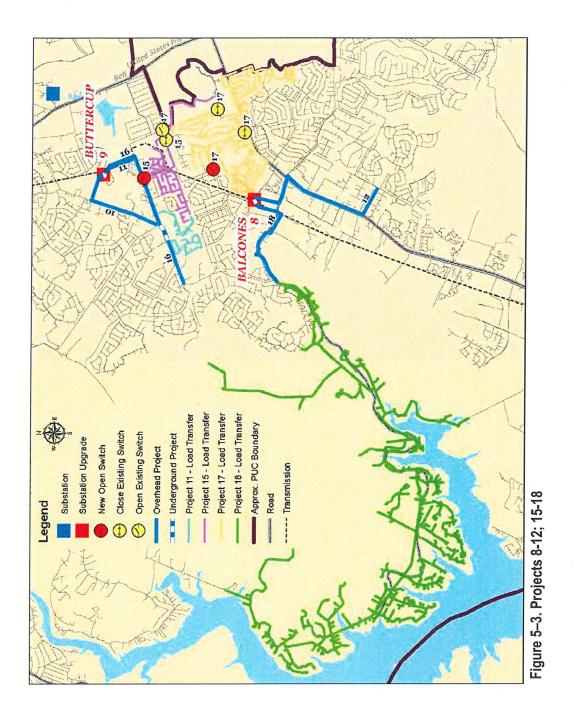
Location: New Alternative Substation 1 – Southwest of Balcones Substation

Estimated Cost: \$153,900

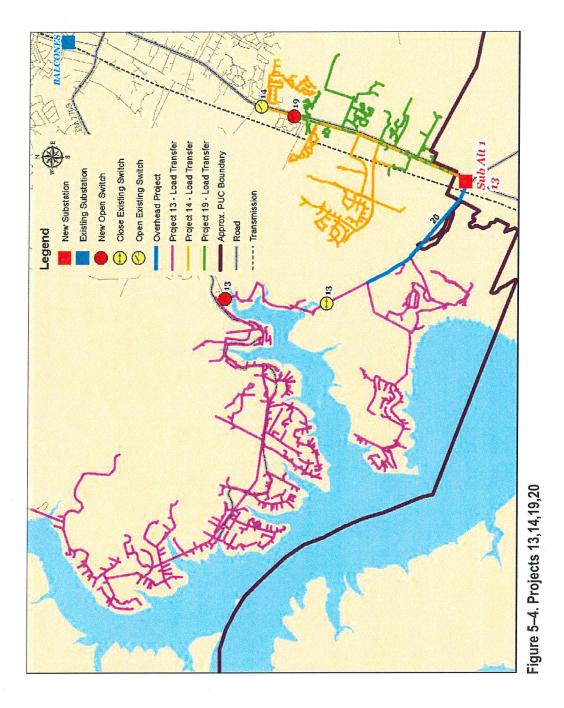
Load Level: 7

Description: Reconductor on new Alternative 1 feeder 1 from 1/0 AAC to 336 ACSR for 7,000 ft from the substation to line section 409332. This project is recommended to relieve conductor loading greater than 65%.

See Figure 5-3 for a geographic representation of Projects 8-12 and 15-18 and Figure 5-4 for a geographic representation of Projects 13, 14, 19, and 20.



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5.3.4 Avery Ranch/Leander

Project 21

Location: New Alternative Substation 2 – North of Avery Ranch Substation

Estimated Cost: \$8,725,800

Load Level: 2 (Land Purchase)

3 (T1 & T2, new feeder 1)

5 (T3)

7(T4)

Description: Purchase land and construct new Alternative 2 Substation with (4) 138-24.9 kV, 46.7-MVA transformers. Construct new feeder 1 getaway with 150 ft of 795 AAC to the line section 409778 and transfer that tap from Avery Ranch feeder AR250 to the new feeder 1. Open switch at 689971324 and close switch 1533873507 to transfer load from Avery Ranch feeder AR30. This project is recommended to relieve transformer loading greater than 50% on Avery Ranch T1.

Project 22

Location: New Alternative Substation 2 – North of Avery Ranch Substation

Estimated Cost: \$35,800

Load Level: 3

Description: Construct new feeder 3 getaway with 150 ft of 795 AAC to the line section 829096974 and transfer that tap from Avery Ranch feeder AR250 to the new feeder 3. Install open switch at 402839 and close switch -343248229 to transfer load to the new feeder 3. Install open switch at 539218222 and close switch at 402839 to transfer load from Avery Ranch feeder AR240. This project is recommended to relieve transformer loading greater than 50% on Avery Ranch T3.

Project 23

Location: New Alternative Substation 2 – North of Avery Ranch Substation

Estimated Cost: \$84,700

Load Level: 3

Description: Construct new feeder 5 getaway with 150 ft of 795 AAC to get away from the substation. From the getaway construct 1,500 ft of double circuit 795 AAC to line section -1800138767 and transfer the tap from Avery Ranch feeder AR130. Open switch at 405612 and 405603 and close switch -549459701 to new feeder 5. This project is recommended to relieve transformer loading greater than 50% on Avery Ranch T3.

Location: New Alternative Substation 2 – North of Avery Ranch Substation

Estimated Cost: \$324,800

Load Level: 3

Description: Construct new feeder 6 getaway with 150 ft of 795 AAC to get away from the substation. From the getaway, construct 7,800 ft of 795 AAC to line section -1877107716 and transfer the tap from Avery Ranch feeder AR130 to new feeder 6. Install open switch at 401145 and close switch at 400949 to transfer load from Avery Ranch feeder AR30. This project is recommended to relieve transformer loading greater than 50% on Avery Ranch T2.

Project 25

Location: New Alternative Substation 2 – North of Avery Ranch Substation

Estimated Cost: \$102,700

Load Level: 5

Description: Construct new feeder 4 getaway with 150 ft of 795 AAC to line section 409778 and construct 1,900 ft of 795 AAC to line section 998065616. Open switch at -1266007323 and back feed 998065616 to transfer load from Avery Ranch feeder AR250. Extend 795 AAC from line section -925095635 to -6899707106 for 200 ft. Transfer line section -6899707106 from Leander feeder LA230 to the new feeder 4. Then install open switch at line section -2098565445 and close switch -1979310756 to transfer load from Leander feeder LA250 to new feeder 4. This project is recommended to relieve transformer loading greater than 50% on Leander T3.

Project 26

Location: New Alternative Substation 2 – North of Avery Ranch Substation

Estimated Cost: \$295,100

Load Level: 5

Description: Construct new feeder 8 getaway with 150 ft of 795 AAC to get away from the substation. From the getaway construct 1,500 ft of double circuit 795 AAC to line section -1800138767, 3,100 ft of 795 AAC, and continue with 1,700 ft of double circuit 795 AAC to line section 689971324. Transfer line section -1764785331 from Avery Ranch feeder AR30 to the new feeder 8. This project is recommended to relieve transformer loading greater than 50% on Avery Ranch T1.

Location: New Alternative Substation 2 – North of Avery Ranch Substation

Estimated Cost: \$263,000

Load Level: 7

Description: Construct new feeder 6 getaway with 150 ft of 795 AAC to get away from the substation. From the getaway, construct 6,600 ft of 795 AAC to line section 1140962881 and transfer the tap from Avery Ranch feeder AR240. This project is recommended to relieve transformer loading greater than 50% on Avery Ranch T3.

Project 28

Location: New Alternative Substation 2 – North of Avery Ranch Substation

Estimated Cost: \$51,700

Load Level: 10

Description: Construct new feeder 2 getaway with 150 ft of 795 AAC to the line section -401770607 and transfer that tap from Avery Ranch feeder AR250 to the new feeder 2. Install open switch at 942457519 and close switch 409775 to transfer load from Leander feeder LA230. Reconductor 1/0 AAC to 795 AAC from line section 401022 to 401019 for 450 ft. Then install open switch at line section 1541944083 and close switch -901979660 to transfer load from Leander feeder LA230 to new feeder 2. This project is recommended to relieve transformer loading greater than 50% on Leander T3.

See Figure 5-5 for a geographic representation of Projects 21-28.

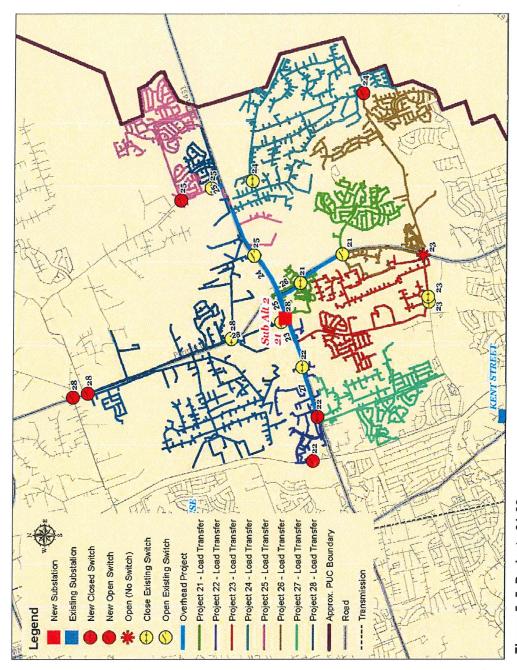


Figure 5-5. Projects 21-28

5.3.5 Seward Junction/Leander

Project 29

Location: Seward Junction **Estimated Cost:** \$682,600

Load Level: 1

Description: Construct new Seward Junction feeder SJ130 with 5,300 ft of 1000 AL and open the switch on line section 338323 to move load from Leander feeder LA10 and close to the new Seward Junction feeder SJ130 at line section 2067007172. This project is recommended to relieve transformer loading on Leander T3 greater than 50% and conductor loading on Leander feeder LA10 greater than 65%.

Project 30

Location: Leander – LA10 Estimated Cost: \$52,800

Load Level: 2

Description: Reconductor on Leander feeder LA10 from line section 342082 to 338441 from 336 AAC to 795 AAC for 1,500 ft. This project is recommended to relieve conductor loading on Leander feeder LA10 greater than 65%.

Project 31

Location: New Alternative Substation 3 – Southeast of Leander Substation

Estimated Cost: \$6,487,300

Load Level: 3 (Land Purchase)

4 (T1, new feeder 1)

5 (T2)

Description: Construct new Alternative 3 Substation with (2) 138-24.9 kV, 46.7-MVA transformers southeast of Leander Substation. Construct new feeder 1 getaway with 400 ft of 795 AAC to the line section 1541944083. Install open switch at 167139926 and close to the new feeder 1 at that location. Extend new feeder 1 with 795 AAC for 14,000 ft from line section 427895624 to -1215132181. Transfer tap -1215132181 from Leander feeder LA250 to the new feeder 1. This project is recommended to relieve transformer loading greater than 50% on Leander T3.

Location: New Alternative Substation 3 – Southeast of Leander Substation

Estimated Cost: \$544,700

Load Level: 4

Description: Construct new feeder 4 getaway with 400 ft of 795 AAC to line section 587997414. From the getaway construct double circuit 795 AAC for 7,400 ft with existing system Leander feeders LA230 and LA210, 550 ft of 795 AAC, and continue with 2,000 ft of double circuit 795 AAC with Leander feeder LA210 to line section 767331699. Install and open a switch at -1169829501 and close switch -141071112 to transfer load to the new feeder. This project is recommended to relieve transformer loading greater than 50% on Leander T3.

Project 33

Location: New Alternative Substation 3 – Southeast of Leander Substation

Estimated Cost: \$30,000

Load Level: 4

Description: Install and open a switch at 1908936161 and close switch at -752637149 to transfer load to Leander feeder LA10 from Leander feeder LA130. Install open switch at 1539999063 and close switch at 602445272 to transfer load to Leander feeder LA130 from Leander feeder LA10. This project is recommended to achieve a better load balance on the Leander feeders.

Project 34

Location: New Alternative Substation 3 – Southeast of Leander Substation

Estimated Cost: \$45,600

Load Level: 4

Description: Construct new feeder 5 getaway with 400 ft of 795 AAC to line section -1564324195. Install open switch at -601844615 and back feed at -1564324195 to the new feeder 5. Install open switch at -684533733 and close the switch at 1038406848 to transfer load from Seward Junction feeder SJ20 to the new feeder 5. This project is recommended to relieve transformer loading greater than 50% on Seward Junction T2.

Project 35

Location: New Alternative Substation 3 – Southeast of Leander Substation

Estimated Cost: \$15,600

Load Level: 5

Description: Construct new feeder 2 getaway with 400 ft of 795 AAC to line section 620748053 and transfer that tap from Leander feeder LA250 to the new feeder 2. This project is recommended to relieve transformer loading greater than 50% on Leander T3.

Section 5

Project 36

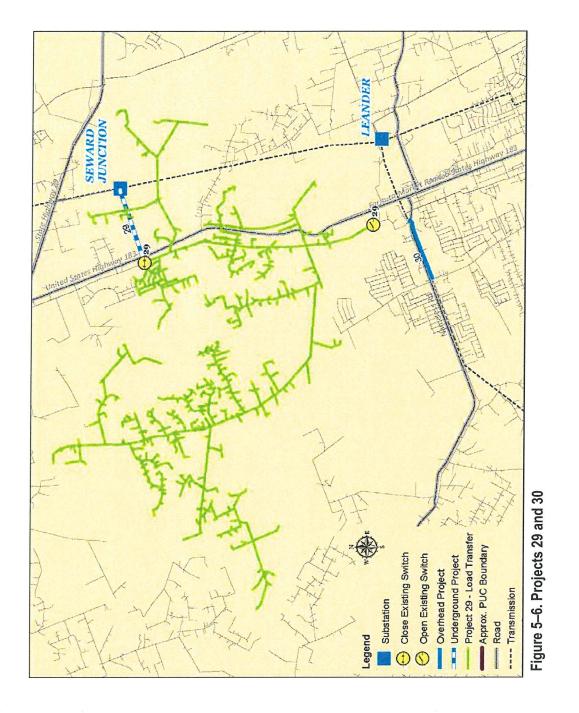
Location: New Alternative Substation 3 – Southeast of Leander Substation

Estimated Cost: \$27,300

Load Level: 8

Description: Construct new feeder 3 getaway with 400 ft of 795 AAC to line section 587997414 and transfer that tap from Leander feeder LA230 to the new feeder 3. Extend with 795 AAC for 300 ft from line section -1992132191 to -995556503 and open switch at 402562 closing to the new extension to transfer load from Leander feeder LA210. This project is recommended to relieve transformer loading greater than 50% on Leander T3.

See Figure 5-6 for a geographic representation of Projects 29 and 30 and Figure 5-7 for a geographic representation of Projects 31-36.



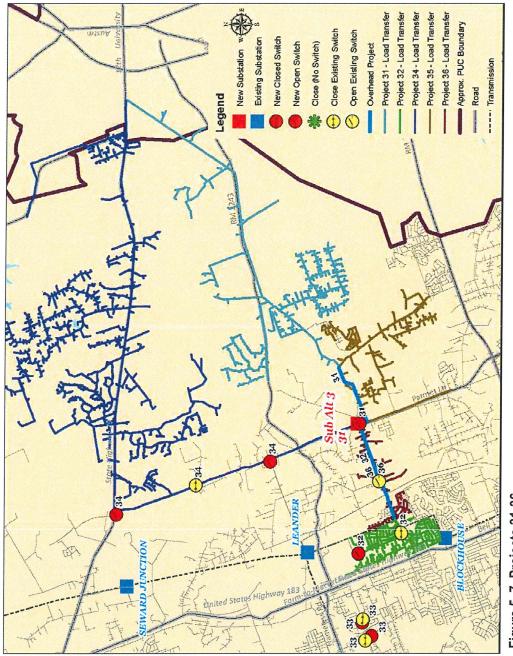


Figure 5-7. Projects 31-36

5.3.6 Blockhouse

Project 37

Location: Blockhouse

Estimated Cost: \$5,560,000 **Load Level:** 1 (T1) and 3 (T3)

Description: Upgrade Blockhouse T1 from 22.4 MVA to 46.7 MVA and install a 46.7-MVA transformer at Blockhouse. In order to balance the load on the Blockhouse transformers move Blockhouse feeder BH140 from Blockhouse T2 to Blockhouse T1 and move Blockhouse feeder BH20 from Blockhouse T1 to Blockhouse T2. The transformer upgrade is recommended to relieve transformer loading on Blockhouse T1 and T2 greater than 50%.

Project 38

Location: Blockhouse

Estimated Cost: \$938,900

Load Level: 1

Description: Construct new Blockhouse feeder BHNEW1 with 1,350 ft of 1000 AL from the substation to line section 1209016904 and then double circuit with Blockhouse feeder BH140 for 4,400 ft of 1000 AL to line section 421188. Transfer the tap at section -15721752 from BH140 to BHNEW1 and construct 800 ft of double circuit 1000 AL down to section 674082839. Transfer the tap at section 421275 from BH140 to BHNEW1. The new feeder is recommended to relieve transformer loading on Blockhouse T2 greater than 50%.

Project 39

Location: Blockhouse

Estimated Cost: \$1,114,300

Load Level: 6 (New Feeder) and 8 (Reconductor)

Description: Construct new Blockhouse feeder BHNEW2 with 5,800 ft of 1000 AL from the substation to line section -1215568786 and then transfer line section -1215568786 from Blockhouse feeder BH140 to the new Blockhouse feeder BHNEW2. Install an open switch on line section 336665992 and close switch 421189 to transfer load from Blockhouse feeder BH130 to the new Blockhouse feeder BHNEW2. Reconductor from 336 AAC and 1/0 to 795 AAC from line section -1215568786 to 410451 for 10,000 ft. The new feeder is recommended to relieve conductor loading on Blockhouse feeder BH140 and BH130 greater than 65%.

See Figure 5-8 for a geographic representation of Projects 37-39.

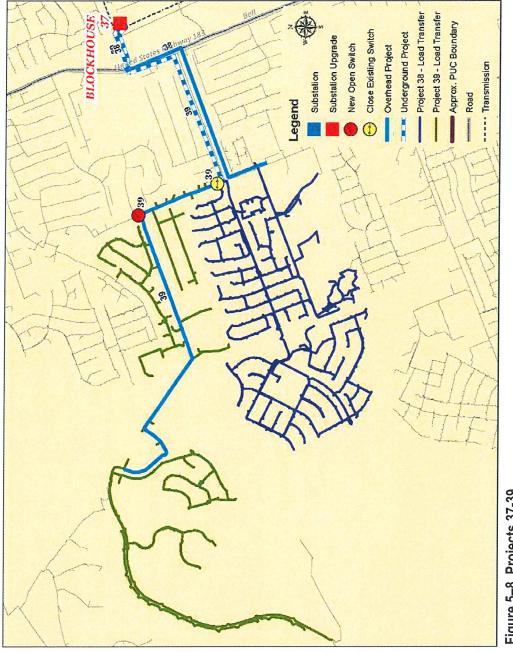


Figure 5-8. Projects 37-39

5.3.7 Conductor Upgrades and Regulator Installation (North)

Project 40

Location: Blockhouse - BH130

Estimated Cost: \$133,900

Load Level: 1

Description: Reconductor on Blockhouse feeder BH130 from line section 420957 to 421746 from 336 AAC to 795 AAC for 3,800 ft. This project is recommended to relieve conductor loading on Blockhouse feeder BH130 greater than 65%.

Project 41

Location: Blockhouse - BH40

Estimated Cost: \$28,200

Load Level: 5

Description: Reconductor on Blockhouse feeder BH40 from line section 1897372631 to 421787 from 336 AAC to 795 AAC for 800 ft. This project is recommended to relieve conductor loading on Blockhouse feeder BH40 greater than 65%.

Project 42

Location: Leander – LA250 **Estimated Cost:** \$109,900

Load Level: 5

Description: Reconductor on Leander feeder LA250 from line section 724240612 to 401387 from 1/0 to 336 ACSR for 5,000 ft. This project is recommended to relieve conductor loading on Leander feeder LA250 greater than 65%.

Project 43

Location: Nameless – NL120 **Estimated Cost:** \$60,000

Load Level: 5

Description: Install three single-phase 250 amp voltage regulators on Nameless feeder NL120 at line section 1926752080. This project is recommended to improve voltage on Nameless feeder NL120 from 119.4 V to 123.2 V at LL10.

Section 5

Project 44

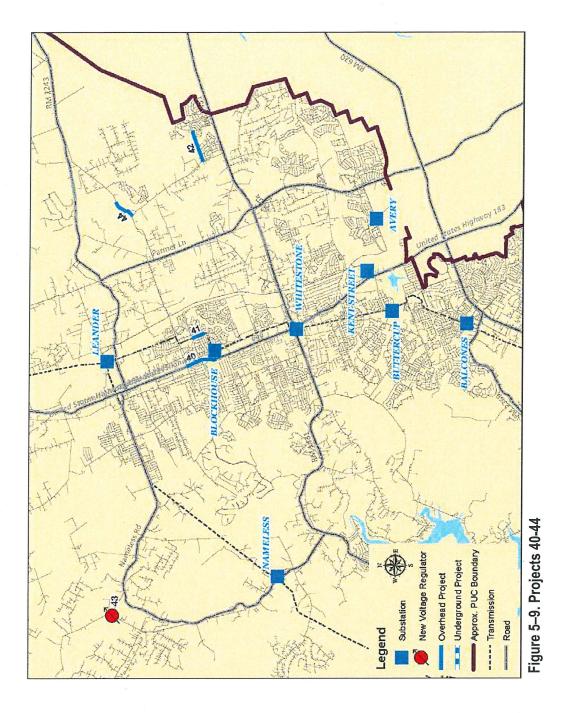
Location: Seward Junction – SJ120

Estimated Cost: \$59,400

Load Level: 9

Description: Reconductor on Seward Junction feeder SJ120 from line section -1215132181 to 402145 from 1/0 to 336 ACSR for 2,700 ft. This project is recommended to relieve conductor loading on Seward Junction feeder SJ120 greater than 65%.

See Figure 5-9 for a geographic representation of Projects 40-44



5.3.8 Manchaca

Project 45

Location: Manchaca

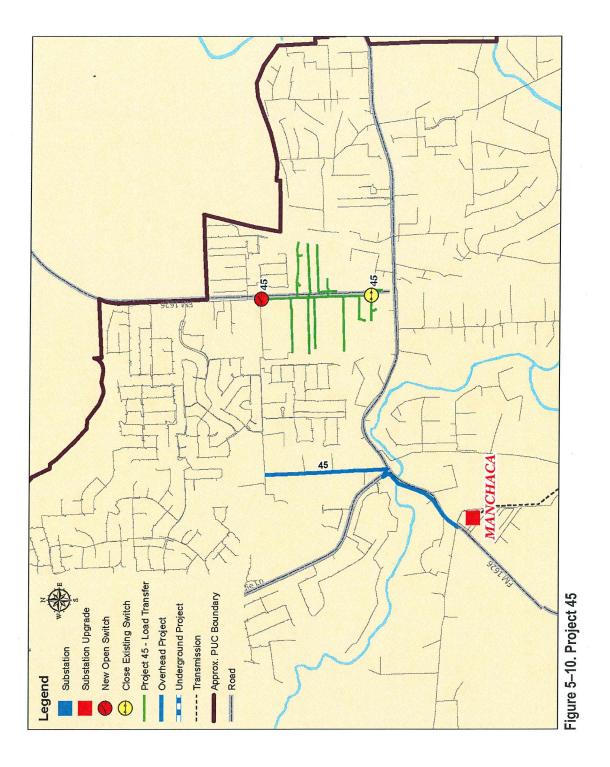
Estimated Cost: \$5,161,700

Load Level: 1 (T1 & T2)

3 (Reconductor)

Description: Upgrade Manchaca T1 and T2 from 22.4 MVA to 46.7 MVA. Install an open switch at line section -1676059073 and close to line section 945987059 to transfer load from Manchaca feeder MC50 to Manchaca feeder MC130. Reconductor on Manchaca feeder MC50 from line section 504962 to 504734 from 336 AAC to 795 AAC for 5,300 ft. This project is recommended to relieve transformer loading on Manchaca T1 and T2 greater than 50% and conductor loading on Manchaca feeder MC50 greater than 65%.

See Figure 5-10 for a geographic representation of Project 45



5.3.9 Buda/Lehigh/Turnersville

Project 46

Location: Lehigh

Estimated Cost: \$3,102,800

Load Level: 1

Description: Install new 138 - 24.9-kV, 46.7-MVA transformer at Lehigh (T2). Install an open switch at line section 511229, construct 795 AAC for 200 ft between the LH20 substation getaway and line section 511176, and close to line section 511176 to transfer load from Buda feeder BD10 to Lehigh feeder LH20. Transfer Lehigh feeder LH20 from Lehigh T1 to T2. This project is recommended to relieve transformer loading on Buda T1 greater than 50% and conductor loading on Buda feeder BD10 greater than 65%.

Project 47

Location: Buda

Estimated Cost: \$4,960,000

Load Level: 1

Description: Upgrade Buda T1 and T2 from 22.4 MVA to 46.7 MVA. The transformer upgrade is recommended to relieve transformer loading on Buda T2 greater than 50%. Buda T1 will also be upgraded at the same time as Buda T2 to keep firm capacity.

Project 48

Location: Turnersville/Buda Estimated Cost: \$82,600

Load Level: 2

Description: Extend Turnersville feeder TV90 for 1,350 ft with 795 AAC from line section -895579931 to 513344. Install an open switch at line section 236847167 and close at line section 234 to transfer load from Buda feeder BD130 to Turnersville feeder TV90. Install an open switch at line section 607365737 and close at line section 448383592 to transfer load from Turnersville feeder TV110 to Turnersville feeder TV90. This project is recommended to relieve transformer loading on Buda T2 greater than 50% and conductor loading on Buda feeder BD130 greater than 65%.

SYSTEM PLAN

Project 49

Location: Buda – BD120 Estimated Cost: \$77,500

Load Level: 6

Description: Reconductor on Buda feeder BD120 from line section 500838 to 517907 from 336 AAC to 795 AAC for 2,200 ft. This project is recommended to relieve conductor loading on Buda feeder BD120 greater than 65%.

Project 50

Location: Lehigh

Estimated Cost: \$2,480,000

Load Level: 7

Description: Upgrade Lehigh T1 from 37.3 MVA to 46.7 MVA. The transformer upgrade is recommended to relieve transformer loading on Lehigh T1 greater than 50%.

See Figure 5-11 for a geographic representation of Projects 46-50

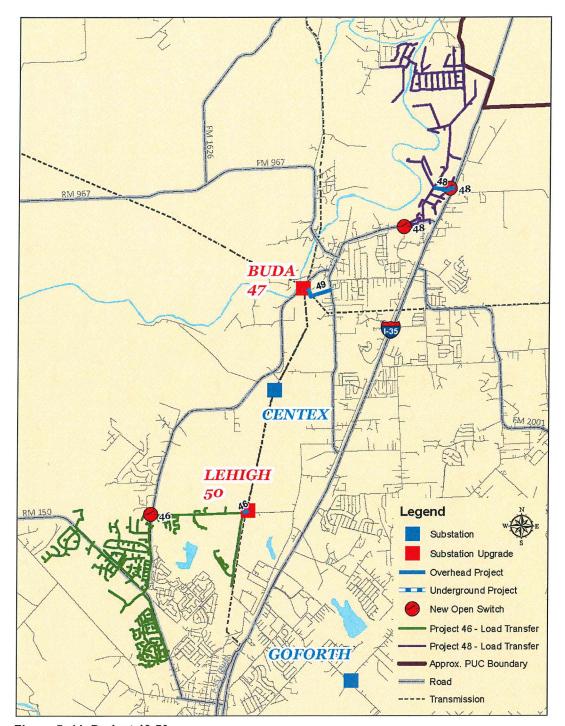


Figure 5-11. Project 46-50

5.3.10 Lehigh/Turnersville/Goforth/Kyle/Canyon

Project 51

Location: Lehigh

Estimated Cost: \$799,800

Load Level: 1 and 3 (800 ft Reconductor)

Description: Construct new Lehigh feeder LHNEW1 on Lehigh T2 with 600 ft of 1000 AL and 10,200 ft of 795 AAC from the substation to line section -808832401 and transfer -808832401 from Lehigh feeder LH40 to the new Lehigh feeder. Install an open switch on line section 517086 and close switch 28927310 to transfer load from Turnersville feeder TV50 to the new Lehigh feeder LHNEW1. Reconductor on Lehigh feeder LHNEW1 from line section -2001368854 to 517250 from 1/0 to 795 AAC for 8,000 ft. Reconductor on Lehigh feeder LHNEW1 from line section 517246 to 517251 from 1/0 to 795 AAC for 800 ft. This project is recommended to relieve transformer loading on Turnersville T1 greater than 50% and conductor loading on Turnersville feeder TV50 and Lehigh feeder LHNEW1 greater than 65%.

Project 52

Location: Goforth

Estimated Cost: \$4,975,000

Load Level: 1

Description: Upgrade Goforth T1 (22.4 MVA) and T2 (37.3 MVA) to 46.7 MVA. Install an open switch at line section 1158462646 and close at switch -706629872 to transfer load from Goforth feeder GF110 to Lehigh feeder LH50. This project is recommended to relieve Transformer loading on Goforth T1 and T2 greater than 50% and conductor loading on Goforth feeder GF110 greater than 65%.

Project 53

Location: Canyon/Kyle

Estimated Cost: \$3,039,700

Load Level: 1

Description: Install new 138 - 24.9-kV, 37.3-MVA transformer at Canyon Substation. Close breaker for new Canyon feeder CN40. Install new switch at line section 505945 and back-feed at line section -646430232 to transfer load from Kyle feeder KY50 to Canyon feeder CN40. Construct new Canyon feeder CN50 with 250 ft of 795 AAC from the substation to line section 124785855 and transfer line section 124785855 to the new feeder. Install open switch at line section -1880012354 and close to switch -1192590638 to transfer load from Kyle feeder KY30 to Canyon feeder CN50. This project is recommended to relieve transformer loading on Kyle T1 greater than 50% and conductor loading on Kyle feeders KY50 and KY30 greater than 65%.

Project 54

Location: Turnersville – TV50

Estimated Cost: \$77,500

Load Level: 2

Description: Reconductor on Turnersville feeder TV50 from line section 1313802570 to 513847 from 336 AAC to 795 AAC for 2,200 ft. This project is recommended to relieve conductor loading on Turnersville feeder TV50 greater than 65%.

Project 55

Location: Turnersville

Estimated Cost: \$2,480,000

Load Level: 3

Description: Upgrade Turnersville T1 from 22.4 MVA to 46.7 MVA. This project is recommended to relieve Transformer loading on Turnersville T1 greater than 50%.

Project 56

Location: Lehigh

Estimated Cost: \$3,316,600

Load Level: 3

Description: Extend Lehigh feeder LH30 for 5,300 ft with 795 AAC from line section 1982492050 to -1651241657. Install an open switch at line section -1651241657 and close at line section -1651241657 to transfer load from Goforth feeder GF120 to Lehigh feeder LH30. Install new 24.9-kV, 46.7 MVA transformer at Lehigh (T3). Install open switch at line section 83944513 and close the switch at line section 512146 to transfer load from Kyle feeder KY20 to Lehigh feeder LH30. Transfer load from Lehigh feeder LH30 from Lehigh T1 to Lehigh T3. This project is recommended to relieve transformer loading on Goforth T2 and Kyle T1 greater than 50% and conductor loading on Goforth feeder GF120 and Kyle feeder KY20 greater than 65%.

Project 57

Location: Goforth – GF30 **Estimated Cost:** \$271,800

Load Level: 6

Description: Construct new Goforth feeder GF30 from Goforth T1 with 300 ft of 1000 AL and 6,400 ft of 795 AAC from the substation to line section 458158808. Transfer tap 458158808 from Goforth feeder GF30 to Goforth feeder GF20. This project is recommended to relieve conductor loading on Goforth feeder GF30 greater than 65%.

Project 58

Location: Turnersville – TV50

Estimated Cost: \$281,800

Load Level: 6

Description: Reconductor on Turnersville feeder TV50 from line section 512550 to 1553735957 from 336 AAC to 795 AAC for 8,000 ft. This project is recommended to relieve conductor loading on Turnersville feeder TV50 greater than 65%.

Project 59

Location: Turnersville

Estimated Cost: Labor Only

Load Level: 6

Description: Transfer Turnersville feeder TV110 from Turnersville T2 to Turnersville T1. This project is recommended to balance loading between Turnersville T1 and T2.

Project 60

Location: Lehigh – LH10 Estimated Cost: \$495,500

Load Level: 7

Description: Construct new Lehigh feeder LH10 from Lehigh T3 with 125 ft of 1000 AL and 12,300 ft of 795 AAC from the substation to line section 1022697672. Transfer tap 1022697672 from Lehigh feeder LH20 to Lehigh feeder LH10. This project is recommended to relieve conductor loading on Lehigh feeder LH20 greater than 65%.

Project 61

Location: Lehigh – LH30 Estimated Cost: \$60,000

Load Level: 7

Description: Install three single-phase 100 amp voltage regulators on Lehigh feeder LH30 at line section -690906531. This project is recommended to improve voltage on Lehigh feeder LH30 from 119.1 V to 121.4 V at LL10.

Section 5

Project 62

Location: Turnersville – TV130

Estimated Cost: \$60,000

Load Level: 7

Description: Install three single-phase 100 amp voltage regulators on Turnersville feeder TV130 at line section 514193. This project is recommended to improve voltage on Turnersville feeder TV130 from 119.3 V to 123.6 V at LL10.

Project 63

Location: Turnersville – TV130

Estimated Cost: \$60,000

Load Level: 1

Description: Install three single-phase 150 amp voltage regulators on Turnersville feeder TV130 at line section 516540. This project is recommended to improve voltage on Turnersville feeder TV130 from 115.0 V to 119.8 V at LL10.

See Figures 5-12, 5-13, and 5-14 for a geographic representation of Projects 51-63.

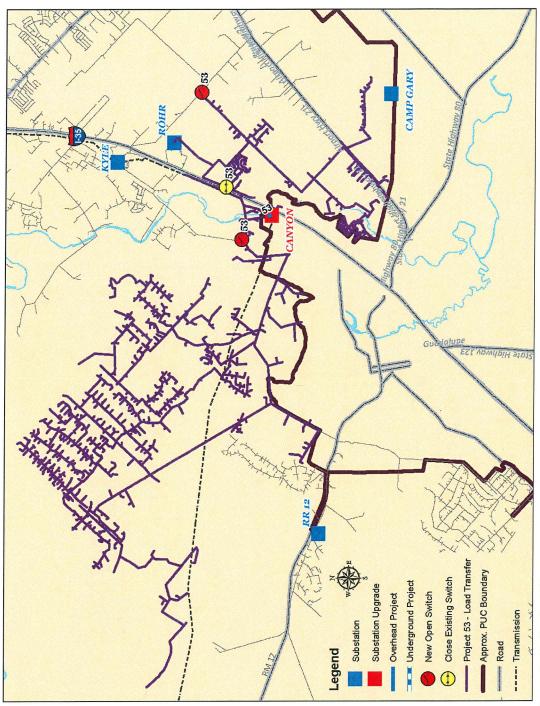


Figure 5-12. Project 53

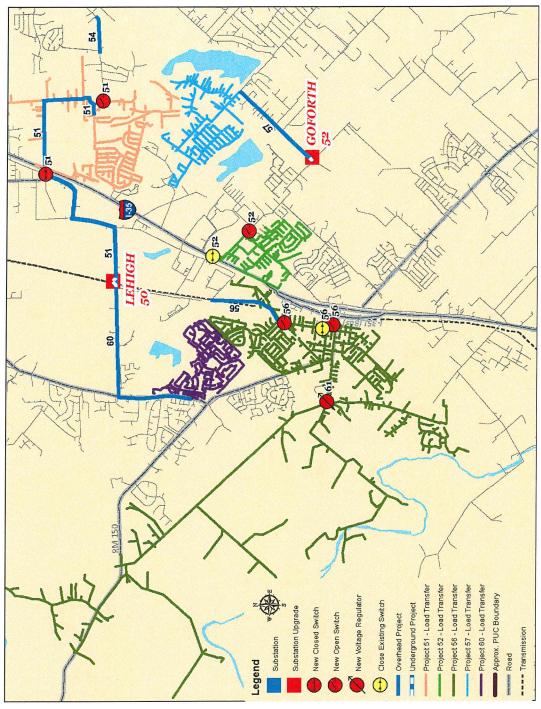


Figure 5-13. Projects 51, 52, 54, 56, 57, 60, and 61

Exhibit 1 SUBSTATION AND FEEDER FORECAST



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PEC Subloads_v7 (Mid-range_Severe Weather)_v3.xlsm Demand Totals (Summer)

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Transformer Demand Growth Rate					3.9%	4.3%	4.6%	4.8%	4.7%								16.8	6./L	18.2	18.9	19.6	20.2	20.9
Feeder / Transformer Diversity Factor				1.01	1.00	1.00	1.00	1.00	1.00	1.00									1.00	1.00	1.00	1.00	1.00
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Transformer Demand Growth Rate					2.6%	2.8%	3.0%	3.2%	3.1%	22		100	12					2.8%	2.8%	2.5%	2.4%	2.3%	2.2%
Feeder / Transformer Diversity Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93 0	0.93 0.	0.93 0.93	3 0.93			0.93	0.93	0.93	0.93	0.93	0.93
	14.0	096.0	0.74	6.4	6.5	6.7	6.9	7.1	7.4	7.6	7.8				E			9.8	10.1	10.4	10.6	10.0	11.1
ANT2_130	21.6	096.0	1.00	6.4	6.5	6.7	6.9	7.1	7.4	7.6	7.8	8.0	8.3 8	8.5 8.8	8 9.1	9.3	9.6	9.8	10.1	10.4	10.6	10.9	11.1
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Transformer Demand Growth Rate					2.6%	2.8%	3.0%	3.2%	3.1%	3.1%	3.0%	3.0%	3.0% 3.	3.0% 3.0%				2.8%	2.8%	2.5%	2.4%	2.3%	2.2%
Feeder / Transformer Diversity Factor				0.1	1.00	1.00	1.00	1.00	1.00	1.00					1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AVERY RANCH Total				58.8	61.2	64.9	0.69	74.5	80.08	84.6 8	89.3 9.	94.1 99	99.2 105.5	5 109.8	114.3	118,9	123.5	128.4	133.4	138.2	142.9 1	147.5	52.0
ART1	37.3	0.978	1.12	27.9	29.0	31.3	33.7	37.4	41.0	43.7				55.9 57.9		61.9		66.1	68.3	70.4			76.5
ART1_20	30.2	0.956	1.67	3.1	3.3	3.5	3.8	4.1	4.4		5.2	5.5	9 0.9	6.4 6.9	9 7.4	1.9	8.4	9.0	9.6	10.2	10.8	11.4	12.0
ART1_30	30.2	0.980	1.00	17.7	18.4	19.2	20.1	21.1	22.1		26.2	28.3		33.6 34.8	36.1	37.3	38.6	40.0	41.3	42.6	43.9	45.1	46.3
ART1_40	30.2	696.0	0.67	8.4	9.8	6.6	11.2	13.5	15.8	16.1		16.7	17.0 17	17.3 17.7	7 18.0	18.3	18.7	19.0	19.4	19.7	20.0	20.3	20.6
Total Feeder Load				29.2	30.3	32.6	35.1	38.7	42.3	45.0	47.7	50.5 5	53.4 57	-	4 61.4	63.6	65.7	68.0	70.3	72.5	74.7	76.8	78.9
Transformer Demand Growth Rate					3.9%	7.9%	7.8%	10.7%	88.6	6.5%	6.1%	2.9%	5.8% 7	7.7% 3.5%	3.4%	3.4%	3.3%		3.4%	3.1%	2.9%	2.8%	2.7%
Feeder / Transformer Diversity Factor				96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	0.96	0.96 0.	96.0 96.0	96.0 9	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
	37.3	0.967	1.21	30.8	32.1	33.6	35.3	37.1	39.0	41.0	43.0	45.0 4	47.2 49	49.6 52.0	0 54.5	57.0	59.6	62.3	65.1	67.8	70.4	72.9	75.5
ART2_130	30.2	0.937	1.08	13.8	14.4	15.2	16.0	16.9	17.8	18.8								29.6	33.1	32.4	33.8	16.4	3 7 8
ART2_140	30.2	0.974	0.92	18.4	19.2	20.0	20.9	21.9	23.0			-						35.6	37.1	38.5	39.8	41.2	42.6
Total Feeder Load				32.2	33.6	35.2	36.9	38.8	40.8	42.9	45.0	47.1 4	49.4 51	51.9 54.4	4 57.0	59.6	62.3	65.2	68.1	70.9	73.6	76.3	79.0
Transformer Demand Growth Rate					70C P	VO . N	700		707	000000													
					4.7%	80.4	4.18	%7°C	5.1%	2.0%	4.9%	4.8%	4.9% 4	4.9% 4.9%	3% 4.7%	% 4.6%	4.5%	4.5%	4.5%	4.1%	3.8%	3.7%	3.5%

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PEC Subloads_V7 (Mid-range_Severe Weather)_v3.xlsm Demand Totals (Summer)

	2,537.4 2,610.5 3	3.0% 2.9%	26.0 26.6	14.1	0.0 0.0	13.9 14.2 2	13.6 13.9 14.2	1.00 1.00		12.2	0.0	12.5 12.8	2.3% 2.2%	0.98 0.98	-		10.0	18.2 18.8	3.3%	0.99 0.99		87.8	45.6 47.1 48.6 4.23%	4.0 4.2	47.5 49.1	3.4% 3.3%	0.99 0.99	39.3 40.7 42.0 4.338	0.0 0.0	19.5 20.1	22.2 23.0 23.7 4.23%	42.5 43.9	3.5% 3.4% 3.3% 0.96 0.96 0.96	92.8 94.4 7E.4	24.4	7 4 4 4	10.4	7 30 0 70	6.0.2
	2,385.9			9 13.2			7 13.7			0 0 0	1.8	Anconomical 1		8 0.98		4 77		_					0 44.0	9	4		66.00	38.0			7 21.5		4.2% 3.8% 0.96 0.96	73.4	L			deriver on a	
11.15 1.116	2,306.	m i			1		7 8% 2 8%		The state of the s	4.11	1.7	decements.		0.98 0.98	-	7.1 7.4		Ī					47.4	3.5	4	30	0.99 0.99	35.1 36.6		16.9 17.5	19.9		4.2% 4.2% 0.96 0.96	216 22 4	L			described.	
11 11 11 11 11 11 11 11	100			12.2	0.0	7.7	2.8%	1.00	7.04	10.7	1.7	11.0	2.8%	0.98	14.9	6.8	8.3	15.1	4.2%	0.99		0.71	33.1	3.3	39.4	4.2%	0.99	33.7	0.0	16.2	19.4	35.2	0.96	20.9		4.9	16.4	21.3	
m	2,061.2		57.3	11.9	0.0		 %		40.6	10.3	1.6	10.7	2.9%	0.98	14.3	6.5	7.9	14.5		0.99			34.6	3.2	37.8		0.99	32.4	0.0	15.5	18.3		0.96	20.2	20.2	4.8		distantana di	
d Forecast (1,98			11.2 11.5			3.0% 2.9%		0.01			-	3.0% 2.9%	0.98 0.98	13.2 13.7			Ī	4.5% 4.4%	0.99 0.99	0.27			2.9 3.1	3		0.99 0.99	29.7 31.0		14.3 14.9	16.8 17.6		4.5% 4.4% 0.96 0.96	.8 19.5		-		distantant.	
PEC Distribution System Demand Forecast (MWs) LL8 LL10 LL11 LL12 LL12 2018 2020 2021 2021 2021	1,90	Í	1.12 20.3						0 70			-		0.98 0.	12.6 13					0.99 0.	C 77 7 77	22.0			Susantanasis.		0.99 0.	28.5 29		13.6 14			0.96 0.	18.1 18.8	L	-		Successor	
ibution Syst	-		4.7	10.6	9 01	404	3.0%	1.00	9.3	8.1	1.5	9.5	3.0%	0.98	12.0	5.5	6.7	12.2	4.5%	0.99	58 7	L	29.1	2.7	31.8	4.5%	0.99	27.2	0.0	13.1	15.4	28.4	0.96	17.5	17.5	4.3	13.5	17.8	3 00/
PEC Distr	1,680.3		5.67				3.0%			7.8	-	NAME OF TAXABLE PARTY.	3.0%		11.5			11.7	4.5%	0.99	54.7	L		2.6	-		0.99	26.0				27.2	_	16.8				dermonant	
1 KL7	1,61	4.2% 4.1%	1.01 7.00				3.1% 3.0%			7.4 7.6		horosom	3.1% 3.0%	0.98 0.98	10.5 11.0	4.8 5.0		10.7 11.2	4.6% 4.5%	66.0 66.0	41 F 52 B	L			27.9 29.1		0.99 0.99	23.9 24.9			The same of the sa	24.9 26.1		15.6 16.2			12.0 12.4	and the second	
18.5 18.6	3 1,54	4.4%					3.1%		-	7.2		8.5		0.98 0	10.1	4.6		10.2	4.7%	0.99 0	49 7 51	L		2.3	and and and a		0 66.0					23.8 2.4		15.1 15		-		Servenne	
11.4	_ 3	47.4	0.1	0.0	1 0	-0	3.2%	1.00	8.0	7.0	1.2	8.2	3.2%	0.98	9.6	4.4	5.3	9.7	4.8%	0.99	47.0	25.2	23.3	2.2	25.4	4.8%	0.99	21.8	0.0	10.4	12.3	22.8	96.0	14.5	14.5	3.8	11.0	14.8	. 000
16.23 20.88	Delet :	Ī	0.00			Name and Address of the Owner, where the Owner, which is the				6.7				0.98	9.2			9.3	4.6%	0.99	44.8	L		2.	2		0.99	20.8		-	darkeassen	21.7		13.9				-	2 00/
77 77 77 77 77 77 77 77 77 77 77 77 77	o g					Southernoon			7.3 7.5		-	7.5 7.7		86.0 86.0	8.4 8.8	3.9 4.0	4.7 4.9	8.5 8.9	3.9% 4.3%	0.99 0.99	41.1 42.9	L		1.9 2.0	22.3 23.2		0.99 0.99	19.1 19.9	0.0 0.0		Secondary	3.9% 4.3%		13.0 13.4	13.0 13.4	3.5 3.6	9.7 10.1	13.2 13.7	2 30/ 2 50/
11.1		157 15				Survivorion		1.00	7.1			7.3		0.98 0	8.1	3.7	4.5	8.2		0.99 0	39.6			1.8	21.4 2		0.99	18.3 1	0.0	-		7.61	0 96.0	12.5 13	12.5	3.4	9.4	12.8 1	
Growth Rate 2010Peak (MW)	1,217.5	45	0.74	-	distriction	annichment.			0.74	and in the same	1.00				1.12	1.00	1.00			J	36	1.12 2		1.00	2		-	1.12		the second section	1.00		7	1	0.93	0.80	1.20	1	
Power Factor Relative		A Principle of the Control of the Co	0.968		***************************************	CONTRACTOR			0.970		0.955				0.972	0.961	0.956					0.948	0.948	0.949				976.0	0.000	0.967	0.976				0.983	0.958	0.989	NATIONAL PROPERTY OF THE PARTY	
Capacity (MVA)			27.4	9.3	8.9	AND DESCRIPTION OF THE PERSONS			22.4	8.9	8.9				37.3	8.9	8.9					22.4	17.7	17.7				22.4	17.7	17.7	17.7				22.4	9.1	18.5		
SUBSTATION FEEDER NAME	PROJECTED SYSTEM COINCIDENT PEAK	SPE CREEK Total	BOTH	BCT1 20	BCT1_40	Total Feeder Load	Transformer Demand Growth Rate	Feeder / Transformer Diversity Factor	BCT2	BCT2_130	BCT2_140	Total Feeder Load	Transformer Demand Growth Rate	Feeder / Transformer Diversity Factor	BCT3	BCT3_250	BCT3_260	Total Feeder Load	Transformer Demand Growth Rate	Feeder / Transformer Diversity Factor	BUDA Total	8011	BOT1_10	BDT1_40	Total Feeder Load	Transformer Demand Growth Rate	Feeder / Transformer Diversity Factor	8013	BDT3_110	BDT3_120	BDT3_130	Transformer Demand Growth Rate	Feeder / Transformer Diversity Factor	BERGHEIM Total	BGT1	BGT1_10	BGT1_20	Total Feeder Load	Transformer Demand Growth Rate

PEC Subloads_v7 (Mid-range_Severe Weather)_v3.xlsm Demand Totals (Summer)

SUBSTATION FEEDER NAME	Capacity (MVA)	Power Factor Relative	Relative Growth Rate	ZO10Peak (MW)	LL 1 LL2 2011 2012		LL3 LL4	LL4 LL5 2014 2015	5 LL6 5 2016	1 44.7		PEC Distribution System Demand Forecast (MWs) LL8 LL10 LL11 LL12 LL1 2018 2020 2021 2022 202	System I LL10 2020	System Demand F LL10 LL11 2020 2021	orecast (1614	1025	LL16	1027	LL18	10149 1	70.20	Compoun Growth Rate
PROJECTED SYSTEM COINCIDENT PEAK System Load Growth Factor			-	17.5	1,258.6 1,308	1,308.1 1,36	9 1,42	1,48	٠, م	٠, "	- ·	٠, ۵	1,827.0	-	1,982.0	7 % 2 %	. ×	m %	Z 2 8	2,385.9 2,	3.2%	T 25	n ×	
BLOCKHOUSE Total				37.2		40.6 4		1	47.7 50.7	7 53.7	7 56.8	0.09	64.4	68.8	73.2	7.77	82.3	85.9		93.2	7.96		101.6	5.16%
BHT1	22.4	0.968	0.93	13.3						ĺ.			Ī		20.6	21.4	22.1	22.9	23.7	24.4	25.2	25.9	26.6	3.53%
07_1118	/-/-	0.998	0.60	4.5									-		2.9	0.9	6.1	6.2	6.4	6.5	9.9	6.7	8.9	2.07%
5H17_40	17.7	0.941	1.20	8.8	-	Name and Address of the Owner, where the Owner, which is the Owner, where the Owner, which is the Owner, where the Owner, which is the Ow	The contract of	- Company	ONE CONTRACTOR	Samuel	-	-	- Constant	Sattement	14.8	15.4	16.0	16.7	17.4	18.0	18.6	19.2	19.8	4.14%
Total Feeder Load				13.3					16.0 16.6	.6 17.2	2 17.8	•			20.7	21.4	22.2	22.9	23.7	24.5	25.2	25.9	26.6	I
Feeder / Transformer Diversity Earter				8	3.3%	3.5%	3.8%	. 4.0%		3.8% 3.8		3.8%	3.8%	3.8%	3.7%	3.6%	3.5%	3.5%	3.5%	3.2%	2.9%	2.8%	2.7%	
בפספו ל וופוסותוופו מואפוסוול ושרכס				8											1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*SECTIONS
BHT2	37.3	0.950	1.12	23.9	24.8 2	26.4	28.1 2		1.7 34.1	36.5	5 39.0	0 41.5	45.2	48.9	52.6	56.4	60.2	63.0	65.0	68.8	74.5	73.3	75.0	900
BHT2_130	17.7	996.0	1.00	11.7				15.4	16.6 18.2						31.8	34.7	37.5	39.4	41.4	43.3	45.1	46.0	46.8	7.18%
BHT2_140	25.9	0.936	1.00	12.5	13.0	13.6	14.2	14.9	15.6 16.3			8 18.6	19.5		21.2	22.2	23.1	24.1	25.1	26.0	26.9	27.8	28.7	4.23%
Total Feeder Load		CONTRACTOR DE CO		24.3	25.2	26.8	28.5 3	Message	32.2 34.6	-		ANNANA	Southedouble	Southwest	53.1	56.8	9.09	63.5	66.4	69.3	72.0	73.8	75.6	Mediamenterina
Transformer Demand Growth Rate					3.9%	6.3%	6.4%								7.6%	7.2%	6.7%	4.7%	4.6%	4.3%	4.0%	2.4%	2.4%	-
Feeder / Transformer Diversity Factor				0.98	0.98	0.98	96.0						0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	Crews and
BARKSDALE AEP DELIVERY PT Total				1.2	1.2	1.2		1.3							1.4	1.4		, n	4 10		3 ,		100000	
BARKSDALE AEP DELIVERY PT Total	0.0	0.968	0.37	1.2	L		1.2	L	13	1 3	1.3	1.3	-	-	7	-		2 -		2.1	6.1		0.1	1.41%
BARKSDALE AEP DELIVERY PT Total	0.0	0.968	1.00	1.2	1.2		1.2			1.3					1.4	4.4	1 2	1.5	1 10	0 5			1.0	1.418
Total Feeder Load	Stationary of the state of the	CATALON SERVICES CONTRACTOR SERVICES	deconstruction of the last	1.2	1.2	1.2									1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.6	
Transformer Demand Growth Rate					1.3%	1.4%	1.5%	1.6%	1.6% 1.	1.5% 1.5%	5% 1.5%		6 1.5%		1.5%	1.4%	1.4%	1.4%	1.4%	1.3%	1.2%	36	**	
Feeder / Transformer Diversity Factor				1.00	1.00	1.00						0 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	ntativi si
BALCONES Total				65.7	67.9	70.4 7	73.2 7	76.3 79	79.4 82.6	6 85.9		2 92.7	96.5	100.3	104.2	108.1	112.1	1163	120.6	1747	178.7	137 5	7 78	y 7.7 C
817.	22.4	0.964	0.56	4.7	8.6	10.1		The State of the			3 11 12				40.6	,							1	0.77%
BLT1_10	8.9	0.000	1.00	0.0		0.0			0.0	0.0			0.0		0.0	6.00	13.7	13.4	13.7	0.45	14.2	14.4	14.7	2.12%
BLT1_20	8.9	0.939	1.00	6.9		7.1	interestation of the last of t	of annihold party	-		9 8 1		L		7 8 7	0 8		6 0		0.00	0 0	0.0	0.0	0.00%
BLT1_30	8.9	0.939	1.33	2.9	2.9	3.0	3.1	3.2	3.3 3.			6 3.7			4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	8.4	2.56%
Total Feeder Load	THE REAL PROPERTY.		CHEST CONTRACTOR CONTR	9.7	6.6	10.1	MONEGORIA		20000000	-	deconstant	-	-	-	12.7	13.0	13.3	13.5	13.8	14.1	14.3	14.6	14.8	
Transformer Demand Growth Rate					2.0%	2.1%	2.3%	2.4%	2.4% 2.	2.3% 2.3%					2.2%	2.1%	2.1%	2.1%	2.1%	1.9%	1.8%	1.7%	1.6%	-
Feeder / Transformer Diversity Factor				0.99	0.99	66.0				66.0 66	66.0 66	6 0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	ng ang tropic flancis.
BLT2	22.4	0.961	0.93	13.5	14.0	14.5				16.9 17.5	.5 18.2	2 18.8	19.6	20.3	21.0	21.8	22.5	23.3	24.1	24.9	25.6	26.4	27.1	3.53%
BLT2_80	8.9	0.952	09.0	7.0	7.2	7.5	7.7						1.01	10.5	10.8	11.2	11.6	12.0	12.4	12.8	13.2	13.6	14.0	3.53%
BLT2_90	8.9	0.961	09.0	6.9	7.1	7.3	7.6		8.2 8.	8.5 8.9				10.3	10.7	11.0	4 11	11.8	12.2	12.6	13.0	13.4	13.7	3.53%
BLT2_100	8.9	0.000	1.20	0.0	0.0	0.0								0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00%
Total Feeder Load				13.8	14.3	14.8	15.4	16.0 1	16.6 17.	17.2 17.9	9 18.6	6 19.3	20.0	20.7	21.5	22.3	23.0	23.8	24.7	25.4	26.2	26.9	27.7	CONTRACTOR
Transformer Demand Growth Rate					3.3%	3.5%				13300	3.8% 3.7%	3.8%	3.8%	3.8%	3.7%	3.6%	3.5%	3.5%	3.5%	3.2%	2.9%	2.8%	2.7%	;
Feeder / Transformer Diversity Factor				0.98	0.98	0.98	0.98	0.98	0.98 0.9	86.0	86.0 86	8 0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	86.0	Annerto
8 173	73.4	0.961	1 30	15.6	16.3	17.1								ı	0 00	9								Ansetso
RIT3 220	17.7	0.056	1 00	0.3		10.3	0.04		43.0	100			2.07	7//-	0 07	30.7	, ,	7.55	24.0	10.4	37.9	39.4	40.9	4.94%
01.13_22.0	/:/-	0.730	8.	2.5	-	10.2		The same of				-	-	-	7/7	18.	19.0	19.0	20.8	21.8	22.7	23.6	24.5	4.94%
DL13_230	1/	0.970	1.00	6.6	- Contraction	7.3	-		-	-	-				12.2	12.8	13.4	14.1	14.8	15.4	16.1	16.7	17.3	4.94%
Total Feeder Load				15.9		17.5			.,					••	.,	30.9	32.4	34.0	35.6	37.2	38.7	40.3	41.8	-
Hanstorine Demand Growth Kate				0	4.6%	30.0	5.3%									2.0%	4.9%	4.9%	4.8%	4.4%	4.4%	3.9%	3.8%	1
ceder / Hanstonner Diversity Factor				0.30	0.30	0.30		26.0	0.98	0.98	98 0.98	8 0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	Section of
- Auto																								nen

PEC Subloads_v7 (Mid-range_Severe Weather)_v3.xlsm Demand Totals (Summer)

NAME OFFICE SYSTEM CONTROLL	y) leg	- 2							211					,	STATE OF THE PARTY		である。一般有効性的	ののでは、日本には、日本のでは、日本には、日本には、日本には、日本には、日本には、日本には、日本には、日本に			COLUMN TO SERVICE AND ADDRESS OF THE PERSON.			10
איז זה דווים היודיוים היודיאים היודיאים המדיים המנ	STATE OF THE PERSON.		Re Gr R	roz A)	800000	2012						2018 201	2018 2019 2020		2022	機器		2025		2027		25000	2030	tmo. one b ss
System Load Growth Factor	- Services			1,217.5	1,258.6 1,308.1 1,3	3.9%	4.2%	,424.1 1,4	4.4% 4.28	1,61	3.1 1,68	3 1,75	1,82	7.0 1,904.1	1 1,982.0	2,061.2	2,141.6	2,22	2,306.2	6	2,462.5 2,	4 2,	610.5	
8174	37.3	0.973	0.93	26.9	27.8	28.8	29.8	31.0										46	3.0%	3.3%	3.2%	3.0%	7.7%	2 5.30/
BLT4_320	17.7	0.963	1.20	10.7	11.1	11.5	12.0	12.5						15.9 16.6					20.0	y uc		0 10	200	0.000
BLT4_330	17.71	0.978	1.20	11.7	12.1	12.5	13.1	13.6	14.2	14.8	15.4	16.0	16.7						21.8	22.5	23.2	23.0	246	3 80%
BLT4_340	7.71	0.978	09.0	4.5	4.6	4.7	4.8	4.9				-		5.5 5.	5.7 5.8			9	6.2		6.4	6.5	9.9	1.90%
Total Feeder Load				26.9	27.8	28.8	29.8	31.0	32.3	33.5		36.1 3	37.4 3	38.8 40.3	.3 41.8	4		4	47.9		50.9	52.4	53.8	
Transformer Demand Growth Rate					3.3%	3.5%	3.8%	4.0%			3.8%				3.8% 3.7%		3.5%			3.2%	2.9%	2.8%	2.7%	1
Feeder / Transformer Diversity Factor				1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	1.00 1.00	1.00	0 1.00					1.00	1.00	1.00	
BLANCO Total				15.5	15.8	16.1	16.5	16.9	173 1	177 1	18.1	2 5 4	18 0 46	103 108		3			0 00	7 44	200			
SKT	27.4	579.0	0 5A	15.5		14.1	16.5	14.0											22.0	22.4	22.8	23.2	23.5	2.12%
BNT4 20	0 8	0.057	90.00	0.0	0.0	1.0	10.0	10.9	- Transaction	***************************************	***************************************	***************************************		Contract					22.0	22.4	22.8	23.2	23.5	2.12%
RNT1 30	6.0	750.0	00.1	7.6	5.3	9.4	0.0	7.0	2.8	0.0	6.1	-		***********		-	-		7.4	7.6	7.7	7.8	7.9	2.12%
BNT1 40	15.4	0.707	9 6			7.0	4.0	4.8	-	0.0	5.1	-	-	-	-				6.2	6.3	6.4	6.5	9.9	2.12%
NT 150	- o «	0.992	1.00	- 0	1.0	5.4	4. 0	6.4	4.6	7.7	20. 0	4.9	5.0	5.2 5.	5.3 5.4	5.5	2.6	5.7	5.9	0.9	6.1	6.2	6.3	2.12%
Total Condon Land	alphina manders describes and experience	Manage State	Market State of the Control of the C	The second second	and the second s	named of the last	Name of Street or other Designation of the Owner, where the Owner, which is the Owner, whi	- Constitution of the Cons	-	-	-	outer (market	demonstration	Museum	Control of the last	100		- Anna	7.7	2.7	2.8	2.8	2.9	2.12%
Transformer Demand Growth Rate				0.0	2.0%	7 1%	0.0	0.71		3.76				į.							23.0	23.4	23.7	İ
Feeder / Transformer Diversity Factor				0.99	2.0% 0 99	%I.7	7.5% 0 99	7.4% 0 dq	7.4%		7.3%	%7.7	7.3%		2.3% 2.2%		2.1%	2.1%	2.1%	1.9%	1.8%	1.7%	1.6%	
								0.00								66.0					0.99	0.99	0.99	
BUTTERCUP Total				49.9		53.9	56.3	58.9		64.2 6	9		72.9 76	76.1 79.3	3 82.7	7 86.1		93.1	8.96	100.3	103.8	107.1	110.5	4.05%
BRT1	37.3	0.993	0.93	13.5	13.9	14.4	15.0	15.6								0 21.7	7 22.5				25.6	26.3	27.0	3.53%
BRT1_10	17.7	0.991	1.20	8.0	8.4	8.8	9.2	9.6	10.1	10.6		11.6	12.1	12.7 13.				15.8			17.6	18.2	18.8	4.34%
BRT1_20	17.7	0.996	09.0	5.9	0.9	6.2	6.3	6.5	***********	-	- Contraction	Constant	- Constitution	MANGETTE					8.5	8.7	8.8	9.0	9.1	2.17%
Total Feeder Load				14.0	14.4	14.9	15.5	16.1			18.1			***		7 22.5	5 23.3		24.9	25.7	26.4	27.2	27.9	SONTH STREET
I ransformer Demand Growth Rate					3.3%	3.5%	3.8%	4.0%	3.9%	3.8%	3.8%	3.7%	3.8%	3.8% 3.			V 0	3.5%			2.9%	2.8%	2.7%	i
recuei / Haisioimer Diversity ractor				76.0	76.0	76.0	0.97	0.97			0.97				0.97 0.97	77 0.97	7 0.97		0.97	0.97	0.97	0.97	0.97	
BRT2	37.3	0.979		17.3	18.0	18.8	19.6	20.6				24.6	25.7 2	26.9 28.1	.1 29.3	30.	6 31.9	33.2	34.6	35.9	37.2	38.4	39.7	4.23%
BRT2_210	17.7	0.971		13.4	14.0	14.5	15.2	15.9	16.7		18.3			20.8 21.8	8 22.7	23.			26.8	27.8	28.8	29.8	30.8	4.23%
BRT2_220	17.7	0.997	1.00	3.8	3.9	1.4	4.3	4.5	conseque	and some					6.1 6.4	4. 6.6	6.9		7.5	7.8	8.1	8.3	8.6	4.23%
Total Feeder Load				17.2	17.9	18.6	19.5	20.4	21.4	22.4	23.4	24.4	25.5 2		27.9 29.1			.,	34.3	35.6	36.9	38.1	39.4	I
Iransformer Demand Growth Rate					3.9%	4.3%	4.6%	4.8%						4.6% 4.					4.2%		3.5%	3.4%	3.3%	-
Feeder / Transformer Diversity Factor				1.01	1.01	1.01	1.01	1.01							1.01 1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	
вктз	22.4	0.959	-	19.1	19.9	20.7	21.7	22.7		24.9	26.0	27.1	28.4 2	29.7 31.	31.0 32.4	4 33.8	3 35.2	36.6	38.2	39.6	41.0	42.4	43.8	4.23%
BRT3_330	25.9	0.958	1.00	19.1	19.9	20.7	21.7	22.7		24.9	26.0	27.2	28.4	9.7 31	0 32	4 33.8	35.	36.7	38.2	39.7	41.1	42.5	43.8	4.23%
Total Feeder Load				19.1	19.9	20.7	21.7	22.7	23.8	24.9	26.0	27.2	28.4 2		31.0 32.4	4 33.8	3 35.2	2 36.7	38.2	39.7	41.1	42.5	43.8	Management of the second
Transformer Demand Growth Rate					3.9%	4.3%	4.6%	4.8%						4.6% 4.		4% 4.3%		1000			3.5%	3.4%	3.3%	-
Feeder / Transformer Diversity Factor				1.00	1.00	1.00	1.00	1.00							00 1.00	1.00	1.00	0 1.00	1.00	1.00	1.00	1.00	1.00	
BERTRAM Total				16.4	16.8	17.3	17.8	18.4	19.0	19.6	20.1	20.7	21.4 2	7.22 22.0	.7 23.3	3 24.0	24.7	7 25.4	26.1	26.7	27.4	28.0	78.6	900
BTT1	22.4	0.971	0.74	16.4	16.8	17.3	17.8	18.4	19.0		20.1									26.7	27.4	28.0	28.6	2 87%
BTT1_30	9.1	0.993	0.50	2.4	2.4	2.4	2.5	2.5	2.6		2.6	2.7	2.7			.8 2.8			2.9	3.0	3.0	3.0	3.1	1.24%
BTT1_40	17.7	0.989	1.00	6.5	9.9	8.9	7.0	7.2	7.4		7.8		8.2	8.4 8		8.9 9.1	1 9.3	3 9.5		10.0	10.2	10.4	10.6	2.49%
BTT1_50	9.1	0.979	1.50	6.2	6.4	6.7	7.0	7.3	7.6		8.2		8.9							11.9	12.2	12.6	12.9	3.73%
BTT1_60	25.9	0.939	1.00	2.5	2.5	2.6	2.7	2.7	2.8		3.0		3.1	3.2 3	3.3 3.	3.4 3.5			3.7	3.8	3.9	4.0	4.0	2.49%
Total Feeder Load				17.6	18.0	18.5	19.1	19.7		21.0	21.6	22.2	22.9 2	23.6 24.	24.3 25.	25.0 25.7				Allehende	29.3	30.0	30.6	
Transformer Demand Growth Rate					2.6%	2.8%	3.0%	3.2%	3.1%		3.0%					%b C %b	78. 2.8%	2.8%	2.8%	2.5%	7.4%	70 C	2 26	
reeder / Iranstormer Diversity Factor				-																	201	6.5.7	7.7	

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PEC Subloads_v7 (Mid-range_Severe Weather)_v3.xlsm Demand Totals (Summer)

0.74 10.8 1.1 1.14 1.186.2 9 1.258.6 1.308.1 1.362.9 1 0.75 3.15 3.2 3.3 3.1 3.2 3.2 3.0 0.75 2.1 2.2 2.3 3.2 3.0 0.75 2.1 2.2 2.3 3.2 3.0 0.75 2.1 2.2 2.3 3.2 3.0 0.74 10.0 1.2 1.2 1.2 1.2 2.3 3.0 0.74 10.0 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2	1,36	4,5% 4.5% 4.5% 4.5% 4.5% 4.5% 4.5% 4.5% 4.	1,486.3 1,549.2 4.4% 4.2% 12.5 12.9 12.5 12.9 4.0 4.2 3.9 4.0	1,61	1,680.3		1,827.0 1		1.982.0 2.0	061.2 2.1		.8 2,306.2	2 2,385.9	2,46	2,53	2 640 5	P C
1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.15						AUTHORISMENTALISMENTALISM	4.3%	4.2%	1	60	2,141.b 2,222.8 3.9% 3.89	3.8% 3.8%		3 2%	3 0%	2,010.3	3.89%
124 0.993 0.74 10.8 11.1 11.4 11.4 11.4 11.4 11.5						14.1	14.6	15.0	15.4	15.9						18.9	2.82%
A 5 0.979 0.75 3.5 3.6 3.7 4.5 Crowth Rate Diversity Factor						14.1	14.6	15.0	15.4	15.9	16.3 16	16.8 17.2	7.71	18.1		18.9	2.82%
Try 0.995 1.00 3.2 3.3 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5		100 mm m m m m m m m m m m m m m m m m m		4.2 4.3		4,5	4.6	4.8	4.9	5.0						5.9	2.57%
Triangle of the control of the contr						4.5	4.6	4.8	5.0	5.2		L		L		6.4	3.43%
15.1 0.920 0.75 2.1 2.2 2.3				3.5 3.6		3.8	3.9	4.0	4.1	4.2						6.4	2.57%
Growth Rate 11.9 12.2 11.5 Diversity Factor 0.91 0.91 0.91 22.4 0.965 0.74 16.9 17.4 17.9 17.7 0.996 - 7.6 17.4 17.9 17.7 0.996 1.00 4.3 4.5 4.8 17.7 0.996 1.00 4.3 4.5 4.8 17.7 0.996 1.00 4.3 4.5 4.8 Diversity Factor 1.00 5.1 5.4 8.7 1.8 Orowith Rate 9.7 0.890 1.00 1.4 1.4 1.4 Sy7 0.991 1.00 1.4 1.4 1.4 1.4 Sy7 0.991 1.00 1.3 1.3 1.3 1.3 Growth Rate 9.7 0.991 1.00 1.3 1.3 1.4 Sy7 0.991 1.00 1.3 1.3 1.4 Sy8 0.994 <td< td=""><td></td><td>000000000000000000000000000000000000000</td><td></td><td></td><td></td><td>2.7</td><td>2.8</td><td>2.9</td><td>3.0</td><td>3.0</td><td></td><td></td><td>3.3 3.3</td><td></td><td></td><td>3.6</td><td>2.57%</td></td<>		000000000000000000000000000000000000000				2.7	2.8	2.9	3.0	3.0			3.3 3.3			3.6	2.57%
Diversity Factor 0.91 0.91 0.91 Diversity Factor 0.92 0.92 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91			13.7 14	14.2 14.6	15.0	15.5	15.9	16.4	16.9	17.4	17.9 18	-	-	-	2	20.7	A STATE OF THE STATE OF T
Diversity Factor 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91					3.0%	3.0%	3.0%	3.0%	2.9%	2.9%						2.2%	1
12.4 0.965 0.74 16.9 17.4 17.9 12.4 0.965 0.74 16.9 17.4 17.9 12.5 0.9476 1.00 4.3 7.5 7.6 17.7 0.940 1.00 5.1 5.4 5.7 17.7 0.940 1.00 5.1 5.4 5.7 17.7 0.945 1.00 5.1 2.6% 5.7 10.5 0.998 0.37 3.7 3.7 3.8 10.5 0.998 0.37 3.7 3.7 3.8 9.7 0.991 1.00 1.4 1.4 1.4 9.7 0.991 1.00 1.4 1.3 1.3 10.8 0.994 1.00 1.3 1.3 10.9 0.998 0.74 1.2 1.3 1.5 10.9 0.998 1.00 3.4 3.5 3.6 0.9 0.000 0.000 0.00 0.0 0.0 0.000 0.000 0.000 0.00 0.0 0.000 0.000 0.000 0.00 0.0 0.000 0.000 0.000 0.000 0.0 0.000 0.000 0.000 0.000 0.0 0.000 0.000 0.000 0.000 0.0 0.000 0.000 0.000 0.000 0.0 0.000 0.000 0.000 0.000 0.0 0.000 0.000 0.000 0.000 0.0 0.000 0.000 0.000 0.000 0.0 0.000 0.000 0.000 0.000 0.0 0.000 0.000 0.000 0.000 0.000 0.0 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0			0.91 0	0.91 0.91	0.91	0.91	0.91	0.91	0.91	0.91		8	10.91	0.91		0.91	
22.4 0.865 0.74 16.9 17.4 17.9 12.9 12.4 12.9 12.4 12.9 12.4 12.9 12.4 12.9 12.4 12.9 12.4 12.9 12.4 12.9 12.4 12.9 12.4 12.9 12.4 12.9 12.4 12.9 12.4 12.9 12.4 12.9 12.4 12.9 12.4 12.9 12.4 12.4 12.4 12.4 12.4 12.4 12.4 12.4					21.4	22.1	7.22	23.4	24.1	24.8	25.5 26	26.2 26.9	9 77.6	283	28.0	20 K	2000
25.9 0,976 - 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6			19.6 20	20.2 20.8		22.1	22.7	23.4	24.1	24.8	L		L			29.5	7 87%
17.7 0.940 1.00 4.3 4.5 4.8 mand Growth Rate					9.7	7.6	7.6	7.6	7.6	7.6						7.6	%00 0
And Growth Rate The control of the						6.7	7.0	7.3	7.7	8.0				9.6		10.2	4.35%
and Growth Rate Triangle 177.1 17.6 18.1 1.1. 1.1. 1.1. 1.1. 1.1. 1.1. 1.						8.0	8.3	8.7	9.1	9.5		10.2 10.6	-	-	-	12.0	4.35%
and Growth Rate 10.5 0.898 0.37 3.7 3.7 3.8 10.5 0.898 0.37 3.7 3.7 3.8 10.5 0.896 1.00 1.4 1.4 1.4 1.4 9.7 0.966 1.00 1.3 1.3 1.3 1.3 and Growth Rate 1.38 0.999 0.74 12.9 13.3 28.9 all 33.3 0.999 0.74 12.0 6.9 2.8 8.9 0.994 1.00 6.7 6.9 2.8 9.3 0.998 1.00 3.4 3.5 3.8 9.0 0.00 0.00 0.00 0.0 0.0 0.0				20.4 21.0		22.3	23.0	23.7	24.4	25.1	· ·	,	parameter	destruction	deretzaen	29.8	VICTORIA CONTRACTORIA CONTRACTO
Annuar Diversity Factor 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.9			3.1%	3.1% 3.0%		3.0%	3.0%	3.0%	2.9%	2.9%						2.2%	
10.5 0.698 0.37 3.7 3.7 3.8 3.8 3.4 3.6 3.9 3.7 3.8 3.8 3.8 3.7 3.8 3.8 3.8 3.8 3.7 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8				0.99 0.99	0.99	0.99	0.99	0.99	0.99	0.99	-	K				0.99	
10.5 0.898 0.37 3.7 3.7 3.8 3.9 3.9 3.9 3.9 3.9 3.9 3.9 3.9 3.9 3.9								Section of the second			THE PERSON NAMED AND POST OFFICE ADDRESS OF THE PERSON NAMED AND POST OF THE PERSON NAMED AND POST OFFI ADDRESS OFF	SPECIAL SERVICE		Antonio and	The Account		encontract planets and
9.7 0.830 1.00 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4						4.2	4.3	* * *	† • • •	6.4	4.5		4.7	20 .	4.8	4.9	1.41%
9.7 0.966 1.00 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4			-	-	-	7.5	2	7	4.4	4.0						4.9	1.41%
Manual Conduct Rates	Andrew server		1.5	7. T		9,1	0. 4.	0.1	1.0	1.6	1.7	1.7	1.7	-	1.8	1.8	1.41%
Medicowch Rate		-	decouseons	-	-	A .	2 4		0.7	1.1	-	-					1.41%
mer Diversity Pactor 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93	- Committee and	-	-	-	-		4.6			6.1	Disconsister	- Career Career	and a second second	- Constitution	and out of the last	and an annual	1.41%
mer Diversity Factor 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93						1.5%	.5%	1.5%	5, 4.0	4.8						 	
8.9 0.784 1.00 6.77 23.3 23.9 7.1 8.9 9.3 0.70 0.70 0.00 0.00 0.00 0.00 0.0 0.0 0	Ŭ	0.93	0.93 0	≅	-	0.93	0.93	0.93	0.93	0.93	0.93 0.	0.93 0.9	0.93 0.93	3 0.93	0.93		
33.3 0.989 0.74 22.7 23.3 23.9 2.9 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1		A STATE OF							Constitution of the second second	The Control of the Co	STATE OF THE PARTY	W. PERSON CO., CO., CO., CO., CO., CO., CO., CO.,		-			The same of the sa
1,10		4.62		677 677		29.5	30.4	31.4	32.3	33.2						39.5	2.82%
9.3 0.998 1.00 3.4 3.5 3.6 0.0 0.000 1.00 0.0 0.0 0.0			de la constitución de la constit	8.0 8.3		16.9	17.4	17.9	18.4	18.9	19.5 20		6 21.1	21.6	22.1	22.5	2.82%
0.0 0.000 1.00 0.0	-		4.0	4.1 4.2	4.3	4.4	4.6	4.7	4.9	5.0	L	5.3				7.111	2.82%
C C C C C C C C C C C C C C C C C C C		0.0				0.0	0.0	0.0	0.0	0.0	0.0		00		9 0	2 0	7000
8.9 0.951 1.00 3.0 3.1 3.2	3.2 3.3			3.6 3.7		4.0	4.1	4.2	4.3	4.4		4.7 4.		5.1		5.3	2.82%
13.2 13.5 13.9						17.2	17.7	18.2	18.7	19.3	ľ		ľ				decourant annual section
2.6% 2.8%		3.2%	3.1%	3.1% 3.0%	3.0%	3.0%	3.0%	3.0%	2.9%	2.9%	2.8% 2.	2.8% 2.			2.3%	2.2%	1
Feeder / Transformer Diversity Factor 0.98 0.98 0.98						0.98	0.98	0.98	0.98	0.98	0.98 0.9	0.98 0.98		3 0.98			
37.3 0.942 0.74 9.7 10.0						12.7	13.1	13.5	13.9	14.3	14.7	15.1 15.	15.5 15.9		-	17.0	2.82%
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PEC Subloads_v7 (Mid-range_Severe Weather)_v3.xlsm Demand Totals (Summer)

with Factor Total 22.4 0.979 0.65 3 9.3 0.990 1.43 3 9.3 0.990 1.43 2 9.3 0.990 0.86 9 9.3 0.990 0.86 9 9.3 0.990 0.86 9 9.3 0.990 0.86 9 9.3 0.990 0.86 9 9.3 0.990 0.86 9 9.3 0.997 0.98 9 1.43 0.997 0.99 0.86 9 1.44 0.997 0.99 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86	1,258.6 1,308.1 3.5% 3.5% 3.5% 3.5% 3.5% 3.5% 3.5% 3.5%	98.1 1, 1362.9 1 1	4.5% 4.5% 38.6 22.6 4.7 8.0 0.0 0.0 0.0 0.0	1,486.3 1,549.2 4.4% 4.2% 39.8 41.1 23.3 23.9 4.9 5.1	9.2 1,613.1	1,680.3		-	1				Charles and a Company of the Company		THE STATE AND ASSESSED.	THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO	mo: no t
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9.3 0.979 1.00 ad 9.3 0.967 1.00 in ond Growth Rate mer Diversity Factor 2.2.4 0.987 0.93			0.0	0.0	0.0 0.0	0.0	0.0	0.0	0.0			0.0			0.0		0.0
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ad Growth Rate rmer Diversity Factor 22.4 0.987 0.93			8.6			11.3	11.8	12.2		13.1	- 4-	14.6	15.1	15.6	L		3.53%
and Growth flate rmer Diversity Factor 1 22.4 0.987 0.93			16.2				19.5	20.3				24.2					-
rmer Diversity Factor 22.4 0.987 0.93 1	3.3%		4.0%	3.9%	3.8% 3.8%		3.8%	3.8%	3.8% 3	3.7% 3.6%	3.5%	3.5%	3.5%		2.9% 2.8%		
22.4 0.987 0.93	0.98 0	0.98 0.98	0.98		86.0 86.0	8 0.98	0.98	0.98				0.98	0.98				
22.4 0.987 0.93	13.8 14	14.3 14.9	15.5				18.7		16	10		22.4	230 2				
	13.8	14.3 14.9	15.5		16.7 17.3	18.0	18.7			20.8 21.6	22.3		L	24.7	25.4 26.1	L	3 536
9.3 0.942 1.00		3.0 3.1	3.2				3.9	district the second	control	DW/W		4.7			5.2 5.3		
DHT1_20 4.5 0.999 0.80 3.8	3.9	4.0 4.1	4.3			4.8	4.9			B			6.6		6.2		2.68%
DHT1_30 9.3 1.000 1.20 6.8	7.1	7.4 7.7	8.1				10.0						13.2	13.7		15.0	
Total Feeder Load 13.5	13.9 1-	14.4 15.0	15.6				18.8					23.2					opposition of the last of the
		3.5% 3.8%	4.0%	3.9%	3.8% 3.8%	3.7%	3.8%	3.8%	3.8% 3	3.7% 3.6%	3.5%	3.5%	3.5%	3.2% 2	2.9% 2.8%		-
Feeder / Transformer Diversity Factor 0.99	0.99	0.99 0.99	0.99				0.99					0.99					
DOBYVILLE Total	1.3	1.3 1.4	1.4	1.4			1.6	1.7				1.0	000				
DVT1 0.0 0.000 0.74 1.3		L	1.4	4.1		L	1.6	1.7	L			0.1	2.0		2.1	2.7	2.02%
DVT1_40 0.00 0.00 1.00 0.6			0.7	0.7			0.8	0.8				1.0	0 1				-
0.0 0.000 1.00 0.6	0.6	0.7 0.7	0.7	0.7			8.0	0.8				1.0	1.0		0		-
Total Feeder Load	1.3	1.3 1.4	1.4	4.1	1.5 1.5	5 1.6	1.6	1.7	1.7	1.8 1.8	1.9	1.9	2.0	2.0	2.1 2.1		The same of
Transformer Demand Growth Rate	2.6%		3.2%	3.1%			3.0%	3.0%				2.8%	2.8%				
Feeder / Transformer Diversity Factor	1.00	1.00 1.00	1.00	1.00			1.00	1.00				1.00	1.00		.00 1.00	1.00	
ORIPPING SPRINGS Total	32.0	33 3 34 0					75.7			100			2000000		200		
22.4 0.988 1.12							43.7					0.66			9		
15.1 1.000 1.00						oc ur	4.4	6.3	7 77		7.5	32.0		35.2	36.5	38.9	4.23%
0.994 1.00				Г			12.7	45.8				0.7					
DST1_40 8.9 0.935 1.00 5.3							7.8	8.2				- 61					4.23%
Total Feeder Load	18.3	19.1 19.9	20.9	21.9	22.9 23.9	25.0	26.1	27.3		29.8 31.1		33.7	35.1				NOW WHEN
Transformer Demand Growth Rate	3.9%	4.3% 4.6%		4.7%	4.5% 4.5		4.5%	4.6%	4.5%			4.2%	4.2%	3.8%	3.5% 3.4%	3.3%	-
Feeder / Transformer Diversity Factor 0.97	0.97	76.0 76.0		26.0	76.0 76.0		0.97	0.97				0.97	0.97				

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PEC Subloads_v7 (Mid-range_Severe Weather)_v3.xlsm

	Column C	Control Cont	1114 11.15 11.16 11.17 11.18 11.13
Marche Ma	The control of the co	The control of the co	4.3% 4.2% 20.24 20.24 20.25 2.05.6 20.27 20.33 20.34 4.3% 4.2% 4.0% 2.141.6 2.222.8 2.306.2 2.385.9 2.462.5 2.55 2.14 4.3% 4.0% 3.9% 3.8% 3.8% 3.5% 3.2% 2.14 2.23 2.44 2.29 2.95
Mathematical Mat	The control of the co	Figure 1964 (1964) (196	1,827.0 1,904.1 1,982.0 2,061.2 2,141.6 2,222.8 2,306.2 2,385.9 2,462.5 2,55 4.3% 4.2% 4.1% 4.0% 3.9% 3.8% 3.8% 3.5% 3.5% 2.4 22.3 2.4.3 2.4.3 2.5.3 2.6.4 2.7 2.7 2.9.5 2.9.5 0.0
1	The control of the co	The control of the co	4.3% 4.2% 4.1% 4.0% 3.9% 3.6% 3.6% 3.5% 3.5% 3.2% 21.4 22.3 23.3 24.3 25.3 26.4 27.5 28.6 29.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0 1.1 1.2 1.2 1.7 1.7 1.8 4.0 2.9 3.7 3.4 3.5 3.7 3.8 4.0
Control Residue Control Re	1.	Control Data Cont	214 22.3 23.3 24.3 25.3 26.4 27.5 26.5 20.6 20.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 136 13.6 14.3 15.0 15.7 17.4 17.8 15.8 2.8 2.9 3.1 3.2 3.4 3.5 3.7 3.8 4.0
Control Name Cont	Fig. 10 Fig.	Control Name Cont	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Council National Part Coun	Consistency Control of the control o	Control Date Cont	13.0 13.6 14.3 15.0 15.7 16.4 17.1 17.8 18.5 12.8 2.9 3.1 3.2 3.4 3.5 3.5 3.7 3.8 4.0
From the control of t	County lass	Conversione National Plane	2.8 2.9 3.1 3.2 3.4 3.5 3.7 3.8 4.0
Control National Part Cont	Compliany	Council black Council blac	
Geomoth Busing Figure 1. 1	Complete Holison Fig. 1 and September 1 and Se	Growth Base	6.2 6.4 6.6 6.8 7.0 7.2 7.5 7.7 7.9
Growth blace (1 year)	Complete Leg Complete	Growth Nate	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
From the parameter of the control tasks of the cont	Propositions (1) (2) (2) (3) (3) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	From the late of the control state of the control s	22.0 23.0 24.0 25.0 26.0 27.1 28.3 29.3 30.4
From the protocol records the control records (1.2) Control record	The control of the co	From the protect of the control force of the contro	4.6% 4.5% 4.4% 4.3% 4.2% 4.2% 4.2% 3.8% 3.5%
1	Company Comp	Control Name	0.97 0.97 0.97 0.97 0.97 0.97 0.97
1.1. 1.1.	The control of the	12.5 6.956 0.24 7.1	
The control biase been control b	Fig. 6.5 Fig. 1.5 Fig. 7.5 Fig	The control beam	9.9 10.2 10.5 10.8 11.1 11.4 11.7 12.0 1
And Growth Base	1	Control blace	7.0 7.7 10.2 10.8 11.4 11.7 12.0
Many Place Hale Hale Hale Hale Hale Hale Hale Hal	4 d order black bases and the control bases are also as a control base of the control bases are also as a control base of the control bases are also as a control base of the control bases are also as a control base of the control bases are also as a control base of the control bases are also as a control base of the control bases are also as a control base of the control bases are also as a control base of the control bases are also as a control base of the control bases are also as a control base of the control bases are also as a control base of the control bases are also as a control base of the control bases are also as a control base of the control base	Many Property Factors	7.3 7.4 7.4 5.0 5.2 5.3
and Growth Rate	Machine Harmony Johnson Harmon Harmony Johnson Harmony Johnson Harmony Johnson Harmony Johnson	and Growth Bates 17.	2.4 2.5 2.5 2.6
Machine Plane 17.1 Sept. 2.65 2.65 2.65 2.65 2.65 2.65 2.65 2.6	From the property from the pro	The property paper in	5.6 5.7 4.3 4.4
The property Pictor (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	The control place of the contr	The Principly Pictor Fig. 1 and Pictor Fig.	3.00 3.00 3.00 10.5 10.8 11.1 11.4 11.7 12.0 12.3
Month Rate	Many Bark Bark Bark Bark Bark Bark Bark Bark	March Rate March Pietre March Pietre March Rate March R	0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97
17.3 Grade 1.12 T.7. 1.2. 1.2. 1.2. 1.2. 1.2. 1.2. 1.2. 1	10.0 10.0	## 12.2 0.540 1.12 1.24 1.24 1.24 1.24 1.24 1.24 1.25 1.24 1.25 1.24 1.25 1.24 1.25 1.25 1.24 1.25	
10.2 0.0570 1.10 2.0 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2	The control of the co	10.00000000000000000000000000000000000	54.2 56.6 59.1 61.6 64.2 66.9 69.7 72.3 74.9
Friending Signature Diversity Factor (2015) 11-0 11-4 11-4 11-4 11-4 11-4 11-4 11-4	The control of the co	The decimal convent Bate browth Factor Cover Bate Bate Bate Bate Bate Bate Bate Bate	20.0 20.9 21.8 22.8 23.7 24.7 25.7 26.7 27.7
The band from the late brownly parts brownly	Tribade Control Rate	Tribade Covery Rate Diversity Factor Live State Live Live Live State Live State Live State Live State Live State Live Live Live State Live State Live State Live State Live State Live Live Live State	3.1 3.2 3.4 3.5 3.6 3.8 4.0 4.1 4.2
Demand Growth Rate 37.3 1,978 1,279 1,270 1,28 1,29 1,29 1,29 1,29 1,29 1,29 1,29 1,29	Demand Group Right 15. 15. 15. 15. 15. 15. 15. 15. 15. 15.	Permand Growth Rate 17.1	16.4 17.1 17.8 18.6 19.4 20.2 21.0 21.8 22.6
From the property process. 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03	Maritime Diversity Processes	The control of the co	19.4 20.3 21.2 22.1 23.0 24.0 25.0 25.9 26.9
From the control field by the	10 10 10 10 10 10 10 10	10 10 10 10 10 10 10 10	4.6% 4.5% 4.4% 4.3% 4.2% 4.2% 4.2% 3.8% 3.5%
30.2 0.979 1.00 1.04 1.02 1.12 2.00 2.04 1.02 1.12 1.12 1.12 1.13 1.13 1.14	17.2 17.2	30.2 0.595 1.10 1.02 1.12 2.20 2.21 2.40 2.61	1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03
10. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	10.2 G.979 1.00 1.04 1.02 1.12 1.12 1.12 1.13 1.13 1.14 1.14 1.15 1.14 1.14 1.14 1.14 1.14	10.2 G. 9.9.9 1.00 10.4 10.8 11.2 11.3 11.9 11.9 11.9 11.9 11.9 11.9 11.9	34.2 35.7 37.3 38.9 40.5 42.2 43.0 45.4 47.7
Friend Growth Rate 1.00	10.0 0.949 1.00 1.16 1.21 1.26 1.32 1.38 14.3 15.1 15.3 15.3 15.3 15.3 15.3 15.3 15	Fri Coad Growth Rate 3.2 2.0 2.3 3. 2 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5	16.1 16.8 17.6 18.3 10.1 10.0 20.7 21.5
Tribade Crowth Rate Dennind Crowth Rate Dennin	Friend Convolt Nate	Tribade convertisate browning crowth Rate browning	181 180 107 200 110 200 181
Demand Crowth Rate 1.00	Demand Crouch Rate 1.00 1	Demand Growth Rate 22.4 5 26.5 26.1 26.9 27.9 28.9 28.9 28.9 3.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	Total 25.2 25.2 25.0 25.0 25.0 25.0 25.0 25.0
Indicative Diversity Factor 2.4. 0.886 0.93 1.24 0.986 0.93 1.24 0.986 0.94	Particular Diversity Pictor (1.00) 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Anticoner Diversity Factor 22.4 G. 9.6 G. 9.7 G. 9.	4 6 4 6 4 5 4 4 4 4 4 5 4 5 4 5 4 5 4 5
24.6 26.7 26.1 26.9 27.9 28.9 29.9 30.9 31.1 34.2 35.4 36.5 37.7 37.8 31.1 34.2 35.4 36.5 37.7 37.8 31.1 34.2 35.4 36.5 37.7 37.8 31.8 31.8 31.8 31.8 31.8 31.8 31.8 31	22.4 0.886 0.93 12.4 12.8 13.2 26.1 26.9 27.9 28.9 29.9 30.9 32.0 33.1 34.2 36.5 37.7 36.9 20.6 0.93 1.2.4 0.886 0.93 12.4 0.93 12.4	24.5 26.7 26.9 13.0 28.9 28.9 28.9 28.9 28.9 28.9 28.9 28.9	3.5% 3.5% 4.2% 4.2% 4.2% 3.5% 3.5% 3.5% 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
24. 5 26.1 26.9 27.9 28.9 29.9 30.9 32.0 32.1 34.2 35.4 35.5 37.7 Total Sheet	24.5 26.7 26.9 27.9 28.9 29.9 32.0 33.1 34.2 36.5 37.7 38.9 40.1 41.4 42.6 43.7 43.7 5.9 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	24.5 26.1 26.9 27.9 28.9 28.9 28.9 28.9 28.9 28.9 28.9 28	
CCT1-100 9.3 0.974 0.020 0.24 0.	CCT.130 S.2.3 0.7906 S.2.3 0.7906 S.2.3 0.7907 S.2.4 0.7006 S.2.3 0.7907 S.2.4 0.7006 S.2.3 0.7907 S.2.4 0.7006 S.2.3 0.7907 S.2.4 0.7007 S.2.4 0.70	CCT1-10	34.2 35.4 36.5 37.7 38.9 40.1 41.4 42.6 43.7
CTL-130 S.	11.1	CTI-LIO P. 20 P.	17.9 18.5 19.2 19.9 20.6 21.3 22.0 22.7 23.4
CTI- -	1.2. 1.2.	CTT- -	7.9 8.1 8.3 8.5 8.7 8.9 9.1 9.3 9.4
Table Market Demand Growth Rate State Load State Demand Growth Rate State Load State Demand Growth Rate State S	This property propert	Total Demonstration of the control o	10.0 10.4 10.9 11.4 11.9 12.5 13.0 13.5 14.0
Target Parallel Rate Parallel	Tendementation of the control base remains a control base remains a control base remains a control base remains a control base remains remains remains a control base remains	Terrest contains the contains that the contains the conta	0.0 0.0 0.0 0.0 0.0 0.0 0.0
de/ Transformer Diversity Factor 37.3 0.991 0.74 1.20 1.00	CFZ-130 3.0 0.991 0.74 1.0	CTZ-140 30.2 0.983 1.00 1.0 <th< td=""><td>17.9 18.6 19.2 19.9 20.6 21.4 22.1 22.8 23.5</td></th<>	17.9 18.6 19.2 19.9 20.6 21.4 22.1 22.8 23.5
1.00 1.00	27.3 0.991 0.74 12.2 12.8 12.0 1.00 1.00 1.00 1.00 1.00 1.00 1.00	TCTZ_110 30.2 0.994 1.00 6.5 6.7 6.9 7.1 7.3 7.5 7.8 8.0 8.2 8.5 8.7 9.0 1.00 1.00 1.00 1.00 1.00 1.00 1.00	3.8% 3.8% 3.7% 3.6% 3.5% 3.5% 3.5% 3.2% 2.9%
Signature Sign	37.3 0.991 0.74 12.2 12.2 13.6 14.1 14.5 14.6 15.9 16.3 <t< td=""><td>TCTZ_110 30.2 0,994 1,00 6.5 6.7 6.9 771 773 775 778 840 82 8.5 87 970 9.3 30.2 0,994 1,00 6.5 6.7 6.9 771 773 775 778 840 82 8.5 8.7 9.0 9.3 30.2 0,994 1,00 6.5 6.7 6.9 771 773 775 778 840 82 8.5 8.7 9.0 9.3 30.2 0,994 1,00 5.2 8.4 6.6 8.8 7.0 77 77 77 77 77 77 77 77 77 77 77 77 77</td><td>1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00</td></t<>	TCTZ_110 30.2 0,994 1,00 6.5 6.7 6.9 771 773 775 778 840 82 8.5 87 970 9.3 30.2 0,994 1,00 6.5 6.7 6.9 771 773 775 778 840 82 8.5 8.7 9.0 9.3 30.2 0,994 1,00 6.5 6.7 6.9 771 773 775 778 840 82 8.5 8.7 9.0 9.3 30.2 0,994 1,00 5.2 8.4 6.6 8.8 7.0 77 77 77 77 77 77 77 77 77 77 77 77 77	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
30.2 0.994 1.00 6.5 6.7 7.1 7.3 7.5 7.8 8.0 8.2 8.5 8.7 9.0 9.3 9.5 9.5 30.2 0.963 1.00 1.4 1.4 1.5 1.5 1.6 1.6 1.7 1.7 1.8 1.9 1.9 9.3 9.5 30.2 0.963 1.00 5.2 5.4 5.5 5.9 6.1 6.2 6.4 6.6 6.8 7.0 7.4 7.7 13.1 13.5 13.8 14.3 14.7 15.2 16.1 16.1 16.6 17.1 17.1 17.1 17.1 17.2 18.2	30.2 0,994 1,00 6,5 6,7 6,9 7,1 7,3 7,5 7,8 8,0 8,2 8,5 8,7 9,0 9,1 9,5 9,8 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0	30.2 0.994 1.00 6.5 6.7 6.9 7.1 7.3 7.5 7.8 8.0 8.2 8.5 8.7 8.9 9.3 9.3 9.3 9.3 9.3 9.3 9.3 9.3 9.3 9	16.3 16.8 17.3 17.8 18.3 19.9 10.2
30.2 0.963 1.00 1.4 1.4 1.5 1.5 1.6 1.6 1.7 1.7 1.7 1.8 1.8 1.9 1.9 2.0 2.0 3.0 30.8 3.08 2.0 3.08 3.08 3.08 3.08 3.08 3.08 3.08 3.	30.2 0.963 1.00 1.4 1.4 1.5 1.5 1.6 1.6 1.7 1.7 1.8 1.8 1.9 1.9 2.0 2.0 2.1 2.1 2.2 2.2 2.3 2.3 2.3 2.3 2.3 2.3 2.2 2.2	30.2 0.963 1.00 1.4 1.4 1.5 1.5 1.6 1.6 1.7 1.7 1.8 1.8 1.9 1.9 1.9 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0	8.7 9.0 9.3 9.5 9.8 10.1 10.1 10.3 10.0
30.2 0.989 1.00 5.2 5.4 5.5 5.7 5.9 6.1 6.2 6.4 6.6 6.8 7.0 7.2 7.4 7.7 7.7 15.1 13.5 13.8 14.7 15.2 15.7 16.1 16.6 17.1 17.6 18.2 18.7 19.2 2.6% 2.8% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0	30.2 0.989 1.00 5.2 5.4 5.5 5.7 5.9 6.1 6.2 6.4 6.6 6.8 7.0 7.2 7.4 7.7 7.9 8.1 8.3 8.5 8.7 8.7 7.9 7.9 8.1 8.3 8.5 8.7 8.7 7.9 8.1 8.3 8.5 8.7 8.7 8.1 8.3 8.5 8.7 8.7 8.1 8.3 8.5 8.7 8.7 8.1 8.3 8.5 8.7 8.7 8.1 8.3 8.5 8.7 8.7 8.1 8.3 8.7 8.2 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3	30.2 0.989 1.00 5.2 5.4 5.5 5.7 5.9 6.1 6.2 6.4 6.6 6.8 7.0 7.2 7.4 7.4 1.5 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3	1.9 1.9 2.0 2.0 2.1 2.2 2.3
13.1 13.5 13.8 14.3 14.7 15.2 15.7 16.1 16.6 17.1 17.6 18.2 18.7 19.2 2.6% 2.8% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 2.9% 2.9%	13.1 13.5 13.8 14.3 14.7 15.2 15.7 16.1 16.6 17.1 17.6 18.2 18.7 19.2 19.8 20.3 20.9 21.4 21.9 21.9 21.9 21.4 21.9 21.6 21.9 21.4 21.9 21.6 21.6 21.6 21.6 21.6 21.6 21.6 21.6	13.1 13.5 13.8 14.3 14.7 15.2 15.7 16.1 16.6 17.1 17.6 18.2 18.7 2.6% 2.8% 3.0% 3.0% 3.1% 3.0% 3.0% 3.0% 3.0% 3.0% 2.9% 1.0° 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93	7.0 7.2 7.4 7.7 7.9 8.1 8.3 8.5 8.7
2.6% 2.8% 3.0% 3.2% 3.1% 3.0% 3.0% 3.0% 3.0% 3.0% 2.9% 2.9%	2.6% 2.8% 3.0% 3.2% 3.1% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 2.9% 2.9% 2.8% 2.8% 2.5% 2.5% 2.4% 2.4% 2.4% 2.6% 2.5% 2.5% 2.4% 2.4%	2.6% 2.8% 3.0% 3.1% 3.1% 3.0% 3.0% 3.0% 3.0% 3.0% 3.0% 2.9% 1.0° (9.3 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0	17.6 18.2 18.7 19.2 19.8 20.3 20.9 21.4 21.9
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PEC Subloads_v7 (Mid-range_Severe Weather)_v3.xlsm Demand Totals (Summer)

SUBSTATION FEEDER	(AVI)	ctor stive	owth ate	VM) OPeak	חוו הוז	113	1.114	11.5	- EL6	1 117	PEC Distr	PEC Distribution System Demand	ystem De	emand Fo	Forecast (MWs)		11 (4 11 14			1 4 4 4 5 4 6	100	-	uno	
NAME	w)	5.7	นอ ผ	v)	10000000		RECORDER.	2015		2017	2018	2019	2020	2021	2022					No.			Comp	රුව b නේ
PROJECTED SYSTEM COINCIDENT PEAK System Load Growth Factor			-	1,217.5	1,258.6 1,308.1	1,362	9 1,424.1	1 1,486.3	3 1,549.2	1,613.1	1,680.3	1,751.0 1	,827.0	1,904.1 1,	1,982.0 2,	2,061.2 2,	2,141.6 2,222.8	2.8 2,306.2	. 7	,385.9 2,462.	5 2,53	4 g	, i	3.89%
FRIESS RANCH Total				6.0		0.9 0.						1.0	1.0	1.0	1.0	1.0		1.1	1.1	1.1			1 1	1 41%
FET1	2.5	0.957	0.37	6.0	-							1.0	1.0	1.0	1.0	1.0		1.1	1.1	1.1			1.1	1.41%
FET1_6040	4.3	0.917	1.00	0.4	-		-	-		-		0.4	0.4	0.4	0.5	0.5		0.5	0.5	0.5			0.5	1.41%
FET1_6045	4.3	0.997	1.00	0.5		-	***************************************		A PRODUCTION OF THE PERSON NAMED IN	2001417000	***************************************	0.5	0.5	9.0	9.0	9.0		9.0	9.0	9.0			9.0	1.41%
Total Feeder Load				6.0			6.0 6.0	6.0	6.0 6	6.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1
Feeder / Transformer Diversity Eactor				60	1.3%	1.4% 1.0						1.5%	1.5%	1.5%	1.5%	7.4	1.4%	1.4%	1.4%	1.3%			1.1%	-
ede / Hallstollife Diversity Factor				00.1								1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	00.1			00.	en Alexandra
FAIRLAND Total				22.7	23.5 24.4					30.0	31.2	32.5	33.9	35.3	36.7	38.1	39.5 4	41.0 4		44 1	45 5 4/	46.9 45	48 3	3 84%
FLT1	22.4	0.875	1.12	9.8		.6 11.1		6 12.2	2 12.8		13.9	14.6	15.2	15.9	16.6	17.3			19.6	L	L	1		3.04% 4.23%
FLT1_10	8.9	0.000	0.67	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	2000
FLT1_20	8.9	696.0	1.00	5.1	5.5	5.9 6.					9.4	10.0	10.7	11.4	12.2	12.9			П	16.0			-	6.61%
FLT1_40	4.5	0.765		5.1	5.1 5	5.1			H		5.1	5.1	5.1	5.1	5.7	5.1		L	L	u.				8000
Total Feeder Load				10.2	10.6 11	11.1 11.	.6 12.1					15.2	15.9	16.6	17.3	18.1		19.6	4	21.2			3.4	201
Transformer Demand Growth Rate						4.3% 4.6%		3% 4.7%	7% 4.6%	8 4.5%		4.5%	4.6%	4.5%	4.4%	4.3%				3.8%		3.4%	3.3%	
Feeder / Transformer Diversity Factor				96.0	0.96 0.9	6.0 96.0						96.0	96.0	0.96	96.0	96.0	96.0	96.0		96.0	96.0		96.0	NAME OF THE OWNER, OF THE OWNER,
FLT2	37.3	0.974	0.93	12.9	13.3 13	13.8 14.						18.0	18.6	19.3	20.1	20.8	21.5	22.2		737			0	2 5 20
FLT2_130	15.1	0.925	0.80	4.5			4.9 5.					5.8	5.9	6.1	6.3	6.4		L	6.9	7.4			2.0	3.03%
FLT2_140	15.1	0.997	1.20	5.7			.4 6.7				-	8.3	8.6	0.6	9.4	7.0				11.3				979.7
FLT2_150	15.1	0.974	1.20	3.4			3.8 3.	-	-	4.5	4.7	8.4	5.1	5.3	5,5	5.7	5.9	6.1	6.4	6.6	0.1.0	7.0	7.3	3.73%
Total Feeder Load				13.6	14.0 14	14.5 15.1		1	MODIFICATION OF THE PERSON			18.9	19.6	20.4	21.1	21.9	-	23.4	and the same	25.0	-	New Assessed	A CONTRACTOR OF THE PARTY OF TH	200
Transformer Demand Growth Rate					3.3% 3.		3.8% 4.0%	3.9%	3.8%			3.8%	3.8%	3.8%	3.7%	3.6%		3.5%	3.5%	3.2%			2.7%	
Feeder / Transformer Diversity Factor				0.95	0.95 0.	0.95 0.95						0.95	0.95	0.95	0.95	0.95		0.95		0.95	0.95	0.95	0.95	shkovn
EAID OAKS Tobal				1 07				200				TOTAL STREET	THE SECTION COMME	CONTRACTOR CONTRACTOR	the King Destroyee American									gallanu"
ANS LOCAL				10.7								15.9	16.7	17.4	18.2	18.9					23.0 2.	23.8 2	24.6	4.23%
FOTA 40	4.77	000.1	1.12	10.7			0000000	-	***	-		15.9	16.7	17.4	18.2	18.9								4.23%
FOT 1.10	18.5	4 000	00.1	4.4				MI 10 666	A. Carrier	******	-	6.5	6.8	7.1	7.4	7.8	8.1			9.1				4.23%
FOIL_20	18.0	000.1	00.1	6.5	-	-	***************************************	-	-	of manages	Anna	9.7	10.1	10.6	11.0	11.5		-		13.5				4.23%
TOTAL TANK TOTAL TOTAL	16.3	0,000	0.83	0.0	demonster	demonstrate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Special and	0.0	0.0	0.0	0.0	0.0	0.0	%00.0
Transformer Demand Courth Date				10.9								16.2	16.9	17.7	18.5	19.3				22.6			5.0	I
Feeder / Transformer Diversity Factor				80.0	5.7%	4.3% 4.	4.6% 4.8			4.5%		4.5%	4.6%	4.5%	4.8%	4.3%				3.8%		3.4%	3.3%	1
eder / Hanstoniel Diversity Factor				0.78								0.98	0.98	0.98	0.98	0.98	0.98	0.98		0.98			86.0	topickrinish
FLATROCK Tatal				7.4								10.1	10.4	10.8	11.2	11.6	12.0 1	12.4 1	12.8 1	13.1	13.5	13.9	14.2	3.35%
FRT1	10.5	966.0	0.88	7.4	***************************************		-					10.1	10.4	10.8	11.2	11.6				L				3.35%
FRIT_100	6.6	966.0	0.84	2.8	-		3.0 3.	the section to	and the second	-	3.5	3.6	3.7	3.9	4.0	4.1	4.2	4.3	4.4	4.6	4.7	4.8	4.9	2.88%
FRI 1_20	8.9	0.996	1.05	4.9	- Constitution	Separation	CONTRACTOR OF THE PERSONS ASSESSMENT OF THE					6.9	7.1	7.4	7.7	8.0	8.2	8.5	8.8	- 6				3.60%
Total Feeder Load				7.7			8.5 8.8	8 9.1	1 9.4	8.6		10.5	10.9	11.3	11.6	12.0		12.9	13.3	13.7	14.1		14.8	
Fansformer Demand Growth Rate							3.6% 3.8				3.5%	3.6%	3.6%	3.6%	3.5%	3.4%	3.3%	3.3%	3.3%	3.0%		2.7%	2.6%	
Feeder / Transformer Diversity Factor				96.0	0.96 0.	0.96 0.9						96.0	96.0	96.0	96.0	96.0		96.0	96.0	96.0			96.0	resente
FRIENDSHIP Total				24.0	250 253		86					0.10	0 00	0 07						1	100000	la contract	**************************************	2000
	22.4	0.984	1.30	8.0		ļ	.2 9.8					12.7	13.3	14.0	1.47	46.6		0.10	33.3			60.5	8.79	4.94%
FST1_10	17.7	0.982	0.86	6.3		-	***************************************		-			o o	10.3	40.8	7.17	2 0 7	7.01			18.6			6.0.	4.94%
FST1_20	17.7	1.000	1.00	2.3		-	-		-	-	-	3.8	4.0	4.3	4.5	4.8	-	1.5.1 E 3	-	14.2	-	-	5.9	4.72%
Total Feeder Load	SACONOS CONTRACTOR OF THE SACONOS CONTRACTOR	ADMINISTRATION AND ADMINISTRA	MANAGEMENT AND ADDRESS OF THE PERSONS ASSESSED.	9.8	6 0.6	Name of the least	0,000,000	-	11.7		-	13.6	14.4	15.1	15.0	7 44	The same	1	and the same	Concession decreases	0.00	***************************************	0.7	0.50%
Transformer Demand Growth Rate							5.3% 5.6%	5.5%		5.3%	5.2%	5.3%	5.3%	5.3%	, r.	5.0%	5. 4	4 9%	4 8%	4.4%		2 0%	2.7.0	l
Feeder / Transformer Diversity Factor				0.93					3 0.93			0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	81.40		5.0%	
	CHRES CONTRACTOR CONTRACTOR	Merchanism and a	The same series and series	And the second second second second			***************************************	Philippine and American		vekinskinskinskinskinskinsk	-	THE PROPERTY OF THE PARTY OF	representation of the co.	A THE PERSON NAMED AND ADDRESS OF THE PERSON NAMED AND ADDRESS		Norman administration of the Comments				The state of the s			2	Lancia de la constante de la c
	control of the contro		den and special appropriate			Viscolation of the Control of the Co	***************	-	**********************************	Contraction of the Contraction o	Postoria de la constitución de l	************	-	Accessory to the second										

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4.94% 0.00% 4.94% 4.94% 4.23% 4.23% 4.23% 4.23% 2.12% 2.12% 2.74% 0.00% 2.74% 3.53% 3.53% 2.21% 3.69% 4.42% 4.23% 4.23% 62.4 3.3% 1.00 7.6 42.7 3.8% 0.98 30.6 0.6 30.6 30.6 3.3% 3.3% 10.9 2.8 2.2 2.1 5.1 2.1 1.2.1 1.6% 0.90 26.9 48.9 48.9 10.2 25.8 15.8 4.7 2,610.5 2,537.4 3.4% 6.9 3.4% 3.4% 0.0 7.3 41.1 3.9% 0.98 4.5 4.5 26.2 2.8% 0.93 15.3 10.7 2.2 2.2 5.0 2.0 2.0 11.9 1.7% 9.0 3.5% 87.0 28.7 3.5% 45.8 45.8 9.6 0.5 10.5 2.7 2.2 4.9 2.0 2.0 11.7 1.8% 0.90 0.0 7.0 7.0 39.6 4.1% 16.8 4.4 25.4 2.9% 0.93 9.0 24.2 14.8 48.6 3.5% 0.94 2,306.2 2,385.9 2,462.5 23.6 3.8% 3.8% 9.3 14.3 46.9 3.8% 0.94 10.3 2.2 2.2 4.8 1.9 11.5 11.9 0.90 0.0 6.8 38.0 4.4% 0.98 16.3 4.2 24.7 3.2% 0.93 0.6 26.7 4.2% 1.00 4.2% 0.0 6.5 6.5 4.8% 0.98 15.8 4.1 24.0 3.5% 0.93 0.6 8.9 22.5 13.7 45.2 4.2% 0.94 10.1 2.5 2.2 4.7 4.7 1.9 1.3 2.1% 2,141.6 2,222.8 3.9% 3.8% 4.2% 8.6 21.6 13.2 43.4 4.2% 0.94 9.9 9.9 2.5 2.2 4.5 1.8 1.8 2.1% 0.90 0.0 28.5 6.2 34.7 4.9% 3.9 3.9 23.2 3.5% 0.93 0.5 0.5 25.1 25.6 4.2% 1.00 52.2 20.7 20.7 3.9 14.7 3.7 3.5% 0.93 4.2% 9.7 2.4 2.2 4.4 1.8 10.8 2.1% 0.90 5.9 5.9 5.9 4.9% 0.98 24.6 24.1 24.6 4.2% 8.2 20.7 12.7 41.6 4.2% 0.94 22.8 2,061.2 48.0 21.9 26.3 48.1 4.3% 37.7 7.9 19.9 12.2 40.0 4.3% 9.5 9.5 2.4 2.2 4.3 1.7 10.6 0.90 23.6 23.1 23.6 4.3% 0.0 0.0 5.6 5.6 31.5 5.0% 0.98 20.0 20.0 3.9 14.2 3.6 21.6 3.6% 0.93 PEC Distribution System Demand Forecast (MWs) 1,982.0 46.2 4.4% 1.00 0.5 22.2 22.6 4.4% 7.6 19.1 11.7 38.3 4.4% 0.94 9.3 9.3 2.2 4.2 1.7 10.4 0.90 5.3 5.3 5.1% 0.98 19.3 3.8 3.4 3.4 20.9 3.7% 0.93 21.0 18.6 3.7 13.2 3.3 20.1 3.8% 0.93 4.5% 9.1 9.1 2.2 2.2 4.1 1.7 10.1 2.3% 0.90 28.0 0.0 23.5 5.1 5.3% 5.3% 0.98 21.7 0.5 21.2 21.7 4.5% 24.1 7.2 18.3 11.2 11.2 6.9 17.5 10.7 35.1 4.6% 0.94 26.6 0.0 27.3 4.8 27.1 5.3% 0.98 18.0 3.6 12.7 3.1 19.4 3.8% 0.93 20.8 20.3 20.8 4.6% 4.6% 8.9 8.9 2.2 2.2 2.2 4.0 4.0 1.6 9.9 1,827.0 19.2 23.1 42.3 17.3 17.3 3.5 12.2 3.0 18.7 3.8% 0.93 1.00 21.2 21.2 4.6 25.8 5.3% 0.98 18.4 22.1 40.5 31.7 6.6 16.7 10.2 33.6 4.5% 0.94 8.7 8.7 2.1 2.2 3.9 1.6 1.6 9.7 2.3% 1,751.0 0.4 19.4 19.8 24.5 5.2% 0.98 4.5% 1.00 6.3 16.0 9.8 32.1 4.5% 0.94 8.5 8.5 2.0 2.2 3.7 1.5 9.5 2.2% 0.90 16.7 3.4 11.7 2.8 2.8 3.7% 0.93 0.4 19.0 38.6 17.6 21.1 38.7 Demand Totals (Summer) 16.1 16.1 3.4 11.3 2.7 17.4 3.8% 0.93 18.2 16.8 20.2 37.1 4.5% 1.00 4.5% 8.3 8.3 2.0 2.2 3.6 1.5 1.5 2.3% 0.90 6.0 5.3% 4.5% 29.0 29.0 6.1 15.3 9.4 30.8 8.2 5.8 14.7 9.0 29.4 4.6% 8.2 8.2 1.9 2.2 3.5 1.4 1.4 9.1 17.4 0.4 17.0 17.4 4.6% 1.00 4.6% 0.0 0.0 3.9 3.9 5.4% 0.98 15.5 3.3 10.9 2.6 16.7 3.8% 0.93 16.1 35.5 27.7 4.7% 20.6 0.0 17.3 3.7 21.0 5.5% 26.5 5.6 14.0 8.6 8.6 4.7% 0.94 8.0 8.0 1.9 2.2 2.2 3.4 1.4 1.4 2.4% 0.90 14.9 3.2 10.4 2.5 2.5 3.9% 0.93 8.7% 0.3 16.3 16.6 33.8 15.4 18.5 5.3 13.4 8.2 26.9 4.8% 0.94 14.4 14.4 3.1 10.0 2.4 15.5 4.0% 0.93 32.4 4.8% 1.00 7.8 1.8 1.8 2.2 3.3 1.3 8.7 8.7 2.4% 0.90 19.5 0.0 16.4 3.5 19.9 5.6% 0.98 0.3 15.5 15.9 4.8% 14.7 13.8 3.0 9.6 2.2 14.9 3.8% 0.93 30.9 4.6% 1.00 7.6 7.6 1.8 2.2 3.2 1.3 8.5 2.3% 0.90 1,362.9 15.5 3.3 118.8 5.3% 0.98 15.1 0.3 14.8 15.1 4.6% 30.8 14.0 16.9 24.2 5.1 12.8 7.8 7.8 4.6% 0.94 1,308.1 13.3 3.0 9.3 2.1 14.4 3.5% 0.93 14.5 0.3 14.2 14.5 4.3% 13.4 14.1 16.1 16.1 4.3% 1.00 23.1 23.1 4.8 12.2 7.5 24.5 4.3% 0.94 7.4 7.4 1.7 2.2 3.1 1.3 8.3 2.1% 0.90 3.2 3.2 17.9 5.0% 0.98 14.0 3.0 17.0 4.6% 13.9 0.3 13.6 13.9 3.9% 22.2 22.2 4.6 11.7 7.2 23.5 3.9% 0.94 7.3 7.3 1.7 2.2 3.0 1.2 8.1 2.0% 0.90 12.8 12.8 2.9 8.9 2.0 13.9 3.3% 0.93 12.9 15.5 2011 13.4 7.1 7.1 1.6 1.6 3.0 3.0 7.9 16.0 0.0 13.4 2.9 16.3 12.4 12.4 2.9 8.6 2.0 13.4 1.00 12.4 14.9 14.9 27.3 9.1 21.3 4.5 11.3 6.9 22.6 MW) Relative Growth Sate 1.00 1.00 1.00 . 00 1 06.1.00.1.00.1 0.93 1.00 0.964 0.967 0.962 0.980 0.000 0.984 0.984 0.935 0.979 0.968 0.998 0.957 0.997 0.981 Power Factor 22.4 0.0 18.5 8.9 8.9 3.0 4.5 37.3 25.9 25.9 33.3 25.9 25.9 17.7 22.4 25.9 25.9 4.7 4.7 17.7 17.7 (AVA) PROJECTED SYSTEM COINCIDENT PEAK Transformer Demand Growth Rate Feeder / Transformer Diversity Factor Feeder / Transformer Diversity Factor Transformer Demand Growth Rate Feeder / Transformer Diversity Factor Fransformer Demand Growth Rate Transformer Demand Growth Rate Total Feeder Load Transformer Demand Growth Rate Transformer Demand Growth Rate SUBSTATION FEEDER NAME GRAPHITE MINE Total Total Feeder Load Feeder / Transfor SLASSCOCK Total GBT4_120 GBT4_130 GBT4_140 SOFORTH Total GMT1_10 GMT1_20 GMT1_50 GMT1_70 GABRIEL Total GLT1_10 GLT1_20 FST2_120 FST2_160 GFT1_10

PEC Subloads_v7 (Mid-range_Severe Weather)_v3.xlsm

PEC Subloads_v7 (Mid-range_Severe Weather)_v3.xlsm Demand Totals (Summer)

The continue of the continue o	SUBSTATION FFFDFR	vacity (AV	wer tor	ative wth ote	W)		11.7	- - -	F	11.		PEC Dis	Distribution	PEC Distribution System Demand Forecast	Demand F	Forecast ((MWs)			44					чти
The continent of the	NAME		se7	oro	w)	2011		3						- EDITOR		上鐵鐵	2023	2024	2025			_			
The continue of the continue o	ED SYSTEM COINCIDENT PEAK Growth Factor				1,217.5	1,258.6	1,308.1 1			1,54		1,68	1,75		1,90	1,982.0	2,061.2	2,141.6	-			ages.	537.4 2,		
From the control of t	OUNTAIN Total				25.7	26.6	27.5	28.5	29.7				3		1		41.4	42	44.3	45.9	47.3	48.7	50.1	51.4	3 53%
The control of the co		22.4	0.974	0.93	15.0	15.5	16.0	16.6	17.3								24.1	24.9	25.8	26.7	27.5	28.4	29.2	29.9	3.53%
The control of the co	-40	14.0	0.963	1.20	9.3	6.7	10.1	10.6	11.1								16.7	17.4	18.1	18.8	19.5	20.2	20.9	21.6	4.28%
The control of the co	_50	8.9	0.974	09.0	6.1	6.3	6.4	6.5	6.7	6.9	7.0						8.2		8.6	8.7	8.9	- 6	9.2	9.4	2.14%
From the parameters of the par	eeder Load				15.5	16.0	16.5	17.2	17.9						destartes	actor actor	-	-	26.6	27.6	28.4	29.3	30.1	30.9	
The proposition of the control formation of th	rmer Demand Growth Rate					3.3%	3.5%	3.8%	4.0%	3.9%	3.8%								3.5%	3.5%	3.2%	2.9%	2.8%	2.7%	
224 6 200 0 0.0 0.	/ Transformer Diversity Factor				0.97	0.97	0.97	0.97	0.97								0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	10002720000
6. See 1.		22.4	0.66.0	0.93	10.7	11.1	11.5	11.9	12.4					Ĺ			E		18.5	10.7	40 %	20.4	0 00	34 E	3 530/
6. 1 6. 1 6. 1 6. 1 6. 1 6. 1 7 6. 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	_120	8.9	0.972	09.0	1.6	1.7	1.7	1.8	1.8		L				L		- Contraction		2.4	2.4	2.5	7.5	3.6	2.12	3.33%
Complise Series of the control of th		8.9	0.995	08.0	6.3	6.5	6.7	6.9	7.2	7.4									10.2	10.1	8 01	277	7.0	0.7	2 478
The county band band band band band band band band		8.9	0.962	1.20	3.2	3.4	3.5	3.7	3.9	4.1	4.3								6.7	7.0	7.2	7.5	7.8	8.1	3.12%
The proposition of the propositi	eeder Load				11.2	11.5	11.9	12.4	12.9		desentation de	-	-	Ī	destatement	disassan	18.0	-	19.2	19.9	20.5	21.1	21.7	22.3	-
Diversity Pictors 1. 2.	rmer Demand Growth Rate					3.3%	3.5%	3.8%	4.0%		**								3.5%	3.5%	3.2%	2.9%	2.8%	2.7%	
Second Burner Second Burne	/ Transformer Diversity Factor				96.0	96.0	96'0	96.0	96.0								0.96	0.96	96.0	0.96	96.0	96.0	96.0	96.0	
17.3 6.45 6.45 6.74 6.74 6.74 6.74 6.74 6.74 6.74 6.74	lei				12.3	12.7	13.0	13.4	13.9									18.6	19.1	19.6	20.1	20.6	21.1	21 5	7 87%
8.9 0.0581 1.00 1.2 1 2.0 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2		37.3	0.955	0.74	12.3	12.7	13.0	13.4	13.9						L	L	No.	18.6	19.1	19.6	20.1	200	24.1	21.5	2 82%
8.9 0.0551 1.100 7.1 7.2 7.2 7.2 7.2 8.2 0.1 4.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1		8.9	0.983	1.00	2.8	2.8	2.9	3.0	3.1	3.2	3.3							-	4.3	4.4	4.5	4 6	4.7	8 7	2 87%
See		8.9	0.951	1.00	7.1	7.3	7.5	7.7	7.9	8.2	8.4								10.9	11.3	11.5	8 4	12.1	15.3	2 87%
The properties of the properti		8.9	0.932	1.00	3.0	3.1	3.2	3.3	3.4	3.5	3.6			A1111		*****			4.7	4.8	4.9	5.0	5.2	5.3	2.82%
Orowth Blace 1246 2.87 2.87 2.87 2.86 2.86 2.86 2.86 2.86 2.86 2.86 2.86 2.86 2.86 2.86 2.86 2.87 2.87 2.86 2.86 2.86 2.86 2.86 2.86 2.86 2.86 2.86 2.86 2.86	eder Load				12.9	13.2	13.6	14.0	14.4	14.9	15.3						18.8		19.9	20.4	21.0	21.5	21.9	22.4	and a second and a second
Diversity Paticips 15.1 0.978	mer Demand Growth Rate					2.6%	2.8%	3.0%	3.2%	3.1%									2.8%	2.8%	2.5%	2.4%	2.3%	2.2%	1
1.	Transformer Diversity Factor				96.0	96.0	96.0	96.0	96.0	96.0							0.96		96.0	96.0	96.0	96.0	96.0	96.0	i
224 0.663 0.93 8.3 8.5 8.6 9.2 9.5 9.5 9.5 10.3 10.7 11.1 11.5 11.5 11.5 11.5 11.5 11.5 11	EBAY Total				19.2	19.8	20.5	21.3	22.2								30.9	32.0	33.1	34.2	35.3	36.3	37.4	38.4	3 53%
151 0.778 1.00 3.4 3.5 3.7 3.8 4.0 4.1 4.3 4.4 4.6 4.6 4.8 4.9 5.1 5.3 5.5 5.5 5.7 5.7 5.8 5.9 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0		22.4	0.963	0.93	8.3	8.5	8.8	9.5	9.5								13.3			14.7	15.2	15.6	16.1	16.5	3.53%
15.1 0.967 1.00 0.7 0.8 0.8 0.8 0.8 0.8 0.9 0.9 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0		15.1	0.978	1.00	3.4	3.5	3.7	3.8	4.0	4.1	4.3						5.5			6.1	6.3	6.5	6.7	8.9	3.53%
15.1 6.376 1.00 4.7 4.9 5.1 5.3 5.5 5.7 5.9 6.1 6.4 6.6 6.8 7.1 7.4 7.6 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9		15.1	0.967	1.00	0.7	0.7	0.8	0.8	0.8	6.0	6.0						1.1		1.2	1.3	1.3	1.3	1.4	1.4	3.53%
Fig. 6.9 Fig	WESTERNING CONTRACTOR OF THE C	15.1	0.978	1.00	4.7	4.9	5.1	5.3	5.5	5.7	5.9				*****		7.6	7.9	8.2	8.5	8.7	9.0	9.2	9.5	3.53%
0.93	eder Load				8.9	9.5	9.5	6.6	10.3								ALC: NO.	TANKS IN	15.3	15.8	16.3	16.8	17.3	17.8	- Commence of the Commence of
04	mer Demand Growth Rate					3.3%	3.5%	3.8%	4.0%	3.9%										3.5%	3.2%	2.9%	2.8%	2.7%	1
37.3 0.980 0.93 10.0 11.3 11.7 12.1 12.6 13.1 14.7 15.2 <t< td=""><td>Transformer Diversity Factor</td><td></td><td></td><td></td><td>0.93</td><td>0.93</td><td>0.93</td><td>0.93</td><td>0.93</td><td>0.93</td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.93</td><td></td><td></td><td>0.93</td><td>0.93</td><td>0.93</td><td>0.93</td><td>0.93</td><td></td></t<>	Transformer Diversity Factor				0.93	0.93	0.93	0.93	0.93	0.93							0.93			0.93	0.93	0.93	0.93	0.93	
8.9 6.972 1.00 6.6 6.8 6.8 7.1 7.3 7.6 7.9 8.1 8.6 6.9 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9		37.3	0.980	0.93	10.9	11.3	11.7	12.1	12.6	13.1	13.6	-				-	-		18.9	19.5	20.1	7.02	21.3	21.0	3 53%
8.9 0,969 1,00 0,7 0,8 0,8 0,8 0,9 0,9 0,9 0,9 1,0 1,0 1,0 1,0 1,0 1,1 1,1 1,1 1,1 1,1	20	8.9	0.972	1.00	9.9	8.9	7.1	7.3	7.6	7.9	8.3								11.4	11.8	12.2	12.5	12.9	13.0	3.53%
8.9 0.993 1.00 3.7 3.9 4.0 4.1 4.3 4.5 4.7 4.8 5.0 5.4 5.4 5.6 5.8 6.0 6.2 6.4 6.7 6.9 7.1 7.3 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5	30	8.9	696.0	1.00	0.7	0.7	0.8	0.8	0.8	6.0	6.0				and the same of		1.2		1.2	1.3	1.3	1.4	1.4	1.4	3.53%
11.1 11.4 11.8 12.3 12.8 13.3 13.8 14.3 14.9 15.4 16.0 16.6 17.2 17.8 18.4 19.1 19.8 20.4 21.0 21.6 22.2 22.2 23.8 21.8 21.8 21.8 21.8 21.8 21.8 21.8 21	Commission and commis	8.9	0.993	1.00	3.7	3.9	4.0	4.1	4.3	4.5	4.7								6.4	6.7	6.9	7.1	7.3	7.5	3.53%
3.13% 3.5% 3.5% 4.0% 3.5% 3.5% 3.5% 3.5% 3.5% 3.5% 3.5% 3.5	seder Load				11.1	11.4	11.8	12.3	12.8	13.3							Appropriate Control of		19.1	19.8	20.4	21.0	21.6	22.2	The state of the s
0,59 0,59 0,59 0,59 0,59 0,59 0,59 0,59	mer Demand Growth Rate					3.3%	3.5%	3.8%	4.0%	3.9%	3.8%								3.5%	3.5%	3.2%	2.9%	2.8%	2.7%	
	Transformer Diversity Factor				0.99	0.99	0.99	0.99	0.99	66.0	66.0								0.99	0.99	0.99	0.99	0.99	0.99	-

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PEC Subloads_v7 (Mid-range_Severe Weather)_v3.xlsm Demand Totals (Summer)

						(A	70.	eak e	(/								istributio	in System	Demand F	orecast (A	(Ms)		1000	\$1000	1200			un	OF.
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	141 141	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		This continue with the property of the prope		edeɔ \W)	Fact	vo1D IEA 1010:	AW)								117	11.10	ELM	11.12	DL43	LL14	200					odwo	wo ie esteA
Martin M	Marie Mari	1	The continue of the continue			Management No.		1,2		258.6 1,30	08.1 1.3	-		100			September 1	100	100	407.74	061.2	141 6	77787	306 2 2		ш		o í	9000
1		1	Mart	1						3.4%	3.9%			50		10	20		-		4.0%	3.6%	3.8%	3.8%		3 0	7,61	າ ດ ∛	87%
This content	1	No.	1	This can be called a control of the control of th					14.2		14.8	題	1								19.0	19.4	19.8	20.2	20.6		6		12%
No. No.	No.	No.	This color		22.4	0.984	0.56	14.2	14.5	14.8									00000000	19.0	19.4	19.8	20.2	20.6				17%	
No. No.	No.	1.00 1.00	This continue is a continue		8.9	968.0	1.00	2.1	2.1	2.2										2.8	2.8	2.9	2.9	3.0	1			12%	
This continue	This continue This continu	This continue conti	No.	This continue conti		8.9	0.958	1.00	9.9	6.7	6.8										8.7	8.9	9.1	9.3	9.6	33		-	12%
Mathematical Control	Martin M	No. 1	No.	This continue with the continue within the continue with the continue with the continue with the con		8.9	0.999	1.00	5.8	5.9	6.0										7.7	7.8	8.0	8.2	8.3				17%
14 14 15 15 15 15 15 15	14 14 15 15 15 15 15 15	14 14 15 15 15 15 15 15	144 147 148 147 148			13.0	0.707		0.0	0.0	0.0										0.0	0.0	0.0	0.0	0.0	1	-		%00.0
The continue of the continue	Marie Mari	This color	10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	The color The					14.4	14.7	15.0	15.3								Name of the least	19.2	19.6	20.0	20.4	20.8	Supple	agrapage	processor	
Marie Mari	Maria Mari	No. 10. No.	Color Colo	This continue with the continue within the continue with the continue with the continue with the con						2.0%	2.1%	2.3%									2.1%	2.1%	2.1%	2.1%	46%			76%	
Martin	Martin	No.	Control Cont	Marie Mari					0.99	0.99	0.99	66.0									0.99	0.99	0.99	0.99	0.99			66'0	
This continue	1	No. 10. No.	No.	Marie Mari	MODELONGER	TREE STREET, S	MARKARAMANA	-codpartments state		100			- CONTROL	200000							Bedformer (feller men	Designation of the latest and the la							
0.077 0.74 0.74 0.74 0.74 0.74 0.74 0.74	0.07 0.79 0.79 0.79 0.79 0.79 0.79 0.79	1	0.077 0.74 0.74 0.74 0.74 0.74 0.74 0.74	No.				9.6			10.5									14.1	14.5	14.9	15.3	15.7				2.82%	
10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	1. 1. 1. 1. 1. 1. 1. 1.	1,000, 1,000 1,0	100 101		22.4	0.979	0.74	9.6	6.6		10.5		-							14.1	14.5	14.9	15.3	15.7				2.82%
14.00 10.7 10.0	1. 1. 1. 1. 1. 1. 1. 1.	1. 1. 1. 1. 1. 1. 1. 1.	1,000 1,00	1.1. 1.1.	-	17.7	0.967	1.00	5.7	5.9		6.3	-						2321		8.7	9.0	9.2	9.5	9.8			San Land	3.12%
1. 1. 1. 1. 1. 1. 1. 1.	14 14 14 14 14 14 14 14	14 15 15 15 15 15 15 15	1, 10 1, 1	1	-	17.7	1.000	0.75	3.9	4.0	4.1	4.2								5.2	5.3	5.5	5.6	5.7	5.8	Name and			34%
Marie Mari	Maria Mari	Martin M	1.00 1.00	1					9.6	8.6	10.1	10.4		-		-	fathermore	National Control	and a second	13.7	14.0	14.4	14.8	15.3	15.6	nest prompted	Annual Property	***************************************	
14 14 15 15 15 15 15 15	14 14 15 15 15 15 15 15	1. 1. 1. 1. 1. 1. 1. 1.	1.00 1.00	Martin M						2.6%	2.8%	3.0%									200	2 8%	2 86	200 0	92.0				
0.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89	0.89 0.99 4.5 4.7 4.8 5.0 5.2 5.4 5.6 5.8 6.0 6.3 6.5 6.7 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7	0.00	1.00 1.00	0.09 0.09 44 47 448 550 554 554 556 518 60 613 62 67 70 72 72 75 75 75 75 75 75 75 75 75 75 75 75 75					1.00	1.00	1.00	1.00									1.00	1.00	1.00	1.00	1.00			%7.7 ₉	
Mathematical Control	1	Martin M	Mathematical Color Mathema	Maria Mari																									
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.89 0.89 0.89 4.89 4.89 4.89 6.89 0.89 0.89 0.89 0.89 0.89 0.89 0.89 0	0.09 0.99 0.99 1.99 1.99 1.99 1.99 1.99	0.89 0.91 4.4 4.7 4.8 5.0 5.2 5.4 5.4 6.4 6.4 6.4 6.4 6.4 6.4 6.4 6.4 6.4 6	0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00					4.5	4.7	4.8	5.0								7.0	7.2	7.5	7.8	8.0	8.3		The California	2000	E 30
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	1		5.6	0.988	0.93	4.5	4.7	4.8	5.0		L		L	L	L	L	7.0	7.7	7.5	7.0	0 0	0	L			0.00%
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11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.	0.991 110 111 11 11 11 11 11 11 11 11 11 11	0.691 0.54 0.54 0.54 0.54 0.54 0.54 0.54 0.54	13.9 14.2 14.5 14.6 15.2 15.5 15.5 15.5 16.5 17.5 17.5 17.5 17.5 18.5	13.0 14.2 14.2 14.2 14.2 15.2					1.00	1.00	1.00	1.00									6	6	5 5	5 6	2.5%	67.7		8 6	
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0.998 1 100 3 3	0.992 1000 333 344 355 346 345 347 348 349 349 349 440 441 442 444 445 446 447 449 446 447 449 446 447 449 448 448 448 448 448 448 448 448 448	0.699 1000 313	0.998 1.00 3.3 3.4 3.5 3.4 3.5 3.6 3.6 4.0 4.1 4.2 4.3 4.6 4.5 4.5 4.6 4.5 4.6 4.5 4.6 4.6 4.6 4.7 4.6 4.6 4.7 4.6 4.6 4.7 4.6 4.6 4.7 4.7 4.6 4.7 4.8 4.7 4.8 4.7 4.8 4.7 4.8 4.7 4.8 4.7 4.8 4.8 4.8 4.8 2.9 2.9 2.9 6.0<	0.695 1100 313 914 915 915 915 915 915 915 917 918 919 919 919 919 919 919 919 919 919		10.5	0.991	0.56	8.2	8.4		8.8								10.7	11.0	11.2	11.4	11.7	11.9			-	2.12%
0.992 1.00 5.0 5.1 5.2 5.2 5.2 6.0 6.1 6.0<	0.95 100 5.0 5.0 5.1 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2	0.972 10.00 5.0 5.1 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2	0.972 1.00 5.0 5.1 5.2 5.3 5.5 5.6 5.0 5.7 5.8 5.0 5.0 6.0 6.1 6.2 6.4 6.5 6.7 6.7 6.7 7.1 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2	0.942 1.00 5.0 5.0 5.1 5.2 5.3 5.5 5.5 5.5 5.0 5.0 6.1 6.2 6.4 6.5 6.4 6.5 6.7 7.0 77 7.2 7.4 7.5 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4		9.3	0.998	1.00	3.3	3.4		3.6									4.5	4.5	4.6	4.7	8.4				17%
6.37 8.6 8.7 8.6 9.7 1.0 10.2 10.4 10.7 10.9 10.7 10.9 11.1 11.4 11.6 11.6 11.7 11.8 12.6 12.7 12.7 12.8 12.7 12.8 12.8 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.39 0.99	6.37 6.56 8.4 </td <td>8.3 8.5 8.7 8.7 8.8 9 9.1 9.3 9.5 9.7 10.0 10.2 10.4 10.7 10.4 11.4 11.4 11.4 11.6 11.6 11.6 11.6 12.7 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8</td> <td>8.3 8.5 8.7 8.7 8.9 9.1 9.3 9.5 9.7 10.0 10.2 10.4 10.7 10.9 11.1 11.4 11.4 11.4 11.4 11.6 11.8 11.8 12.1 11.8 11.8 12.1 11.8 11.8</td> <td>8.3 6.8 6.7 6.8 6.9 6.9 6.0 6.2 6.0 6.8 6.0 6.8 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0</td> <td></td> <td>9.3</td> <td>0.962</td> <td>1.00</td> <td>5.0</td> <td>5.1</td> <td></td> <td>5.3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>6.7</td> <td>8.9</td> <td>7.0</td> <td>7.1</td> <td>7.2</td> <td></td> <td></td> <td>-</td> <td>2.12%</td>	8.3 8.5 8.7 8.7 8.8 9 9.1 9.3 9.5 9.7 10.0 10.2 10.4 10.7 10.4 11.4 11.4 11.4 11.6 11.6 11.6 11.6 12.7 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8	8.3 8.5 8.7 8.7 8.9 9.1 9.3 9.5 9.7 10.0 10.2 10.4 10.7 10.9 11.1 11.4 11.4 11.4 11.4 11.6 11.8 11.8 12.1 11.8 11.8 12.1 11.8 11.8	8.3 6.8 6.7 6.8 6.9 6.9 6.0 6.2 6.0 6.8 6.0 6.8 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0		9.3	0.962	1.00	5.0	5.1		5.3									6.7	8.9	7.0	7.1	7.2			-	2.12%
1047 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.977	208 214 215 218 218 218 218 218 218 218 218 218 218	0.977 0.56 5.7 0.39 0.79 0.29 0.39 <th< td=""><td>2007</td><td></td><td></td><td></td><td></td><td>8.3</td><td>8.5</td><td></td><td>8.9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Mental</td><td>11.1</td><td>11.4</td><td>11.6</td><td>11.8</td><td>12.1</td><td>decement</td><td>protestate parties</td><td>-</td><td></td></th<>	2007					8.3	8.5		8.9								Mental	11.1	11.4	11.6	11.8	12.1	decement	protestate parties	-	
0.977 0.56 6.7 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9	0.977 0.56 5.7 5.8 5.9 0.99 0.99 0.99 0.99 0.99 0.99 0.99	0.977 0.56 6.7 6.8 6.8 0 0.99 0.99 0.99 0.99 0.99 0.99 0.99	0.977 0.58 5.7 5.8 6.9 6.99 0.99 0.99 0.99 0.99 0.99 0.99	0.977						2.0%		2.3%									2.1%	94	2 1%	5	1 9%				
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0.982 1.00 2.8 2.9 2.9 3.1 3.1 3.2 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.7 3.4 3.5 4.0 4.1 4.2 4.4 4.2 4.4 4.2 4.4 4.5 4.4 4.2 4.4 4.5 4.4 4.2 4.4 4.2 4.4 4.2 4.4 4.2 4.4 4.2 4.4 4.2 4.4 4.5 4.4 4.5 4.4 4.5 4.6 4.6 4.6 4.6 4.6 4.8 2.3<	0.972 1.00 2.8 2.9 2.9 3.1 3.1 3.2 3.1 3.2 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.5 3.4 3.7 3.4 4.0 4.1 4.2 4.4 4.5 4.4 4.5 4.4 4.5 4.7 7.9 8.1 4.0 4.4 4.5 4.4 4.5 4.0 4.5 4.5 4.6 6.8 6.9 7.1 7.5 7.6 7.6 7.6 7.6 7.7 7.8 2.38	0.972 1.00 2.8 2.9 2.9 2.9 2.9 2.9 3.1 3.1 3.2 3.4 3.5 3.6 3.6 3.9 3.9 4.0 4.1 4.2 4.3 4.3 4.4 4.2 4.4 4.1 4.1 4.2 4.4 4.2 4.4 4.1<	0.972 1.00 2.8 2.9 3.0 3.1 3.2 3.3 3.4 3.4 3.5 3.6 3.7 3.6 3.7 3.8 3.8 3.9 4.0 4.1 4.2 4.3 4.3 0.974 1.00 3.0 3.1 3.1 3.1 3.1 3.2 3.3 3.7 3.6 4.0 4.1 4.2 4.3 4.3 4.3 4.3 4.3 3.3 3.4 3.9 4.0 4.1 4.2 4.3	0.992 1.00 2.8 2.9 2.9 2.0 2.9 2.0 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1		10.5	0.977	0.56	5.7	5.8	5.9	0.9	T TOTAL								7.6	7.7	7.9	8.1	8.2	8.4			2.12%
0.974 1.00 3.0 3.1 4.1 4.2 4.1 4.2 4.1 4.2 4.1 4.2 4.2 4.2 4.2 4.2 3.2 2.3<	0.974 1.00 3.0 3.1 4.1 4.2 4.1 4.2 4.1 4.2 4.1 4.2 4.1 4.2 4.2 4.2 4.2 3.2 2.3%	0.744 1.00 3.0 3.1 3.1 3.2 3.3 3.4 3.5 3.4 3.5 3.4 4.5 4.6 4.1 4.1 4.2 4.3 4.0 4.1 4.2 4.3 4.4 4.5 4.6 4.8 3.5 3.4 3.7 3.7 3.4 4.1 4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.7 7.5 3.8 2.1% 2.3%	0.974 1.00 3.0 3.1 3.1 3.2 3.3 3.4 3.5 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.8 2.3<	10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	-	4.5	0.982	1.00	2.8	2.9	2.9	3.0	-					-		-	3.8	3.8	3.9	4.0	4.1	4.1			2.12%
4.8 5.9 6.1 6.2 6.3 6.6 6.8 6.9 7.1 7.3 7.4 7.6 7.7 7.9 8.1 8.2 8.4 8.6 8.9 8.9 7.3 7.4 7.6 7.7 7.9 8.1 8.2 8.4 8.6 8.4 8.2 2.38	5.8 6.4 6.5 6.6 6.8 6.9 7.1 7.3 7.4 7.6 7.7 7.9 8.1 8.2 8.4 8.6 8.9 8.9 6.3 7.3 7.4 7.6 7.7 7.9 8.1 8.2 8.4 8.6 8.6 6.8 6.9 7.3 7.3 7.4 7.6 7.7 7.9 8.1 8.1 8.7 8.7 8.7 8.7 8.8 8.3 8.2 8.8 8.9 <td>5.8 5.9 6.5 6.6 6.8 6.9 7.1 7.3 7.4 7.6 7.7 7.9 8.1 8.2 8.4 8.6 8.6 6.9 7.1 7.3 7.4 7.6 7.7 7.9 8.1 8.1 8.6 8.7 1.8 1.78 1.9 1.9 1.9 1.9 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7<td>5.8 5.9 6.1 6.9 6.4 6.9 7.7 7.4 7.5 7.4 7.5 7.9 8.1 8.2 8.4 8.9 7.9 7.4 7.7 7.9 8.1 8.2 8.4 8.9 7.3 7.4 7.2 7.3 7.4 7.3 7.4 7.2 7.3 7.4 7.3 7.4 7.2 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.4 7.3 7.4<td>5.8 5.9 6.1 6.2 6.3 6.6 6.8 7.1 7.3 7.4 7.6 7.7 7.9 8.1 8.2 8.4 8.6 6.8 6.8 6.8 6.8 6.9 7.1 7.3 7.4 7.6 7.7 7.9 8.1 8.1 8.2 8.4 8.6 8.7 8.2 8.2 8.1 8.2 8.1 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2<td>Printed Supposed to</td><td>9.3</td><td>0.9/4</td><td>1.00</td><td>3.0</td><td>3.1</td><td>3.1</td><td>3.2</td><td>-</td><td>-</td><td>-</td><td>- Charlenna</td><td>- Contraction</td><td>-</td><td>-</td><td>-</td><td>4.0</td><td>4.1</td><td>4.2</td><td>4.3</td><td>4.3</td><td>4.4</td><td></td><td></td><td>2.12%</td></td></td></td>	5.8 5.9 6.5 6.6 6.8 6.9 7.1 7.3 7.4 7.6 7.7 7.9 8.1 8.2 8.4 8.6 8.6 6.9 7.1 7.3 7.4 7.6 7.7 7.9 8.1 8.1 8.6 8.7 1.8 1.78 1.9 1.9 1.9 1.9 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 <td>5.8 5.9 6.1 6.9 6.4 6.9 7.7 7.4 7.5 7.4 7.5 7.9 8.1 8.2 8.4 8.9 7.9 7.4 7.7 7.9 8.1 8.2 8.4 8.9 7.3 7.4 7.2 7.3 7.4 7.3 7.4 7.2 7.3 7.4 7.3 7.4 7.2 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.4 7.3 7.4<td>5.8 5.9 6.1 6.2 6.3 6.6 6.8 7.1 7.3 7.4 7.6 7.7 7.9 8.1 8.2 8.4 8.6 6.8 6.8 6.8 6.8 6.9 7.1 7.3 7.4 7.6 7.7 7.9 8.1 8.1 8.2 8.4 8.6 8.7 8.2 8.2 8.1 8.2 8.1 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2<td>Printed Supposed to</td><td>9.3</td><td>0.9/4</td><td>1.00</td><td>3.0</td><td>3.1</td><td>3.1</td><td>3.2</td><td>-</td><td>-</td><td>-</td><td>- Charlenna</td><td>- Contraction</td><td>-</td><td>-</td><td>-</td><td>4.0</td><td>4.1</td><td>4.2</td><td>4.3</td><td>4.3</td><td>4.4</td><td></td><td></td><td>2.12%</td></td></td>	5.8 5.9 6.1 6.9 6.4 6.9 7.7 7.4 7.5 7.4 7.5 7.9 8.1 8.2 8.4 8.9 7.9 7.4 7.7 7.9 8.1 8.2 8.4 8.9 7.3 7.4 7.2 7.3 7.4 7.3 7.4 7.2 7.3 7.4 7.3 7.4 7.2 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.4 7.4 7.3 7.4 <td>5.8 5.9 6.1 6.2 6.3 6.6 6.8 7.1 7.3 7.4 7.6 7.7 7.9 8.1 8.2 8.4 8.6 6.8 6.8 6.8 6.8 6.9 7.1 7.3 7.4 7.6 7.7 7.9 8.1 8.1 8.2 8.4 8.6 8.7 8.2 8.2 8.1 8.2 8.1 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2<td>Printed Supposed to</td><td>9.3</td><td>0.9/4</td><td>1.00</td><td>3.0</td><td>3.1</td><td>3.1</td><td>3.2</td><td>-</td><td>-</td><td>-</td><td>- Charlenna</td><td>- Contraction</td><td>-</td><td>-</td><td>-</td><td>4.0</td><td>4.1</td><td>4.2</td><td>4.3</td><td>4.3</td><td>4.4</td><td></td><td></td><td>2.12%</td></td>	5.8 5.9 6.1 6.2 6.3 6.6 6.8 7.1 7.3 7.4 7.6 7.7 7.9 8.1 8.2 8.4 8.6 6.8 6.8 6.8 6.8 6.9 7.1 7.3 7.4 7.6 7.7 7.9 8.1 8.1 8.2 8.4 8.6 8.7 8.2 8.2 8.1 8.2 8.1 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 <td>Printed Supposed to</td> <td>9.3</td> <td>0.9/4</td> <td>1.00</td> <td>3.0</td> <td>3.1</td> <td>3.1</td> <td>3.2</td> <td>-</td> <td>-</td> <td>-</td> <td>- Charlenna</td> <td>- Contraction</td> <td>-</td> <td>-</td> <td>-</td> <td>4.0</td> <td>4.1</td> <td>4.2</td> <td>4.3</td> <td>4.3</td> <td>4.4</td> <td></td> <td></td> <td>2.12%</td>	Printed Supposed to	9.3	0.9/4	1.00	3.0	3.1	3.1	3.2	-	-	-	- Charlenna	- Contraction	-	-	-	4.0	4.1	4.2	4.3	4.3	4.4			2.12%
2.08 2.18 2.18 2.18 2.18 2.18 2.18 2.18 2.1	2.08 2.18 2.38 2.48 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.3	2.08 2.18 <th< td=""><td>2.70 2.18 2.28 2.39 2.38 2.39 2.41 2.41 2.41 <th< td=""><td>2.08 2.18 2.38 2.48 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.3</td><td></td><td></td><td></td><td></td><td>5.8</td><td>5.9</td><td>6.1</td><td>6.2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>7.7</td><td>7.9</td><td>8.1</td><td>8.2</td><td>8.4</td><td>8.6</td><td></td><td>8.8</td><td>1</td></th<></td></th<>	2.70 2.18 2.28 2.39 2.38 2.39 2.41 2.41 2.41 <th< td=""><td>2.08 2.18 2.38 2.48 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.3</td><td></td><td></td><td></td><td></td><td>5.8</td><td>5.9</td><td>6.1</td><td>6.2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>7.7</td><td>7.9</td><td>8.1</td><td>8.2</td><td>8.4</td><td>8.6</td><td></td><td>8.8</td><td>1</td></th<>	2.08 2.18 2.38 2.48 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.3					5.8	5.9	6.1	6.2									7.7	7.9	8.1	8.2	8.4	8.6		8.8	1
1.7. 1.7. 1.7. 1.7. 1.7. 1.7. 1.7. 1.7.	1.75 1.75	1,75 1,75	0.972 0.56 6.3 6.4 6.5 6.7 6.9 7.0 7.2 7.3 7.5 7.7 7.8 8.0 8.0 98 0.98 0.98 0.98 0.99 0.99 0	1.75 1.75						40.7 0.00	4.1%	7.3%									2.1%	2.1%	2.1%	2.1%	1.9%	1.8%		1.6%	1
6.3 6.4 6.5 6.7 6.9 7.0 7.2 7.3 7.5 7.7 7.8 8.0 8.0 8.2 8.4 8.6 8.7 8.9 8.0 8.2 8.4 8.6 8.7 8.9 9.1 9.2 9.4 9.6 9.6 9.7 8.9 9.1 9.2 9.4 9.6 9.6 9.7 9.4 9.6 9.7 9.7 9.7 9.7 9.4 9.6 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7	6.3 6.4 6.5 6.7 6.9 7.0 7.2 7.3 7.5 7.7 7.8 8.0 8.2 8.4 8.6 8.7 8.9 9.1 9.2 9.1 9.2 9.4 9.6 9.6 9.0 9.1 9.2 9.4 9.6 9.6 9.0 9.1 9.2 9.4 9.6 9.6 9.0 9.2 9.4 9.6 9.6 9.2 9.2 9.4 9.6 9.6 9.2 9.2 9.4 9.6 9.2 9.2 9.4 9.6 9.2 9.2 9.2 9.2 9.2 9.2 9.2 9.2 9.2 9.2	6.3 6.4 6.5 6.7 6.9 7.0 7.2 7.3 7.5 7.7 7.8 8.0 8.2 8.4 8.6 8.7 8.9 9.1 9.2 9.4 9.6 9.6 9.6 9.7 9.7 9.6 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7	6.3 6.4 6.5 6.7 6.9 7.0 7.2 7.3 7.5 7.5 8.4 8.6 8.7 8.6 8.4 8.6 8.7 8.9 9.1 0.992 0.56 6.3 6.4 6.5 6.7 6.9 7.0 7.2 7.3 7.5 7.5 7.5 7.6 8.0 8.2 8.4 8.6 8.7 8.9 9.1 0.992 0.56 6.3 6.4 6.5 6.5 6.7 6.9 7.0 7.2 7.3 7.5 7.5 7.5 7.6 8.0 8.2 8.4 8.6 8.6 8.7 8.9 9.1 0.992 0.57 1.3 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	6.3 6.4 6.5 6.7 6.9 7.0 7.2 7.3 7.5 7.7 7.8 8.0 8.2 8.4 8.6 8.7 8.9 9.1 9.2 9.4 9.6 9.0 9.0 9.0 9.0 9.1 9.2 9.4 9.6 9.0 9.0 9.1 9.2 9.4 9.6 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0					0.30	0.70	0.98	86.0									0.98	0.98	0.98	0.98	0.98	0.98		86.0	
0.922 0.56 6.4 6.4 6.5 6.4 6.5 6.7 6.9 6.7 6.9 7.2 7.3 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5	0.922 0.56 6.3 6.4 6.5 6.7 6.9 70 72 72 72 72 72 72 72 72 72 72 72 72 72	0.922 0.56 6.8 6.8 6.4 6.5 6.7 6.9 70 72 73 72 73 75 77 75 78 6.0 6.2 6.0 6.2 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0	0.922 0.56 6.3 6.4 6.5 6.6 7 6.6 7 7 6.9 7.0 7.2 7.3 7.3 7.5 7.7 7.8 6.0 6.2 6.0 6.2 6.4 6.6 6.7 6.7 6.9 6.1 6.0 6.7 6.0 6.2 6.0 6.7 6.0 6.2 6	0.922 0.56 6.3 6.4 6.5 6.7 6.9 72 72 72 72 72 72 72 72 72 72 72 72 72					6.3	6.4	6.5	6.7									8.4	8.6	8.7	8.9	9.1	9.2		ercen	2.12%
0.934 0.67 1.5 1.5 1.5 1.5 1.5 1.6 1.6 1.6 1.6 1.6 1.7 1.7 1.7 1.7 1.7 1.8 1.8 1.8 1.8 1.8 1.8 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	0.924 0.67 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	0.924 0.67 1.5 1.5 1.5 1.5 1.5 1.5 1.6 1.6 1.6 1.6 1.7 1.7 1.7 1.7 1.7 1.7 1.8 1.8 1.8 1.8 1.8 1.8 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	0.924 0.67 1.5 1.5 1.5 1.5 1.5 1.6 1.6 1.6 1.6 1.7 1.7 1.7 1.7 1.7 1.8 1.8 1.8 1.8 1.9 1.8 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	0.924 0.67 1.5 1.5 1.5 1.5 1.5 1.6 1.6 1.6 1.6 1.7 1.7 1.7 1.7 1.7 1.7 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9		3.8	0.992	0.56	6.3	6.4	6.5	6.7							d		8.4	8.6	8.7	8.9	9.1	9.2			2.12%
0.982 1.00 1.7 1.8 1.8 1.8 1.9 1.9 1.9 1.9 2.0 2.0 2.1 2.1 2.1 2.2 2.2 2.2 2.3 2.4 2.4 2.4 2.4 2.4 2.4 2.5 2.5 2.5 2.0 2.0 2.0 2.1 2.1 2.2 2.2 2.3 2.4 2.4 2.4 2.4 2.4 2.4 2.4 2.4 2.4 2.4	0.982 100 1,7 1,8 1,8 1,8 1,9 1,9 1,9 1,9 1,9 2,0 2,0 2,1 2,1 2,2 2,2 2,2 3,3 2,4 2,4 2,4 2,4 2,4 2,4 2,4 2,4 2,4 2,4	0.982 100 17 11 12 12 12 12 12 12 12 12 12 12 12 12	0.982 1.00 1.7 1.8 1.8 1.8 1.9 1.9 1.9 1.0 2.0 2.0 2.1 2.1 2.2 2.2 2.3 2.3 2.3 2.4 2.4 2.4 2.4 2.4 2.4 2.4 0.94 0.07 1.3 2.3 2.3 2.3 2.3 2.3 2.3 2.4 2.4 2.4 2.4 2.4 0.94 0.07 1.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2.3 2	0.992 100 1.7 1.8 1.8 1.8 1.9 1.9 1.9 1.9 2.0 2.0 2.1 2.1 2.2 2.2 2.3 2.4 2.4 2.4 2.4 2.4 2.4 2.5 2.5 2.5 2.5 2.6 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0		9.1	0.924	0.67	1.5	1.5	1.5	1.5									1.8	1.8	1.8	1.8	1.9	1.9			1.40%
0.997 1.33 2.5 2.6 2.6 2.7 2.8 2.9 2.9 3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.5 3.6 3.7 3.6 3.6 3.7 3.6 3.6 3.7 3.6 3.6 3.7 3.6 3.6 3.6 3.8 3.6 3.8 3.6 3.8 3.6 3.8 3.8 3.6 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8	0.947 1.33 2.5 2.6 2.6 2.7 2.8 2.9 2.9 3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.5 3.6 3.7 3.8 4.0 4.0 4.1 4.2 4.3 4.4 4.0 4.4 4.0 4.4 4.0 4.4 4.4 4.4 4.4	0.947 1.33 2.5 2.6 2.6 2.7 2.8 2.9 3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.5 3.6 3.7 3.8 3.9 4.0 4.1 4.2 4.3 4.4 4.5 4.4 4.5 4.4 4.5 4.4 4.5 4.4 4.5 4.4 4.5 4.5	0.947 1.33 2.5 2.6 2.6 2.7 2.8 2.0 3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 4.0 4.1 4.1 0.94 0.057 1.3 1.3 1.3 1.3 1.3 1.4 1.4 1.4 1.4 1.4 1.4 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6	0.947 1.33 2.5 2.6 2.6 2.7 2.8 2.9 3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.7 3.7 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8 3.8	Anna lance security and a	9.1	0.982	1.00	1.7	1.7	1.8	1.8									2.3	2.3	2.4	2.4	2.4	2.5			2.10%
0.949 0.67 1.3 1.3 1.3 1.3 1.4 1.4 1.4 1.4 1.4 1.5 1.5 1.5 1.5 1.5 1.5 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.9 8.1 8.3 8.5 8.6 8.8 9.0 9.2 9.4 9.6 9.8 10.0 10.2 10.2 10.4 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5	0949 0.67 1.3 1.3 1.3 1.3 1.4 1.4 1.4 1.4 1.4 1.4 1.5 1.5 1.5 1.5 1.5 1.6 1.6 1.6 1.6 1.6 1.6 1.7 1.7 1.7 1.7 1.9 1.1 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3	0.949 0.67 1.3 1.3 1.3 1.3 1.4 1.4 1.4 1.4 1.4 1.5 1.5 1.5 1.5 1.5 1.6 1.6 1.6 1.6 1.6 1.7 1.7 1.7 1.7 1.7 1.9 1.1 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3	0.949 0.67 1.3 1.3 1.3 1.3 1.4 1.4 1.4 1.4 1.4 1.5 1.5 1.5 1.5 1.5 1.5 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6	0949 0.67 1.3 1.3 1.3 1.3 1.4 1.4 1.4 1.4 1.4 1.5 1.5 1.5 1.5 1.5 1.6 1.6 1.6 1.6 1.6 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7	and the second desirement of the second	9.1	0.967	1.33	2.5	2.6	2.6	2.7									3.7	3.8	3.9	4.0	4.1	4.2	-		2.80%
7.1 7.2 7.4 7.6 7.7 7.9 8.1 8.3 8.5 8.6 8.8 9.0 9.2 9.4 9.6 9.8 10.0 10.2 10.4 10.5 2.0% 2.1% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3	7.1 7.2 7.4 7.6 7.7 7.9 8.1 8.3 8.5 8.6 8.8 9.0 9.2 9.4 9.6 9.8 10.0 10.2 10.4 10.5 2.0% 2.0% 2.1% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3% 2.1% 2.1% 2.1% 2.1% 1.9% 1.8% 1.7% 1.6% 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91	7.1 7.2 7.4 7.6 7.7 7.9 8.1 8.3 8.5 8.6 8.8 9.0 9.2 9.4 9.6 9.8 10.0 10.2 10.4 10.5 2.05 2.05 2.18 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.3	7.1 7.2 7.4 7.6 7.7 7.9 8.1 8.3 8.5 8.6 8.8 9.0 9.2 9.4 9.6 9.8 10.0 2.05 2.18 2.38 2.48 2.48 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.18 2.18 2.19 2.19 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0	7.1 7.2 7.4 7.6 7.7 7.9 8.1 8.3 8.5 8.6 8.8 9.0 9.2 9.4 9.6 9.8 10.0 10.2 10.4 10.5 2.05 2.05 2.18 2.38 2.38 2.38 2.38 2.38 2.38 2.38 2.3	-	4.7	0.949	0.67	1.3	1.3	1.3	1.3									1.5	1.6	1.6	1.6	1.6	1.6			1.40%
2.0% 2.1% 2.3% 2.4% 2.4% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3% 2.1% 2.1% 2.1% 2.1% 2.1% 1.9% 1.6% 1.7% 1.6% 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91	2.0% 2.1% 2.3% 2.4% 2.4% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3% 2.1% 2.1% 2.1% 2.1% 2.1% 1.9% 1.5% 1.5% 1.6% 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91	2.0% 2.1% 2.3% 2.4% 2.4% 2.3% 2.3% 2.2% 2.3% 2.3% 2.3% 2.2% 2.1% 2.1% 2.1% 2.1% 1.9% 1.5% 1.7% 1.6% 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91	2.005 2.1% 2.3% 2.4% 2.4% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3	2.0% 2.1% 2.3% 2.4% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3% 2.1% 2.1% 2.1% 2.1% 1.9% 1.8% 1.7% 1.6% 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91					6.9	7.1	7.2	7.4									9.2	9.4	9.6	9.8	10.0	10.2	and and and	NAVE AND ADDRESS OF THE PERSON	
0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91	0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91	0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91	0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91	0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91						2.0%	2.1%	2.3%									2.1%	2.1%	2.1%	2.1%	1.9%	1.8%		1.6%	i
									0.91	0.91	0.91	0.91									0.91	0.91	0.91	0.91	0.91	0.91		1.91	

SUBSTATION	r) :ity	10	ų,	(PEC Dist	PEC Distribution System Demand Forecast (MWs)	stem De	mand For	recast (M)	Vs)							ų: ui	
FEEDER NAME	(VM)	Pow Tact	Relat wond staft	MM)						117	877			Ti					4	17 LL18	18 LL19	1,1,20	mpor irowi	
PROJECTED SYSTEM COINCIDENT PEAK				17 F	1 258 6 1 208 1 1 32 3 0	1 1 323	7 0 4 424 4	4 4 486 3	4 540.2	707	-	MARKET !		10000	-	COLOR S	10000	-	PHONES -	Actions		2030		
System Load Growth Factor					3.4% 3.4%	3.9% 4.					1,680.3	1,751.0 1,	1,82/.0 1,	1,904.1	1,982.0 2,	2,061.2 2,1	2,141.6 2,22	2,222.8 2,30	2,306.2 2,385.9	2,46	2.5 2,537.4	4 2,610.5	3.89%	3 9
KENT STREET Total	SHARBERT IN			10.2	10.6 11.0		-		7 13.2	13.8	14.4	15.1	15.8	16.5	17.2	18.0			,	,	1,	١	ACC F	
KST1	37.3	0.932	1.12	10.2	10.6	11.0 11			_	_		15.1	15.8	16.5	17.2	18.0							-	e a
KST1_20	30.2	0.927	1.00	7.4	8 7.7	8.0 8		8.8 9.2	.2 9.6			10.9	11.4	12.0	12.5	13.0	13.6		-	-				8 8
KST1_30	30.2	0.935	1.00	3.0	3.1	3.2 3	3.4 3.	3.5 3.	3.7 3.9	4.1	4.2	4.4	4.6	4.8	5.1	5.3	5.5	5.7						2 26
Total Feeder Load				10.4	10.8 11	11.2 11.	11.7 12.3	3 12.9	.9 13.5	14.1	14.7	15.4	16.1	16.8	17.5	18.3	19.1	-	Sections	eroseesee	donner or or or		domento	
Transformer Demand Growth Rate					3.9% 4.	4.3% 4.		4.8% 4.7	4.7% 4.6%	4.5%	4.5%	4.5%	4.6%	4.5%	4.4%	4.3%	4.2%							
Feeder / Transformer Diversity Factor				0.98	0.98 0.9	0.98 0.9	0.98 0.98	86.0 86	86 0 86	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98						unning and
KYLE Total				19.4	20.2 21.0	.0 22.0	0 23.0	0 24.1	1 25.2	26.4	27.6	28.8	30.1	31.5	32.9	34.3	35.7	37.2	38.7 4	40.2 4	41 6 430	44.4	200	9
KYT1	22.4	0.991	1.12	19.4	20.2 21.0		22.0 23.0	0 24.1	.1 25.2	26.4		28.8	30.1	31.5	32.9	34.3	L	L	L	L	L		-	2 3
KYT1_20	8.9	0.890	1.00	8.0	8.3 8	8.6	9.0					11.8	12.4	12.9	13.5	14.1	14.7	15.3				18 3	4.23%	e 24
KYT1_30	4.5	0.979	1.00	5.4	5.6 5.6	5.8 6.	6.1 6.4	4 6.7	7 7.0	7.3	7.7	8.0	8.4	8 8	- 6	5 0	0 0	10 3	L	L	L	ļ	707.1	6 9
KYT1_40	8.9	0.000	1.00	0.0	0.0	0.0	0.0		0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		7.23%	8 34
KYT1_50	8.9	1.000	1.00	6.3	6.5 6	6.8 7	7.1 7.	7.5 7.8	.8 8.2	8.6	8.9	9.3	8.6	10.2	10.6	11.11	11.6	12.1	12.6				4 23%	. 34
Total Feeder Load				19.7	20.4 21	21.3 22	22.3 23.4	.4 24.5	.5 25.6	26.7	27.9	29.2	30.5	31.9	33.3	34.7	36.2	37.7		ľ		Į,	Section of the sectio	deressed.
Transformer Demand Growth Rate					3.9% 4.	4.3% 4.	4.6% 4.	4.8% 4.7	4.7% 4.6%	% 4.5%	4.5%	4.5%	4.6%	4.5%	4.4%	4.3%	4.2%	4.2%						
Feeder / Transformer Diversity Factor				0.99	0.99	0.99 0.	0.99 0.99	66.0 66	66.00	0.99	0.99	0.99	66.0	0.99	0.99	0.99	0.99	0.99						PARCANCE
LEANDER Total				56.4	58.6 62.7	7. 67.1	.1 71.8	8 76.6	6 81.4	86.3	92.9	7.66	106.8	115.0	123.2	131.6	140.0 14	147.6 15	155.2 16	162 7 17	4771 1774	182 6	970 7	9
LAT2	22.4	696.0	1.12	18.3	19.0 19	19.8 20	717 717	7 77 77 7	7 23.8	248	0.96	27.4	20.4	200	0.05	L	L	L		l			0.0	e
LAT2_110	17.7	0.982	1.00	6.8								10.1	10.5	11.0	11.5	12.0	12.5		13.5	14.1	14 K 15 0	4 4 4 5 5	4.23%	96 9
LAT2_130	17.7	0.956	1.00	11.6	12.0 12	12.5 13	13.1 13.7	7. 14.4	15.1	15.7	16.4	17.2	18.0	18.8	9.61	20.4						L	1000 ×	6 8
Total Feeder Load				18.4	19.1 19	19.9 20	20.8 21.8	.8 22.8	.8 23.9	25.0	26.1	27.3	28.5	29.8	31.1	32.4	33.8							
Transformer Demand Growth Rate					3.9%	4.3% 4.		4.8% 4.7	4.7% 4.6%	% 4.5%	4.5%	4.5%	4.6%	4.5%	4.4%	4.3%	4.2%	4.2%						
Feeder / Transformer Diversity Factor				1.00	1.00 1.	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					ter mineratuur
LAT3	22.4	0.979	1.12	11.7	12.1 12	12.6 13	13.2 13.9	9 14.5	.5 15.2	15.9	16.6	17.3	18.1	18.9	19.7	20.6	21.5	22.4	23.3	24.2	25.0 25.9	7 74 7	70 C F	7
LAT3_10	17.7	0.982	1.00	11.6	12.0 12	12.5 13	13.1 13.7	7. 14.4	15.1	15.7	16.4	17.2	18.0	18.8	19.6	20.4	21.3	22.2						2 24
LAT3_30	17.7	0.000	1.00	0.0	0.0	0.0		0.0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0					0.00%	2 28
Total Feeder Load				11.6		12.5 13	13.1 13.7		.4 15.1	15.7	16.4	17.2	18.0	18.8	19.6	20.4	21.3	22.2	23.1	24.0	24.8 25.7	7 26.5		7
Transformer Demand Growth Rate					10				SP.			4.5%	4.6%	4.5%	4.4%	4.3%	4.2%	4.2%	4.2%					
Feeder / Transformer Diversity Factor				1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01 1.01	1.01		antelessa
LAT4	37.3	0.953	1.12	26.5	27.5 30	30.3 33	33.2 36.3	.3 39,3	3 42.5	45.6	50.4	55.3	60.3	66.4	72.5	78.7	84.9	90.2	95.5	100.7	105.8 110.9	9 115.0	7.61%	36
LAT4_210	25.9	0.944	1.00	7.9			9.9 10.	10.8 11.8	.8 12.7		15.2	16.7	18.2	19.8	21.3	22.9	24.5	25.1						35
LAT4_220	25.9	0.998	1.00	1.6	1.6	1.7	1.8 1.	1.8 1.	1.9 2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.9	3.0	3.1	L			-	8
LAT4_230	25.9	0.954	1.00	5.9		6.9		8.5 9.	9.3 10.2	11.0	12.4	13.8	15.2	17.6	20.0	22.4	24.8	27.3			ľ.			- 35
LAT4_250	25.9	0.945	1.00	12.9		14.5 15	15.6 16.8	.8 18.0	.0 19.3	20.5	22.3	24.1	26.0	27.9	29.8	31.8	33.7	35.7				L	6.39%	36
Total Feeder Load				28.2				.0 41.1	ľ	47.4		56.9	61.8	67.8	73.8	79.8	85.9	91.1	96.3 10	101.5 10	106.5 111.6	6 115.6		and the same of
Transformer Demand Growth Rate											10.5%	9.7%	80.6	10.1%	9.2%	8.5%	7.9%	6.2%	5.9%	5.5%	5.1% 4.8%			uterro
Feeder / Transformer Diversity Factor				0.94	0.94 0.	0.94 0.	0.94 0.94	94 0.94	94 0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94 0.94	4 0.94		-Value
																								UNI SAN

PEC Subloads_v7 (Mid-range_Severe Weather)_v3.xlsm Demand Totals (Summer)

The continue of the continue o	The column The	Control Cont	1,613,1 1,613,1 1,4.0 14.0 14.0 0.0 0.0 0.1 1,00 1,00 1,00 1,00 1,00	1,751.0 1,751.0 1,751.0 15.3 15.3 15.3 15.3 15.3 15.3 15.3 15.3	1,827.0 1,827.0 1,827.0 1,000	1,904.1 1,904.1 16.7 16.7 16.7 16.8 16.8 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.	2002 4.18 4.18 4.18 4.18 17.4 17.4 17.4 17.5	22 21.0% 82 83 83 83 4.3% 00 00 00 00 00 00 00		7	7	2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2	2,52	30,00	иподшо С
The control of the co		National Park 1,217, 1,216, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	2017 1,68 1,168 1,168 1,168 1,168 1,168 1,168 1,168 1,168 1,168 1,169 1,	1,75	1,820	1,904.1 1,904.1 16.7 16.7 16.7 16.8 16.8 16.8 16.8 17.9 10.0 10.0 10.0 18.4 18.4 10.1 10.0 11.00 11.00 11.00 11.00 11.00 11.01 11.01 11.01	992.0 4-18.7 17.4 17.5 17.5 17.5 17.5 17.5 17.5 17.5 17.5				7, 2	22.4	2,5	3 6 7	Com
From the part of t	Figure 1	NOTICIPATIFIEM 1, 217.5 1, 128.6 1, 130.1 1, 136.2 9 1, 424.1 1, 446.3 1, 154.2 1, 12.8 1 1, 130.1 1, 136.2 9 1, 424.1 1, 446.3 1, 154.2 1, 12.8 1, 13.4 1, 13.8 1, 13	1,613.1 1,68 4.15 14.0 14.0 0.0 0.0 0.0 0.1 14.1 14.1 14.	1,73	7,82	1,904.1 4.2% 16.7 16.7 16.7 7.6 0.0 0.0 1.00 45.8 4.5% 1.00 1.00 3.8% 1.01 18.4 0.3 8.0 1.01 16.2	992.0 4.1% 17.4 17.4 17.4 17.4 17.5	18.1.7 18.2.7 18.2.7 18.3.7 19.3.8 19.3.8 11.00 11.00 10.	141.6 2, 3.9% 19.0 19.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	57	4.	2, 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2,61	E
The control of the co	The control of the co	Monthly Pictor 25.9 0.3995 1.12 10.3 10.7 11.2 11.7 12.2 12.8 13.4 13.4 13.4 13.4 13.4 13.4 13.4 13.4	4.1% 4.1% 4.1% 14.0 10.0 0.0 0.0 0.1 14.1 14.1 1.00 1.00				4.1% 17.4 17.4 17.4 17.4 17.5 17.5 17.5 17.5 17.5 17.5 17.6 17.6 17.6 17.6 17.6 17.6 17.6 17.6	18.2 18.2 18.2 18.3 0.0 0.0 0.0 1.00 11.00 14.3% 14.3% 14.3% 17.7 29.0 3.6% 1.01 1.01	13.9% 19.0 19.0 0.0 0.0 0.0 19.0 19.0 19.0 19						
The continue of the continue	The control of the co	11.0 11.0	14.0 1 14.0 1 14.0 0.1 6.4 1 14.1 1 14.1 1 15.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6				17.4 17.4 17.5 17.9 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.	18.2 0.0 0.0 0.0 0.0 18.3 4.3% 1.00 4.3% 1.00 1.00 3.6% 1.01 1.01	19.0 0.0 0.0 0.0 0.0 10.0						
The control of the co	1. 1. 1. 1. 1. 1. 1. 1.	25.9 0.000 1.00 0.01 0.01 0.01 0.01 0.01 0	14.0 14.0 14.0 14.1 14.1 14.1 14.0 14.0 14.0 16.0				17.4 0.0 0.0 17.5 17.5 17.5 1.00 4.4% 1.00 4.7.5 28.0 3.7% 1.01 1.01 1.01	18.2 0.0 0.2 0.2 18.3 4.3% 1.00 1.00 3.6% 1.01 1.01 1.01	19.0 0.0 0.0 0.0 10.						
Fig. 1. Since the control of the con	The control of the co	2.5.9 1,0000 1,100 0,10 0,10 0,10 0,10 0,10	0.0 0.0 1.0 14.1 4.5% 1.00 1.00 23.3 3.8% 1.01 1.0	<u> </u>			0.0 0.0 7.9 4.4% 1.00 47.5 28.0 3.7% 1.01 19.1 10.	0.0 0.2 8.3 18.3 4.3% 1.00 1.00 29.0 3.6% 1.01 1.01	0.0 8.6 4.2% 4.2% 4.2% 1.00 1.00 8.0 8.0 8.0 8.0 8.0 8.0 8.0						
The control of the co	The control of the co	and Growth Rate 22.9 0.940 1.00 0.1 1.00 1.00 1.00 1.00 1.00 1.0	0.1 6.4 7.5 1.00 1.00 39.5 4.3% 1.01 6.0 6.0 8.6 6.9 8.6 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.	7			9.2 4.4% 4.4% 4.4% 1.00 47.5 28.0 3.7% 10.3 10.3 10.3 11.1 11.1 10.3 1	9.8 18.3 4.3% 1.00 49.2 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7	8.6 19.0 19.0 19.0 10.0 10.0 8.0 8.0 8.0 8.0 10.0 10.0 1						
Management	Mathematic	and Growth Rate 225 0.040 1.00 5.6 5.8 6.0 6.3 5.6 6.0 6.3 5.6 6.0 6.3 5.8 6.1 3.5 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	6.4 4.5% 1.00 1.00 23.7 8.0 6.0 6.0 6.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1				7.9 17.5 1.00 1.00 4.4% 1.00 4.7.5 28.0 3.7% 1.01 1.01	8.3 4.38 4.30 1.00 1.00 1.01 1.01 1.01 1.01 1.01 1	8.6 19.0 1.00 1.00 1.00 10.1 10.1 10.1 10.1						
Mathematic	Mathematical Fig. 1	and Growth Rate Table 100 5.6 5.8 6.6 6.6 6.8 7.2 Table 100 1.00 1.00 1.00 1.00 1.00 1.00 1.00	7.5 14.1 4.3% 1.00 1.00 23.3 3.6% 8.2 6.0 23.3 3.6% 1.01 15.7 1.01 14.9 14.9 14.9				9.4 17.5 1.00 47.5 28.0 3.7% 1.01 19.1 10.3 3.7% 10.3 3.7%	18.3 4.3% 1.00 1.00 1.01 1.01 1.01 1.01 1.01 1.0	10.2 14.2% 1.00 10						
Mantonent particles and the section of the section	Mathomatical properties and a continue prope	and Growth Rate Table State S	4.5% 4.5% 1.00 1.00 23.5 4.5% 1.01 1.01 14.9 14.9 14.19 14.19 14.19				4.4% 4.4% 1.00 47.5 28.0 3.7% 10.1 10.1 16.3 3.7% 1.01	4.3% 1.00 1.00 11.6 11.6 11.6 1.01 19.8 0.3 0.3 0.3 0.3 0.3 0.3 0.3 19.6 19.6	4.2% 1.00 1.00 10.0 10.0 8.0 30.0 30.0 3.5% 1.01 1.01 1.11 1.01	19.8 4.2% 1.00 10.2 10.2 10.2 8.3 31.1 3.5% 1.10 1.01 21.2 0.3 9.2 1.11 1.15 1.10 1.10 1.10 1.10 1.10 1.10					
The control of the co	The control bilary co	and Growth Rate Table Tokenth Rate Table Tok	1.00 1.00 39.5 4 23.7 6.0 23.3 6.1.01 1.01 14.9 14.9 14.9 14.9				4.4% 1.00 1.00 47.5 28.4 28.0 3.7% 1.01 1.01 18.9 3.7% 1.01	4.3% 1.00 1.00 116 116 9.7 7.7 7.7 7.7 29.0 3.6% 1.01 1.01 19.8 19.8 1.07 19.8	4.2% 1.00 10.0 8.0 8.0 3.5% 1.01 11.11 11.11	4.2% 1.00 1.02 10.2 8.3 8.3 8.3 8.3 1.1 3.5% 1.01 1.01 2.1.2 0.3 9.2 1.01	4.2% 1.00 1.00 18.7 18.7 19.5 19.5 19.5 19.1 10.1 21.9 19.3 21.7 21.7 21.7				
Mathematical mathe	From the protective process. The control of the con	Trunc Diversity Factor	1,00 39.5 4 23.7 9.1 8.2 23.3 6.3 88 1.01 15.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6			4	47.5 28.4 1111 1111 1111 101 103 103 103 103 103	1.00 1.00 1.01	1,000 1000	1.00 1.00 1.25 1.25 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.0	54.5 32.6 10.0				
The control of the co	Fig. 1. See See See See See See See See See Se	22.4 0,996 0,93 18,3 18,9 19,6 20,3 20,3 21,1 22,0 20,2 18,1 22,0 20,2 20,3 21,1 22,0 20,2 20,3 21,2 20,3 21,2 20,3 21,2 20,3 20,3 20,3 20,3 20,3 20,3 20,3 20	39.5 4 21.0 1 10.0 10.0 1 10.0			4	28.0 7.4 7.4 7.4 7.4 28.0 3.7% 10.1 10.1 18.9 3.7% 18.9	49.2 29.0 3.6% 1.01 19.8 0.3 8.6 1.01 19.6 19.6 19.6	20.9 112.1 112.1 11.0 20.4 0.3 0.3 0.3 0.3 0.3 0.3 0.3	52.7 11.5 10.2 8.3 8.3 31.4 3.5% 1.01 21.2 0.3 71.2 11.5	54.5 32.6 10.5 8.7 32.2 3.5% 1.01 0.3 9.5 11.9				
The control of the	1	30,6 31,6 32,7 33,9 35,3 36,7 38,1 36,7 3,1 36	39.5 4 23.7 4 24.9 1 1.01 1 1.				28.4 11.1 9.5 7.4 28.0 3.7% 1.01 1.01 10.3 8.3 18.9 18.9	101 101 101 101 101 101 101 101 101 101	50.9 10.0 10.0 10.0 3.5% 1.01 1.01 20.4 20.4 20.3	52.7 11.5 12.5 10.2 10.2 3.5% 1.01 21.2 0.3 11.5 11.5	21.5 10.5 10.5 10.5 10.5 10.5 10.0				
11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12.4 0.000 1.01 0.000 1.01 0.000 0.01	224 0,996 0,93 18.3 18.9 18.6 20.0 21.1 2.0 2.26	23.7 8.2 6.0 6.0 23.3 1.01 15.9 0.2 6.9 8.6 1.01 14.9 14.9 14.9				28.0 3.7% 1.01 19.1 18.9 3.7% 1.01	11.6 11.6 11.6 29.0 3.6% 1.01 19.6 19.6 19.6 11.01	30.5 8.0 8.0 30.0 3.5% 1.0f 11.1 20.3	31.5 10.2 8.3 31.1 3.5% 1.01 21.2 0.3 9.2 11.5	32.2 8.7 32.2 3.5% 1.00 1.01 21.9 0.3 9.5 11.9				
Half with the control of the control	1. 1. 1. 1. 1. 1. 1. 1.	8.9 0.966 1.20 6.8 7.0 7.3 7.6 8.0 8.3 8.7 8.7 8.4 8.7 8.8 8.7 8.8 8.7 8.8 8.7 8.8 8.7 8.8 8.7 8.8 8.7 8.8 8.7 8.8 8.8	8.2 8.2 23.3 3.8% 1.01 15.9 6.9 8.9 8.6 1.01 14.9 14.9				1141 9.5 7.4 28.0 3.7% 1.01 1.01 18.3 18.3 3.7% 1.01	9.7 7.7 29.0 3.6% 1.01 1.01 19.6 3.6% 1.01	12.4 10.0 3.5% 1.01 20.4 0.3 8.9 11.1	12.5 10.2 8.3 31.1 3.5% 1.01 21.2 0.3 9.2 11.15	10.5 8.7 32.2 3.5% 1.01 1.01 0.3 9.5 11.9				
The control of the co	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	15.1 0.992 0.80 6.8 6.9 7.1 7.3 7.6 7.8 8.0 8.0 9.9 1.20 4.5 4.7 4.9 5.1 5.3 5.6 5.8 8.0 9.9 1.20 4.5 4.7 4.9 5.1 5.3 5.6 5.8 8.0 9.9 9.0 9.9 1.20 9.3 9.2 9.3 9.2 9.3 9.2 9.3 9.2 9.3 9.2 9.3 9.2 9.3 9.2 9.3 9.2 9.3 9.2 9.3 9.2 9.3 9.2 9.3 9.2 9.3 9.2 9.3 9.2 9.3 9.2 9.3 9.2 9.3	8.2 6.0 2.3.3 1.001 1.00				9.5 7.4 28.0 3.7% 1.01 19.1 0.3 8.3 18.9 3.7%	9.7 7.7 29.0 3.6% 1.01 19.8 8.6 19.6 3.6% 1.01	10.00 30.00 3.5% 1.01 20.4 0.3 8.9 11.11	10.2 8.3 31.1 3.5% 1.01 0.3 9.2 111.5	10.5 8.7 32.2 3.5% 1.01 0.3 9.5 11.9				0000000
Manufactional lange and the control lange an	Mathematic	and frowth Rate 8.9 0.991 1.20 4.5 4.7 4.9 5.1 5.3 5.6 5.8	23.3 23.3 1.01 15.9 1.01 2.0 2.0 6.0 8.6 8.6 1.01 1.01 1.01 14.9 14.9 14.9				28.0 3.7% 1.01 19.1 0.3 8.3 10.3 18.9 3.7%	29.0 3.6% 1.01 1.01 19.8 0.3 8.6 19.6 3.6%	8.0 30.0 3.5% 1.01 0.3 8.9 11.1	8.3 31.1 3.5% 1.01 0.3 9.2 111.5	8.7 3.5% 1.01 1.01 0.3 9.5 1119 21.7 3.5%		7,000		
Mathomatical mathomatic mathomati	Many Many Markey	and Growth Rate 224 0,997 0,997 12.3 12.5 12.5 13.8 14.0 1.01 1.01 224 0,997 0,997 12.3 12.7 12.1 1.01 1.01 1.01 1.01 224 0,997 1.00 0,2 0.2 0,2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.	23.3 3.8% 1.01 15.0 0.2 6.9 8.6 8.6 1.01 14.9 14.9 14.9				28.0 3.7% 1.01 1.01 0.3 8.3 18.9	29.0 3.6% 1.01 1.01 0.3 8.6 19.6 3.6%	30.0 3.5% 1.01 0.3 8.9 11.1	31.1 3.5% 1.01 0.3 9.2 11.5	32.2 3.5% 1.01 0.3 9.5 11.9 21.7 3.5%				
The control binds below	From the covery halfs between the control field between the control field between the covery halfs between the covery hal	mend Growth Rate 2.3.% 3.5.%	1.01 1.01 1.02 0.2 6.9 8.6 1.01 1.01 14.9 1.01 14.9 1.01				1.01 1.01 1.03 8.3 18.9 1.03 1.7%	3.6% 1.01 0.3 8.6 19.6 3.6%	3.5% 1.01 20.4 0.3 8.9 11.1	3.5% 1.01 1.01 0.3 9.2 11.5	3.5% 1.01 1.01 0.3 0.3 9.5 111.9 3.5%				W Desired
The control of the co	mary threatily finds a continue to the continu	omer Divertity Factor 1.01 0.03 12.3 12.7 13.1 13.6 14.2 14.7 15.3 15.9 12.3 12.0 12.2 14.5 19.9 11.0 12.3 12.2 12.4 0.997 1.00 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	1.01 15.9 6.9 8.6 8.6 15.7 15.7 14.9 14.9 14.9				19.1 0.3 8.3 10.3 18.9 3.7%	1.01 0.3 8.6 10.7 10.6 3.6%	20.4 0.3 8.9 11.1 20.3	1.01 21.2 0.3 9.2 11.5	21.9 0.3 0.3 11.9 21.7 3.5%				Management
14. 6 604 6 605 1	224 G. 947 G. 0.51 G. 2.5 G. 2. G. 2	224 0.997 1.00 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	15.9 6.02 6.03 15.7 15.7 1.01 14.9 14.9 5.5				19.1 0.3 8.3 10.3 18.9 3.7%	19.8 8.6 10.7 19.6 3.6%	20.4 0.3 8.9 11.1	21.2 0.3 9.2 11.5	21.9 0.3 9.5 11.9 3.5%				1000
124 0.07 0.0 1 0.0	1 2 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.4 0.997 0.33 123 12, 131 13.6 14.2 14.7 15.3 1.3 13.6 14.2 14.7 15.3 1.3 13.6 14.2 14.7 15.3 1.3 13.6 14.2 14.7 15.3 1.3 13.6 14.2 14.7 15.3 1.3 13.6 14.2 14.7 15.3 1.3 13.6 14.2 14.7 15.3 1.3 13.6 14.2 14.7 14.8 15.2 13.6 14.2 14.8 14.1 14.6 15.2 13.8 13.8 13.8 13.8 13.8 13.8 13.8 13.8	15.9 0.2 6.9 8.6 1.01 14.9 1.01 14.9 5.5 5.5				19.1 0.3 8.3 10.3 18.9 3.7%	19.6 3.6% 1.01	20.4	21.2 0.3 9.2 11.5 21.0	21.9 0.3 9.5 11.9 21.7 3.5%				NAME OF TAXABLE PARTY.
4.5 Geometric Control Each Cont	4 5 0.079 1 LOS 0.029 1 LOS 0.2 0 2 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4.5 0.993 1.00 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	8.6 8.6 115.7 11.01 114.9 14.9 14.9				6.3 10.3 18.9 3.7%	9.6 10.7 19.6 3.6%	0.3	0.3 9.2 11.5 21.0	0.3 9.5 11.9 21.7 3.5%				
Heap to the control of the control o	8 6 0 990 140 6 53 6 2 6 6 4 6 7 6 6 6 6 6 7 7 6 7 7 7 7 7 7 6 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8.9 0.950 1.00 5.3 5.5 5.7 5.9 6.2 6.4 6.7 6.7 mond Growth Rate mand Growth Rate 8.9 0.998 1.00 4.7 13.0 13.5 13.5 13.5 13.5 13.5 13.5 14.1 14.6 15.2 14.5 14.1 14.6 15.2 14.5 14.1 14.6 15.2 14.5 14.1 14.6 15.2 14.5 14.1 14.1 14.1 14.1 14.1 14.1 14.1	6.9 8.6 3.8% 1.01 14.9 14.9 6.5 6.5				8.3 10.3 18.9 3.7%	8.6 19.6 3.6%	20.3	9.2	9.5 11.9 21.7 3.5%				No.
4. S.	Many discrimination and set if a bit is	and Growth Rate 2.2.4 0.997 1,00 6,7 6,9 7.1 7.4 7.7 8.0 8.3 2.2.4 0.992 0.56 12.7 13.0 13.5 13.5 13.9 14.2 14.5 14.5 14.5 14.5 14.5 14.5 14.5 14.5	8.6 15.7 3.8% 1.01 14.9 14.9 5.5				18.9 3.7% 1.01	19.6 3.6% 1.01	11.1	11.5	21.7				Management
many decountility becomes that the control of the c	mand convolvables	and Growth Rate 12.2 12.6 13.0 13.5 14.1 14.6 15.2 anner Diversity Factor 1.01 1.02	15.7 3.8% 1.01 14.9 14.9 5.5				18.9 3.7% 1.01	19.6 3.6% 1.01	20.3	21.0	21.7				Management
mand from this best best best best best best best bes	Figure Developing the control base besides the control base besides besides the control base besides besides besides besides to be a control base besides besi	mand Growth Rate 2.2.4 0.892 0.56 12.7 13.0 13.2 13.5 13.9 14.2 14.5 1.01 2.2.4 0.892 0.56 12.7 13.0 13.2 13.5 13.9 14.2 14.5 1.01 8.9 0.998 1.00 4.7 4.8 4.9 5.1 5.2 5.3 5.4 6.2 and Growth Rate 8.9 0.996 1.00 2.7 2.8 2.9 2.9 3.0 3.1 3.1 and Growth Rate mand Growth Rate 2.0.5 2.1.5 2.1.5 13.5 13.5 13.1 14.4 14.8 and Growth Rate 2.0.7 2.0.8 2.1.8 2.38 2.48 2.48 2.48 2.38 and Growth Rate 2.0.8 2.1.8 2.38 2.48 2.48 2.38 2.48 2.38 and Growth Rate 2.0.8 2.1.8 2.38 2.48 2.48 2.38 2.48 2.38 2.48 2.38 2.48 2.38 2.48 2.38 2.48 2.38 2.48 2.38 2.48 2.38 2.48 2.38 2.38 2.48 2.48 2.38 2.48 2.38 2.48 2.48 2.38 2.48 2.38 2.48 2.48 2.38 2.48 2.48 2.48 2.48 2.48 2.48 2.48 2.4	1.01 14.9 14.9 5.5 6.4	7		100	3.7%	3.6%		2	3.5%				
ormer Diversity Pictors 2. 2	omer blowerly pictory 2.	armer Diversity Factor 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.0	14.9 1 14.9 5.5				1.01	1.01	3.5%	3.5%					
2.4 0.092 0.54 0.72 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.	224 6.982 6.58 6.27 1.20 1.20 1.21 1.20 1.20	22.4 0.982 0.56 12.7 13.0 13.5 13.5 13.9 14.2 14.5 14.5 14.5 14.5 14.5 14.5 14.5 14.5	14.9 1			16.2			1.01	101	101	2			
24 Control Con	1. 1. 1. 1. 1. 1. 1. 1.	224 0.992 0.56 12.7 13.0 13.2 13.5 13.9 14.2 14.5 14.5 14.5 14.5 14.5 14.5 14.5 14.5	14.9 1		15.9	16.2				1					
224 0.895 1.00 4.7 4 4.0 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1	2.4 0.982 0.56 1.27 1.30 1.32 1.32 1.32 1.32 1.32 1.32 1.32 1.32	2.4 0.982 0.56 12.7 13.0 13.2 13.5 13.9 14.2 14.5 14.5 14.5 14.5 14.5 14.5 14.5 14.5	5.5				16.6	17.0	17.3	17.7	18.0				2.12
6 9 0 998 1 100 6 47 1 12 1 12 1 12 1 12 1 12 1 12 1 12 1	8.9 G.949 1.00 4.7 4.8 4.9 4.9 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	8.9 0.998 1.00 4.7 4.8 4.9 5.1 5.2 5.4 5.4 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	5.5			16.2	16.6	17.0	17.3	17.7	18.0		NOTICE AND ADDRESS OF THE PARTY		2.12
8.9 0.07% 1.00 5.4 5.5 5.8 5.9 6.1 6.2 6.4 6.5 6.4 6.4 6.5 6.4 6.5 6.4 6.5 6.4 6.5 6.4 6.5 6.4 6.5 6.4 6.5 6.4 6.5 6.4 6.5 6.4 6.5 6.4 6.5 6.4 6.5 6.4 6.5 6.4 6.5 6.4 6.5 6.4 6.4 6.5 6.4 6.4 6.5 6.4 6.4 6.5 6.4 6.4 6.5 6.4 6.4 6.4 6.4 6.4 6.4 6.4 6.4 6.4 6.4	8.9 G-776 1.00 5.4 1.	8.9 0.976 1.00 5.4 5.6 5.7 5.8 5.9 6.1 6.2 and the converted conve	44			6.1	6.2	6.3	6.5	9.9	6.7	6.9		-	2.12
8. 9 6.946 1.00 2.7 2.8 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25	8.9 G.946 I, 100 B.7 C.28 B.7	and Growth Rate				7.0	7.1	7.3	7.4	7.6	7.7	7.0		-	2 42
and dispersive that the control based of the contro	and Growth Rate	oad 12.9 13.5 13.5 13.8 14.1 14.4 14.8 mand Growth Rate 2.0% 2.1% 2.3% 2.4% 2.3% 2.3% ormer Diversity Factor 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98	3.2	-		3.5	3.6	3.7	3.7	3.8	3.9	4.0	-	- Contestone	2 12
The control base of the co	Proposition of convoltables 2.08 2.08 2.18 2.28 <t< td=""><td>2.0% 2.1% 2.3% 2.4% 2.3% 2.3% ormer Diversity Factor 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98</td><td>15.1</td><td>(Academic)</td><td>-</td><td>-</td><td>16.9</td><td>17.2</td><td>17.6</td><td>18.0</td><td>18.3</td><td>18.7</td><td>-</td><td>-</td><td>and the same of th</td></t<>	2.0% 2.1% 2.3% 2.4% 2.3% 2.3% ormer Diversity Factor 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98	15.1	(Academic)	-	-	16.9	17.2	17.6	18.0	18.3	18.7	-	-	and the same of th
omer Diversity Pattern 22.4 0.560 0.734 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	omer Diversity Patcial Factor Annual Conversity Patcial Factor Ann	ormer Diversity Factor 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98	2.3%				2.2%	2.1%	2.1%	2.1%	2.1%	1.9%			
22.4 0.960 0.74 16.6 170 17.5 18.1 18.1 18.2 19.2 19.3 19.1 17.1 17.2 19.2 19.2 19.3 19.3 19.3 19.3 19.3 19.3 19.3 19.3	224 0.960 0.74 16.6 17.0 17.5 18.1 18.6 19.2 19.3 36.1 36.1 36.1 36.5 39.8 41.1 42.5 43.8 45.2 46.6 48.0 49.4 14.1 16.6 17.0 17.5 18.1 18.6 19.2 18.0 19.2 1	28.7 29.6 30.5 31.5 32.6 33.8 34.9	0.98				0.98	0.98	0.98	0.98	0.98	0.98			
224 0.960 0.75 4.66 4.66 4.6.0 49.4 50.7 52.0 53.2 Mail discrementary From the control of the co	22.4 0.966 0.50 3.0 1.3 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	28.7 29.6 30.5 31.5 32.6 33.8 34.9	A STATE OF THE PERSON NAMED IN COLUMN NAMED IN		The same of										
ACCT-1-40 2.1 4 0.940 2.2 4 0	22.4 0.960 0.74 6.6 7.5 6.1 7.5 6.1 7.5 6.1 7.5 6.1 7.5 6.1 7.5 6.1 7.5 6.1 7.5 6.1 7.5 6.1 7.5		36.1		m	41.1	42.5	43.8	45.2	46.6	48.0				3.13%
VICT-10-10-10-10-10-10-10-10-10-10-10-10-10-	MCTT-10 17.0 0.952 1.50 1.37 1.3.1 1.3.1 1.3.1 1.3.1 1.3.2 1.3.2 1.3.3 1	72.4 0.960 0.74 16.6 17.5 18.1 18.6 19.2 19.8 17.1 17.5 18.1 19.2 19.8 17.1 17.5 18.1 18.5 19.2 19.8 17.1 17.5 18.1 18.5 19.2 19.8 17.1 17.5 18.1 18.5 19.2 19.8 17.1 17.5 18.1 18.5 19.2 19.8 17.1 17.5 18.1 18.5 19.2 19.8 17.1 17.5 18.1 18.5 19.2 19.2 19.8 17.1 17.5 18.1 18.5 19.2 19.2 19.8 17.1 17.5 18.1 18.5 19.2 19.2 19.2 19.2 19.2 19.2 19.2 19.2	20.4	Ĭ		23.0	23.7	24.3	25.0	25.7	26.4	27.1			2.82%
Late deed be described by the parameter browning factors and the parameter browning factors	12. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		3.0			3.8	3.9	3.9	3.9	4.0	4.0	4.1			90.1
224 0.992 0.93 1.20 7.0 7.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1	224 0.992 0.99 0.99 0.99 0.99 0.99 0.99 0.9	17.7 14.2 14.7 15.2 15.8 16.3	16.9				19.9	20.6	21.2	21.9	22.5				3.19%
4 Figure 1 F	Active Transformer Diversity Redor 22.4 0.99		50.5				23.8	24.5	25.1	25.8	26.6				
Mortality and the control mortality and the	LIVING LI		3.0%				2.9%	2.9%	2.8%	2.8%	2.8%				
MCT2_110 30.2 0.993 1.20 7.0 7.2 1.3 7.6 1.3 1.4 1.0 1.4 1.2 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	MCT2-110 30.2 0.933 1.1.20 7.0 7.3 7.6 1.3.4 14.0 14.5 15.1 15.7 16.2 16.9 17.5 18.2 18.6 19.5 18.8 19.5 10.2 20.9 21.6 20.9 2	65.0 65.0 66.0 66.0 66.0 66.0	66.0				0.99	0.99	0.99	0.99	0.99				
302 0.993 1,20 7,0 7,3 7,5 6,7 9,8 3,3 8,7 9,0 9,4 9,5 10,3 10,7 11,2 11,7 12,1 12,6 13,1 13,7 14,2 14,6 15,1 15,6 17,7 0.999 0.80 5.5 5.7 5.8 6.0 6,2 6,4 6,5 6,8 7,0 7,2 7,4 18,1 18,8 19,5 20,2 20,9 21,6 2,2,3 2,3 2,3 2,4 25,1 25,1 25,1 25,1 25,1 25,1 25,1 25,1	302 0.993 1.20 7.0 7.3 7.6 7.9 8.3 8.7 9.0 9.4 9.8 10.3 10.7 11.2 11.7 12.1 12.1 12.1 12.1 13.7 14.2 14.2 11.7 0.999 0.80 5.5 5.7 5.8 6.0 6.2 6.4 6.6 6.8 7.0 7.0 7.2 7.4 7.6 7.8 8.0 8.2 20.9 21.6 22.3 23.0 7.3 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8	22.4 0,992 0,93 12.1 12.5 13.0 13.4 14.0 14.5 15.1	15.7			18.2	18.8	19.5	20.2	20.9	21.6	22.3		į	
17.7 0.999 0.80 5.5 5.7 5.8 6.0 6.2 6.4 6.6 6.8 7.0 7.2 7.4 7.5 7.8 8.0 8.2 8.4 8.7 8.7 8.7 8.7 8.9 8.4 8.7 8.7 8.7 8.7 8.7 8.7 8.7 8.7 8.7 8.7	17.7 0.999 0.80 5.5 5.7 5.8 6.0 6.2 6.4 6.6 6.8 7.0 7.2 7.4 7.6 7.8 8.0 8.2 8.4 8.7 8.9 8.9 8.9 8.9 8.9 8.9 8.9 8.9 8.9 8.9	30.2 0.993 1.20 7.0 7.3 7.6 7.9 8.3 8.7 9.0	9.4			11.2	11.7	12.1	12.6	13.1	13.7	14.7			00 8
12.5 12.9 13.4 13.9 14.5 15.0 15.6 16.2 16.8 17.4 18.1 18.8 19.5 20.2 20.9 21.6 22.3 23.0 23.7 24.4 25.1 3.3% 3.3% 3.5% 3.5% 3.5% 3.5% 3.5% 3.5%	12.5 12.9 13.4 13.9 14.5 15.0 15.6 16.2 16.8 17.4 18.1 18.8 19.5 20.2 20.9 21.6 22.3 23.0 3 3.38 3.58 3.58 3.98 3.89 3.78 3.88 3.78 3.88 3.78 3.88 3.78 3.68 3.78 3.58 3.58 3.28 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97	17.7 0.999 0.80 5.5 5.7 5.8 6.0 6.2 6.4 6.6	6.8			7.6	7.8	8.0	8.2	4.8	8.7	6.8		-	7.6
3.3% 3.5% 3.6% 4.0% 3.9% 3.8% 3.7% 3.8% 3.8% 3.8% 3.7% 3.6% 3.5% 3.5% 3.5% 2.8% 2.7% 2.7% 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97	3.3% 3.5% 3.5% 3.6% 4.0% 3.9% 3.8% 3.8% 3.8% 3.8% 3.8% 3.8% 3.6% 3.5% 3.5% 3.5% 3.2% 3.2% 3.2% 3.2% 3.2% 3.2% 3.2% 3.2	12.5 12.9 13.4 13.9 14.5 15.0 15.6	16.2	POSSESSION AND ADDRESS OF THE PARTY NAMED IN COLUMN TWO IN COLUMN TO PARTY NAMED IN COLUMN TO PA	and the same of	18.8	19.5	20.2	20.9	21.6	22.3	23.0	-	and solven	Treatment
0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97	0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97	3.3% 3.5% 3.8% 4.0% 3.9% 3.8%	3.8%			3.8%	3.7%	3.6%	3.5%	3.5%	3.5%	3.2%			
		76.0 76.0 76.0 76.0 76.0 76.0	0.97			0.97	0.97	0.97	0.97	0.97	0.97	0.97			
		Page 13 of 1	age 13 of 18												7 07 60 17

PEC Subloads_v7 (Mid-range_Severe Weather)_v3.xlsm Demand Totals (Summer)

FEEDER	oed AV/	wc icto	wa	w	1.1.1	.2 11.3	3 1.14	4 15	5 11.6	s LL7	877	677	C 10	THE REST	61.12	1 (13	Plett	5-1		1. 1. 7. 1. 1	0 - 1	0611 0411	9
NAME	N)		กอ ผ		2007.2002	2012 201						2019	2020	SECTION 1	2022	_00000							Comp
PROJECTED SYSTEM COINCIDENT PEAK System Load Growth Factor			-	1,217.5	1,258.6 1,30	1,308.1 1,362.9	1,42	1,48	1,54	9.2 1,613.1	1 1,680.3	3 1,751.0	1,827.0	1,904.1	1,982.0	2,061.2 2	2,141.6 2,	2,222.8 2,	2,306.2 2,	2,385.9 2,4	2,462.5 2,537.4	7	
NAMELESS Total				19.2	19.8 2	20.4 27	2	2	7	7			26.9	2	2	29.7	30.6		32.6	33.6			36.2
NLT	22.4	1.000	0.74	8.3	8.5						.2 10.5	5 10.8		2 11.5	11.8	12.2	12.5	12.9	13.2	13.6	13.9		4.5
NLT1_10	25.9	0.998	1.00	5.7	5.9				-		No.				-	8.7	8.9	9.2	9.5	9.8			10.5
NLT1_20	25.9	0.987	0.75	2.7	2.7	2.8				3.1 3.			3.4	3.5	3.6	3.7	3.7	3.8	3.9	4.0		1.4	4.2
Total Feeder Load				8.4	9.6		9.2	9.5	9.8 10		10.4 10.7	7 11.0	11.3	3 11.7	12.0	12.3	12.7	13.0	13.4	13.7	-	Accommon	4.7
Transformer Demand Growth Rate																2.9%	2.8%	2.8%	2.8%	2.5%			2.2%
Feeder / Transformer Diversity Factor				0.99	0.99	0.99		0.99	0.99 0.	0.99 0.99	66.0 66		0.99		0.99	0.99	0.99	0.99	0.99	0.99		0.99	0.99
NLT2	27.4	0.977	10.03	10.9	11.2	116																	1
NLT2_120	17.7	0.949	1.00	7.3			8.1	8.4	8.7	0 00	9.4 9.7	7 40.1	1.61	10.3	6.91	17.5	18.1	18.7	19.4	20.0	20.6	21.2	21.7
NLT2_130	17.7	0.998	1.00	3.7	80,60	-		-	-		-	-		-		7.11	12.1	12.5	12.9	13.3	-	-	4.5
Total Feeder Load	***************************************	-	restaurantessa	10.9	- Commerce	-	distribution of		OCCUPATION OF THE PERSON	- Control of the Cont	CONTRACTOR OF THE PERSON OF TH	Description of the last of the	THE PERSON NAMED IN	-	-	6.6	0.1	6.3	6.5	6.8	- Control of the last of the l	-	7.3
Transformer Demand Growth Rate				6:01					,00 .		14.7					17.6	18.2	18.8	19.5	20.1			21.9
Feeder / Transformer Diversity Factor				0.99				0.99			_	3.8%	3.8%	3.8%	3.7%	3.6%	3.5%	3.5%	3.5%	3.2%	2.9%	2.8%	2.7%
															6.5	0.33	66.0	0.99	66.0	66.0			66.
PALEFACE Total				20.9	21.7 2	22.6 2.		24.8 2	25.9 27	27.1 28.4	4 29.6	5 31.0	32.4	1 33.8	35.3	36.8	38.4	40.0	41.6	43.2	44.7 4	46.3 4	47.8
PFT1	37.3	0.975	1.12	12.6	13.1	13.6	14.2	14.9	15.6 16		-					22.2	23.1	24.1	25.1	26.0			28.8
PFT1_20	29.3	1.000	1.00	3.4	3.5	3.7				4.4				3 5.5		9.9	6.3	9.9	6.8	7.1	7.3		7.8
PFT1_30	29.3	0.894		0.0	0.0	0.0		0.0	0.0		0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PFT1_40	13.8	0.950	1.00	9.2	9.5	9.9	10.4	10.9		12.0 12.5	.5 13.1	13.6	14.3			16.2	16.9	17.6	18.4	19.1			200
Total Feeder Load				12.6				_					19.6	5 20.5	21.4	22.3	23.2	24.2	25.2	26.2			8.9
Transformer Demand Growth Rate							4.6%	4.8%		4.6% 4.	4.5% 4.5%	5% 4.5%			4.4%	4.3%	4.2%	4.2%	4.2%	3.8%	3.5%		3.3%
Feeder / Transformer Diversity Factor				0.99	0.99	0.99			0.99 0.				0.99	66.0 6	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	.99
9572	22.4	1.000	1.12	8.3	8.6	00		-				a constitution								CONTRACTOR DATE	No.		
PFT2_120	25.9	0.996	1.00	4.6	4.7	-	-		7.4	7 0 4		2 0 7		13.4	0.41	14.0	15.3	15.9	16.6	17.2	17.8	18.4	0.6
PFT2 140	17.7	926	1 00	3.7	3.0	-			-	-		Anytheritae	-			8.0	8.4	8.7	9.1	9.4	Option to	10.1	0.4
Total Fooder I and	principal designation of the second control	2000	National Property of the Parket	7.7	3.7	- Constant	DATE CONTROL	DECMONSTRATES	***************************************	- Description	-	-	5.8	6.1	-	9.9	6.9	7.2	7.5	7.7	8.0	8.3	8.6
Transformer Demand Growth Rate				0.0	0. %				550	10.8			=		.53		15.3	15.9	16.6	17.2	17.8	4.8	0.6
Feeder / Transformer Diversity Factor				1.00	1.00		1.00	100	1.00		4.3%	4.38	4.0%	4.5%	4.4%	4.3%	4.2%	4.2%	4.2%	3.8%	3.5%	3.4%	3.3%
•															8	8:	8:	8.1	9.1	00.1	00.1	9.1	00.
ROHR Total				6.2		6.2											6.2	6.2	6.2	6.2	6.2	6.2	5.2
RHT4	22.4	0.766		6.2	6.2	6.2					.2 6.2					Section 190	6.2	6.2	6.2	6.2	6.2	6.2	6.2
RHT1_20	20.7	0.688	1.00	3.8	3.8	3.8											3.8	3.8	3.8	3.8	3.8	3.8	3.8
RHT1_30	17.7	0.922	1.00	2.9	2.9	2.9		2.9	2.9	2.9 2.	2.9 2.9	9 2.9	2.9	9 2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Total Feeder Load				6.7	6.7	6.7									divolution of the state of the	200000000000000000000000000000000000000	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Transformer Demand Growth Rate					0.0%	0.0%	0.0%	0.0%	0.0%		0.0% 0.0%						0.0%	0.0%	0.0%	0.0%	%0.0		80.0
Feeder / Transformer Diversity Factor				0.92	0.92	0.92				0.92 0.92		2 0.92				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
RIVER OAKS Total				14.3	15.0 1	15.7 1					5 21.5	5 22.7	23.9	3 25.1	26.4	27.8	29.1	30.5	32.0	33.4	348	26.7	376
RKT1	22.4	0.660	1.30	14.3	15.0	15.7	16.6	17.5	18.5	19.5 20.		L	L	L	L	27.8	79.1	30.5	32.0	33 A	L	L	
RKT1_10	9.3	0.943	0.29	4.2	4.3	4.3					2444					5.1	5.2	5.2	5.3	5.3	5.4	7.7	4
RKT1_20	9.3	1.000	1.43	9.9	7.1	7.6	8.2	8.8				8 12.7				16.6	17.6	18.7	0 0 0	21.0	20.4	2.5	
RKT1_40	13.0	0.660	0.86	3.7	3.8	4.0		4.4	4.6	4.8	5.0 5.2		5.7	7 5.9	6.2	6.4	9.9	6.9	7.2	7.4	7.6	7.9	8.1
Total Feeder Load				14.5	15.1	15.9 1									ľ	28.0	29.4	30.9	32.4	33.8	-	acceptant.	38.0
Transformer Demand Growth Rate					4.6%	2.0%	5.3%				5.3% 5.2						4.9%	4.9%	4.8%	4	76	à	
																				24.1			3.8%

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PEC Subloads_v7 (Mid-range_Severe Weather)_v3.xlsm Demand Totals (Summer)

PEC Subloads_v7 (Mid-range_Severe Weather)_v3.xlsm Demand Totals (Summer)

SUBSTATION	(A)	10	47	() 69ķ								stribution	System	PEC Distribution System Demand Forecast (MWs)	orecast ()	(Ws)							U	
FEEDER	/AW)	Pow Fact	Jales word stag	AOIC WM)											11.12		1114	1115	LL16 L	11.17	LA.18 LL	LL 19 LI	ubor FF50	rowt Sate
PROJECTED SYSTEM COINCIDENT PEAK				1 217 5	1 258 6 1 308 1 1 362 0	308 1 1 34	-	2014 Z015 1 424 1 1 484 3	2015 2016 484 3 4 540 2	0.2 4 642 4		No Pos	Section 1	MAKES !	-	-	98	Charles		The second				i DP
System Load Growth Factor					3.4%	3.9%	100	20		7	1% 4.2%	8 4.2%	1,627.0	1,904.1	1,982.0	2,061.2	2,141.6 2,2 3.9%	2,222.8 2,3	2,306.2 2,3 3.8%	2,385.9 2,4	2,462.5 2,53 3.2%	2,537.4 2,6	2,610.5	3.89%
SJT2	22.4	0.994	1.12	2.0	2.0	2.1	2.2	2.3							3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	4.5	4.23%
SJT2_140	25.9	0.581	1.00	0.2	0.2	0.2	0.2	0.3		0.3 0.3	.3 0.3	3 0.3	0.3	9 0.4	0.4	6.0	0.4	0.4	0.4	0.4	0.5	0.5	0.5	4.23%
SJT2_150	25.9	0.951	1.00	1.5	1.6	1.7	1.8	1.8							2.6	2.7	2.8	3.0	3.1	3.2	3.3	3.4	3.5	4.23%
Total Feeder Load				1.8	1.8	1.9	2.0	2.1	2.2	2.3 2.4	4 2.5			2.9	3.0	3.1	3.2	3.4	3.5	3.7	3.8	3.9	4.0	Married Marrie
Transformer Demand Growth Rate					3.9%	4.3%	4.6%	4.8%				V 0			4.4%	4.3%	4.2%	4.2%	4.2%	3.8%	3.5%	3.4%	3.3%	
Feeder / Transformer Diversity Factor				1.11	1.1	1.11	11	1.11	1.11	1.11 1.11	1.11	1.11	1.11	1.11	1.1	.	1.11	1.1	1.11	1.11	1.1	1.11	<u>1.1</u>	2000000000
STARCKE Total				r.	F.7	u u	F 7	0 9			SHAME S	CANA					APPROPRIESTED AND A STATE OF S	NAME AND ADDRESS OF THE PERSONS ASSESSED.	September 1	Section of the same	and a second	SEMES S	Application of	121440
SKT1	37.3	0.978	1.12	5.1	5.2	5.5	5.7	0.0	6.3	6.6 6.9	7.7	7.5	7.0	7.8	9.0	6.9	9.3	7.6	10.1	10.5		11.2	11.6	4.23%
SKT1 30	0.0	866 0	79.0	8 6	1.8	0 0	0.0	0.0					I		8.6	6.9	9.3	9.7	10.1	10.5	10.8	11.2	11.6	4.23%
pression constitution of the constitution of t	15.4	0.074	200	3.6	2 0 5	0,7		0.7			7.3				2.6	2.7	2.8	2.9	2.9	3.0	3.1	3.2	3,3	3.13%
Total Fooder I cad	deservations and a second	construction and a second	Naconatamental	2.0	5.0	0.4	4.2	4.4	4.6	4.9 5.1	-	4 5.6	5.9	Constitution	6.5	6.8	7.1	7.5	7.8	8.1	8.4	8.8	9.1	4.69%
יסופו בפנים ורספים				4.0	o i	, S		4.9							9.1	9.5	6.6	10.3	10.7	11.2	11.5	11.9	12.3	ì
Fandor / Transformer Discrete Easter					3.9%	4.3%	4.6%	4.8%							4.4%	4.3%	4.2%	4.2%	4.2%	3.8%	3.5%	3.4%	3.3%	
recuei / Haistonnet Diversity Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94 0.94	0.94	4 0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	Metaues
SHERWOOD SHORES Total				12.0	12.3	12.7	13.1		13.9 14	14.4 14.8	8 15.3	15.7	16.2	16.7	17.3	17.8	18.3	18.8	19.4	19.9	20.4	9 02	21.4	2 03%
557.1	10.5	0.973	0.56	5.4	5.5	5.6	5.8	5.9		6.2 6.3					7.1	7.2	7.4	7.5	7.7	7.8			8.7	2 12%
SST1_10	8.9	0.887	0.67	9.0	9.0	9.0	9.0	9.0						L	9.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1 11%
SST1_30	8.9	0.977	1.33	5.0	5.1	5.2	5.4	5.5	5.6	5.8 5.9	9 6.0	5 6.2		6.5	9.9	8.9	6.9	7.1	7.2	7.4	7.5	7.6	7.8	2 2 2 2 %
Total Feeder Load				5.6	5.7	5.8	5.9	6.1			5 6.7	7 6.8	7.0	7.1	7.3	7.4	7.6	7.7	7.9	8.1	8.7	R 3	2 2	
Transformer Demand Growth Rate					2.0%	2.1%	2.3%	2.4%			3% 2.2%				2.2%	2.1%	2.1%	2.1%	2.1%	1.9%	8%	27.	2.5	on other
Feeder / Transformer Diversity Factor				0.97	0.97	76.0	0.97	0.97	0.97	76.0	76.0 76	1000			0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	32,000.000.0
SST2	10.5	966 0	0 93	4 4	8.7	7.0	7.7	7.6																en reer
000 000		2000		2		2 2	2.,	0.7	6.7	0.7	0.0				10.2	9.01	10.9	11.3	11.7	12.1	12.4	12.8	13,1	3.53%
077 7100	6.9	0.995	1.00	0.0	8.9	7.0	7.3	7.6	- Contraction	- Contraction					10.2	10.6	11.0	11.3	11.7	12.1	12.5	12.8	13.2	3.53%
Transformer Domes of County Days				9.9	8.9	7.0	7.3	7.6					9.5	6.6	10.2	10.6	11.0	11.3	11.7	12.1	12.5	12.8	13.2	-
Hanstoniel Defiaild Growth Rate				1	3.3%	3.5%	3.8%	4.0%			_				3.7%	3.6%	3.5%	3.5%	3.5%	3.2%	2.9%	2.8%	2.7%	WZF ON
reeder / Hanslormer Diversity Factor				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	********
SPICEWOOD Total				23.4	24.2	25.1	26.0	27.1	28.1 2	29.2 30.3	3 31.4	1 32.6	33.9	35.1	36.4	37.7	39.0	40.4	41.8	43.4	44.4	45.7	0 77	2 5.00
SWT1	22.4	0.957	0.93	11.9	12.3	12.7	13.2	13.7	14.3						18.5	19.1	19.8	20.5	21.2	21.9	L	L	23.8	3 53%
SWT1_10	8.9	0.950	09.0	2.7	2.7	2.8	2.9	2.9						L	3.6	3.6	3.7	3.8	3.9	4.0	4.1	4.1	4.7	2 30%
SWT1_20	8.9	0.957	1.00	9.2	9.6	6.6	10.3	10.8			2 12.7	7 13.2	13.8		14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.0	19.6	3.83%
Total Feeder Load				11.9	12.3	12.7	13.2	13.7		14.8 15.4	4 15.9	9 16.5	17.2	2 17.8	18.5	19.1	19.8	20.5	21.2	21.9	22.5	23.2	23.8	1
Transformer Demand Growth Rate					3.3%	3.5%	3.8%	4.0%	3.9%	3.8% 3.8%	8% 3.7%	3.8%			3.7%	3.6%	3.5%	3.5%	3.5%	3.7%	2 9%	2 8%	2 L	and the same
Feeder / Transformer Diversity Factor				1.00	1.00	1.00	1.00	1.00							1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	100 September 10	1	Control of the Contro				CONSTRUCTION OF THE PERSONS																	april in
SW12	22.4	0.976	0.93	11.6	11.9	12.4	12.8	13.3		14.4 14.9	.9 15.5	5 16.1	16.7	7 17.3	17.9	18.6	19.2	19.9	20.6	21.3	21.9	22.5	23.1	3.53%
SWT2_110	8.9	0.993	1.00	6.2	6.4	6.7	7.0	7.3				6.8	9.3	3 9.7	10.1	10.5	10.9	11.3	11.7	12.1	12.5	12.9	13.3	3.87%
SWT2_120	8.9	0.944	0.80	5.3	5.5	5.6	5.8	0.9	6.3			9 7.1		4 7.6	7.8	8.1	8.3	8.6	8.9	9.1	9.3	9.6	9.8	3.10%
Total Feeder Load				11.5	11.9	12.3	12.8	13.3		Ī	,			7 17.3	17.9	18.6	19.2	19.9	20.6	21.2	21.9	22.5	23.1	-
Transformer Demand Growth Rate					3.3%	3.5%	3.8%	4.0%		1					3.7%	3.6%	3.5%	3.5%	3.5%	3.2%	2.9%	2.8%	2.7%	
Feeder / Transformer Diversity Factor				1.00	1.00	1.00	0.1	1.00	1.00	1.00 1.00	00 1.00	0 1.00	1.00	0 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	en distrib
iyosa																								Zenov.

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PEC Subloads_v7 (Mid-range_Severe Weather)_v3.xlsm Demand Totals (Summer)

This continue with the conti		Capacity (AVM)	Power Factor Relative	Growth Stef	(WW)	11.1 11.1 2011 20	2012	LL3 L1	11.4 LL5	5 116	2017	PEC Dis	stribution LL9 2019	System LL 10 2020	PEC Distribution System Demand Forecast (MWs) LL8	orecast (LL12 2022	MWs) LL13 ze23	LL14 2024	1025	LL 16	1027	LL18 1	11.19	11.20	ompoun d Growth Rate
The control of the	PROJECTED SYSTEM COINCIDENT PEAK System Load Growth Factor			1,		1,258.6 1,30	-	9 1,42	1,48	3 1,54	1,61	1,68	1,75	1,82	1,90	1,982.0	20	30	3.8%	7 2 %	9 2	462.5 2	7	10.5	
The control of the	TURNERSVILLE Total				31.3								A		5	53.0	55.2	57.5	59.9	62.4	64.8	67.1	69.4	71.6	4.23%
The control base of the co	TVT1	22.4	0.953	1.12	17.7									27.5		30.0	31.2	32.5	33.9	35.3	36.7	38.0	39.2	40.5	4.23%
The control of the co	TVT1_70	17.7	0.947	1.00	0.0	0.0	0.0	0.0		L						0.0	0.0	32.6	34.0	35.4	36.8	38.1	39.3	40.6	4.23%
The control brown	Total Feeder Load	And a second second second	electron description of the second	Contract Con	17.7	and to only	19.2	- descendant			NAME OF TAXABLE PARTY.				Market	30.0	31.3	32.6	34.0	35.4	36.8	38.1	30.3	40.0	600.0
Mathematikativing mathematikat	Transformer Demand Growth Rate					3.9%	4.3%									4.4%	4.3%	4.2%	4.2%	4.2%	3.8%	3.5%	3.4%	3.3%	
8.2. Corp. 1450 1450 1450 1451 1451 1451 1451 1451	Feeder / Transformer Diversity Factor				1.00	1.00	1.00	1.00	1.00							1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Marche March March March Marche Marche Marche Marche Marche March	TVT2	37.3	0.942	1.12	13.6	14.1	14.7	15.4	16.1					21.1	22.0	23.0	24.0	25.0	26.0	27.1	28.7	29.2	30.4	31.1	A 238
Main Control Days 1,000	TVT2_110	30.2	0.950	1.00	3.1	3.2	3.4	3.5	3.7							5.3	5.5	5.7	5.9	6.2	6.4	6.7	6.9	7.1	4.23%
Fig. 1. Seed to the control of the c	TVT2_120	30.2	0.950	1.00	4.0	4.2	4.4	4.6	4.8			-				6.8	7.1	7.4	7.7	8.0	8.3	8.6	8.9	9.2	4.23%
From the control of t	TVT2_130 preprint production and pro	30.2	0.941	1.00	6.5	- Louis American	7.0	7.4	Syndratio	CUTABOURSE	hormone	-	doubles	-	- Contraction	11.0	11.5	12.0	12.5	13.0	13.5	13.9	14.4	14.9	4.23%
Machimenying the control of the cont	Transformer Domand Growth Bate				13.6		14.8	15.4								23.1	24.1	25.1	26.1	27.2	28.2	29.2	30.2	31.2	
The control of the co	Feeder / Transformer Diversity Factor				1.00	1.00	1.00		1.00							1.00	1.00	4.2%	1.00	4.2%	3.8%	3.5%	3.4%	3.3%	
17. 1.00 1.00 1.		240000000000000000000000000000000000000	THE STATE OF THE S	CACCAGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	and the second second			-	-										3	3	8	3	3	3	
11 1 1 1 1 1 1 1 1	WIMBERLEY Total				28.9						35	3,	3	3	4	41.2	42.3	43.5	44.7	46.0	47.1	48.3	49.3	50.4	2.82%
Mathematika	Wert	37.3	1.000	0.74	7.2	7.4		7.8	8.0		***************************************	1		-		10.2	10.5	10.8	11.1	11.4	11.7	12.0	12.2	12.5	2.82%
Tr. 1 1, 100 1, 101 1,	WCT1_50	17.7	1.000	1.00	3.7	3.8		4.0	4.1	-	-					5.2	5.4	5.5	5.7	5.8	6.0	6.1	6.3	6.4	2.82%
Managaman barranty places at a consistency of the c	wcII_60	17.7	1.000	1.00	3.7	3.7		4.0	4.1		design		december	-	-	5.2	5.4	5.5	5.7	5.8	6.0	6.1	6.2	6.4	2.82%
The property process of the process	Total Feeder Load				7.3	7.5	7.7	8.0	8.2							10.4	10.7	11.0	11.3	11.7	11.9	12.2	12.5	12.8	I
The control co	Fander / Transformer Discrete Earler				80	2.6%	2.8%	3.0%								2.9%	2.9%	2.8%	2.8%	2.8%	2.5%	2.4%	2.3%	2.2%	
17. 18.	record / Halistofffer Diversity Factor				0.98	86.0	86.0	0.98								0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
177 6 350 6 140 6 154 7 140 7 140 6	WCT2	37.3	0.965	0.74	21.7		22.9					L				30.9	31.8	32.7	33.6	34.6	35.4	36.3	37.1	37.0	7 87%
177 0.596 1.00 1.14 1.15	WCT2_120	17.7	996.0	1.00	7.4		7.8	8.1								10.6	10.9	11.2	11.5	11.8	12.1	12.4	12.6	12.9	2.82%
4 March Marc	WCT2_130	17.7	0.970	1.00	11.5		12.1	12.5								16.4	16.8	17.3	17.8	18.3	18.7	19.2	19.61	20.0	2.82%
defined convolved bare and convo	WCT2_140	17.7	0.936	1.00	3.0		3.1	-				-				4.2	4.4	4.5	4.6	4.7	4.9	5.0	5.1	5.2	2.82%
The Principle of the Pr	Transformer Domest County Days				21.9		23.1									31.2	32.1	32.9	33.9	34.8	35.7	36.5	37.4	38.2	-
4 September 177 0.993 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Feeder / Transformer Diversity Factor				66 0		7.2%									2.9%	2.9%	2.8%	2.8%	2.8%	2.5%	2.4%	2.3%	2.2%	-
17.7 0.992 1.00 1.02 1.02 1.02 1.03 1.04 1.02 1.02 1.03 1.04 1.02 1.02 1.03 1.04 1.02 1.02 1.03 1.04 1.02 1.03 1.04 1.02 1.03 1.04 1.02 1.03 1.04 1.03 1.04 1.03 1.04 1.03 1.04 1.03 1.04 1.03 1.04 1.03 1.04 1.03 1.04 1.03 1.04 1.03 1.04 1.03 1.04 1.04 1.04 1.04 1.04 1.04 1.04 1.04																0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	
37.3 0.975 1.12 34.3 55.6 37.2 38.9 40.7 41.2 41.0	WHITESTONE Total				56.3							w				95.3	99.4	103.6		112.4	116.7			0.62	4.23%
1571 September 1572 S	WS111 WST1 40	37.3	0.975	1.12	34.3	35.6	37.2									58.1	9.09	63.1	65.7	68.5	71.1	73.6	76.1	78.6	4.23%
STT. 200 25.9 0.972 1.00 13.5 14.1 14.6 15.1 16.8 17.2 17.3	WST1_50	25.9	0.963	1.00	8.0	8.3	8.7	0.1	u u							4./2	28.6	29.8	31.0	32.3	33.5	34.7	35.9	37.1	4.23%
Figure Demand Growth Rate Fig. 1 St. 1 St	WST1_60	25.9	0.972	1.00	13.5	14.1	14.6	15.3								72.9	73.9	74.8	15.4	16.0	16.7	17.2	17.8	18.4	4.23%
Official Legistes 1.7. Solution 1.7.	Total Feeder Load		AND STREET, ST	named described and other states of the stat	37.7	descensor	40.9	42.7	and and a second	dicatanto	September 1	000000	- Constitution	Contemporary	parameter.	63.9	9.99	69.4	72.3	75.3	78.7	81.0	83.7	86.4	4.23%
CFT_Tankformer Diversity Factor 37.3 0.965 1.12 22.0	Transformer Demand Growth Rate					3.9%	4.3%	4.6%	4.8%							4.4%	4.3%	4.2%	4.2%	4.2%	3.8%	3.5%	3.4%	36.	
57.2 Geometric Series S	Feeder / Transformer Diversity Factor				0.91	0.91	0.91	0.91		200						0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	
572.10 11.7 0.999 1.00 9.6 9.9 1.00 10.4 10.8 11.9 12.4 13.0 13.5 12.7 14.8 15.5 16.2 16.9 17.8 18.4 19.8 18.4 18.4 18.4 18.4 18.4 18.4 18.4 18	WST2	37.3	7 965	1.12	22.0		03.8	0 70																1	
17.7 0.961 1.00 10.0 10.4 10.8 11.3 11.9 12.4 13.0 13.6 14.2 14.8 15.5 16.2 16.3 17.7 11.4 11.4 17.7 0.970 1.00 2.9 3.0 3.1 3.4 3.6 3.8 3.9 4.1 4.3 4.3 4.5 16.2 16.3 17.7 11.4 11.4 13.6 17.7 11.4 11.4 13.6 17.7 11.4 11.4 13.6 17.7 11.4 11.4 13.6 17.7 11.4 13.6 17.7 11.4 11.4 13.6 17.7 11.4 11.4 13.6 17.7 11.4 11.4 13.6 17.7 11.4 11.4 13.6 17.7 11.4 11.4 13.6 17.7 11.4 11.4 11.4 11.4 11.4 11.4 11.4	WST2_10	17.71	0.999	1.00	9.6	_	10.4			L						16.3	4,6 0	40.5	7.76	43.9	49.0	47.2	48.8	50.4	4.23%
17.7 0,920 1,00 2.9 3.0 3.1 3.3 3.4 3.6 3.8 3.9 4.1 4.3 4.5 4.7 4.9 5.1 5.3 5.5 5.8 6.0 6.2 6.4 6.1 6.1 6.2 6.4 6.4 6.2 6.4 6.4 6.2 6.4 6.4 6.2 6.4 6.4 6.2 6.4 6.4 6.2 6.4 6.4 6.2 6.4 6.4 6.2 6.4 6.4 6.4 6.2 6.4 6.4 6.4 6.4 6.4 6.4 6.4 6.4 6.4 6.4	WST2_20	17.7	0.961	1.00	10.0	10.4	10.8									16.0	17.7	0 7 8 1	10.3	0 00	20.4	24.5	7.17	6 17	4.23%
22.5 23.3 24.3 25.4 26.7 27.9 29.2 30.5 31.9 33.3 34.9 36.4 38.0 39.7 41.3 43.1 44.8 46.6 46.2 49.8 3.8 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5	WST2_30	17.7	0.920	1.00	2.9	3.0	3.1	3.3						L		4.9	-		r.	a a	0 4	6.7	7.77	6.77	4.23%
3.5% 4.3% 4.6% 4.7% 4.6% 4.5% 4.5% 4.6% 4.5% 4.6% 4.5% 4.4% 4.1% 4.2% 4.2% 3.8% 3.5% 3.4% 0.5% 0.5% 0.5% 0.5% 0.5% 0.5% 0.5% 0.5	Total Feeder Load			odeoldrancoversoven	22.5	ALCOHOLD .	24.3	25.4		-	Secondary.		CONTRACTOR	-	-	-	39.7	41.3	43.1	44.8	46.6	48.2	40 8	. r	4.43%
0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98	Transformer Demand Growth Rate					3.9%	4.3%	4.6%									4.3%	4.2%	4.2%	4.2%	3.8%	3.5%	3.4%	3.3%	
	Feeder / Transformer Diversity Factor				0.98	0.98	0.98	0.98		=							0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	

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FEEDER	/AW	gow.	elati won Rate	MM)	177	1.1.2	1173	154	1.5	1 977	117 1	TT8 TT8	9 LL10	1 1111	LL12	LL13		11.15	EL16	LL17 LI	LL18 LL19	9 11.20	nodi
NAME) 'O		я 5	, 0Z	2011	2012	2013	2014	2015 7	2016 2	2017 2	2018 20	2019 2020	2021	2022	2023	2024	57.07	2026	2027 20	2028 2029	0502	no.
PROJECTED SYSTEM COINCIDENT PEAK				1,217.5	1,258.6	1,258.6 1,308.1 1,362.9 1,424.1 1,486.3	,362.9 1,	424.1 1,	486.3 1,5	349.2 1,6	13.1 1,6	1,549.2 1,613.1 1,680.3 1,751.0	1.0 1,827.0	.0 1,904.1	1,904.1 1,982.0	2.061.2	2.141.6	2 222 8 2	2 306 2 2		,	c	ľ
System Load Growth Factor					3.4%	3.9%	4.2%	4.5%	4.4%	4.2%	4.1%	4.2%		4.3% 4.2%	8 4.1%	4.0%	3.9%			3.5%	3.2%	3.0% 2,9%	
WIRTZ Total				13.8	14.1	14.5	15.0	15.4	15.9	16.4	16.9	17.4 1	17.9 18.5	5 19.0	19.6	20.1	20.7	21.3	21.9		7		2.82%
WZT5	0.0	0.993	0.74	4.8	4.9	5.1	5.2	5.4	5.5	5.7	5.9	6.1	6.2 6	6.4 6.6	6.8	7.0	7.2	7.4	7.6	7.8	L	L	
WZT5_10	8.9	0.980	0.50	2.4	2.4	2.4	2.5	2.5	2.6	2.6	2.7	2.7	2.8	2.8 2.8	3 2.9	2.9	3.0	3.0	3.1	3.1			-
WZT5_20	30.2	0.997	1.25	2.5	2.6	2.7	2.8	2.9	3.1	3.2	3.3	3.5	3.6	3.7 3.9	4.0	4.2	4.4	4.5	4.7	4.8	5.0	-	-
Total Feeder Load				4.9	5.0	5.1	5.3	5.5	5.6	5.8	0.9	6.2	6.4 6	6.5 6.7	6.9	7.1	7.3	7.5	7.7	7.9	8.1	odnamiene odnamiene	Sentiments
Transformer Demand Growth Rate					2.6%	2.8%	3.0%	3.2%	3.1%	3.1%	3.0%	3.0%	3.0% 3	3.0% 3.0%	% 2.9%	2.9%	2.8%	2.8%	2.8%	2.5%	2.4%		
Feeder / Transformer Diversity Factor				0.98	0.98	0.98	86.0	0.98	86.0	0.98	86.0	86.0	0.98 0.	0.98 0.98	3 0.98	0.98	0.98	0.98	0.98	0.98		-	. 8

WZT6	0.0	0.980	0.74	0.6	9.2	9.6	9.7	10.1	10.4	10.7	11.0	11.3	11.7	12.0 12.4	12.8	13.1	13.5	13.9	14.3	14.6	15.0	15.3 15.6	7.87%
WZT6_130	8.9	0.956	1.25	3.3	3.4	3.6	3.7	3.8	4.0	4.1	4.2	4.4	4.5	4.7 4.8	5.0	5.2	5.3	5.5	5.7	5.8	0.9	6.2 6.	-
WZT6_150	8.9	0.959	1.00	2.8	2.8	2.9	3.0	3.1	3.2	3.2	3.3	3.4	3.5	3.6 3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	L	-
WZT6_160	8.9	0.995	1.00	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3 4.5	5 4.6	4.7	4.8	4.9	5.1	5.2	5.3		5.5 2.58%
Total Feeder Load				9.4	9.6	6.6	10.2	10.6	10.9	11.2	11.6	11.9	12.3 12	12.6 13.0	13.4	13.8	14.2	14.6	15.0	15.3	15.7	16.1 16.4	Comprome 200
Transformer Demand Growth Rate					2.6%	2.8%	3.0%	3.2%	3.1%	3.1%	3.0%	3.0%	3.0% 3	3.0% 3.0%	% 2.9%	2.9%	2.8%	2.8%	2.8%	2.5%			2.7%
Feeder / Transformer Diversity Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95 0.	0.95 0.95	5 0.95	0.95	0.95	0.95	0.95	0.95		-	2
ACTUAL/ FORECAST COINCIDENT SYSTEM PEAK				1,217.5	1,258.6	1,258.6 1,308.1 1,362.9	1 1	1,424.1 1,	1,486.3 1,	1,549.2 1,	1,613.1 1,0	1,680.3 1,7	1,751.0 1,827.0	.0 1,904.1	1,982.0	2,061.2	2,141.6	2,222.8	2,306.2	2,385.9 2,4	2,462.5 2,537,4	7.4 2.610.5	2
CALCULATED NON-COINCIDENT SUB. PEAK	2,351.7		*CSatulated Insulation	1,292.2	1,335.9	1,335.9 1,388.3 1,446.2	1	1,510.9 1	1,576.7 1,	1,643.2 1,	1,710.9 1,	1,781.8 1,8	1,856.6 1,936.8	.8 2,018.2	2,100.5	2,184.2	2,269.2	2,355.0	2,443.3 2	2,527.6 2,6	2,608.7 2,688.0	8.0 2,765.5	2
SYSTEM COINCIDENCE FACTOR				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94 0.	0.94 0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	Total Control of the

PEC Subloads_v7 (Mid-range_Severe Weather)_v3.xlsm Demand Totals (Summer)

Exhibit 2 COST OF LOSSES



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All information in BLUE text requires input data.

LOAD LOSS CALCULATION

ANNUAL COST OF LOSS PER kW:

Cost for Demand:

1kW*DR*DF

Cost for Energy:

(.84(LF^2) + .16(LF))*1kW*(ER)*8760 hours

\$0.00 /kW

\$148.40 /kW

DR = Existing Power Demand Rate (1)

= \$0.00 /kW

LF = Three Year Average Annual Load Factor

= 45.12%

ER = Existing Power Energy Rate (1)

= \$0.06966 /kWh

DF = Three Year Average Annual Demand Factor

8.49

ANNUAL COST FOR 1kW OF PEAK LOSSES:

\$148.40 /kW

CORE LOSS CALCULATION

ANNUAL COST OF LOSS PER kW:

Cost for Demand: Cost for Energy 1kW*DR*12 months

1kW*ER*8760 hours

\$0.00 /kW

\$610.19 /kW

DR = Existing Power Demand Rate (1)

= \$0.00 /kW

ER = Existing Power Energy Rate $^{(1)}$

= \$0.06966 /kWh

ANNUAL COST FOR 1kW OF PEAK LOSSES:

\$610.19 /kW

1

	LOA	D FACTOR	CALCULAT	ΓΙΟΝ ⁽²⁾		
,			pec .	Three	Percent	Percent
		eak Load (kV		Year	of	of Peak
Month	2008	2009	2010	Average	Peak	Squared
January February March April May June July August September October November December	1,024,997 972,882 855,326 767,491 1,002,438 1,080,902 1,068,172 1,103,284 1,027,410 797,983 633,878 1,046,852	943,637 1,008,398 796,966 732,665 919,477 1,148,247 1,180,159 1,150,189 1,101,808 888,352 660,406 1,071,215	1,329,572 1,056,964 963,803 645,137 868,609 1,031,961 1,085,520 1,217,468 1,099,226 831,022 748,734 748,734	1,099,402 1,012,748 872,032 715,098 930,175 1,087,037 1,111,284 1,156,980 1,076,148 839,119 681,006 955,600	95.02% 87.53% 75.37% 61.81% 80.40% 93.95% 96.05% 100.00% 93.01% 72.53% 58.86% 82.59%	0.77 0.57 0.38 0.65
System Peak Ann. MWh Purch. Ann. Load Factor	1,103,284 4,687,027 48.50%	1,180,159 4,611,548 44.61%	1,329,572 4,921,570 42.26%	1,156,980 4,740,048 45.12%	100.00%	8.49

Notes: (1) Based on the average annual energy purchases and power cost for 2008-2010.

(2) Ann. MWh Purch. and Peak Load (kW) for PEC w/o CENTEX.

(From compilation of data in 2011 Load Forecast)

Exhibit 3 PRESENT WORTH COST ASSUMPTIONS



Pedernales Electric Cooperative, Inc.

10/03/11

Economic Analysis Assumptions

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All information in BLUE text requires input data.

PRESENT	WORTH	COST	ASSIIMP"	TIONS
LIZEOLINI	AAOIZIII		4000INIE	

Interest for Present Worth Analysis

6.51%

	TRANSMISSION	SUBSTATION	DISTRIBUTION
Annual Inflation on Investment	5.00%	5.00%	5.00%
Depreciation Life of Investment (Years)	40.00	50.00	33.30
Annual Depreciation (3-yr. Avg.)	2.50%	2.00%	3.00%
Nominal Interest Rate	6.51%	6.51%	6.51%
Capital Recovery Factor (Calculated)	7.08%	6.80%	7.42%
Percent O&M Expense of Installed Plant	2.13%	2.84%	3.56%
Annual Inflation of O&M Expenses	0.00%	0.00%	0.00%
Tax on Investment Book Value	0.50%	0.50%	0.50%
Annual Inflation of Tax Rate	0.00%	0.00%	0.00%
Percent Insurance Expense of Installed Plant	0.00%	0.00%	0.00%
Annual Inflation of Insurance Expense	0.00%	0.00%	0.00%

COST OF LOSSES

Cost for 1kW of Peak Loss (Cu)	\$148.40
Cost for 1kW of Peak Loss (Fe)	\$610.19
Annual Inflation of Cost of Losses	5.00%

Exhibit 4 BASE CASE



Base Case Capital Improvements Summary (2011 \$'s)

Load Level	Description	Estimated Cost
		2011\$
Substation	Improvements	
3	Project 1 - Install new Kent St 46.7 MVA transformer (T2)	\$3,080,000
11	Project 2 - Upgrade Kent St T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 4 - Upgrade Whitestone T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 5 - Upgrade Whitestone T2 37.3 MVA transformer with a 46.7 MVA transformer Project 3 - Upgrade Nameless T1 22.4 MVA transformer with a 37.3 MVA transformer	\$2,480,000 \$2,400,000
3	Project 3 - Opgrade Nameless 11 22.4 MVA transformer with a 37.3 MVA transformer	\$2,400,000
1	Project 7 - Upgrade Balcones T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 7 - Upgrade Balcones T2 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 8 - Upgrade Buttercup T3 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
4	Project 11 - Upgrade Buttercup T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
8	Project 12 - Upgrade Buttercup T2 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 17 - Upgrade Balcones T4 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
6	Project 19 - Upgrade Avery Ranch T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
9	Project 19 - Upgrade Avery Ranch T2 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 22 - Install new Avery Ranch 46.7 MVA transformer (T4)	\$3,080,000
1	Project 20 - Install new Kent St 46.7 MVA transformer (T3)	\$3,080,000
4	Project 28 - Upgrade Seward Junction T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
2	Project 29 - Upgrade Leander T2 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 29 - Upgrade Leander T3 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
4	Project 29 - Upgrade Leander T4 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
6	Project 30 - Install new Leander 46.7 MVA transformer (T5)	\$3,080,000
2	Project 32 - Upgrade Seward Junction T2 22.4 MVA transformer with a 46.7 MVA transformer Project 41 - Upgrade Blockhouse T1 22.4 MVA transformer 46.7 MVA transformer	\$2,480,000
3	Project 41 - Install new Blockhouse 46.7 MVA transformer (T3)	\$2,480,000
1	Project 41 - Install new Blockhouse 40.7 MVA transformer (15) Project 56 - Upgrade Manchaca T1 22.4 MVA transformer with a 46.7 MVA transformer	\$3,080,000 \$2,480,000
1	Project 56 - Upgrade Manchaca T2 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
7	Project 58 - Upgrade Lehigh T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 57 - Install new Lehigh 46.7 MVA transformer (T2)	\$3,080,000
1	Project 59 - Upgrade Buda T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 59 - Upgrade Buda T3 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 65 - Upgrade Turnersville T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 68 - Upgrade Goforth T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 68 - Upgrade Goforth T2 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 69 - Install new Canyon 37.3 MVA transformer (T1)	\$3,000,000
3	Project 67 - Install new Lehigh 46.7 MVA transformer (T3)	\$3,080,000
	SUBTOTAL SUBSTATION	\$91,360,000
Distribution	Improvements	
3	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS4C	\$25,800
2	Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft)	\$1,790,800
3	Project 1 - Install open switch on WS10	\$15,000
1	Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS50 Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40	\$25,800
1	Project 2 - Constituct (6,700 ft) of 1000 At to relieve Ark40 Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC	\$1,120,500 \$140,900
1	Project 3 - Construct (11,500 ft) of 1000 AL to relieve NL10	\$1,481,100
1	Project 3 - Install open switch on WS30	\$15.000
2	Project 6 - Double circuit with Whitestone WS60 1000 AL (4,000 ft)	\$695,500
2	Project 9 - Install open switch on BR220	\$15,000
1	Project 7 - Convert Balcones T1 and T2 to 24.9-kV (525,794 ft)	\$1,792,500
1	Project 10 - Construct (500 ft) of 500 Cu to relieve BR20	\$37,900
1	Project 10 - Double circuit Buttercup BR340 with Buttercup BR20 1000 AL (2,700 ft)	\$469,400
1	Project 10 - Construct (1,100 ft) of 500 Cu to relieve BR20	\$83,300
2	Project 13 - Double circuit Buttercup BR20 with Buttercup BR330 and BR340 (10,000 ft) 795 AAC	\$526,200
1	Project 14 - Double circuit Buttercup BR210 with Buttercup BR330 (6,300 ft) 795 AAC	\$331,500
6	Project 15 - Construct new getaway 1000 AL (1,000 ft) for BL10	\$128,800
6	Project 15 - Double circuit Balcones BL10 with Balcones BL330 (5,000 ft) 795 AAC	\$263,100
6	Project 15 - Construct (150 ft) of 1000 AL for BL10	\$19,300
6	Project 15 - Double circuit and rebuild Balcones BL10 with Balcones BL330 (2,100 ft) 1000 AL	\$365,100
1	Project 16 - Reconductor BL320 (10,600 ft) from 336 AAC to 795 AAC	\$373,400

Base Case Capital Improvements Summary (2011 \$'s)

Load Level	Description	Estimated Cost
2	Project 21 - Construct new Kent St KS60 (4,300 ft) of 1000 AL to relieve AR240	\$553,800
1	Project 21 - Extend AR240 (2,900 ft) 1000 AL to relieve KS60	\$373,500
1	Project 21 - Install open switch on KS60	\$15,000
3	Project 23 - Construct new Avery Ranch ARNEW1 (4,400 ft) 1000 AL	\$566,700
2	Project 23 - Double circuit and rebuild ARNEW1 with AR30 (4,900 ft) 1000 AL	\$851,900
3	Project 23 - Insall open switch on AR250	\$15,000
5	Project 24 - Reconductor Avery Ranch AR30 (8,300 ft) from 336 AAC to 795 AAC	\$292,400
2	Project 25 - Construct new Avery Ranch ARNEW2 (5,200 ft) of 1000 AL to relieve AR120	\$669,700
1	Project 27 - Construct new Seward Junction SJ130 (5,300 ft) of 1000 AL to relieve LA10	\$682,600
10	Project 31 - Install open switch on LA230	\$15,000
4	Project 32 - Construct new Seward Junction SJ120 (4,500 ft) of 1000 AL	\$579,500
4	Project 32 - Construct (8,400 ft) of 1000 AL for SJ120	\$1,081,800
4	Project 32 - Construct (900 ft) of 1000 AL for SJ120 to relieve SJ20	\$115,900
6	Project 33 - Extend LA250 (17,000 ft) 1000 AL	\$2,189,400
2	Project 37 - Reconductor Leander LA10 (4,000 ft) from 336 AAC to 795 AAC	\$140,900
2	Project 37 - Reconductor Leander LA10 (1,500 ft) from 336 AAC to 795 AAC	\$52,800
1	Project 38 - Reconductor Leander LA10 (1,100 ft) from 336 AAC to 795 AAC	\$38,800
1	Project 38 - Reconductor Leander LA10 (250 ft) from 336 AAC to 795 AAC	\$8,800
8	Project 39 - Reconductor Leander LA210 (350 ft) from 336 AAC to 795 AAC	\$12,300
9	Project 40 - Construct new Leander LANEW1 (1,900 ft) 1000 AL to relieve LA220	\$244,700
1	Project 42 - Construct new Blockhouse BHNEW1 (1,350 ft) 1000 AL	\$173,900
1	Project 42 - Double circuit Blockhouse BHNEW1 with Blockhouse BH140 (4,400 ft) 1000 AL	\$765,000
6	Project 43 - Construct new Blockhouse BHNEW2 (5,800 ft) 1000 AL to relieve BH140	\$747,000
6	Project 43 - Install open switch on BH130	\$15,000
8	Project 43 - Reconductor Blockhouse BHNEW2 (10,000 ft) from 336 AAC and 1/0 to 795 AAC	\$352,300
1	Project 44 - Reconductor Blockhouse BH130 (3,800 ft) from 336 AAC to 795 AAC	\$133,900
5	Project 45 - Reconductor Blockhouse BH40 (800 ft) from 336 AAC to 795 AAC	\$28,200
5	Project 46 - Reconductor Whitehouse WS60 (2,300 ft) from 336 AAC to 795 AAC	\$81,000
1	Project 47 - Reconductor Buttercup BR210 (5,400 ft) from 1/0 to 795 AAC	\$190,200
5	Project 48 - Reconductor Leander LA250 (5,000 ft) from 1/0 to 336 AAC Project 49 - Reconductor Seward Junction SJ120 (2,700 ft) from 1/0 to 336 AAC	\$109,900 \$59,400
9	Project 50 - Reconductor Leander LA210 (4,000 ft) from 336 AAC to 795 AAC	\$140,900
5	Project 50 - Necondactor Leander EA216 (4,500 N) from 500 AAC to 730 AAC	\$60,000
5	Project 53 - Install Voltage Regulator (NL120 - 250 Amps)	\$60,000
5	Project 52 - Install Voltage Regulator (LA230 - 400 Amps)	\$60,000
6	Project 54 - Reconductor Balcones BL220 (250 ft) from 336 AAC to 795 AAC	\$8,800
7	Project 55 - Reconductor Whitestone WS20 (1,800 ft) from 336 AAC to 795 AAC	\$63,400
1	Project 56 - Install open switch on MC50	\$15,000
3	Project 56 - Reconductor Manchaca MC50 (5,300 ft) from 336 AAC to 795 AAC	\$186,700
1	Project 57 - Install open switch on BD10	\$15,000
1	Project 57 - Extend LH20 (200 ft) 795 AAC	\$7,800
2	Project 60 - Install open switch on BD130	\$15,000
2	Project 60 - Install open switch on TV110	\$15,000
2	Project 60 - Extend Turnersville TV90 (1,350 ft) 795 AAC to relieve BD130	\$52,600
6	Project 61 - Reconductor Buda BD120 (2,200 ft) from 336 AAC to 795 AAC	\$77,500
1	Project 62 - Construct Lehigh LHNEW1 (600 ft) 1000 AL	\$77,300
1	Project 62 - Construct (10,200 ft) 795 AAC on LHNEW1 to relieve LH40	\$397,500
1	Project 62 - Install open switch on TV50	\$15,000
1	Project 62 - Reconductor Lehigh LHNEW1 (8,000 ft) from 1/0 to 795 AAC	\$281,800
3	Project 62 - Reconductor Lehigh LHNEW1 (800 ft) from 1/0 to 795 AAC	\$28,200
6	Project 63 - Reconductor Turnersville TV50 (8,000 ft) from 336 AAC to 795 AAC	\$281,800
2	Project 64 - Reconductor Turnersville TV50 (2,200 ft) from 1/0 to 795 AAC	\$77,500
3	Project 67 - Extend Lehigh LH30 (5,300 ft) 795 AAC	\$206,600
3	Project 67 - Install open switch on GF120	\$15,000
1	Project 68 - Install open switch on GF110	\$15,000
1	Project 69 - Install open switch on KY50	\$15,000
1	Project 69 - Construct new Canyon CN50 (250 ft) 795 AAC	\$9,700
1	Project 69 - Intall open switch on KY30	\$15,000
3	Project 67 - Install open switch on KY20	\$15,000
7	Project 70 - Construct new Lehigh LH10 (125 ft) 1000 AL	\$16,100
7	Project 70 - Construct (12,300 ft) 795 AAC on LH10	\$479,400
6	Project 71 - Construct new Goforth GF30 (300 ft) 1000 AL	\$38,600

Base Case Capital Improvements Summary (2011 \$'s)

Load Level	Description	Estimated Cost
6	Project 71 - Construct (6,400 ft) 795 AAC on GF30	\$249,400
7	Project 72 - Install Voltage Regulator (LH30 - 52 Amps)	\$60,000
7	Project 73 - Install Voltage Regulator (TV130 - 53 Amps)	\$60,000
1	Project 74 - Install Voltage Regulator (TV130 - 110 Amps)	\$60,000
1	Project 18 - Install open switch on BL30	\$15,000
	SUBTOTAL DISTRIBUTION	\$24,078,800
osses S	ummary	
osses S	ummary	
osses S 0	ummary Calculated Distribution Losses (kW)	6,317
		6,317 8,274
0	Calculated Distribution Losses (kW)	

Exhibit 5 ALTERNATIVE 1



Alternative 1 - New Substation Southwest of Balcones Capital Improvements Summary (2011 \$'s)

Load Level	Description	Estimated Cost
		2011 \$
	Improvements	
3	Project 1 - Install new Kent St 46.7 MVA transformer (T2)	\$3,080,000
1	Project 2 - Upgrade Kent St T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 4 - Upgrade Whitestone T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 5 - Upgrade Whitestone T2 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 3 - Upgrade Nameless T1 22.4 MVA transformer with a 37.3 MVA transformer	\$2,400,000
3	Project 3 - Upgrade Nameless T2 22.4 MVA transformer with a 37.3 MVA transformer Porject 7 - Upgrade Balcones T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,400,000
1	Project 7 - Upgrade Balcones T2 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000 \$2,480,000
1	Project 8 - Upgrade Battercup T3 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
4	Project 11 - Upgrade Buttercup T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
8	Project 12 - Upgrade Buttercup T2 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
6	Project 19 - Upgrade Avery Ranch T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
9	Project 19 - Upgrade Avery Ranch T2 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 22 - Install new Avery Ranch 46.7 MVA transformer (T4)	\$3,080,000
1	Project 20 - Install new Kent St 46.7 MVA transformer (T3)	\$3,080,000
4	Project 28 - Upgrade Seward Junction T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
2	Project 29 - Upgrade Leander T2 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 29 - Upgrade Leander T3 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
4	Project 29 - Upgrade Leander T4 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
6	Project 30 - Install new Leander 46.7 MVA transformer (T5)	\$3,080,000
2	Project 32 - Upgrade Seward Junction T2 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 41 - Upgrade Blockhouse T1 22.4 MVA transformer 46.7 MVA transformer	\$2,480,000
3	Project 41 - Install new Blockhouse 46.7 MVA transformer (T3)	\$3,080,000
1	Project 56 - Upgrade Manchaca T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 56 - Upgrade Manchaca T2 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
7	Project 58 - Upgrade Lehigh T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 57 - Install new Lehigh 46.7 MVA transformer (T2)	\$3,080,000
1	Project 59 - Upgrade Buda T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 59 - Upgrade Buda T3 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 65 - Upgrade Turnersville T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 68 - Upgrade Goforth T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 68 - Upgrade Goforth T2 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 69 - Install new Canyon 37.3 MVA transformer (T1)	\$3,000,000
3	Project 67 - Install new Lehigh 46.7 MVA transformer (T3)	\$3,080,000
1	Alternative Project 1 - Install new Alternative 46.7 MVA transformer (T1)	\$4,100,000
1	Alternative Project 1 - Land for new substation	\$120,000
	SUBTOTAL SUBSTATION	\$93,100,000
Distribution	Improvements	
3	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS40	\$25,800
2	Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft)	\$1,790,800
3	Project 1 - Install open switch on WS10	\$15,000
1	Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS50	\$25,800
1	Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40	\$1,120,500
4	Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC	\$140,900
1	Project 3 - Construct (11,500 ft) of 1000 AL to relieve NL10	\$1,481,100
1	Project 3 - Install open switch on WS30	\$15,000
2	Project 6 - Double circuit with Whitestone WS60 1000 AL (4,000 ft)	\$695,500
2	Project 9 - Install open switch on BR220	\$15,000
1 1	Project 7 - Convert Balcones T1 and T2 to 24.9-kV (525,794 ft)	\$1,792,500
1	Project 10 - Construct (500 ft) of 500 Cu to relieve BR20	\$37,900
1	Project 10 - Double circuit Buttercup BR340 with Buttercup BR20 1000 AL (2,700 ft)	\$469,400
1	Project 10 - Construct (1,100 ft) of 500 Cu to relieve BR20	\$83,300
2	Project 13 - Double circuit Buttercup BR20 with Buttercup BR330 and BR340 (10,000 ft) 795 AAC	\$526,200
1	Project 14 - Double circuit Buttercup BR210 with Buttercup BR330 (6,300 ft) 795 AAC	\$331,500
6	Project 15 - Construct new getaway 1000 AL (1,000 ft) for BL10	\$128,800
6	Project 15 - Double circuit Balcones BL10 with Balcones BL330 (5,000 ft) 795 AAC	\$263,100 \$373,400
1	Project 16 - Reconductor BL320 (10,600 ft) from 336 AAC to 795 AAC Project 21 Construct new Kent St KS60 (4,300 ft) of 1000 AL to relieve AP240	
2	Project 21 - Construct new Kent St KS60 (4,300 ft) of 1000 AL to relieve AR240	\$553,800

Alternative 1 - New Substation Southwest of Balcones Capital Improvements Summary (2011 \$'s)

Load Level	Description	Estimated Cost
1	Project 21 - Extend AR240 (2,900 ft) 1000 AL to relieve KS60	\$373,500
1	Project 21 - Install open switch on KS60	\$15,000
3	Project 23 - Construct new Avery Ranch ARNEW1 (4,400 ft) 1000 AL	\$566,700
2	Project 23 - Double circuit and rebuild ARNEW1 with AR30 (4,900 ft) 1000 AL	\$851,900
3	Project 23 - Insall open switch on AR250	\$15,000
5	Project 24 - Reconductor Avery Ranch AR30 (8,300 ft) from 336 AAC to 795 AAC	\$292,400
2	Project 25 - Construct new Avery Ranch ARNEW2 (5,200 ft) of 1000 AL to relieve AR120	\$669,700
1	Project 27 - Construct new Seward Junction SJ130 (5,300 ft) of 1000 AL to relieve LA10	\$682,600
10	Project 31 - Install open switch on LA230	\$15,000
4	Project 32 - Construct new Seward Junction SJ120 (4,500 ft) of 1000 AL	\$579,500
4	Project 32 - Construct (8,400 ft) of 1000 AL for SJ120	\$1,081,800
4	Project 32 - Construct (900 ft) of 1000 AL for SJ120 to relieve SJ20	\$115,900
6	Project 33 - Extend LA250 (17,000 ft) 1000 AL	\$2,189,400
2	Project 37 - Reconductor Leander LA10 (4,000 ft) from 336 AAC to 795 AAC	\$140,900
2	Project 37 - Reconductor Leander LA10 (1,500 ft) from 336 AAC to 795 AAC	\$52,800
1	Project 38 - Reconductor Leander LA10 (1,100 ft) from 336 AAC to 795 AAC	\$38,800
1	Project 38 - Reconductor Leander LA10 (250 ft) from 336 AAC to 795 AAC	\$8,800
8	Project 39 - Reconductor Leander LA210 (350 ft) from 336 AAC to 795 AAC	\$12,300
9	Project 40 - Construct new Leander LANEW1 (1,900 ft) 1000 AL to relieve LA220	\$244,700
1	Project 42 - Construct new Blockhouse BHNEW1 (1,350 ft) 1000 AL	\$173,900
1	Project 42 - Double circuit Blockhouse BHNEW1 with Blockhouse BH140 (4,400 ft) 1000 AL	\$765,000
6	Project 43 - Construct new Blockhouse BHNEW2 (5,800 ft) 1000 AL to relieve BH140	\$747,000
6	Project 43 - Install open switch on BH130	\$15,000
8	Project 43 - Reconductor Blockhouse BHNEW2 (10,000 ft) from 336 AAC and 1/0 to 795 AAC	\$352,300
1	Project 44 - Reconductor Blockhouse BH130 (3,800 ft) from 336 AAC to 795 AAC	\$133,900
5	Project 45 - Reconductor Blockhouse BH40 (800 ft) from 336 AAC to 795 AAC	\$28,200
5	Project 46 - Reconductor Whitehouse WS60 (2,300 ft) from 336 AAC to 795 AAC	\$81,000
1	Project 47 - Reconductor Buttercup BR210 (5,400 ft) from 1/0 to 795 AAC	\$190,200
5	Project 48 - Reconductor Leander LA250 (5,000 ft) from 1/0 to 336 AAC	\$109,900
9	Project 49 - Reconductor Seward Junction SJ120 (2,700 ft) from 1/0 to 336 AAC	\$59,400
8	Project 50 - Reconductor Leander LA210 (4,000 ft) from 336 AAC to 795 AAC	\$140,900
5	Project 51 - Install Voltage Regulator (LA250 - 400 Amps)	\$60,000
5	Project 53 - Install Voltage Regulator (NL120 - 250 Amps)	\$60,000
5	Project 52 - Install Voltage Regulator (LA230 - 400 Amps)	\$60,000
7	Project 55 - Reconductor Whitestone WS20 (1,800 ft) from 336 AAC to 795 AAC	\$63,400
1	Project 56 - Install open switch on MC50	\$15,000
3	Project 56 - Reconductor Manchaca MC50 (5,300 ft) from 336 AAC to 795 AAC	\$186,700
1	Project 57 - Install open switch on BD10	\$15,000
1	Project 57 - Extend LH20 (200 ft) 795 AAC	\$7,800
2	Project 60 - Install open switch on BD130	\$15,000
2	Project 60 - Install open switch on TV110	\$15,000
2	Project 60 - Extend Turnersville TV90 (1,350 ft) 795 AAC to relieve BD130	\$52,600
6	Project 61 - Reconductor Buda BD120 (2,200 ft) from 336 AAC to 795 AAC	\$77,500
1	Project 62 - Construct Lehigh LHNEW1 (600 ft) 1000 AL	\$77,300
1	Project 62 - Construct (10,200 ft) 795 AAC on LHNEW1 to relieve LH40	\$397,500
1	Project 62 - Install open switch on TV50	\$15,000
1	Project 62 - Reconductor Lehigh LHNEW1 (8,000 ft) from 1/0 to 795 AAC	\$281,800
3	Project 62 - Reconductor Lehigh LHNEW1 (800 ft) from 1/0 to 795 AAC	\$28,200
6	Project 63 - Reconductor Turnersville TV50 (8,000 ft) from 336 AAC to 795 AAC	\$281,800
2	Project 64 - Reconductor Turnersville TV50 (2,200 ft) from 1/0 to 795 AAC	\$77,500
3	Project 67 - Extend Lehigh LH30 (5,300 ft) 795 AAC	\$206,600
3	Project 67 - Install open switch on GF120	\$15,000
1	Project 68 - Install open switch on GF110	\$15,000
1	Project 69 - Install open switch on KY50	\$15,000
1	Project 69 - Construct new Canyon CN50 (250 ft) 795 AAC	\$9,700
1	Project 69 - Intall open switch on KY30	\$15,000
3	Project 67 - Install open switch on KY20	\$15,000
7	Project 70 - Construct new Lehigh LH10 (125 ft) 1000 AL	\$16,100
7	Project 70 - Construct (12,300 ft) 795 AAC on LH10	\$479,400
6	Project 71 - Construct new Goforth GF30 (300 ft) 1000 AL	\$38,600
6	Project 71 - Construct (6,400 ft) 795 AAC on GF30	\$249,400
7	Project 72 - Install Voltage Regulator (LH30 - 52 Amps)	\$60,000

Alternative 1 - New Substation Southwest of Balcones Capital Improvements Summary (2011 \$'s)

Load Level	Description	Estimated Cost
7	Project 73 - Install Voltage Regulator (TV130 - 53 Amps)	\$60,000
1	Project 74 - Install Voltage Regulator (TV130 - 110 Amps)	\$60,000
1	Alternative Project 1 - Construct (100 ft) 795 AAC on ALT1NEW1	\$3,900
1	Alternative Project 1 - Install open switch on BL330	\$15,000
7	Alternative Project 2 - Reconductor ALT1NEW1 (7,000 ft) from 1/0 to 336 AAC	\$153,900
1	Alternative Project 3 - Construct (100 ft) 795 AAC on ALT1NEW2	\$3,900
6	Alternative Project 4 - Construct (100 ft) 795 AAC on ALT1NEW3	\$3,900
6	Alternative Project 4 - Install open switch on BL220	\$15,000
1	Project 18 - Install open switch on BL30	\$15,000
	SUBTOTAL DISTRIBUTION	\$23,881,200
OTAL C	APITAL COST	\$116,981,200
osses S	ımmary	
0	Calculated Distribution Losses (kW)	6,317
10	Calculated Distribution Losses (kW)	8,328
resent V	forth Cost	
20	20-Year Cumulative Present Worth Cost	\$148,605,500

Exhibit 6 ALTERNATIVE 2



Alternative 2 - New Substatino North of Avery Ranch Capital Improvements Summary (2011 \$'s)

Load Level	Description	Estimated Cost
		2011 \$
Substation	Improvements	
3	Project 1 - Install new Kent St 46.7 MVA transformer (T2)	\$3,080,000
1	Project 2 - Upgrade Kent St T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 4 - Upgrade Whitestone T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 5 - Upgrade Whitestone T2 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 3 - Upgrade Nameless T1 22.4 MVA transformer with a 37.3 MVA transformer	\$2,400,000
3	Project 3 - Upgrade Nameless T2 22.4 MVA transformer with a 37.3 MVA transformer	\$2,400,000
1	Project 7 - Upgrade Balcones T1 22.4 MVA transformer with a 46.7 MVA transformer Project 7 - Upgrade Balcones T2 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000 \$2,480,000
1	Project 8 - Upgrade Batchies 12 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
4	Project 11 - Upgrade Buttercup T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
8	Project 12 - Upgrade Buttercup T2 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 17 - Upgrade Balcones T4 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
4	Project 28 - Upgrade Seward Junction T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
2	Project 29 - Upgrade Leander T2 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 29 - Upgrade Leander T3 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
4	Project 29 - Upgrade Leander T4 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
6	Project 30 - Install new Leander 46.7 MVA transformer (T5)	\$3,080,000
1	Project 41 - Upgrade Blockhouse T1 22.4 MVA transformer 46.7 MVA transformer	\$2,480,000
3	Project 41 - Install new Blockhouse 46.7 MVA transformer (T3)	\$3,080,000
1	Project 56 - Upgrade Manchaca T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 56 - Upgrade Manchaca T2 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
7	Project 58 - Upgrade Lehigh T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 57 - Install new Lehigh 46.7 MVA transformer (T2) Project 59 - Upgrade Buda T1 22.4 MVA transformer with a 46.7 MVA transformer	\$3,080,000 \$2,480,000
1	Project 59 - Upgrade Buda T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 65 - Upgrade Turnersville T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 68 - Upgrade Goforth T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 68 - Upgrade Goforth T2 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 69 - Install new Canyon 37.3 MVA transformer (T1)	\$3,000,000
3	Project 67 - Install new Lehigh 46.7 MVA transformer (T3)	\$3,080,000
3	Alternative Project 1 - Install new Alternative 46.7 MVA transformer (T1);	\$2,150,000
2	Alternative Project 1 - Land for new substation	\$120,000
3	Alternative Project 1 - Install new Alternative 46.7 MVA transformer (T2)	\$2,150,000
5	Alternative Project 1 - Install new Alternative 46.7 MVA transformer (T3)	\$2,150,000
7	Alternative Project 1 - Install new Alternative 46.7 MVA transformer (T4)	\$2,150,000
	SUBTOTAL SUBSTATION	\$86,480,000
Distribution	Improvements	
3	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS40	\$25,800
2	Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft)	\$1,790,800
3	Project 1 - Install open switch on WS10	\$15,000
1	Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS50	\$25,800
1	Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40	\$1,120,500
4	Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC	\$140,900
1	Project 3 - Construct (11,500 ft) of 1000 AL to relieve NL10	\$1,481,100 \$15,000
1	Project 3 - Install open switch on WS30 Project 6 - Double circuit with Whitestone WS60 1000 AL (4,000 ft)	\$695,500
2	Project 9 - Install open switch on BR220	\$15,000
1	Project 7 - Convert Balcones T1 and T2 to 24.9-kV (525,794 ft)	\$1,792,500
1	Project 10 - Construct (500 ft) of 500 Cu to relieve BR20	\$37,900
1	Project 10 - Double circuit Buttercup BR340 with Buttercup BR20 1000 AL (2,700 ft)	\$469,400
1	Project 10 - Construct (1,100 ft) of 500 Cu to relieve BR20	\$83,300
2	Project 13 - Double circuit Buttercup BR20 with Buttercup BR330 and BR340 (10,000 ft) 795 AAC	\$526,200
1	Project 14 - Double circuit Buttercup BR210 with Buttercup BR330 (6,300 ft) 795 AAC	\$331,500
6	Project 15 - Construct new getaway 1000 AL (1,000 ft) for BL10	\$128,800
6	Project 15 - Double circuit Balcones BL10 with Balcones BL330 (5,000 ft) 795 AAC	\$263,100
6	Project 15 - Construct (150 ft) of 1000 AL for BL10	\$19,300
6	Project 15 - Double circuit and rebuild Balcones BL10 with Balcones BL330 (2,100 ft) 1000 AL	\$365,100
1	Project 16 - Reconductor BL320 (10,600 ft) from 336 AAC to 795 AAC	\$373,400

Alternative 2 - New Substatino North of Avery Ranch Capital Improvements Summary (2011 \$'s)

Project 37 - Reconductor Leander LA10 (4,000 ft) from 336 AAC to 795 AAC \$28,00 ft Project 38 - Reconductor Leander LA10 (1,100 ft) from 336 AAC to 795 AAC \$33,60 ft Project 38 - Reconductor Leander LA10 (2,100 ft) from 336 AAC to 795 AAC \$38,00 ft Project 39 - Reconductor Leander LA10 (2,50 ft) from 336 AAC to 795 AAC \$12,00 ft Project 39 - Reconductor Leander LA10 (2,50 ft) from 336 AAC to 795 AAC \$12,00 ft Project 49 - Construct new Blockhouse BHNEWY (1,50 ft) 1,000 AL to relieve LA220 \$2244.70 ft Project 42 - Construct new Blockhouse BHNEWY (1,50 ft) 1,000 AL to relieve LA220 \$244.70 ft Project 42 - Construct new Blockhouse BHNEWY (1,50 ft) 1,000 AL to relieve BH140 \$174,00 ft Project 43 - Install open switch on BH130 \$15,00 ft Project 43 - Install open switch on BH130 \$15,00 ft Project 43 - Reconductor Blockhouse BHNEWY (1,50 ft) 1,000 AL to relieve BH140 \$15,00 ft Project 43 - Install open switch on BH130 \$15,00 ft Project 43 - Reconductor Blockhouse BHNEWY (1,50 ft) 1,000 AL to relieve BH140 \$15,00 ft Project 45 - Reconductor Blockhouse BH130 (3,800 ft) from 336 AAC to 795 AAC \$133,90 ft Project 45 - Reconductor Blockhouse BH130 (3,800 ft) from 336 AAC to 795 AAC \$133,90 ft Project 46 - Reconductor Blockhouse BH130 (3,800 ft) from 336 AAC to 795 AAC \$140,90 ft Project 47 - Reconductor Whilehouse WS60 (2,300 ft) from 336 AAC to 795 AAC \$140,90 ft Project 47 - Reconductor Buttercup BR210 (5,400 ft) from 10 to 795 AAC \$150,00 ft Project 47 - Reconductor Seward Junction S1120 (2,700 ft) from 10 to 336 AAC \$150,00 ft Project 47 - Reconductor Seward Junction S1120 (2,700 ft) from 10 to 336 AAC \$150,00 ft Project 45 - Reconductor Leander LA260 (5,000 ft) from 350 AAC \$150,00 ft Project 45 - Reconductor Leander LA260 (5,000 ft) from 350 AAC \$150,00 ft Project 45 - Reconductor Leander LA260 (5,000 ft) from 350 AAC \$150,00 ft Project 45 - Reconductor Leander LA260 (5,000 ft) from 350 AAC \$150,00 ft Project 45 - Reconductor Leander LA260 (5,000 ft) from 350 AAC \$150,00 ft Project 45 - Reconductor Leander LA260 (5,0	Load Level	Description	Estimated Cost
Project 37 - Reconductor Leander LA10 (4,000 ft) from 336 AAC to 795 AAC \$28,00 ft Project 38 - Reconductor Leander LA10 (1,100 ft) from 336 AAC to 795 AAC \$33,60 ft Project 38 - Reconductor Leander LA10 (2,100 ft) from 336 AAC to 795 AAC \$38,00 ft Project 39 - Reconductor Leander LA10 (2,50 ft) from 336 AAC to 795 AAC \$12,00 ft Project 39 - Reconductor Leander LA10 (2,50 ft) from 336 AAC to 795 AAC \$12,00 ft Project 49 - Construct new Blockhouse BHNEWY (1,50 ft) 1,000 AL to relieve LA220 \$2244.70 ft Project 42 - Construct new Blockhouse BHNEWY (1,50 ft) 1,000 AL to relieve LA220 \$244.70 ft Project 42 - Construct new Blockhouse BHNEWY (1,50 ft) 1,000 AL to relieve BH140 \$174,00 ft Project 43 - Install open switch on BH130 \$15,00 ft Project 43 - Install open switch on BH130 \$15,00 ft Project 43 - Reconductor Blockhouse BHNEWY (1,50 ft) 1,000 AL to relieve BH140 \$15,00 ft Project 43 - Install open switch on BH130 \$15,00 ft Project 43 - Reconductor Blockhouse BHNEWY (1,50 ft) 1,000 AL to relieve BH140 \$15,00 ft Project 45 - Reconductor Blockhouse BH130 (3,800 ft) from 336 AAC to 795 AAC \$133,90 ft Project 45 - Reconductor Blockhouse BH130 (3,800 ft) from 336 AAC to 795 AAC \$133,90 ft Project 46 - Reconductor Blockhouse BH130 (3,800 ft) from 336 AAC to 795 AAC \$140,90 ft Project 47 - Reconductor Whilehouse WS60 (2,300 ft) from 336 AAC to 795 AAC \$140,90 ft Project 47 - Reconductor Buttercup BR210 (5,400 ft) from 10 to 795 AAC \$150,00 ft Project 47 - Reconductor Seward Junction S1120 (2,700 ft) from 10 to 336 AAC \$150,00 ft Project 47 - Reconductor Seward Junction S1120 (2,700 ft) from 10 to 336 AAC \$150,00 ft Project 45 - Reconductor Leander LA260 (5,000 ft) from 350 AAC \$150,00 ft Project 45 - Reconductor Leander LA260 (5,000 ft) from 350 AAC \$150,00 ft Project 45 - Reconductor Leander LA260 (5,000 ft) from 350 AAC \$150,00 ft Project 45 - Reconductor Leander LA260 (5,000 ft) from 350 AAC \$150,00 ft Project 45 - Reconductor Leander LA260 (5,000 ft) from 350 AAC \$150,00 ft Project 45 - Reconductor Leander LA260 (5,0	1	Project 27 - Construct new Seward Junction SJ130 (5,300 ft) of 1000 AL to relieve LA10	\$682,600
Project 37 - Reconductor Leander LA10 (1,500 ft) from 336 AAC to 795 AAC		Project 37 - Reconductor Leander LA10 (4,000 ft) from 336 AAC to 795 AAC	\$140,900
Project 38 - Reconductor Leander LA10 (250 ft) from 336 AAC to 795 AAC \$12,30	2		\$52,800
8 Project 39 - Reconductor Leander LA210 (350 ft) from 336 AAC to 795 AAC \$244.70 9 Project 40 - Construct new Bender LAND (1908 ft) (1000 AL to relieve LA220 \$244.70 1 Project 42 - Construct new Blockhouse BHNEW1 (1,350 ft) 1000 AL to relieve BH140 (4,400 ft) 1000 AL \$173,90 1 Project 42 - Outble circuit Blockhouse BHNEW1 (5,000 ft) 1000 AL to relieve BH140 (4,400 ft) 1000 AL \$745,00 6 Project 43 - Install open switch on BH130 \$15,00 8 Project 43 - Reconductor Blockhouse BHNEW2 (10,000 ft) from 336 AAC to 795 AAC \$352,30 1 Project 44 - Reconductor Blockhouse BH140 (3,000 ft) from 336 AAC to 795 AAC \$133,90 5 Project 45 - Reconductor Blockhouse BH140 (3,000 ft) from 336 AAC to 795 AAC \$182,00 6 Project 47 - Reconductor Blotterouse BW50 (2,300 ft) from 10 to 795 AAC \$180,00 1 Project 47 - Reconductor Blotterouse BW50 (2,300 ft) from 10 to 795 AAC \$180,00 9 Project 47 - Reconductor Several Junction SL120 (2,700 ft) from 306 AAC \$180,00 9 Project 49 - Reconductor Several Junction SL120 (2,700 ft) from 306 AAC to 795 AAC \$140,00 5 Project 50 - Reconductor Leander LA210 (4,000 ft) from 36 AAC to 795 AAC \$140,00	1	Project 38 - Reconductor Leander LA10 (1,100 ft) from 336 AAC to 795 AAC	\$38,800
9 Project 40 - Construct new Leander LANEWY (1,900 ff) 1000 AL to relieve LA220 \$244,70 1 Project 42 - Construct new Blockhouse BHNEWY (1,350 ff) 1000 AL \$173,90 2 Project 42 - Construct new Blockhouse BHNEWY (5,500 ff) 1000 AL to relieve BH140 \$765,00 6 Project 43 - Construct new Blockhouse BHNEWZ (5,500 ff) 1000 AL to relieve BH140 \$747,00 6 Project 43 - Reconductor Blockhouse BHNEWZ (10,000 ff) from 336 AAC and 1/0 to 795 AAC \$352,30 5 Project 43 - Reconductor Blockhouse BHNEWZ (10,000 ff) from 336 AAC and 1/0 to 795 AAC \$133,90 5 Project 44 - Reconductor Blockhouse BH10 (800 ff) from 336 AAC to 795 AAC \$133,90 5 Project 47 - Reconductor Wintehouse W600 (2,300 ff) from 336 AAC to 795 AAC \$190,20 6 Project 47 - Reconductor Vintehouse W600 (2,300 ff) from 1/0 to 795 AAC \$190,20 7 Project 47 - Reconductor Seward Juncion SJ120 (2,700 ff) from 1/0 to 336 AAC \$190,90 8 Project 49 - Reconductor Seward Juncion SJ120 (2,700 ff) from 1/0 to 336 AAC \$190,90 9 Project 41 - Install Voltage Regulator (NL120 - 250 Amps) \$60,000 6 Project 52 - Install Voltage Regulator (NL120 - 250 Amps) \$60,000 6 Project 53 - Install Voltage Regulator (NL120 - 250 Amps) \$60,000 7 Project 55 - Reconductor Winkinstone WS200 (1,800 ff) from 336 AAC to 795 AAC \$18,000	1	Project 38 - Reconductor Leander LA10 (250 ft) from 336 AAC to 795 AAC	\$8,800
Project 42 - Construct new Blockhouse BINEWT (1,350 ft) 1000 AL \$755,00	8	Project 39 - Reconductor Leander LA210 (350 ft) from 336 AAC to 795 AAC	\$12,300
Project 42 - Double circuit Blockhouse BHNEW1 with Blockhouse BH140 (4.400 ft) 1000 AL 1	9	Project 40 - Construct new Leander LANEW1 (1,900 ft) 1000 AL to relieve LA220	\$244,700
6 Project 43 - Install open switch on BH30 \$15,000 8 Project 43 - Install open switch on BH30 \$15,000 8 Project 43 - Reconductor Blockhouse BHNEW2 (10,000 ft) from 336 AAC to 795 AAC \$35,200 1 Project 44 - Reconductor Blockhouse BH108 (00,000 ft) from 336 AAC to 795 AAC \$133,900 5 Project 45 - Reconductor Blockhouse BH40 (80,000 ft) from 336 AAC to 795 AAC \$81,000 5 Project 46 - Reconductor Blockhouse BH40 (80,000 ft) from 336 AAC to 795 AAC \$81,000 6 Project 47 - Reconductor Under BH210 (5,400 ft) from 10 to 795 AAC \$10,000 9 Project 49 - Reconductor Leander LAZ50 (5,000 ft) from 10 to 336 AAC \$10,000 5 Project 51 - Install Voltage Regulator (LAZ50 - 400 Amps) \$6,000 6 Project 51 - Install Voltage Regulator (LAZ50 - 400 Amps) \$6,000 6 Project 53 - Install Voltage Regulator (LAZ50 - 400 Amps) \$6,000 6 Project 54 - Reconductor Wilhiestone WS20 (1,500 ft) from 336 AAC to 795 AAC \$8,800 7 Project 55 - Reconductor Wilhiestone WS20 (1,500 ft) from 336 AAC to 795 AAC \$8,800 9 Project 56 - Reconductor Wilhiestone WS20 (1,500 ft) ftom 336 AAC to 795 AAC \$18,000	1	Project 42 - Construct new Blockhouse BHNEW1 (1,350 ft) 1000 AL	\$173,900
6 Project 43 - Reconductor Blockhouse BHNEW2 (10,000 ft) from 336 AAC and 1/0 to 795 AAC \$352,00 ft Project 44 - Reconductor Blockhouse BHNEW2 (10,000 ft) from 336 AAC to 795 AAC \$382,00 ft Project 44 - Reconductor Blockhouse BH30 (3,000 ft) from 336 AAC to 795 AAC \$28,20 ft Project 45 - Reconductor Whitehouse WS60 (2,300 ft) from 336 AAC to 795 AAC \$28,20 ft Project 46 - Reconductor Whitehouse WS60 (2,300 ft) from 336 AAC to 795 AAC \$38,000 ft Project 47 - Reconductor Whitehouse WS60 (2,300 ft) from 1/0 to 795 AAC \$199,900 ft Project 47 - Reconductor Bustercup BR210 (5,400 ft) from 1/0 to 795 AAC \$199,900 ft Project 48 - Reconductor Leander LA250 (5,500 ft) from 1/0 to 336 AAC \$109,900 ft Project 49 - Reconductor Leander LA250 (5,500 ft) from 1/0 to 336 AAC \$109,900 ft Project 50 - Reconductor Leander LA250 (4,000 ft) from 336 AAC to 795 AAC \$140,900 ft Project 51 - Install Voltage Regulator (NL120 - 250 Amps) \$80,000 ft Project 53 - Install Voltage Regulator (NL120 - 250 Amps) \$80,000 ft Project 54 - Reconductor Whitestone WS20 (1,900 ft) from 336 AAC to 795 AAC \$8,000 ft Project 55 - Install open switch on MC50 \$150,000 ft) from 336 AAC to 795 AAC \$8,000 ft Project 56 - Install open switch on MC50 \$150,000 ft) from 336 AAC to 795 AAC \$8,000 ft Project 57 - Install open switch on BD10 \$15,000 ft Project 57 - Install open switch on BD10 \$15,000 ft Project 57 - Install open switch on BD10 \$15,000 ft Project 57 - Install open switch on BD10 \$15,000 ft Project 57 - Install open switch on BD10 \$15,000 ft Project 60 - Install open switch on BD10 \$15,000 ft Project 60 - Install open switch on BD10 \$15,000 ft Project 61 - Reconductor Manchaea MC50 (5,000 ft) from 336 AAC to 795 AAC \$77,500 ft Project 61 - Reconductor Full Amps MC ACC \$10,000 ft Project 62 - Construct Lehigh LHNEW1 (600 ft) 1000 AL \$77,300 ft Project 62 - Install open switch on Full Amps MC ACC \$15,000 ft Project 62 - Reconductor Tumerswille TV50 (2,000 ft) from 100 to 795 AAC \$28,000 ft Project 62 - Reconductor Tumerswille TV50 (2,000 ft) from 100 to	1		\$765,000
8 Project 43 - Reconductor Blockhouse BHNEWZ (10,000 ft) from 336 AAC and 1/10 to 795 AAC \$332,90 1 Project 44 - Reconductor Blockhouse BH30 (3,800 ft) from 336 AAC to 795 AAC \$133,90 5 Project 46 - Reconductor Whitehouse WIS60 (2,300 ft) from 336 AAC to 795 AAC \$28,20 6 Project 47 - Reconductor Butterup BR270 (5,400 ft) from 1/10 to 736 AAC \$190,20 6 Project 48 - Reconductor Leander LA250 (5,000 ft) from 1/10 to 336 AAC \$199,20 9 Project 49 - Reconductor Leander LA250 (5,000 ft) from 1/10 to 336 AAC \$199,90 9 Project 49 - Reconductor Leander LA250 (5,000 ft) from 1/10 to 336 AAC \$199,90 9 Project 59 - Reconductor Leander LA210 (4,000 ft) from 336 AAC to 795 AAC \$140,000 5 Project 51 - Install Voltage Regulator (LA250 - 400 Amps) \$80,000 6 Project 55 - Reconductor Whitestone WS20 (1,800 ft) from 336 AAC to 795 AAC \$8,800 7 Project 55 - Reconductor Whitestone WS20 (1,800 ft) from 336 AAC to 795 AAC \$83,800 9 Project 56 - Reconductor Whitestone WS20 (1,800 ft) from 336 AAC to 795 AAC \$186,700 1 Project 57 - Install open switch on MC50 (5,300 ft) from 336 AAC to 795 AAC \$186,700 1 P	6	Project 43 - Construct new Blockhouse BHNEW2 (5,800 ft) 1000 AL to relieve BH140	\$747,000
1 Project 44 - Reconductor Blockhouse BH130 (3,800 ft) from 336 AAC to 795 AAC \$28.20 5 Project 45 - Reconductor Whitehouse WS60 (2,300 ft) from 336 AAC to 795 AAC \$91.00 1 Project 47 - Reconductor Whitehouse WS60 (2,300 ft) from 336 AAC to 795 AAC \$190,200 1 Project 47 - Reconductor Buttercup BR210 (5,400 ft) from 1/0 to 795 AAC \$190,200 9 Project 48 - Reconductor Leander LA250 (5,000 ft) from 1/0 to 795 AAC \$190,900 9 Project 49 - Reconductor Leander LA250 (5,000 ft) from 1/0 to 336 AAC \$190,900 5 Project 50 - Reconductor Leander LA210 (4,000 ft) from 336 AAC to 795 AAC \$140,900 5 Project 51 - Install Voltage Regulator (LA250 - 400 Amps) \$80,000 5 Project 53 - Install Voltage Regulator (LA250 - 400 Amps) \$80,000 6 Project 54 - Reconductor Balcones BL220 (250 ft) from 336 AAC to 795 AAC \$88,800 7 Project 55 - Reconductor Whitestone WS20 (1,800 ft) from 336 AAC to 795 AAC \$88,800 7 Project 55 - Reconductor Whitestone WS20 (1,800 ft) from 336 AAC to 795 AAC \$88,800 7 Project 55 - Install open switch on MC50 \$1,800 ft) from 336 AAC to 795 AAC \$186,700 8 Project 57 - Install open switch on BD10 \$15,000 1 Project 57 - Install open switch on BD10 \$15,000 2 Project 60 - Install open switch on BD10 \$15,000 2 Project 60 - Install open switch on BD10 \$15,000 2 Project 60 - Extend Turnersville TV90 (1,350 ft) from 336 AAC to 795 AAC \$7,800 3 Project 60 - Extend Turnersville TV90 (1,350 ft) from 336 AAC to 795 AAC \$7,800 5 Project 61 Project 62 - Construct Leight LHNEW1 (800 ft) from 336 AAC to 795 AAC \$7,800 5 Project 62 - Install open switch on BD10 \$15,000 5 Project 63 - Install open switch on BD10 \$15,000 5 Project 64 Project 65 - Reconductor Buda BD120 (2,200 ft) from 336 AAC to 795 AAC \$7,800 5 Project 64 Project 65 - Reconductor Buda BD120 (2,200 ft) from 336 AAC to 795 AAC \$7,800 5 Project 65 - Reconductor Buda BD120 (2,200 ft) from 336 AAC to 795 AAC \$7,800 5 Project 65 - Reconductor Leight LHNEW1 (800 ft) from 10 to 795 AAC \$7,800 5 Project 65 - Reconductor Le	6		\$15,000
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			\$5,800
		Alternative Project 4 - Construct (1,900 ft) 795 AAC on AltNEW4	\$74,100

Alternative 2 - New Substatino North of Avery Ranch Capital Improvements Summary (2011 \$'s)

Load Level	Description	Estimated Cost
5	Alternative Project 4 - Construct (200 ft) 795 AAC on AltNEW4	\$7,800
5	Alternative Project 4 - Install open switch on LA250	\$15,000
3	Alternative Project 5 - Construct (150 ft) of 795 AAC for AltNEW5	\$5,800
3	Alternative Project 5 - Double Circuit and construct (1,500 ft) 795 AAC on AltNEW5	\$78,900
3	Alternative Project 6 - Construct (150 ft) of 795 AAC for AltNEW6	\$5,800
3	Alternative Project 6 - Construct (7,800 ft) 795 AAC on AltNEW6	\$304,000
3	Alternative Project 6 - Install open switch on AR30	\$15,000
7	Alternative Project 7 - Construct (150 ft) of 795 AAC for AltNEW7	\$5,800
7	Alternative Project 7 - Construct (6,600 ft) 795 AAC on AltNEW7	\$257,200
5	Alternative Project 8 - Construct (3,250 ft) of 795 AAC for AltNEW8	\$126,700
5	Alternative Project 8 - Double Circuit and construct (3,200 ft) 795 AAC on AltNEW8	\$168,400
2	Project 18 - Install open switch on BL30	\$15,000
	SUBTOTAL DISTRIBUTION	\$17,862,800
TOTAL C	APITAL COST	\$104,342,800
Losses Su	ımmary	
0	Calculated Distribution Losses (kW)	6,317
10	Calculated Distribution Losses (kW)	7,576
Present W	forth Cost	
20	20-Year Cumulative Present Worth Cost	\$133,472,800

Exhibit 7 ALTERNATIVE 3



Alternative 3 - New Substation Southeast of Leander Capital Improvements Summary (2011 \$'s)

Load Level	Description	Estimated Cost
	·	2011 \$
Substatio	Improvements	
3	Project 1 - Install new Kent St 46.7 MVA transformer (T2)	\$3,080,000
1	Project 2 - Upgrade Kent St T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 4 - Upgrade Whitestone T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 5 - Upgrade Whitestone T2 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 3 - Upgrade Nameless T1 22.4 MVA transformer with a 37.3 MVA transformer	\$2,400,000 \$2,400,000
3	Project 3 - Upgrade Nameless T2 22.4 MVA transformer with a 37.3 MVA transformer Porject 7 - Upgrade Balcones T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 7 - Opgrade Balcones 11 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 8 - Upgrade Buttercup T3 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
4	Project 11 - Upgrade Buttercup T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
8	Project 12 - Upgrade Buttercup T2 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 17 - Upgrade Balcones T4 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
6	Project 19 - Upgrade Avery Ranch T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
9	Project 19 - Upgrade Avery Ranch T2 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
3	Project 22 - Install new Avery Ranch 46.7 MVA transformer (T4)	\$3,080,000
1	Project 20 - Install new Kent St 46.7 MVA transformer (T3)	\$3,080,000
1	Project 41 - Upgrade Blockhouse T1 22.4 MVA transformer 46.7 MVA transformer	\$2,480,000
3	Project 41 - Install new Blockhouse 46.7 MVA transformer (T3)	\$3,080,000
1	Project 56 - Upgrade Manchaca T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 56 - Upgrade Manchaca T2 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
7	Project 58 - Upgrade Lehigh T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 57 - Install new Lehigh 46.7 MVA transformer (T2)	\$3,080,000
1	Project 59 - Upgrade Buda T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 59 - Upgrade Buda T3 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 65 - Upgrade Turnersville T1 22.4 MVA transformer with a 46.7 MVA transformer Project 68 - Upgrade Goforth T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000 \$2,480,000
1	Project 68 - Upgrade Goforth T2 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000
1	Project 69 - Install new Canyon 37.3 MVA transformer (T1)	\$3,000,000
3	Project 67 - Install new Lehigh 46.7 MVA transformer (T3)	\$3,080,000
4	Alternative Project 1 - Install new Alternative 46.7 MVA transformer (T1)	\$2,366,700
3	Alternative Project 1 - Land for new substation	\$120,000
5	Alternative Project 1 - Install new Alternative 46.7 MVA transformer (T2)	\$2,366,700
5	Alternative Project 1 - Install new Alternative 46.7 MVA transformer (T3)	\$2,366,700
	SUBTOTAL SUBSTATION	\$83,100,100
istribution	Improvements	
-		405.000
3	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS40	
2	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS40 Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft)	\$1,790,800
2	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS40 Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10	\$1,790,800 \$15,000
2 3 1	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS40 Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10 Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS50	\$1,790,800 \$15,000 \$25,800
2 3 1	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS40 Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10 Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS50 Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40	\$1,790,800 \$15,000 \$25,800 \$1,120,500
2 3 1 1 4	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS4C Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10 Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS5C Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40 Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC	\$1,790,800 \$15,000 \$25,800 \$1,120,500 \$140,900
2 3 1 1 4 1	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS4C Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10 Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS5C Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40 Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC Project 3 - Construct (11,500 ft) of 1000 AL to relieve NL10	\$1,790,800 \$15,000 \$25,800 \$1,120,500 \$140,900 \$1,481,100
2 3 1 1 4 1	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS4C Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10 Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS5C Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40 Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC Project 3 - Construct (11,500 ft) of 1000 AL to relieve NL10 Project 3 - Install open switch on WS30	\$1,790,800 \$15,000 \$25,800 \$1,120,500 \$140,900 \$1,481,100 \$15,000
2 3 1 1 4 1	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS4C Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10 Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS5C Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40 Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC Project 3 - Construct (11,500 ft) of 1000 AL to relieve NL10 Project 3 - Install open switch on WS30 Project 6 - Double circuit with Whitestone WS60 1000 AL (4,000 ft)	\$1,790,800 \$15,000 \$25,800 \$1,120,500 \$140,900 \$1,481,100 \$15,000 \$695,500
2 3 1 1 4 1 1 2	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS4C Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10 Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS5C Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40 Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC Project 3 - Construct (11,500 ft) of 1000 AL to relieve NL10 Project 3 - Install open switch on WS30	\$1,790,800 \$15,000 \$25,800 \$1,120,500 \$140,900 \$1,481,100 \$15,000
2 3 1 1 4 1 1 2 2	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS4C Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10 Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS5C Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40 Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC Project 3 - Construct (11,500 ft) of 1000 AL to relieve NL10 Project 3 - Install open switch on WS30 Project 6 - Double circuit with Whitestone WS60 1000 AL (4,000 ft) Project 9 - Install open switch on BR220	\$1,790,800 \$15,000 \$25,800 \$1,120,500 \$140,900 \$1,481,100 \$15,000 \$695,500 \$15,000
2 3 1 1 4 1 1 2 2	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS4C Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10 Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS5C Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40 Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC Project 3 - Construct (11,500 ft) of 1000 AL to relieve NL10 Project 3 - Install open switch on WS30 Project 6 - Double circuit with Whitestone WS60 1000 AL (4,000 ft) Project 9 - Install open switch on BR220 Project 7 - Convert Balcones T1 and T2 to 24.9-kV (525,794 ft)	\$1,790,800 \$15,000 \$25,800 \$1,120,500 \$140,900 \$1,481,100 \$695,500 \$15,000 \$11,792,500
2 3 1 1 4 1 1 2 2 1 1	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS4C Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10 Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS5C Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40 Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC Project 3 - Construct (11,500 ft) of 1000 AL to relieve NL10 Project 3 - Install open switch on WS30 Project 6 - Double circuit with Whitestone WS60 1000 AL (4,000 ft) Project 9 - Install open switch on BR220 Project 7 - Convert Balcones T1 and T2 to 24.9-kV (525,794 ft) Project 10 - Construct (500 ft) of 500 Cu to relieve BR20 Project 10 - Double circuit Buttercup BR340 with Buttercup BR20 1000 AL (2,700 ft) Project 10 - Construct (1,100 ft) of 500 Cu to relieve BR20	\$1,790,800 \$15,000 \$25,800 \$1,120,500 \$140,900 \$1,481,100 \$695,500 \$15,000 \$1,792,500 \$37,900
2 3 1 1 4 1 1 2 2 1 1 1 1 1 2 2	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS4C Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10 Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS5C Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40 Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC Project 3 - Construct (11,500 ft) of 1000 AL to relieve NL10 Project 3 - Install open switch on WS30 Project 6 - Double circuit with Whitestone WS60 1000 AL (4,000 ft) Project 9 - Install open switch on BR220 Project 7 - Convert Balcones T1 and T2 to 24.9-kV (525,794 ft) Project 10 - Construct (500 ft) of 500 Cu to relieve BR20 Project 10 - Double circuit Buttercup BR340 with Buttercup BR20 1000 AL (2,700 ft) Project 10 - Construct (1,100 ft) of 500 Cu to relieve BR20 Project 13 - Double circuit Buttercup BR20 with Buttercup BR340 nd BR340 (10,000 ft) 795 AAC	\$1,790,800 \$15,000 \$25,800 \$1,120,500 \$140,900 \$1,481,100 \$695,500 \$15,000 \$17,92,500 \$37,900 \$469,400 \$83,300 \$526,200
2 3 1 1 4 1 1 2 2 1 1 1 1 1 2 2 1	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS4C Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10 Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS5C Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40 Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC Project 3 - Construct (11,500 ft) of 1000 AL to relieve NL10 Project 3 - Install open switch on WS30 Project 6 - Double circuit with Whitestone WS60 1000 AL (4,000 ft) Project 9 - Install open switch on BR220 Project 7 - Convert Balcones T1 and T2 to 24.9-kV (525,794 ft) Project 10 - Construct (500 ft) of 500 Cu to relieve BR20 Project 10 - Double circuit Buttercup BR340 with Buttercup BR20 1000 AL (2,700 ft) Project 10 - Construct (1,100 ft) of 500 Cu to relieve BR20 Project 13 - Double circuit Buttercup BR20 with Buttercup BR330 and BR340 (10,000 ft) 795 AAC Project 14 - Double circuit Buttercup BR210 with Buttercup BR330 (6,300 ft) 795 AAC	\$1,790,800 \$15,000 \$25,800 \$1,120,500 \$140,900 \$1,481,100 \$15,000 \$15,000 \$17,792,500 \$37,900 \$469,400 \$83,300 \$526,200 \$331,500
2 3 1 1 4 1 1 2 2 1 1 1 1 2 2 1 1 1 1 6	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS4C Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10 Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS5C Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40 Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC Project 3 - Construct (11,500 ft) of 1000 AL to relieve NL10 Project 3 - Install open switch on WS30 Project 6 - Double circuit with Whitestone WS60 1000 AL (4,000 ft) Project 9 - Install open switch on BR220 Project 7 - Convert Balcones T1 and T2 to 24.9-kV (525,794 ft) Project 10 - Construct (500 ft) of 500 Cu to relieve BR20 Project 10 - Double circuit Buttercup BR340 with Buttercup BR20 1000 AL (2,700 ft) Project 10 - Construct (1,100 ft) of 500 Cu to relieve BR20 Project 13 - Double circuit Buttercup BR20 with Buttercup BR330 and BR340 (10,000 ft) 795 AAC Project 14 - Double circuit Buttercup BR210 with Buttercup BR330 (6,300 ft) 795 AAC Project 15 - Construct new getaway 1000 AL (1,000 ft) for BL10	\$1,790,800 \$15,000 \$25,800 \$1,120,500 \$140,900 \$1,481,100 \$695,500 \$15,000 \$1,792,500 \$37,900 \$469,400 \$83,300 \$526,200 \$331,500 \$128,800
2 3 1 1 4 1 1 2 2 1 1 1 1 1 2 2 1 1 6 6 6	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS4C Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10 Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS5C Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40 Project 3 - Construct (11,500 ft) for 336 AAC to 795 AAC Project 3 - Construct (11,500 ft) of 1000 AL to relieve NL10 Project 3 - Install open switch on WS30 Project 6 - Double circuit with Whitestone WS60 1000 AL (4,000 ft) Project 9 - Install open switch on BR220 Project 7 - Convert Balcones T1 and T2 to 24.9-kV (525,794 ft) Project 10 - Construct (500 ft) of 500 Cu to relieve BR20 Project 10 - Double circuit Buttercup BR340 with Buttercup BR20 1000 AL (2,700 ft) Project 13 - Double circuit Buttercup BR20 with Buttercup BR330 and BR340 (10,000 ft) 795 AAC Project 14 - Double circuit Buttercup BR210 with Buttercup BR330 (6,300 ft) 795 AAC Project 15 - Construct new getaway 1000 AL (1,000 ft) for BL10 Project 15 - Double circuit Balcones BL10 with Balcones BL30 (5,000 ft) 795 AAC	\$1,790,800 \$15,000 \$25,800 \$1,120,500 \$140,900 \$15,000 \$15,000 \$15,000 \$17,792,500 \$37,900 \$469,400 \$83,300 \$526,200 \$331,500 \$128,800
2 3 1 1 4 1 1 2 2 1 1 1 1 2 1 1 2 1 6 6 6	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS4C Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10 Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS5C Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40 Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC Project 3 - Construct (11,500 ft) of 1000 AL to relieve NL10 Project 3 - Install open switch on WS30 Project 6 - Double circuit with Whitestone WS60 1000 AL (4,000 ft) Project 9 - Install open switch on BR220 Project 7 - Convert Balcones T1 and T2 to 24.9-kV (525,794 ft) Project 10 - Construct (500 ft) of 500 Cu to relieve BR20 Project 10 - Double circuit Buttercup BR340 with Buttercup BR20 1000 AL (2,700 ft) Project 10 - Construct (1,100 ft) of 500 Cu to relieve BR20 Project 13 - Double circuit Buttercup BR20 with Buttercup BR330 and BR340 (10,000 ft) 795 AAC Project 14 - Double circuit Buttercup BR210 with Buttercup BR330 (6,300 ft) 795 AAC Project 15 - Construct new getaway 1000 AL (1,000 ft) for BL10 Project 15 - Double circuit Balcones BL10 with Balcones BL330 (5,000 ft) 795 AAC Project 15 - Construct (150 ft) of 1000 AL for BL10	\$1,790,800 \$15,000 \$25,800 \$1,120,500 \$1,40,900 \$15,000 \$695,500 \$15,000 \$17,792,500 \$37,900 \$469,400 \$83,300 \$526,200 \$331,500 \$128,800 \$19,300
2 3 1 1 1 2 2 1 1 1 1 2 2 1 1 1 1 6 6 6	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS4C Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10 Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS5C Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40 Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC Project 3 - Construct (11,500 ft) of 1000 AL to relieve NL10 Project 3 - Install open switch on WS30 Project 6 - Double circuit with Whitestone WS60 1000 AL (4,000 ft) Project 9 - Install open switch on BR220 Project 7 - Convert Balcones T1 and T2 to 24.9-kV (525,794 ft) Project 10 - Construct (500 ft) of 500 Cu to relieve BR20 Project 10 - Double circuit Buttercup BR340 with Buttercup BR20 1000 AL (2,700 ft) Project 10 - Construct (1,100 ft) of 500 Cu to relieve BR20 Project 13 - Double circuit Buttercup BR20 with Buttercup BR330 and BR340 (10,000 ft) 795 AAC Project 15 - Construct new getaway 1000 AL (1,000 ft) for BL10 Project 15 - Construct Balcones BL10 with Balcones BL330 (5,000 ft) 795 AAC Project 15 - Construct (150 ft) of 1000 AL for BL10 Project 15 - Double circuit and rebuild Balcones BL10 with Balcones BL330 (2,100 ft) 1000 AL	\$1,790,800 \$15,000 \$25,800 \$1,120,500 \$140,900 \$1,481,100 \$15,000 \$15,000 \$17,792,500 \$37,900 \$469,400 \$83,300 \$526,200 \$331,500 \$128,800 \$263,100 \$19,300 \$365,100
2 3 1 1 4 1 1 2 2 1 1 1 1 2 1 1 1 2 6 6 6	Project 1 - Construct new getaway 1000 AL (200 ft) for Kent St KS4C Project 1 - Double circuit Kent St KS40 with Kent St KS30 1000 AL (10,300 ft) Project 1 - Install open switch on WS10 Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS5C Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40 Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC Project 3 - Construct (11,500 ft) of 1000 AL to relieve NL10 Project 3 - Install open switch on WS30 Project 6 - Double circuit with Whitestone WS60 1000 AL (4,000 ft) Project 9 - Install open switch on BR220 Project 7 - Convert Balcones T1 and T2 to 24.9-kV (525,794 ft) Project 10 - Construct (500 ft) of 500 Cu to relieve BR20 Project 10 - Double circuit Buttercup BR340 with Buttercup BR20 1000 AL (2,700 ft) Project 10 - Construct (1,100 ft) of 500 Cu to relieve BR20 Project 13 - Double circuit Buttercup BR20 with Buttercup BR330 and BR340 (10,000 ft) 795 AAC Project 14 - Double circuit Buttercup BR210 with Buttercup BR330 (6,300 ft) 795 AAC Project 15 - Construct new getaway 1000 AL (1,000 ft) for BL10 Project 15 - Double circuit Balcones BL10 with Balcones BL330 (5,000 ft) 795 AAC Project 15 - Construct (150 ft) of 1000 AL for BL10	\$15,000 \$25,800 \$1,120,500 \$140,900 \$1,481,100 \$15,000 \$15,000 \$17,792,500 \$37,900 \$469,400 \$83,300 \$526,200 \$31,500 \$128,800 \$128,800 \$19,300

Alternative 3 - New Substation Southeast of Leander Capital Improvements Summary (2011 \$'s)

Load Level	Description	Estimated Cost
1	Project 21 - Install open switch on KS60	\$15,000
3	Project 23 - Construct new Avery Ranch ARNEW1 (4,400 ft) 1000 AL	\$566,700
2	Project 23 - Double circuit and rebuild ARNEW1 with AR30 (4,900 ft) 1000 AL	\$851,900
3	Project 23 - Insall open switch on AR250	\$15,000
5	Project 24 - Reconductor Avery Ranch AR30 (8,300 ft) from 336 AAC to 795 AAC	\$292,400
2	Project 25 - Construct new Avery Ranch ARNEW2 (5,200 ft) of 1000 AL to relieve AR120	\$669,700
1	Project 27 - Construct new Seward Junction SJ130 (5,300 ft) of 1000 AL to relieve LA10	\$682,600
2	Project 37 - Reconductor Leander LA10 (1,500 ft) from 336 AAC to 795 AAC	\$52,800
1	Project 42 - Construct new Blockhouse BHNEW1 (1,350 ft) 1000 AL	\$173,900
1	Project 42 - Double circuit Blockhouse BHNEW1 with Blockhouse BH140 (4,400 ft) 1000 AL	\$765,000
6	Project 43 - Construct new Blockhouse BHNEW2 (5,800 ft) 1000 AL to relieve BH140	\$747,000
6	Project 43 - Install open switch on BH130	\$15,000
8	Project 43 - Reconductor Blockhouse BHNEW2 (10,000 ft) from 336 AAC and 1/0 to 795 AAC	\$352,300
1	Project 44 - Reconductor Blockhouse BH130 (3,800 ft) from 336 AAC to 795 AAC	\$133,900
5	Project 45 - Reconductor Blockhouse BH40 (800 ft) from 336 AAC to 795 AAC	\$28,200
5	Project 46 - Reconductor Whitehouse WS60 (2,300 ft) from 336 AAC to 795 AAC	\$81,000
1	Project 47 - Reconductor Buttercup BR210 (5,400 ft) from 1/0 to 795 AAC	\$190,200
5	Project 48 - Reconductor Leander LA250 (5,000 ft) from 1/0 to 336 AAC	\$109,900
9	Project 49 - Reconductor Seward Junction SJ120 (2,700 ft) from 1/0 to 336 AAC	\$59,400
5	Project 53 - Install Voltage Regulator (NL120 - 250 Amps)	\$60,000
6	Project 54 - Reconductor Balcones BL220 (250 ft) from 336 AAC to 795 AAC	\$8,800
7	Project 55 - Reconductor Whitestone WS20 (1,800 ft) from 336 AAC to 795 AAC	\$63,400
1	Project 56 - Install open switch on MC50	\$15,000
3	Project 56 - Reconductor Manchaca MC50 (5,300 ft) from 336 AAC to 795 AAC	\$186,700
1	Project 57 - Install open switch on BD10	\$15,000
1	Project 57 - Extend LH20 (200 ft) 795 AAC	\$7,800
2	Project 60 - Install open switch on BD130	\$15,000
2	Project 60 - Install open switch on TV110	\$15,000
2	Project 60 - Extend Turnersville TV90 (1,350 ft) 795 AAC to relieve BD130	\$52,600
6	Project 61 - Reconductor Buda BD120 (2,200 ft) from 336 AAC to 795 AAC	\$77,500
11	Project 62 - Construct Lehigh LHNEW1 (600 ft) 1000 AL	\$77,300
1	Project 62 - Construct (10,200 ft) 795 AAC on LHNEW1 to relieve LH40	\$397,500
1	Project 62 - Install open switch on TV50	\$15,000
1	Project 62 - Reconductor Lehigh LHNEW1 (8,000 ft) from 1/0 to 795 AAC	\$281,800
3	Project 62 - Reconductor Lehigh LHNEW1 (800 ft) from 1/0 to 795 AAC	\$28,200
6	Project 63 - Reconductor Turnersville TV50 (8,000 ft) from 336 AAC to 795 AAC	\$281,800 \$77,500
2	Project 64 - Reconductor Turnersville TV50 (2,200 ft) from 1/0 to 795 AAC Project 67 - Extend Lehigh LH30 (5,300 ft) 795 AAC	\$206,600
3		\$15,000
3	Project 67 - Install open switch on GF120 Project 68 - Install open switch on GF110	\$15,000
1	Project 69 - Install open switch on KY50	\$15,000
1	Project 69 - Construct new Canyon CN50 (250 ft) 795 AAC	\$9,700
1	Project 69 - Intall open switch on KY30	\$15,000
3	Project 67 - Install open switch on KY20	\$15,000
7	Project 70 - Construct new Lehigh LH10 (125 ft) 1000 AL	\$16,100
7	Project 70 - Construct (12,300 ft) 795 AAC on LH10	\$479,400
6	Project 71 - Construct new Goforth GF30 (300 ft) 1000 AL	\$38,600
6	Project 71 - Construct (6,400 ft) 795 AAC on GF30	\$249,400
7	Project 72 - Install Voltage Regulator (LH30 - 52 Amps)	\$60,000
7	Project 73 - Install Voltage Regulator (TV130 - 53 Amps)	\$60,000
1	Project 74 - Install Voltage Regulator (TV130 - 110 Amps)	\$60,000
4	Alternative Project 2 - Construct (400 ft) of 795 AAC for AltNEW1	\$15,600
4	Alternative Project 2 - Install open switch on LA230	\$15,000
4	Alternative Project 2 - Double Circuit and construct (14,000 ft) 795 AAC on AltNEW1	\$736,700
5	Alternative Project 3 - Construct (400 ft) of 795 AAC for AltNEW2	\$15,600
8	Alternative Project 4 - Construct (400 ft) of 795 AAC for AltNEW3	\$15,600
8	Alternative Project 4 - Construct (300 ft) 795 AAC on AltNEW4	\$11,700
4	Alternative Project 6 - Install open switch on LA130	\$15,000
4	Alternative Project 6 - Install open switch on LA10	\$15,000
4	Alternative Project 5 - Construct (900 ft) of 795 AAC for AltNEW4	\$35,100
4	Alternative Project 5 - Double Circuit and construct (9,400 ft) 795 AAC on AltNEW4	\$494,600
4		

Alternative 3 - New Substation Southeast of Leander Capital Improvements Summary (2011 \$'s)

Load Level	Description	Estimated Cost
4	Alternative Project 7 - Construct (400 ft) of 795 AAC for AltNEW5	\$15,600
4	Alternative Project 7 - Install open switch on LA250	\$15,000
4	Alternative Project 7 - Install open switch on SJ20	\$15,000
4	Alternative Project 7 - Construct (1000 ft) of 795 AAC for AltNEW6	\$39,000
2	Project 18 - Install open switch on BL30	\$15,000
	SUBTOTAL DISTRIBUTION	\$20,860,300
TOTAL C	APITAL COST	\$103,960,400
Losses St	ummary	
0	Calculated Distribution Losses (kW)	6,317
10	Calculated Distribution Losses (kW)	7,882
Present W	/orth Cost	
20	20-Year Cumulative Present Worth Cost	\$133,412,000

Exhibit 8 ALTERNATIVE 4



Alternative 4 - New Substation West of Whitestone Capital Improvements Summary (2011 \$\s'\$)

Load Level	Description				
		2011\$			
Substatio	n Improvements				
1	Project 2 - Upgrade Kent St T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
3	Project 4 - Upgrade Whitestone T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
3	Project 5 - Upgrade Whitestone T2 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
1	Porject 7 - Upgrade Balcones T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
1	Project 7 - Upgrade Balcones T2 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
1	Project 8 - Upgrade Buttercup T3 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
1	Project 17 - Upgrade Balcones T4 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
6	Project 19 - Upgrade Avery Ranch T1 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
9	Project 19 - Upgrade Avery Ranch T2 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
3	Project 22 - Install new Avery Ranch 46.7 MVA transformer (T4)	\$3,080,000			
1	Project 20 - Install new Kent St 46.7 MVA transformer (T3)	\$3,080,000			
4	Project 28 - Upgrade Seward Junction T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
2	Project 29 - Upgrade Leander T2 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
3	Project 29 - Upgrade Leander T3 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
4	Project 29 - Upgrade Leander T4 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
6	Project 30 - Install new Leander 46.7 MVA transformer (T5)	\$3,080,000			
2	Project 32 - Upgrade Seward Junction T2 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
1	Project 41 - Upgrade Blockhouse T1 22.4 MVA transformer 46.7 MVA transformer	\$2,480,000			
3	Project 41 - Install new Blockhouse 46.7 MVA transformer (T3)	\$3,080,000			
1	Project 56 - Upgrade Manchaca T1 22.4 MVA transformer with a 46.7 MVA transformer Project 56 - Upgrade Manchaca T2 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000 \$2,480,000			
7	Project 58 - Upgrade Lehigh T1 37.3 MVA transformer with a 46.7 MVA transformer				
1	Project 57 - Install new Lehigh 46.7 MVA transformer (T2)	\$2,480,000 \$3,080,000			
1	Project 59 - Upgrade Buda T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
1	Project 59 - Upgrade Buda T3 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
3	Project 65 - Upgrade Turnersville T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
1	Project 68 - Upgrade Goforth T1 22.4 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
1	Project 68 - Upgrade Goforth T2 37.3 MVA transformer with a 46.7 MVA transformer	\$2,480,000			
1	Project 69 - Install new Canyon 37.3 MVA transformer (T1)	\$3,000,000			
3	Project 67 - Install new Lehigh 46.7 MVA transformer (T3)	\$3,080,000			
3	Alternative Project 1 - Install new Alternative 46.7 MVA transformer (T1)	\$2,366,700			
3	Alternative Project 1 - Install new Alternative 46.7 MVA transformer (T2)	\$2,366,700			
2	Alternative Project 1 - Land for new substation	\$120,000			
7	Alternative Project 1 - Install new Alternative 46.7 MVA transformer (T3)	\$2,366,700			
	SUBTOTAL SUBSTATION	\$85,740,100			
Distribution	Improvements				
1	Project 2 - Construct new getaway 1000 AL (200 ft) for Kent St KS50	\$25,800			
1	Project 2 - Construct (8,700 ft) of 1000 AL to relieve AR40	\$1,120,500			
4	Project 2 - Reconductor (4,000 ft) from 336 AAC to 795 AAC	\$140,900			
2	Project 9 - Install open switch on BR220	\$15,000			
1	Project 7 - Convert Balcones T1 and T2 to 24.9-kV (525,794 ft)	\$1,792,500			
1	Project 10 - Construct (500 ft) of 500 Cu to relieve BR20	\$37,900			
1	Project 10 - Double circuit Buttercup BR340 with Buttercup BR20 1000 AL (2,700 ft)	\$469,400			
1	Project 10 - Construct (1,100 ft) of 500 Cu to relieve BR20	\$83,300			
2	Project 13 - Double circuit Buttercup BR20 with Buttercup BR330 and BR340 (10,000 ft) 795 AAC	\$526,200			
1	Project 14 - Double circuit Buttercup BR210 with Buttercup BR330 (6,300 ft) 795 AAC	\$331,500			
	D : 145 O 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
6	Project 15 - Construct new getaway 1000 AL (1,000 ft) for BL10	\$128,800			
	Project 15 - Construct new getaway 1000 AL (1,000 ft) for BL10 Project 15 - Double circuit Balcones BL10 with Balcones BL330 (5,000 ft) 795 AAC	\$128,800 \$263,100			
6	Project 15 - Double circuit Balcones BL10 with Balcones BL30 (5,000 ft) 795 AAC Project 15 - Construct (150 ft) of 1000 AL for BL10				
6	Project 15 - Double circuit Balcones BL10 with Balcones BL30 (5,000 ft) 795 AAC Project 15 - Construct (150 ft) of 1000 AL for BL10 Project 15 - Double circuit and rebuild Balcones BL10 with Balcones BL330 (2,100 ft) 1000 AL	\$263,100			
6 6 6	Project 15 - Double circuit Balcones BL10 with Balcones BL30 (5,000 ft) 795 AAC Project 15 - Construct (150 ft) of 1000 AL for BL10 Project 15 - Double circuit and rebuild Balcones BL10 with Balcones BL30 (2,100 ft) 1000 AL Project 16 - Reconductor BL320 (10,600 ft) from 336 AAC to 795 AAC	\$263,100 \$19,300			
6 6 6	Project 15 - Double circuit Balcones BL10 with Balcones BL30 (5,000 ft) 795 AAC Project 15 - Construct (150 ft) of 1000 AL for BL10 Project 15 - Double circuit and rebuild Balcones BL10 with Balcones BL330 (2,100 ft) 1000 AL	\$263,100 \$19,300 \$365,100			
6 6 6 6	Project 15 - Double circuit Balcones BL10 with Balcones BL30 (5,000 ft) 795 AAC Project 15 - Construct (150 ft) of 1000 AL for BL10 Project 15 - Double circuit and rebuild Balcones BL10 with Balcones BL30 (2,100 ft) 1000 AL Project 16 - Reconductor BL320 (10,600 ft) from 336 AAC to 795 AAC	\$263,100 \$19,300 \$365,100 \$373,400			
6 6 6 6 1 2	Project 15 - Double circuit Balcones BL10 with Balcones BL30 (5,000 ft) 795 AAC Project 15 - Construct (150 ft) of 1000 AL for BL10 Project 15 - Double circuit and rebuild Balcones BL10 with Balcones BL330 (2,100 ft) 1000 AL Project 16 - Reconductor BL320 (10,600 ft) from 336 AAC to 795 AAC Project 21 - Construct new Kent St KS60 (4,300 ft) of 1000 AL to relieve AR240 Project 21 - Extend AR240 (2,900 ft) 1000 AL to relieve KS60 Project 21 - Install open switch on KS60	\$263,100 \$19,300 \$365,100 \$373,400 \$553,800			
6 6 6 1 2	Project 15 - Double circuit Balcones BL10 with Balcones BL30 (5,000 ft) 795 AAC Project 15 - Construct (150 ft) of 1000 AL for BL10 Project 15 - Double circuit and rebuild Balcones BL10 with Balcones BL330 (2,100 ft) 1000 AL Project 16 - Reconductor BL320 (10,600 ft) from 336 AAC to 795 AAC Project 21 - Construct new Kent St KS60 (4,300 ft) of 1000 AL to relieve AR240 Project 21 - Extend AR240 (2,900 ft) 1000 AL to relieve KS60 Project 21 - Install open switch on KS60 Project 23 - Construct new Avery Ranch ARNEW1 (4,400 ft) 1000 AL	\$263,100 \$19,300 \$365,100 \$373,400 \$553,800 \$373,500			
6 6 6 1 2 1	Project 15 - Double circuit Balcones BL10 with Balcones BL30 (5,000 ft) 795 AAC Project 15 - Construct (150 ft) of 1000 AL for BL10 Project 15 - Double circuit and rebuild Balcones BL10 with Balcones BL330 (2,100 ft) 1000 AL Project 16 - Reconductor BL320 (10,600 ft) from 336 AAC to 795 AAC Project 21 - Construct new Kent St KS60 (4,300 ft) of 1000 AL to relieve AR240 Project 21 - Extend AR240 (2,900 ft) 1000 AL to relieve KS60 Project 21 - Install open switch on KS60 Project 23 - Construct new Avery Ranch ARNEW1 (4,400 ft) 1000 AL Project 23 - Double circuit and rebuild ARNEW1 with AR30 (4,900 ft) 1000 AL	\$263,100 \$19,300 \$365,100 \$373,400 \$553,800 \$15,000 \$566,700 \$851,900			
6 6 6 1 2 1 1 3	Project 15 - Double circuit Balcones BL10 with Balcones BL30 (5,000 ft) 795 AAC Project 15 - Construct (150 ft) of 1000 AL for BL10 Project 15 - Double circuit and rebuild Balcones BL10 with Balcones BL330 (2,100 ft) 1000 AL Project 16 - Reconductor BL320 (10,600 ft) from 336 AAC to 795 AAC Project 21 - Construct new Kent St KS60 (4,300 ft) of 1000 AL to relieve AR240 Project 21 - Extend AR240 (2,900 ft) 1000 AL to relieve KS60 Project 21 - Install open switch on KS60 Project 23 - Construct new Avery Ranch ARNEW1 (4,400 ft) 1000 AL	\$263,100 \$19,300 \$365,100 \$373,400 \$553,800 \$373,500 \$15,000 \$566,700			

Alternative 4 - New Substation West of Whitestone Capital Improvements Summary (2011 \$'s)

Load Level	Description	Estimated Cost
2	Project 25 - Construct new Avery Ranch ARNEW2 (5,200 ft) of 1000 AL to relieve AR120	\$669,700
1	Project 27 - Construct new Seward Junction SJ130 (5,300 ft) of 1000 AL to relieve LA10	\$682,600
10	Project 31 - Install open switch on LA230	\$15,000
4	Project 32 - Construct new Seward Junction SJ120 (4,500 ft) of 1000 AL	\$579,500
4	Project 32 - Construct (8,400 ft) of 1000 AL for SJ120	\$1,081,800
4	Project 32 - Construct (900 ft) of 1000 AL for SJ120 to relieve SJ20	\$115,900
6	Project 33 - Extend LA250 (17,000 ft) 1000 AL	\$2,189,400
2	Project 37 - Reconductor Leander LA10 (4,000 ft) from 336 AAC to 795 AAC	\$140,900
2	Project 37 - Reconductor Leander LA10 (1,500 ft) from 336 AAC to 795 AAC	\$52,800
1	Project 38 - Reconductor Leander LA10 (1,100 ft) from 336 AAC to 795 AAC Project 38 - Reconductor Leander LA10 (250 ft) from 336 AAC to 795 AAC	\$38,800 \$8,800
1	Project 39 - Reconductor Leanuer LA10 (250 ft) from 336 AAC to 795 AAC	\$12,300
9	Project 40 - Construct new Leander LANEW1 (1,900 ft) 1000 AL to relieve LA220	\$244,700
1	Project 42 - Construct new Blockhouse BHNEW1 (1,350 ft) 1000 AL	\$173,900
1	Project 42 - Double circuit Blockhouse BHNEW1 with Blockhouse BH140 (4,400 ft) 1000 AL	\$765,000
6	Project 43 - Construct new Blockhouse BHNEW2 (5,800 ft) 1000 AL to relieve BH140	\$747,000
6	Project 43 - Install open switch on BH130	\$15,000
8	Project 43 - Reconductor Blockhouse BHNEW2 (10,000 ft) from 336 AAC and 1/0 to 795 AAC	\$352,300
1	Project 44 - Reconductor Blockhouse BH130 (3,800 ft) from 336 AAC to 795 AAC	\$133,900
5	Project 45 - Reconductor Blockhouse BH40 (800 ft) from 336 AAC to 795 AAC	\$28,200
5	Project 48 - Reconductor Leander LA250 (5,000 ft) from 1/0 to 336 AAC	\$109,900
9	Project 49 - Reconductor Seward Junction SJ120 (2,700 ft) from 1/0 to 336 AAC	\$59,400
8	Project 50 - Reconductor Leander LA210 (4,000 ft) from 336 AAC to 795 AAC	\$140,900
5	Project 51 - Install Voltage Regulator (LA250 - 400 Amps)	\$60,000
5	Project 53 - Install Voltage Regulator (NL120 - 250 Amps)	\$60,000
5	Project 52 - Install Voltage Regulator (LA230 - 400 Amps)	\$60,000
6	Project 54 - Reconductor Balcones BL220 (250 ft) from 336 AAC to 795 AAC Project 56 - Install open switch on MC50	\$8,800 \$15,000
	Project 56 - Reconductor Manchaca MC50 (5,300 ft) from 336 AAC to 795 AAC	\$186,700
1	Project 57 - Install open switch on BD10	\$15,000
1	Project 57 - Extend LH20 (200 ft) 795 AAC	\$7,800
2	Project 60 - Install open switch on BD130	\$15,000
2	Project 60 - Install open switch on TV110	\$15,000
2	Project 60 - Extend Turnersville TV90 (1,350 ft) 795 AAC to relieve BD130	\$52,600
6	Project 61 - Reconductor Buda BD120 (2,200 ft) from 336 AAC to 795 AAC	\$77,500
1	Project 62 - Construct Lehigh LHNEW1 (600 ft) 1000 AL	\$77,300
1	Project 62 - Construct (10,200 ft) 795 AAC on LHNEW1 to relieve LH40	\$397,500
1	Project 62 - Install open switch on TV50	\$15,000
1_	Project 62 - Reconductor Lehigh LHNEW1 (8,000 ft) from 1/0 to 795 AAC	\$281,800
3	Project 62 - Reconductor Lehigh LHNEW1 (800 ft) from 1/0 to 795 AAC	\$28,200
2	Project 63 - Reconductor Turnersville TV50 (8,000 ft) from 336 AAC to 795 AAC Project 64 - Reconductor Turnersville TV50 (2,200 ft) from 1/0 to 795 AAC	\$281,800 \$77,500
3	Project 67 - Extend Lehigh LH30 (5,300 ft) 795 AAC	\$206,600
3	Project 67 - Install open switch on GF120	\$15,000
1	Project 68 - Install open switch on GF110	\$15,000
1	Project 69 - Install open switch on KY50	\$15,000
1	Project 69 - Construct new Canyon CN50 (250 ft) 795 AAC	\$9,700
1	Project 69 - Intall open switch on KY30	\$15,000
3	Project 67 - Install open switch on KY20	\$15,000
7	Project 70 - Construct new Lehigh LH10 (125 ft) 1000 AL	\$16,100
7	Project 70 - Construct (12,300 ft) 795 AAC on LH10	\$479,400
6	Project 71 - Construct new Goforth GF30 (300 ft) 1000 AL	\$38,600
6	Project 71 - Construct (6,400 ft) 795 AAC on GF30	\$249,400
7	Project 72 - Install Voltage Regulator (LH30 - 52 Amps)	\$60,000
7	Project 73 - Install Voltage Regulator (TV130 - 53 Amps)	\$60,000 \$60,000
3	Project 74 - Install Voltage Regulator (TV130 - 110 Amps) Alternative Project 2 - Construct (100 ft) of 795 AAC for AltNEW1	\$3,900
3	Alternative Project 3 - Construct (100 ft) of 795 AAC for AltNEW1	\$3,900
3	Alternative Project 3 - Install open switch on NL10	\$15,000
3	Alternative Project 4 - Construct (100 ft) of 795 AAC for AltNEW3	\$3,900
2	Alternative Project 4 - Double Circuit and construct (6,400 ft) 795 AAC on AltNEW3	\$336,800
3	Alternative Project 4 - Install open switch on BR210	\$15,000

Alternative 4 - New Substation West of Whitestone Capital Improvements Summary (2011 \$\frac{1}{5}\$)

Load Level	Description	Estimated Cost \$49,300	
2	Alternative Project 4 - Reconductor (1,400 ft) from 4 ACSR to 795 AAC		
7	Alternative Project 5 - Construct (100 ft) of 795 AAC for AltNEW4	\$3,900	
7	Alternative Project 5 - Install open switch on WS20	\$15,000	
7	Alternative Project 5 - Reconductor (2,400 ft) from 336 AAC to 795 AAC	\$84,500	
6	Alternative Project 6 - Construct (100 ft) of 795 AAC for AltNEW5	\$3,900	
6	Alternative Project 6 - Double Circuit and construct (10,000 ft) 795 AAC on AltNEW5	\$526,200	
6	Alternative Project 6 - Reconductor (4,000 ft) from 336 AAC to 795 AAC	\$140,900	
2	Project 18 - Install open switch on BL30	\$15,000	
	SUBTOTAL DISTRIBUTION	\$20,923,200	
OTAL C	APITAL COST	\$106,663,300	
osses Su	ımmary		
0	Calculated Distribution Losses (kW)	6,317	
10	Calculated Distribution Losses (kW)	8,379	
resent W	forth Cost		
20	20-Year Cumulative Present Worth Cost	\$137,080,300	

Exhibit 9 TEN-YEAR ELECTRIC SYSTEM PLAN MAP



Appendix A 2011 LOAD FORECAST



Load Forecast

Pedernales Electric Cooperative



August 2011



PEDERNALES ELECTRIC COOPERATIVE 2011 LOAD FORECAST

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This report has been prepared for the use of the client for the specific purposes identified in the report. The conclusions, observations and recommendations contained herein attributed to R. W. Beck, Inc. (R. W. Beck) constitute the opinions of R. W. Beck. To the extent that statements, information and opinions provided by the client or others have been used in the preparation of this report, R. W. Beck has relied upon the same to be accurate, and for which no assurances are intended and no representations or warranties are made. R. W. Beck makes no certification and gives no assurances except as explicitly set forth in this report.

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EXECUTIVE SUMMARY

R. W. Beck, an SAIC Company (R. W. Beck) was retained by Pedernales Electric Cooperative (PEC) to prepare a forecast of peak load and energy requirements of PEC (2011 Load Forecast). The 2011 Load Forecast was prepared by R. W. Beck to identify future loads upon which an additional distribution system assessment was based. R. W. Beck used an econometric approach to forecast retail electricity sales and overall system net energy for load (NEL) and peak demand for the PEC system. Load data for PEC's largest member, Texas Lehigh Cement Company (Centex), were separately analyzed but were ultimately excluded from the Forecast.

A load forecast is a critical input to many utility processes including, but not limited to, generation resource planning, fuel and purchased power budgeting, transmission planning, financial planning and budgeting, and staffing. A rigorous and detailed process that relies on recognized standards of practice, as well as a thorough review of results by various parties, is essential to PEC operations and long-term planning.

R. W. Beck performed an econometric analysis of PEC's electricity sales by major rate classification, generally over the period 1990-2010 (Study Period), resulting in regression equations that explain electricity sales as a function of various economic and demographic data for the economic area, prices of electricity and natural gas, weather, and other variables. Similar analyses of monthly distribution loss factors (combining both line and transformer losses and billing cycle differentials) and load factors were also performed to establish appropriate forecasting equations for these factors, driven primarily by weather conditions. Independent projections of the explanatory variables, including assumed normal weather conditions, were then combined with the regression equations to generate forecasts of electricity sales, distribution loss factors, and load factors. Forecast of NEL and peak demand were derived from the total sales forecast based on the forecasted distribution loss factors and load factors.

The 2011 Load Forecast results include a Base Case that reflects a mid-range economic scenario utilizing economic projections provided by IHS Global Insight, a widely utilized provider of such projections in the utility industry. The Base Case results reflect projected growth rates for system NEL of approximately 4.3 percent over 2011-2020 and 3.6 percent over 2021-2030. This compares to historical growth over 2001-2010 of approximately 4.8 percent. Similarly, the Base Case results reflect projected growth rates for summer and winter peak demand of approximately 4.2 percent over 2011-2020 and 3.6 percent over 2021-2030. This compares to historical growth over 2001-2010 of approximately 5.3 percent and 4.1 percent for summer and winter peak demand, respectively.

Figures ES-1 and ES-2 below depict the historical and projected system NEL and summer and winter peak demand, excluding Centex.



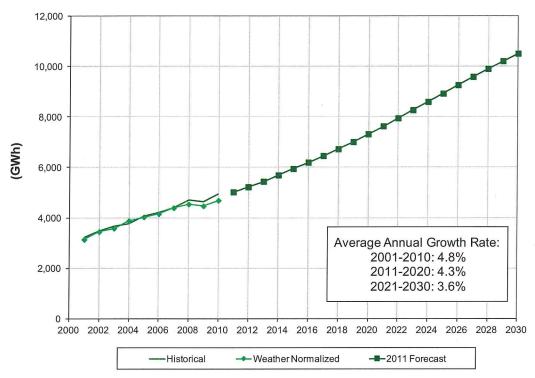


Figure ES-1: Historical and Projected System NEL

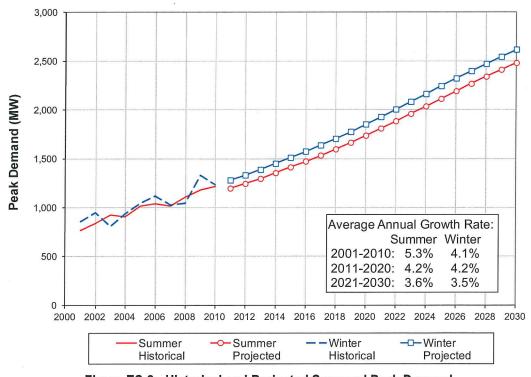


Figure ES-2: Historical and Projected Seasonal Peak Demand

The resulting residential member count and electricity sales forecasts are summarized in Table ES-1. The peak demand forecast was adjusted upward slightly during the distribution system planning effort to include additional load primarily in the Cedar Park area that was deemed to be not implicit in the organic system forecast resulting directly from the forecast equations. In order to capture this adjustment across the range of forecast determinants, an equivalent amount of electricity sales were added in a "Spot Loads" category, as the additional load was not specifically classified. As shown in Table ES-1, this additional load grows from approximately 1 percent of sales in 2015 to approximately 3 percent by 2030.

Table ES-1
Historical and Projected Member and Sales Data

		Retail Electricity Sales (GWh)			
	Residential		Non-	Spot	
	Members	Residential	Residential	Loads	Total
Histori	cal				
2001	144,730	2,329	821	0	3,151
2004	170,047	2,595	981	0	3,576
2007	195,612	3,047	1,132	0	4,179
2010	211,541	3,455	1,325	0	4,780
Project	ted				
2011	215,968	3,406	1,360	0	4,765
2012	221,419	3,527	1,438	9	4,975
2013	227,346	3,644	1,520	21	5,185
2014	233,606	3,770	1,612	36	5,419
2015	240,053	3,900	1,708	53	5,660
2020	275,097	4,601	2,224	147	6,972
2025	314,824	5,405	2,837	263	8,505
2030	352,732	6,192	3,485	336	10,013

Table ES-2 below provides historical and projected system load data (NEL and peak demand as measured at PEC's delivery points) for selected years, excluding Centex. As shown below, summer peak demand is expected to grow from approximately 1,196 MW in 2011 to 1,737 MW in 2020, an increase of nearly 550 MW, or approximately 45 percent, over the initial 10-year period of the forecast horizon. Similarly, winter peak demand is expected to grow from approximately 1,280 MW in 2011 to 1,852 MW in 2020, an increase of approximately 570 MW, or 45 percent, over the initial 10-year period of the forecast horizon.

Table	ES-2
Historical and Projected S	ystem Requirements Data

	NEL	Peak Demand (MW)		
Year	(GWh)	Summer	Winter	
Historical				
2001	3,236	766.9	858.9	
2004	3,767	907.9	935.5	
2007	4,398	1,013.0	1,025.0	
2010	4,935	1,217.5	1,232.3	
Projected				
2011	5,024	1,196.4	1,279.8	
2012	5,222	1,243.4	1,331.7	
2013	5,443	1,295.6	1,388.2	
2014	5,688	1,353.7	1,450.0	
2015	5,942	1,412.9	1,511.2	
2020	7,319	1,736.7	1,852.0	
2025	8,928	2,112.9	2,244.6	
2030	10,511	2,481.5	2,617.9	

Exhibit A contains detailed tabular results across all forecast determinants.

In addition to the Base Case results discussed above, R. W. Beck also produced results for the following scenarios:

- High Economic Case
- Low Economic Case
- Severe Peak Weather Case

The High and Low Economic Cases correspond to higher and lower projections of population and economic activity growth in PEC's service area over the forecast horizon. For these scenarios, the entire set of forecast equations were simulated with alternative economic projections to result in a complete set of forecast determinants. The Severe Peak Weather Case reflects peak day weather conditions for the summer and winter peak that correspond to the 95th percentile of potential conditions (i.e., midpoint of the top tenth percentile), based on an analysis of historical peak day weather over 1992-2010. For this scenario, only the load factors in the months of January and August (the months determined to most often represent the seasonal peaks) were varied.

Table ES-3 below provides seasonal peak demands for the historical period and projected values over the forecast horizon, including results for the Base Case and the three alternative scenarios discussed above. Exhibit A provides further detailed results across the forecast determinants, although the Severe Weather Case encompasses variations related to annual seasonal peak demand only.

For purposes of the downstream System Planning Study and in consultation with R. W. Beck, PEC decided to utilize the seasonal peak projections reflected in the Severe Weather Case.

EXECUTIVE SUMMARY

Table ES-3
Historical and Projected Peak Demand Data

	Summer Peak Demand				Winter Peak Demand			
Year	Base Case	High Economic Case	Low Economic Case	Severe Weather Case	Base Case	High Economic Case	Low Economic Case	Severe Weather Case
Historical								
2001	766.9				858.9			
2004	907.9				935.5			
2007	1,013.0				1,025.0			
2010	1,217.5				1,232.3			
Projected								
2011	1,196.4	1,225.2	1,167.6	1,258.6	1,279.8	1,326.0	1,233.4	1,438.5
2012	1,243.4	1,290.5	1,196.3	1,308.1	1,331.7	1,390.1	1,273.1	1,496.8
2013	1,295.6	1,354.6	1,236.3	1,362.9	1,388.2	1,459.0	1,317.3	1,560.4
2014	1,353.7	1,425.0	1,282.1	1,424.1	1,450.0	1,533.6	1,366.3	1,629.8
2015	1,412.9	1,496.8	1,328.7	1,486.3	1,511.2	1,607.8	1,414.2	1,698.5
2020	1,736.7	1,887.9	1,584.8	1,827.1	1,852.0	2,019.5	1,683.8	2,081.7
2025	2,112.9	2,344.7	1,879.3	2,222.8	2,244.6	2,497.5	1,989.9	2,522.9
2030	2,481.5	2,807.9	2,151.7	2,610.5	2,617.9	2,968.8	2,263.7	2,942.6

The following report and appendices detail the methodology, process, and results of the 2011 Load Forecast. The first section of the report provides some background on the project and an overview of the PEC system. The second section provides an overview of the underlying methodology, including a description of the econometric models and selected explanatory variables. This is followed by a description of the data sources that have been relied on for the various types of data needed for the Forecast. Next, a list of principal considerations and assumptions, which have been relied upon, are included to provide context for the results. Finally, the Base Case results across all forecast determinants are summarized, and the results of additional scenarios are discussed. Several appendices, containing detailed tabular results, the forecast equations, and economic data, accompany this report.

SECTION 1 BACKGROUND

1.1 Purpose of Report

R. W. Beck, an SAIC Company (R. W. Beck) was retained by Pedernales Electric Cooperative (PEC) to prepare a forecast of peak load and energy requirements of PEC (2011 Load Forecast). The 2011 Load Forecast was prepared by R. W. Beck to identify future loads upon which an additional distribution system assessment, also prepared by R. W. Beck, was based. R. W. Beck performed a similar system study in 2007 for which a similar load forecast was prepared (2007 Load Forecast). This report communicates the methodology, data sources, and resulting projections developed as part of the 2011 Load Forecast.

1.2 Overview of PEC System

PEC is a cooperative electric utility that delivers electricity to more than 237,000 active accounts throughout 8,100 square miles immediately west of Austin, Texas. PEC is the largest retail electric cooperative in the U.S., and is owned by its customer-members and directed by board members elected by its customer-members. PEC's headquarters is in Johnson City.

PEC's service area is organized into eight operating districts and extends into 24 counties in a predominantly rural region commonly referred to as the "Hill Country." PEC's service area has historically been rapidly growing because of its proximity to the Austin and San Antonio metropolitan areas.

PEC obtains wholesale all-requirements electric service from the Lower Colorado River Authority (LCRA) and recently renewed its agreement with LCRA for a period extending to 2041. However, PEC also purchases electricity from AEP Energy Partners (AEPEP) to supply the western portion of PEC's service area that is outside LCRA's territory. In addition, under the agreement with LCRA, PEC is allowed to make certain other purchases and has contracted with AEPEP for approximately 90 MW of renewable electricity from a wind farm operated by AEPEP.

1.3 Regional Economy

The U.S. economy recently experienced its worst recession since the Great Depression, beginning in December 2007 and ending during the third quarter of



SECTION 1

2009¹. During this period, the U.S. economy suffered five out of six quarters of real gross domestic product (GDP) declines and an unemployment rate that quickly shot up from 5 percent during the latter part of 2007 to nearly 10 percent by the end of 2009 and has stubbornly remained close to that level to date. While as early as last year most economists expected a fairly robust recovery, it appears that some of the early momentum, driven primarily by federal stimulus and inventory restocking, has been lost. Second quarter 2011 GDP growth came in at only 1.3 percent, and revisions to previous quarters show a deeper recession and weaker recovery than previously expected². While real GDP is above where it was before the financial crisis, payroll employment is still far below its previous peak.

Texas joined the country in recession in late 2008, but remained relatively resilient throughout the national downturn and is now well on its way to recovery. Payrolls began to rise in January 2010 and, by the end of the year, were up by 235,000 jobs or 2.3 percent. The expansion has continued in 2011, with payrolls increasing by 3.3 and 2.8 percent quarter-over-quarter (annualized) in the first and second quarters, respectively. Texas lost just over 430,000 jobs during the recession and has now recovered well above half of the jobs lost over the course of the recession. The unemployment rate has remained close to 8.2 percent since the last quarter of 2010.³

Austin was not able to avoid the national housing crisis and credit crunch completely, and, although it significantly outperformed the country during the recession, the metro's economy weakened significantly. Payrolls began to decline in the final months of 2008 and continued their descent through much of 2009. From their peak in August 2008 to their trough in September 2009, payrolls in Austin fell 3.3 percent. The Austin housing market also suffered, with home prices and housing starts dropping significantly. The Austin economy began to recover from the recession in the final months of 2009, when payrolls began trending slowly higher. Austin is one of the nation's top five metros, in terms of payroll growth during the last year, and the expansion has continued into 2011. Despite the moderate improvement in payrolls, the unemployment still ended the year at 7.1 percent, only slightly below the 7.4 percent rate recorded at the end of 2009.

Figure ES-1 below depicts historical and projected data on the unemployment rate for the State of Texas and the Austin metropolitan statistical area (MSA), as reported by IHS Global Insight.

¹ As reported by the Business Cycle Dating Committee of the NBER, the recognized authority for determining the start and end points of economic expansions and recessions.

² According to a July 2011 report by IHS Global Insight, real GDP growth in 2008 was revised down from 0.0% to -0.3% and in 2009 from -2.6% to -3.5%, resulting in a peak-to-trough recessionary decline of 5.1% instead of the previously reported 4.1%.

Much of the information in the preceding paragraph is from IHS Global Insight's Regional Outlook Report for the State of Texas dated August 25, 2011.

⁴ Information in the preceding paragraph was taken from IHS Global Insight's Regional Outlook Report for the Austin Metropolitan Statistical Area dated July 28, 2011.

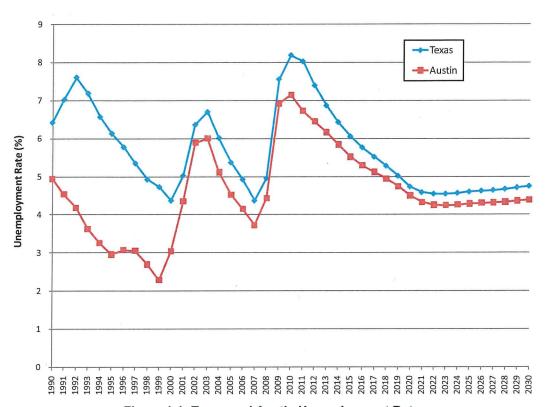


Figure 1-1: Texas and Austin Unemployment Rate

While updated census numbers for the Austin region were not yet available, from 1990 to the 2000 Census, the population of the five-county Austin-Round Rock-San Marcos MSA expanded at an annual rate of 4.0 percent. In the second half of the decade, out-of-state workers were drawn by the technology recovery. During the recent recession, Austin continued to significantly outperform the nation. The metro's population has grown at an average annual rate of 3.7 percent since 2006, reaching 1.7 million as of July 1, 2009. This ranks Austin among the top 10 fastest-growing metros in the United States. Forbes recently ranked Austin as the number one city in terms of growth prospects for the next decade. Austin joins three other Texas cities—Dallas, Houston, and San Antonio, in the top ten.⁵

The Austin MSA comprises Bastrop, Caldwell, Hays, Travis, and Williamson Counties. The last three of these comprise more than 60 percent of PEC's customermembers. As a result of its dominance of the periphery of Austin and proximity to San Antonio, PEC is well-positioned to grow significantly into the future.

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⁵ "The Next Big Boom Towns In The U.S." <u>www.forbes.com</u>, July 6, 2011.

SECTION 2 OVERVIEW OF METHODOLOGY

The 2011 Load Forecast prepared by R.W. Beck uses an econometric approach to forecast retail electricity sales and overall system net energy for load (NEL) and peak demand. Econometric forecasting makes use of regression to establish historical relationships between energy consumption and certain explanatory variables based on fundamental economic theory and experience. The validity and significance of historical relationships and the overall models are evaluated using various statistical measures. Models that, in the view of the analyst, best explain the historical variation of energy consumption are selected. These historical relationships are generally assumed to continue into the future, and the selected models are then simulated using projections of the explanatory variables, resulting in projections of energy usage and other modeled load concepts.

Econometric forecasting can be a more reliable technique for long-term forecasting than trend-based approaches and other techniques, because the approach results in an explanation of variations in electric consumption rather than simply an extrapolation of history. As a result of this approach, utilities are more likely to anticipate departures from historical trends in energy consumption, given accurate projections of the driving variables. In addition, understanding the underlying relationships that affect energy consumption allows utilities to perform scenario and risk analyses, thereby improving decisions.

2.1 Model Specification

Econometric models were used to forecast energy sales and member counts by major rate classification. The methodology utilized to forecast residential sales involves a separate analysis and forecast of the trend in residential member counts and the average energy use per residential member, which are then combined to produce a projection of residential sales. This treatment is common for homogeneous member types and useful for benchmarking to commonly-held beliefs and understanding of the energy-using characteristics of the typical household, as well as the expected growth in service area residents.

Non-residential sales were analyzed in total, rather than being separated into customer counts and average use for modeling, as the members in this class are generally not homogenous. An analysis of average usage of such a non-homogenous group of members does not yield the kind of useful information and results that can be cross-referenced to economic theory and intuition in the way that the residential analysis does. Non-residential sales were grouped together for modeling as the historical period exhibited significant reclassifications and class migration.



Residential and non-residential sales were then simply summed to represent total electricity sales.

The models developed for the forecast are of a functional form that is often referred to as "double-log" form, in which the dependent and major independent variables are natural logs of the variables being analyzed. The following is the general form of the equation:

$$\ln Y_t = \alpha + \beta_1 \ln X_{1t} + \beta_2 \ln X_{2t} + \dots + B_n \ln X_{nt} + C_t$$

In this equation, Y_t is the dependent variable, such as average residential usage per member per year. X_{1t} through X_{nt} are independent, or explanatory, variables, such as average income, electricity price, and weather.

The Greek characters α , or alpha, and each β , or beta, are estimated by the statistics program. In this functional form, β represents the percentage change in Y that can be expected from a 1 percent change in the associated X term and is often referred to as "elasticity". The coefficient for the variable average income in a model of average residential usage would then represent the income elasticity of average annual residential sales.

The variable \mathcal{C}_t , or epsilon, is the amount of error in the equation's estimate of the natural log of the dependent variable and represents other impacts that are not significant enough to model or for which data cannot be easily obtained or simply natural volatility related to people's behavior.

Variables that can have the value of zero, such as weather variables or binary variables, cannot be logged, because the natural log of zero is undefined. These variables are in the equation in non-logged form and can be interpreted to represent the percentage change in Y that can be expected from a one *point* change in X, as opposed to a 1 percent change in X. While these coefficients are not actually elasticity measurements, they are still often referred to in that way for simplicity.

The models were estimated using ordinary least squares in the computer program Econometric ViewsTM. The values for the forecast were computed directly in the statistics program and exported. An ExcelTM spreadsheet was then used to perform further calculations which derive the remaining forecasted variables.

2.2 Derivation of NEL and Peak Demand

Forecasted monthly net energy for load was derived from the summation of sales across customer classifications and estimated loss factors for each month. Monthly distribution loss factors, which incorporate billing cycle differentials and true distribution system line and transformer losses, were projected based on a regression analysis of the historical loss factors over the study period. This regression analysis captures variations in distribution loss factors primarily as a function of current and lagged month average weather conditions, calendar days, and seasonal factors.

Similarly, forecast monthly peak demands were derived from monthly NEL based on a forecast of monthly load factors. Monthly load factors were modeled primarily as a function of average and peak day weather conditions. As these are assumed to be

OVERVIEW OF METHODOLOGY

constant and based on normal weather conditions, load factors are stable over the forecast horizon. It is also common in load forecasting studies for load factor to be impacted by electricity prices, the mix of industrial load, and other variables. However, these were not found to have a significant impact on PEC's load factor. This may be a reflection of the fact that PEC does not have a large amount of industrial load outside of Centex.

2.3 Forecast Scenarios

In addition to the Base Case Forecast, R. W. Beck has also prepared high and low forecasts to capture the uncertainty in future trends of population and economic activity (High and Low Economic Cases). These forecast ranges are intended to encompass 80 percent of the uncertainty in the driving variables. These results are produced by simulating the forecast equations with higher and lower assumptions regarding future economic and demographic growth derived from information regarding the historical accuracy of such projections provided by a separate data provider, Woods and Poole Economic, Inc. Such data was obtained from Woods and Poole as Global Insight does not publish such data, and both providers utilize fairly similar methodologies for their projections. As the forecast of energy requirements is directly integrated with the peak demand forecast, the variations in the energy forecast produced for the forecast ranges also result in variations in the peak demand forecast.

In order to inform the downstream distribution system study, R. W. Beck also produced a Severe Weather Case impacting summer and winter peak demand. The Severe Weather Case was produced by varying the future values of peak day weather conditions, based on an analysis of historical peak weather conditions, as described further in Section 3. In addition, the Severe Weather Case focuses exclusively on peak demands of the summer and winter seasonal peak months only. Accordingly, NEL is not impacted and peak demands for the remaining months are not impacted by this scenario.

SECTION 3 DATA SOURCES

3.1 Historical System Data

Data regarding monthly numbers of member accounts, electric sales, and revenues by rate classification were provided by PEC staff for the period 1990-2010. The most recent portion of this data was obtained from PEC for purposes of this project, while other portions were obtained during prior projects. In each case, a significant overlap of data was obtained to assure continuity and consistency across time.

PEC staff also provided data regarding monthly net energy for load (NEL) and peak demand. The former corresponds to energy purchased under various power supply contracts, including purchases from the Lower Colorado River Authority (LCRA) and American Electric Power. The peak demand data reflects the maximum 15-minute integrated demand as measured at the delivery points of PEC. Monthly NEL and peak demand values reflect LCRA's billing cycle, which runs from the 25th of the prior month to the 24th of the current month.

NEL is typically greater than total retail sales by the amount of losses incurred over the members' distribution lines and related equipment (e.g., transformers) and unbilled sales, such as energy use at PEC's offices and system facilities. In addition, however, NEL differs from total retail sales on a monthly basis as a result of timing differences related to retail billing cycles. Loss factors computed for purposes of the Forecast represent a percentage adjustment to account for all of these differences between NEL and total sales.

3.2 Economic and Demographic Data

Data regarding the economy and population of the counties that encompass the PEC service area were obtained from IHS Global Insight (Global Insight), a widely used provider of such data in the utility industry. These data include county population, households, employment, personal income, retail sales, and gross regional product. Global Insight produces updated projections at least semi-annually (or when a change in conditions or outlook warrant).

Based on several econometric experiments, it was determined that the closest fit to the historical retail electric sales data resulted from using a simple summation of Comal, Hays, and Williamson Counties (Tri-County Area), which comprise more than 60 percent of the members of PEC and represent the majority of PEC growth. A table of selected historical and projected data reported by Global Insight for the Tri-County Area is shown in Exhibit B. Although all data was not necessarily utilized in each of the forecast equations, each was examined for its potential to explain changes in historical electric sales. Note that "personal income" refers to the total income earned



SECTION 3

by the population in a county rather than average personal income per capita, thereby combining population and income per capita concepts.

Supplemental economic and/or demographic data was gathered by R. W. Beck and PEC staff from certain other sources. Additional data regarding historical and projected population trends was gathered via estimated and projected data provided by the Texas State Data Center (TX SDC). However, this data was found to be outdated and actually had previously been gathered for purposes of the 2007 Forecast. PEC also provided R. W. Beck with alternative projections published by Esri, Inc.; however, this data was benchmarked to the similar data obtained from IHS Global Insight and found to reflect a similar outlook.

3.3 Weather Data

Historical weather data for the Austin-Camp Mabry weather station was provided by the National Climatic Data Center. The influence on electricity sales of weather has been represented through the use of two data series—heating and cooling degree days (HDD and CDD, respectively). Degree days are derived by comparing the average daily temperature and a base temperature, typically 65 degrees Fahrenheit, which was the base relied on herein. To the extent the average daily temperature exceeds 65 degrees Fahrenheit, the difference between that average temperature and the base is the number of CDD for the day in question. Conversely, HDD result from average daily temperatures which are below 65 degrees Fahrenheit. Heating and cooling degree days are then summed over the period of interest; for purposes of this forecast, degree days summed over a calendar month and over the LCRA billing cycle, as discussed above, were used.

Because predicting future long-term weather patterns is not practical, normal weather conditions have been assumed in the projected period. Thirty-year normal monthly HDD and CDD were provided by NOAA and are generally based on average weather conditions from 1971 through 2000⁶.

Figure 3-1 shows a graphical comparison of historical and normal annual HDD and CDD for the Austin-Camp Mabry weather station. The data reflects that the PEC service territory experiences relatively greater amounts of warm than cold weather, although, given the limited penetration of natural gas in the region, electric loads in the winter are highly sensitive to the latter.

Updated normal weather data reflecting the period 1981-2010 became available from the NOAA in July 2011. However, this was not sufficiently early in the project to be useful.

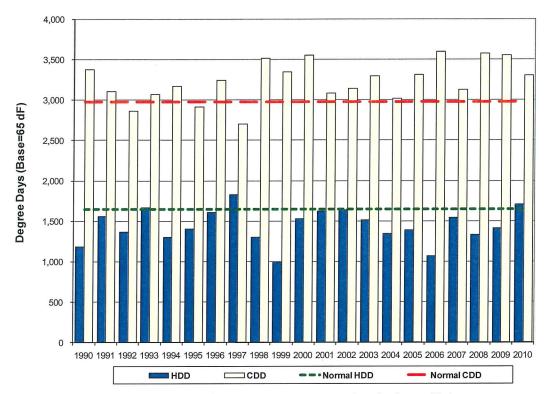


Figure 3-1: Actual v. Normal Weather Data – Austin Camp Mabry

The influence of weather on monthly peak load factor was represented and tested using several weather-related data series. In addition to the HDD and CDD series discussed above, several weather variables associated with the peak day weather were constructed. Daily weather statistics were compiled, including high and low "dry bulb" temperatures, average dew point, humidity, snowfall, and rainfall. Peak day weather determinants were then determined based on information regarding the timing of PEC's peak demand. In addition, high and low temperatures from the day prior to the peak day were similarly determined.

For the forecast period, average of peak weather conditions over 1992-2010 were assumed to reflect conditions that could be expected on PEC's peak days. For purposes of the Severe Case discussed later herein, a range of potential peak day conditions were developed based on the historical volatility in summer peak day conditions.

Figure 3-2 and 3-3 below depict the daily high temperature on the summer peak day and the daily low temperature on the winter peak day, respectively, over 1992-2010 compared to their average values over 1992-2010, which form the basis for the Base Case results, and similar values assumed for the Severe Case. The data shows a great deal of volatility in peak day temperatures (note however that the chart has a Y-axis that is restricted to the range of temperatures of interest). For the winter peak low temperatures in Figure 3-3, the 2010 value is highlighted to indicate that the value for this observation did not influence the analysis as it occurred in February 2011, after the end of the study period. Note that both the 2009 and 2010 values are somewhat below even the severe case.

SECTION 3

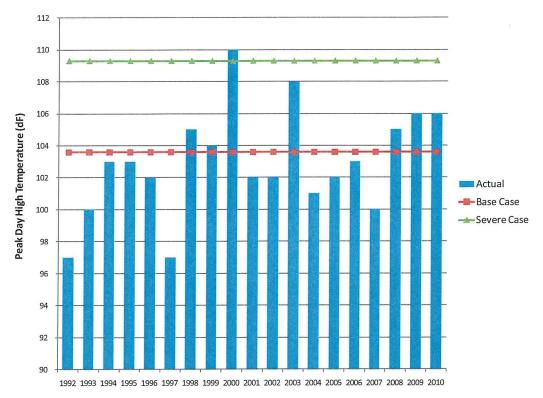


Figure 3-2: Range of Peak Summer High Temperature

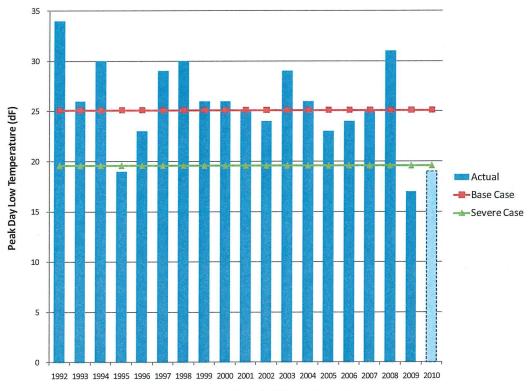


Figure 3-3: Range of Peak Winter Low Temperature

3.4 Real Electricity Price Data

The real price of electricity is represented by real average revenue, which is calculated by dividing retail electricity revenues by electricity sales and normalizing for inflation using the implicit price deflator for personal consumption expenditures (PCEd), as reported by the U. S. Bureau of Economic Analysis. The adjustment for inflation is accomplished by dividing each period's nominal average revenue by the PCEd value. Note that the PCEd, as well as the other components of the implicit gross domestic product deflator, are revised periodically, even several years after the fact, as more supporting data becomes available.

The forecast model for average residential usage includes a 12-month moving average of this price term to reflect that the demand response from price changes takes some time to be felt. However, it is important to recognize that this slightly lagged demand response may only capture discretionary use. Changes to electric consumption resulting from the replacement of the stock of electric appliances (which increase the average efficiency of appliances) take much longer to be felt and may be more significant. This longer lag between changes in electricity price and variations in load could be modeled instead of, or in addition to, this shorter lag. However, the lack of data of a sufficiently long history and the subtlety of the relationship, combined with the influence of more general technological change, prevented such an effort.

Projected electricity prices are assumed to increase at the rate of inflation. Consequently, the real price is projected to be essentially constant. Figure 3-4 depicts the historical and projected trend of the real average price of electricity for PEC's residential members as compared to the same for the average residential consumer in Texas. Note that the *real* price of electricity has fallen by about 20 percent over the last 3 years.

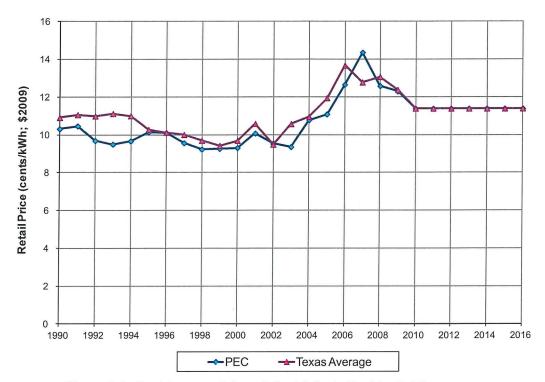


Figure 3-4: Real Average Price of Electricity to Residential Consumers

3.5 Real Natural Gas Price Data

The real price of natural gas for the state of Texas (on average) was obtained from the Energy Information Administration for the Study Period. Data reflective of actual end-user residential prices and city-gate prices were tested for their ability to explain variation in electric sales. Adjustment of nominal prices to represent constant dollars was performed as discussed above for electricity prices using the PCEd.

Theoretically, a rise in average natural gas prices should result in an increase in electric usage, as these commodities can be considered imperfect substitutes, particularly for home heating. This influence of natural gas prices can result from multiple behavioral changes, including the use of portable electric space heaters (gas or electric) and electric blankets (short-run response) as a substitute for a primary heating system (central or room, gas or electric), and the increased saturation of home appliances to the resource expected to be cheaper on average over time (long-run response).

Projected natural gas prices are assumed to increase at the rate of inflation. Consequently, the real price is projected to be essentially constant. Figure 3-5 below depicts the historical and projected trend of real residential natural gas prices for the state of Texas. Note that the *real* price of natural gas to consumers has fallen over 20 percent over the last 3 years.

DATA SOURCES

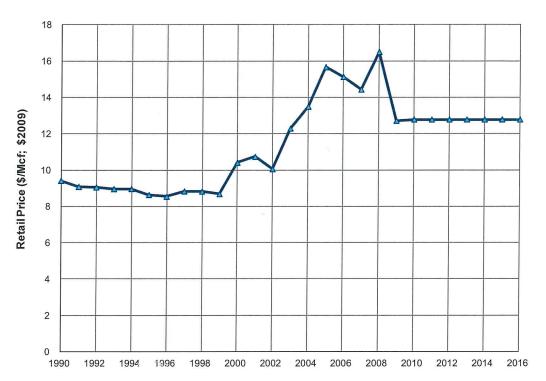


Figure 3-5: Real Average Price of Natural Gas to Texas Residential Consumers

SECTION 4 PRINCIPAL CONSIDERATIONS AND ASSUMPTIONS

In preparing the 2011 Load Forecast, as summarized in this report, R. W. Beck has made certain assumptions with respect to conditions that may occur in the future. While we believe these assumptions are reasonable for the purposes of the forecast, they are dependent on future events, and actual conditions may differ from those assumed. While we believe the sources of the information provided to us, or prepared by others, to be reliable and the use of such information to be reasonable for the purposes of the forecast, we offer no other assurances with respect thereto. For example, to the extent that economic, demographic, weather, or other conditions occur that are different from those assumed by us or from the information provided to us or prepared by others, the actual future PEC load can be expected to vary from the forecast.

It should be emphasized that the confidence associated with any forecast varies inversely with the length of the forecast horizon. The probability of other factors affecting forecasted values increases with uncertainty about future developments; this uncertainty increases with the length of the forecast horizon. With this in mind, the 2011 Load Forecast should be seen as providing reasonable estimates of PEC's future demand and energy requirements for the purposes for which the Forecast is intended. However, these estimates are subject to the future effects of factors that cannot be reasonably foreseen at this time.

The development of the 2011 Load Forecast was based upon the following principal consideration and assumptions:

- The data on which this Forecast is based, both external (economic, weather, etc.) and internal (energy sales, peak demands, etc.) are assumed to be accurate. While R. W. Beck has reviewed the data for major anomalies, R. W. Beck can give no assurances that the data are without error. In particular, recent historical economic data at the county level (generally for the period after 2009) actually represent projections by IHS Global Insight, as actual data are unavailable. Further, even "actual" economic and demographic data for the most recent several years is subject to substantial revision as more supporting data becomes available. Therefore, the relationships upon which the forecast is based may be somewhat in error, as the "true" data could show a different quantitative relationship. In particular, the 2010 Census was recently completed but has yet to be fully captured in the economic and demographic data obtained from IHS Global Insight.
- The future influence on energy sales of the economic, demographic, and weather factors, on which the econometric models are based, was assumed to be similar to the estimated influence of such factors generally over the Study Period. Similarly,



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the estimated influence on distribution loss and load factors of weather conditions and seasonal factors during the Study Period was assumed to be representative of the future.

Although the econometric models implicitly account for the historical relationships between energy usage and the following factors to the extent they have occurred in the past, the Forecast does not explicitly reflect extraordinary potential future effects of: (a) increases in appliance design efficiency or building insulation standards; (b) development of substitute energy sources; (c) members switching to traditional or new types of electrical appliances from other alternatives (e.g., electric vehicles); (d) members switching from electrical appliances to other alternatives; or (e) variations in load that might result from legal, legislative, regulatory, or policy actions.

SECTION 5 OVERVIEW OF RESULTS

The following discussion provides some detail regarding the results of the econometric analysis of retail electricity sales, the resulting forecasts of residential members and residential and non-residential sales, and the forecasts of system net energy for load (NEL) and seasonal peak demand. For the Base Case results for each forecast determinant, graphs are provided that depict both the current results and similar results from the 2007 Forecast, if applicable. The charts show several years of history and the forecast horizon, although the time period shown is shortened on both ends to limit the vertical scale and focus more on recent historical data. Additional numerical detail is provided in Exhibit A.

For further information regarding the regression equations used to produce these results, see Exhibit C.

5.1 Residential Class

For the residential class, the analysis of electric sales was separated into independent analyses of the number of member accounts and average consumption per account, the product of which is total residential sales. This approach is common for sufficiently homogenous customer classes and, as it results in projections of both customer counts and average usage, is not only directly useful in various planning analyses but also can be more easily benchmarked to intuition and knowledge of PEC staff with "boots on the ground" than a forecast of total sales only.

5.1.1 Residential Member Counts

The number of residential customers is typically projected on the basis of the historical relationship between residential customers and population or the number of households, either in the utility's service area or surrounding county. If such data were reported and accurate for a specific utility's service area, the data would be nearly perfectly correlated and, indeed, essentially analogous to residential members. However, utility forecasting typically must rely on demographic and economic data that represents a somewhat different geographic area than, or some amalgamation of reported geographic areas that does not correspond to, the exact service territory. In addition, competition can sometimes exist in various forms in some service areas. The typical econometric model of residential utility members then reflects the portion of the households in the total geographic area that are served by the utility. Alternately, the model may reflect how that proportion might be trending through time, as a result of differing growth rates or competitive dynamics.

The regression analysis indicated that residential customer counts can be best explained as a function of households in the Tri-County Area. The forecasting equation, shown in Exhibit C, reflects a "differenced" functional form, wherein the equation is explaining the percentage changes in customer counts rather than customer counts in absolute terms. The primary parameter on household counts, referred to as

"elasticity," is 0.82, which implies growth of slightly less than one-for-one for residential customer counts.

The resulting projection of residential members, as compared to the results of the 2007 Forecast, is shown in Figure 5-1 below. The results reflect slower growth than the recent past but still sufficient to add over 63,000 members, or 30 percent, over the first 10 years of the forecast horizon.

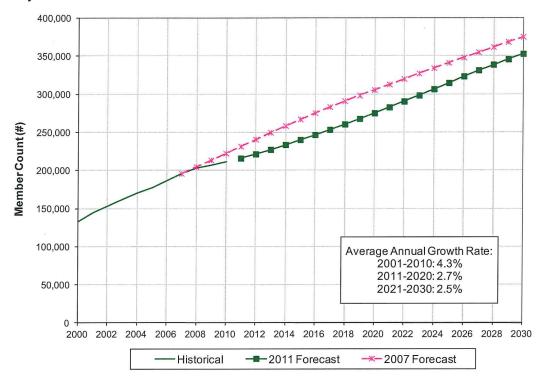


Figure 5-1: Historical and Projected Residential Members

The growth rates presented above can be compared to the growth rates assumed for household counts in the Tri-County Area, which are 4.5 percent over 2001-2010, 4.0 percent over 2011-2020, and 3.3 percent over 2021-2030. The results reflect that the number of residential members is expected to grow slightly slower than the number of households in the Tri-County Area. The larger differential between the county households and residential customer growth rates over the forecast horizon reflects that, relative to the Tri-County Area household count growth, PEC's member count growth has been slowing over the last several years.

5.1.2 Residential Average Consumption

The regression equation used to forecast average residential usage reflects that average residential usage is best explained by a combination of the following variables:

- Real average personal income per household
- Real electricity and natural gas prices
- Weather variables
- Seasonal factors

The elasticity of average usage with respect to average income, also referred to as the "income elasticity", is estimated in the residential average use model to be 0.23. This reflects that a 10 percent increase in average income in the Tri-County Area can be expected to result in a 2.3 percent increase in average residential use. Similarly, the elasticity with respect to real electricity prices is estimated to be -0.15, implying that a 10 percent increase in electricity prices will yield a 1.5 percent *decrease* in consumption, all else equal. The estimated elasticity with respect to natural gas prices is much smaller in absolute terms, at 0.03. These results dovetail with those of numerous similar studies in the utility industry over the years.

Income and the price variables are included in the model as a reflection of a considerable weight of economic theory suggesting that these variables affect consumers' purchasing habits. In the case of income, the effect is rather indirect. As average incomes rise, current residents and new residents will tend to build larger homes or add on to existing homes, upgrade other aspects of their homes resulting in greater electric use, and/or purchase new and/or larger electric appliances. In the case of price, the influence is more direct. When *real* electricity prices go up (particularly versus *real* natural gas prices), PEC's residential members will tend to conserve to some degree and/or use alternative appliances to avoid primary appliance use (e.g., portable heaters) and, in the longer term, will be encouraged to replace primary electric appliances with more efficient ones or alternative-fueled appliances.

The remaining variables capture average temperatures, in the form of heating and cooling degree days, and various adjustments to address anomalies in the data and persistent residual patterns. Weather variables include the one month lag of heating and cooling degree days to capture the effect of billing cycle differentials to the calendar-correct weather data. Note that the estimated influence of the lagged weather variables is considerably stronger than the current month variables. This suggests that the preponderance of billed sales in any particular month is heavily weighted toward usage in the prior month (i.e., the date ranges of most billing cycles are considerably later than actual usage). However, the model also reflects that beginning about 2001, billing cycle lags were reduced, in that this phenomenon became much less pronounced (i.e., prior month weather conditions began to be a less dominant indicator of billed sales). In addition, beginning about 2003, the month of December began to reflect considerably greater billed sales, perhaps reflecting more regular meter reading activity during the period leading up to the holidays.

Exhibit C contains the regression equation used to forecast residential average use, including both the full equation and a version that represents the more recent period of data and simplifies for the change in billing cycle weighting discussed above.

Figure 5-2 below depicts the historical actual and weather-normalized values and resulting projection of average use per residential member, as well as the projection reflected in the 2007 Forecast. The data reflect a considerable downward weather-normalization impact over the last few years as weather has been significantly more severe during the summer and, for 2010, more severe in both the summer and winter. The forecast reflects an increase in average usage, on a weather-normalized basis, resulting from both improved economic conditions and a significant reduction in electricity prices, driven primarily by a sharp reduction in the cost of natural gas-fired electric generation. While retail natural gas prices are also projected to decline

significantly from the levels seen over the last several years, the influence on residential electric consumption is very limited in PEC's service area.

Exhibit C contains the forecasting equations and statistical output.

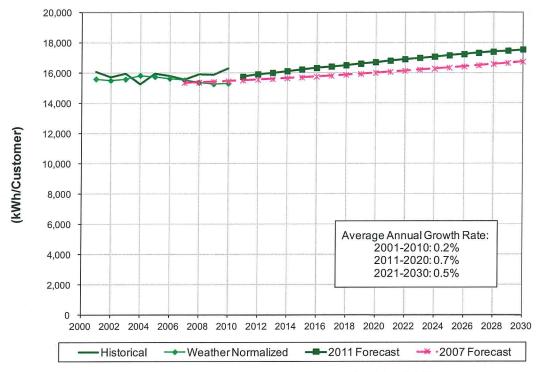


Figure 5-2: Historical and Projected Average Residential Usage

The historical trend and resulting projection of total residential electricity sales, reflecting the simple multiplication of the member count and average usage forecast discussed above, are depicted in Figure 5-3.

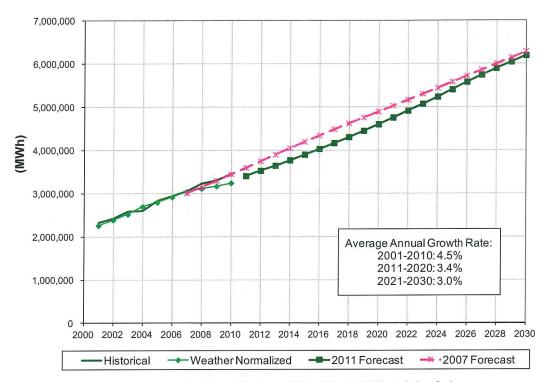


Figure 5-3: Historical and Projected Residential Electricity Sales

5.2 Non-residential Class

PEC has several non-residential customer classes; however, a significant redesign of these classes was completed in late 2004 causing considerable migration across classes and to new classes. Accordingly, all non-residential billing data (excluding Centex) was combined under a single umbrella for the forecast. In addition, the non-residential forecast methodology does not reflect the same separate forecast of member counts and usage that was utilized for the residential forecast. This reflects the fact that non-residential customers are not sufficiently homogenous to be conducive to this approach, and the ebb-and-flow of competitive dynamics, for which data are really not obtainable, has more of an impact on the average size of commercial businesses and industries than macroeconomic data. Therefore, the non-residential forecast simply entails a forecast of total sales to this group of members.

The non-residential sales equation reflects that commercial sales are best explained by total real personal income in the Tri-County Area and the intensity of weather. The non-residential sales equation also contains adjustments to capture the acquisition of the Kimble system. The inclusion of total personal income in the model captures the total earning and spending power of the region's residents. The elasticity on personal income is somewhat below 1.0, which implies that sales growth for this class will lag the growth in the earning and spending power of the regions residents. This is likely the result of both slightly lower electric sales growth for PEC's service area relative to the region and gradual improvements in the efficiency of the utilization of electricity.

The historical actual and weather-normalized sales data and resulting projection of non-residential sales are depicted in Figure 5-4, as well as the projection reflected in

the 2007 Forecast. As shown in the figure, the influence of weather is considerably less for the non-residential class. The resulting projection starts somewhat lower than the 2007 Forecast but implies similar growth rates.

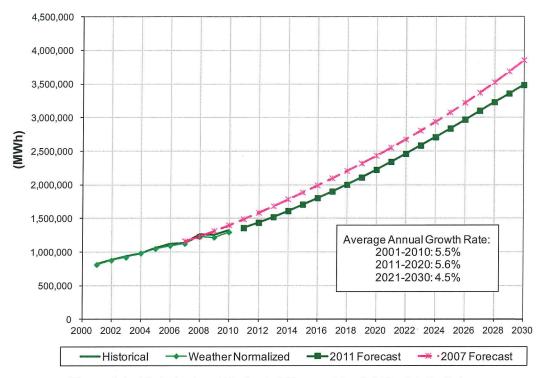


Figure 5-4: Historical and Projected Non-residential Electricity Sales

5.3 Total Electricity Sales Forecast

Based on a simple summation of the forecasts of residential and non-residential sales discussed above, a forecast of total electricity sales was initially produced for purposes of a preliminary draft forecast. However, during the downstream system planning effort, the peak demand forecast was adjusted upward slightly to include additional load primarily in the Cedar Park area that was deemed to be not implicit in the organic system forecast resulting directly from the forecast equations. In order to capture this adjustment across the range of forecast determinants, an equivalent amount of electricity sales were added in a "Spot Loads" category, as the additional load was not specifically classified. While the inclusion of this additional load was deemed important for the system planning study, the impact on the overall forecast is small, equivalent to approximately 1 percent of sales in 2015 and 3 percent by 2030.

Table 5-1 below provides a numerical summary of the retail electricity sales forecast for selected years.

Table 5-1
Historical and Projected Member and Sales Data

4 5			Retail Electric	ity Sales (GWh)
	Residential		Non-	Spot	
	Members	Residential	Residential	Loads	Total
Histori	cal				
2001	144,730	2,329	821	0	3,151
2004	170,047	2,595	981	0	3,576
2007	195,612	3,047	1,132	0	4,179
2010	211,541	3,455	1,325	0	4,780
Project	ted				
2011	215,968	3,406	1,360	0	4,765
2012	221,419	3,527	1,438	9	4,975
2013	227,346	3,644	1,520	21	5,185
2014	233,606	3,770	1,612	36	5,419
2015	240,053	3,900	1,708	53	5,660
2020	275,097	4,601	2,224	147	6,972
2025	314,824	5,405	2,837	263	8,505
2030	352,732	6,192	3,485	336	10,013

The historical data and resulting projection of total electricity sales, reflecting the summation of the residential and non-residential sales forecasts and the Cedar Park spot loads discussed above, are depicted in Figure 5-6.

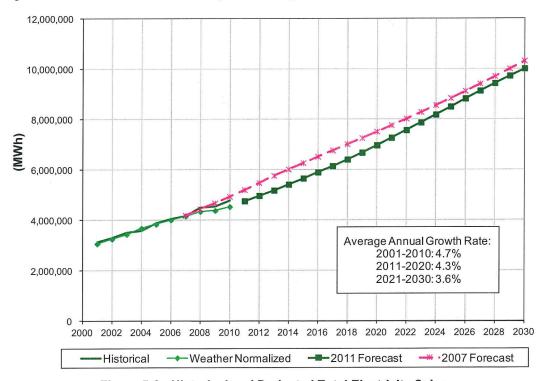


Figure 5-6: Historical and Projected Total Electricity Sales

5.4 Loss Factors

The forecast of total retail sales discussed above is translated into NEL, or net system energy requirements, by adding an estimate of distribution losses, derived from a regression analysis. The regression equation used to estimate distribution loss factors reflects that the majority of the variation in monthly loss factors is related to weather intensity, weather differentials among adjacent months, and other seasonal effects (number of days in each month versus typical billing cycle differences). The equation also includes an adjustment for some anomalous observations. For this purpose, daily weather data were utilized and summed on a monthly basis to reflect the LCRA billing cycle, which runs from the 25th of the prior month to the 24th of the current month. The resulting regression equation is included in Exhibit C.

5.5 Forecast of NEL

The forecast of net energy for load (NEL) is derived from forecasted total sales and monthly loss factors developed as discussed above. The resulting forecasted NEL generally follows the projected trend of total sales discussed above and is depicted in Figure 5-7 below.

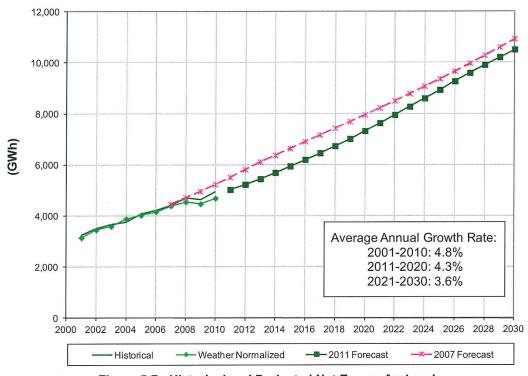


Figure 5-7: Historical and Projected Net Energy for Load

5.6 Forecast of Load Factor

In order to translate the forecast of NEL into peak demand, a forecast of load factor is required. A common assumption for this purpose is an average of recent historical load factors. However, this assumption is highly dependent on the weather conditions

that were exhibited during this period. In addition, this process includes no effort to analyze or understand the influence of any factors on the relationship between energy consumption and peak demand. Accordingly, the 2011 Load Forecast included a regression analysis of monthly load factor. The resulting forecast equation is included in Exhibit C and reflects that variations in load factor are best explained by variations in temperatures for the month on average (on an LCRA billing basis) and for the peak day and day before the peak. There are also some seasonal effects beyond what is captured by the weather data. The regression analysis also revealed that afternoon peaks on a Friday typically resulted in lower peak demands (i.e., higher load factors) than would otherwise be expected. The equation also includes an adjustment for a further anomalous observation, in June 2009. For this purpose, daily weather data were utilized and summed on a monthly basis to reflect the LCRA billing cycle, which runs from the 25th of the prior month to the 24th of the current month.

5.7 Forecast of Peak Demand

Monthly peak demands are forecasted based on the combination of forecasted NEL and load factor as discussed above. Seasonal peaks are derived from the resulting monthly data. The summer period is defined as April through October, while the winter period is defined as November of the current year through March of the succeeding year. The months assumed to represent the seasonal peak conditions were January and August. In reality, of course, the surrounding months can also exhibit these peak conditions, but it is important that the seasonal peaks are reflected in the forecasted determinants on a Base Case basis. The seasonal peaks have historically occurred most often in the months of January and August.

Historical and projected summer and winter peak demand are depicted below in Figures 5-8 and 5-9, respectively, as compared to the projections reflected in the 2007 Forecast. Figure 5-10, which follows depicts both seasonal peak demands.

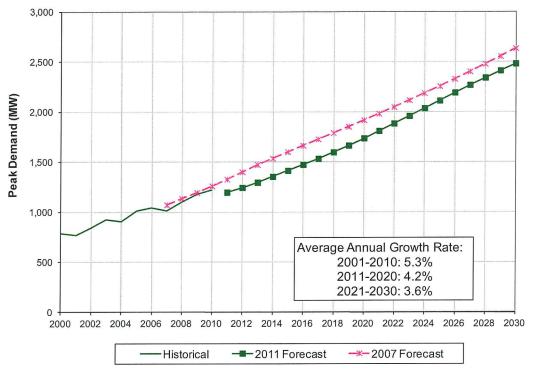


Figure 5-8: Historical and Projected Summer Peak Demand

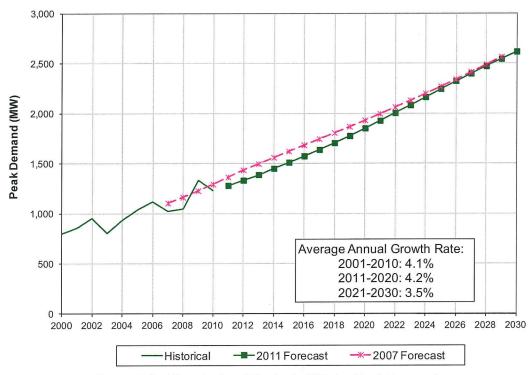


Figure 5-9: Historical and Projected Winter Peak Demand

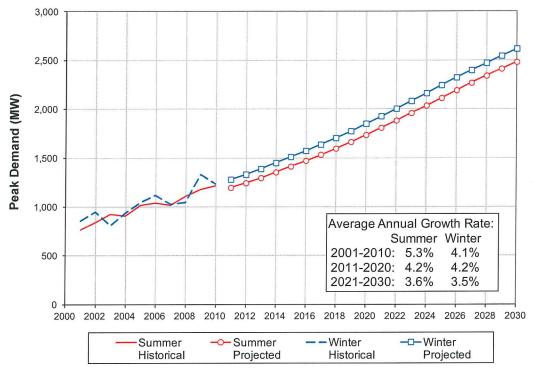


Figure 5-10: Historical and Projected Seasonal Peak Demand

Table 5-2 below provides historical and projected system load data (NEL and peak demand as measured at PEC's delivery points) for selected years, excluding Centex. As shown below, summer peak demand is expected to grow from approximately 1,196 MW in 2011 to 1,737 MW in 2020, an increase of nearly 550 MW, or 45 percent, over the initial 10-year period of the forecast horizon. Similarly, winter peak demand is expected to grow from approximately 1,280 MW in 2011 to 1,852 MW in 2020, an increase of approximately 570 MW, or 45 percent, over the same period.

Table 5-2
Historical and Projected Peak Demand Data

	NEL	Peak Dema	nd (MW)
Year	(GWh)	Summer	Winter
Historical			
2001	3,236	766.9	858.9
2004	3,767	907.9	935.5
2007	4,398	1,013.0	1,025.0
2010	4,935	1,217.5	1,232.3
Projected			
2011	5,024	1,196.4	1,279.8
2012	5,222	1,243.4	1,331.7
2013	5,443	1,295.6	1,388.2
2014	5,688	1,353.7	1,450.0
2015	5,942	1,412.9	1,511.2
2020	7,319	1,736.7	1,852.0
2025	8,928	2,112.9	2,244.6
2030	10,511	2,481.5	2,617.9

SECTION 6 FORECAST SCENARIOS

While a forecast that is derived from projections of the driving variables, obtained from reputable sources, provides a sound basis for planning, there is significant uncertainty in the future level of such variables. To the extent that economic, demographic, weather, or other conditions occur that are different from those assumed or provided, future load can be expected to vary from the forecast. For various purposes, it is important to understand the amount by which the forecast can be in error and the sources of error.

In order to provide an indication regarding the amount of uncertainty that exists in the forecast, we have produced alternative forecasts that reflect more and less aggressive projections of economic growth than assumed in the Base Case. In addition, in order to support the downstream system planning study, we have also produced peak demand forecasts assuming more severe weather conditions on the summer and winter peak days than assumed in the Base Case. These alternative forecasts are discussed further below.

6.1.1 Economic and Demographic Uncertainty

Alternative projections of population and economic growth were developed by examining the amount of error that can be expected in such projections. While Global Insight does not publish information regarding the potential error of their projections, we relied on such statistics published by another provider of economic projections in wide use in the utility industry and government, Woods and Poole Economics. These statistics reflect the average historical errors exhibited by Woods and Poole's projections at the state level over 1984 through approximately 2009 across the U.S.

While it is possible that the Global Insight projections will exhibit a different degree of error than those from Woods and Poole, both firms rely on a similar underlying data set and methodology, so it is reasonable to assume a similar degree of accuracy. It is also possible that the accuracy of economic and demographic projections in Texas will be different than those of other states, but data specific to Texas could not be easily obtained. Similarly, such data for the Austin metro area or the Tri-County Area could not be easily obtained.

Table 6-1 below provides the amount by which the economic projections were adjusted upward and downward from the Base Case assumptions to develop the High and Low Economic Growth Cases.

Table 6-1
Economic Scenarios – Assumed Variance from Base Case (+/-)

	Population	Employment	Income	Income Per Capita
2011	1.5%	2.7%	3.5%	3.5%
2012	2.3%	3.7%	4.3%	3.8%
2013	2.9%	4.4%	5.1%	4.0%
2014	3.4%	5.0%	5.9%	4.3%
2015	3.9%	5.6%	6.7%	4.5%
2016	4.4%	6.0%	7.5%	4.8%
2017	4.8%	6.5%	8.3%	5.0%
2018	5.2%	6.9%	8.8%	5.3%
2019	5.6%	7.3%	9.4%	5.5%
2020	6.0%	7.6%	9.9%	5.8%
2021	6.3%	7.9%	10.4%	6.0%
2022	6.7%	8.3%	11.0%	6.3%
2023	7.0%	8.6%	11.5%	6.5%
2024	7.3%	8.9%	12.0%	6.8%
2025	7.6%	9.1%	12.6%	7.0%
2026	7.9%	9.4%	13.1%	7.3%
2027	8.2%	9.7%	13.6%	7.5%
2028	8.5%	9.9%	14.2%	7.8%
2029	8.8%	10.2%	14.7%	8.0%
2030	9.1%	10.4%	15.2%	8.3%

These ranges are intended to capture approximately 80 percent of occurrences (i.e., 1.3 standard deviations), implying that there is only a 20 percent chance of loads falling outside of the resulting band as a result of economic variations. The 80 percent "confidence interval" is a range of forecast uncertainty in common use for planning in the utility industry.

Figure 6-1 depicts the resulting range of residential member counts.

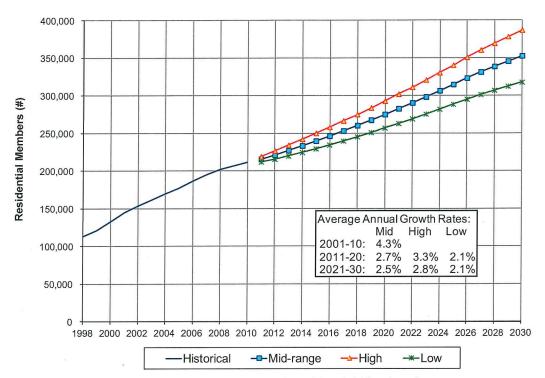


Figure 6-1: Range of Forecasted Residential Member Counts

Figure 6-2 depicts the resulting range of residential average use. The band is very tight as a result of the fairly low elasticity with respect to average incomes, which are themselves not as uncertain as the total size of the economy. From this figure, it is clear that weather is a more significant influence on usage than the economy.

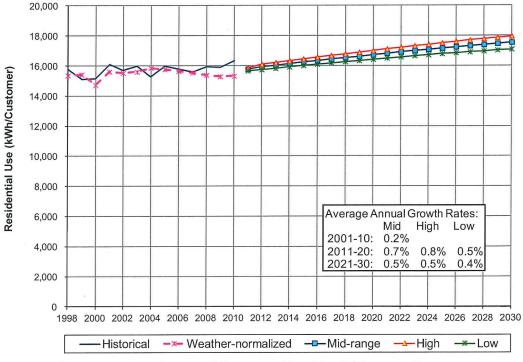
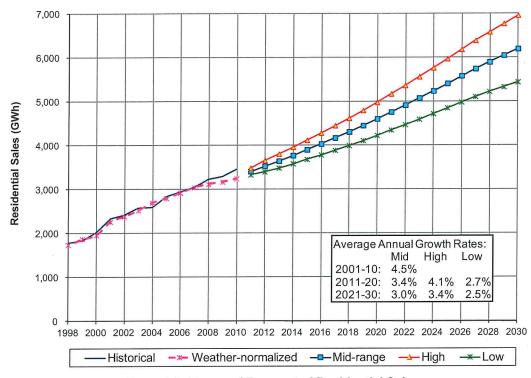


Figure 6-2: Range of Forecasted Residential Average Use



Figures 6-3 and 6-4 depict the resulting range of residential and non-residential sales.



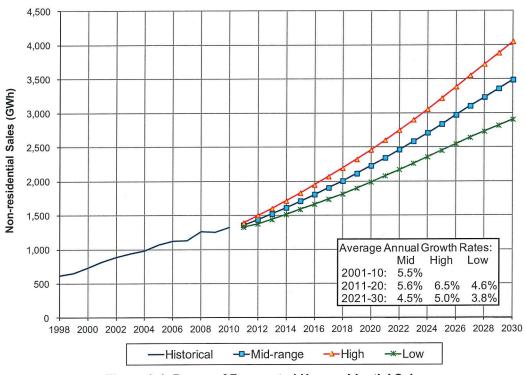


Figure 6-4: Range of Forecasted Non-residential Sales

Figures 6-5 and 6-6 depict the resulting ranges of total sales and NEL, which is merely derived from total sales on the basis of an estimate of distribution losses.

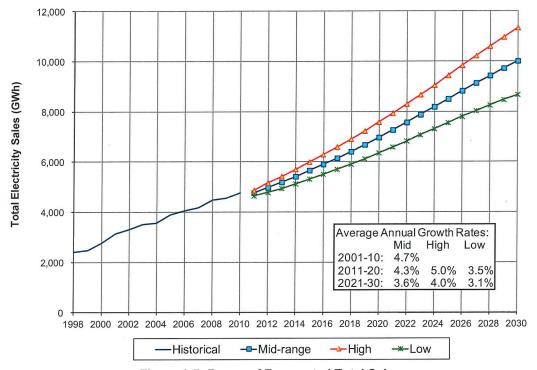


Figure 6-5: Range of Forecasted Total Sales

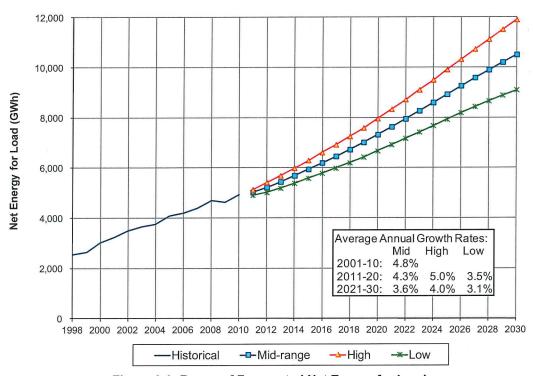


Figure 6-6: Range of Forecasted Net Energy for Load

Figures 6-7 and 6-8 depict the resulting ranges of summer and winter peak demand, which are derived from NEL on the basis of estimated load factors. However, these ranges do not reflect the impact of varying peak day weather conditions, which is discussed in the next sub-section.

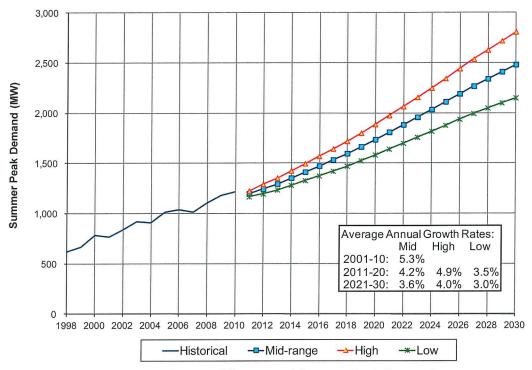


Figure 6-7: Range of Forecasted Summer Peak Demand

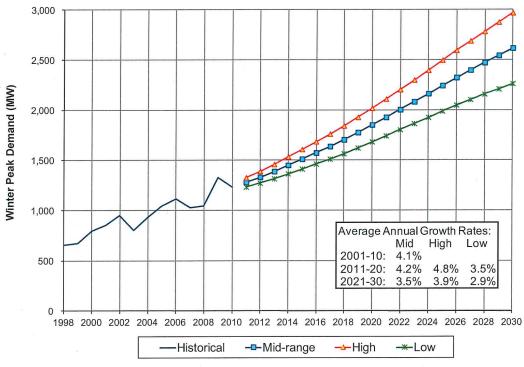


Figure 6-8: Range of Forecasted Winter Peak Demand

6.1.2 Weather Uncertainty

In order to inform the downstream distribution system study, R. W. Beck also produced a Severe Weather Case impacting summer and winter peak demand. The Severe Weather Case was produced by varying the future values of summer and winter peak day weather conditions, based on an analysis of peak weather conditions over 1992-2010. Similar analyses were performed on weather conditions for the day before the peak, although the range of temperature was reduced to reflect some non-collinearity with the peak day conditions. The peak day weather conditions in the Severe Weather Case are intended to represent the 95th percentile of potential weather conditions, implying that such severe conditions should be exhibited approximately only once in ten years.

The Severe Weather Case focuses exclusively on peak demands of the summer and winter seasonal peak months only. Accordingly, NEL is not impacted and peak demands for the remaining months are not impacted by this scenario.

Figures 6-9 and 6-10 below compare the Base Case forecast under normal weather to the Severe Case forecast of summer and winter CP demand. The impact of severe weather conditions, as depicted in the figures below and consistent with the 95th percentile of potential conditions, was approximately 5.2 percent and 12.4 percent, respectively, for summer and winter peak demand.

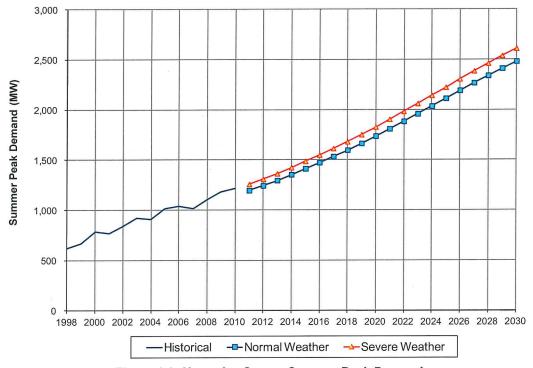


Figure 6-9: Normal v. Severe Summer Peak Demand

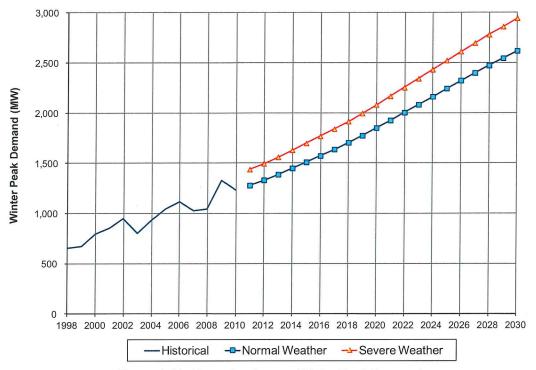


Figure 6-10: Normal v. Severe Winter Peak Demand

As the historical data shown in each figure correspond to a range of weather conditions from which assumptions for the Severe Weather Case were drawn, the historical variation can be seen to correlate closely to the differential between the Normal and Severe Weather forecasts. In particular, the historical winter peak demand data is significantly more volatile than the summer peak demands; this is consistent with the significantly larger differential between the Normal and Severe Weather forecast of winter peak demand than summer peak demand.

Table 6-2 below provides the historical and projected values for seasonal peak demand under the Base Case and the three scenarios discussed above—the High and Low Economic Growth Cases and the Severe Weather Case.

Table 6-2
Historical and Projected Peak Demand Data

		Summer Pe	eak Demand			Winter Pe	ak Demand	
Year	Base Case	High Economic Case	Low Economic Case	Severe Weather Case	Base Case	High Economic Case	Low Economic Case	Severe Weather Case
Historical								
2001	766.9				858.9			
2004	907.9				935.5			
2007	1,013.0				1,025.0			
2010	1,217.5				1,232.3			
Projected								
2011	1,196.4	1,225.2	1,167.6	1,258.6	1,279.8	1,326.0	1,233.4	1,438.5
2012	1,243.4	1,290.5	1,196.3	1,308.1	1,331.7	1,390.1	1,273.1	1,496.8
2013	1,295.6	1,354.6	1,236.3	1,362.9	1,388.2	1,459.0	1,317.3	1,560.4
2014	1,353.7	1,425.0	1,282.1	1,424.1	1,450.0	1,533.6	1,366.3	1,629.8
2015	1,412.9	1,496.8	1,328.7	1,486.3	1,511.2	1,607.8	1,414.2	1,698.5
2020	1,736.7	1,887.9	1,584.8	1,827.1	1,852.0	2,019.5	1,683.8	2,081.7
2025	2,112.9	2,344.7	1,879.3	2,222.8	2,244.6	2,497.5	1,989.9	2,522.9
2030	2,481.5	2,807.9	2,151.7	2,610.5	2,617.9	2,968.8	2,263.7	2,942.6

Exhibit A DETAILED FORECAST RESULTS



R. W. Beck, Inc. 12/12/2011

Exhibit A-1

PEC 2011 Load Forecast - Base Case

Historical and Projected Energy Sales by Customer Class, NEL, and Demand - PEC w/o CENTEX (Calendar Year 2001-2030)

				Residential	ial			Non-residential	ntial	Spot Loads		TOTAL SALES	200	DISTRIB.	TOTAL NEL	TEI	4	PEAK DEMAND	MAND	
				Avg.		Sales/								LOSSES			Summer		Winter	
	Calendar	Sales	%	Cust.	%	Cust.	%	Sales	%	Sales	%		%			%	Peak	%	Peak ¹	%
	Year	(MWh)	Chg	(#)	Chg	(MWh)	Chg	(MWh)	Chg	(MWh)	Chg	(MWh)	Chg	(MW)	(MWh)	Chg	(MM)	Chg	(MM)	Chg
	2001	2,329,326	1	144,730		16.1	1	821,357	1	0	1	3,150,683	1	85,641	3,236,324	ì	766.9	-	858.9	-
	2002	2,415,447	3.7%	153,573	6.1%	15.7	-2.3%	884,625	7.7%	0	1	3,300,071	4.7%	192,348	3,492,419	7.9%	841.1	9.7%	920.6	10.7%
	2003	2,579,628	%8.9	161,553	5.2%	16.0	1.5%	936,744	2.9%	0	1	3,516,371	%9.9	153,025	3,669,396	5.1%	921.6	%9.6	805.9	-15.2%
ls:	2004	2,594,570	%9.0	170,047	5.3%	15.3	-4.4%	981,067	4.7%	0		3,575,637	1.7%	191,073	3,766,710	2.7%	6.706	-1.5%	935.5	16.1%
oric	2005	2,829,912	9.1%	177,261	4.2%	16.0	4.6%	1,065,826	8.6%	0	ı	3,895,738	%0.6	182,976	4,078,714	8.3%	1,013.9	11.7%	1,044.3	11.6%
ist	2006	2,943,517	4.0%	186,337	5.1%	15.8	-1.1%	1,123,369	5.4%	0	1	4,066,886	4.4%	146,184	4,213,070	3.3%	1,039.4	2.5%	1,118.3	7.1%
Н	2007	3,047,376	3.5%	195,612	2.0%	15.6	-1.4%	1,132,020	%8.0	0	1	4,179,397	2.8%	219,050	4,398,446	4.4%	1,013.0	-2.5%	1,025.0	-8.3%
	2008	3,227,419	2.9%	202,633	3.6%	15.9	2.2%	1,264,701	11.7%	0	į	4,492,121	7.5%	209,547	4,701,668	%6.9	1,103.3	8.9%	1,046.9	2.1%
	2009	3,295,203	2.1%	207,257	2.3%	15.9	-0.2%	1,252,916	%6.0-	0	ı	4,548,119	1.2%	87,265	4,635,383	-1.4%	1,180.2	7.0%	1,329.6	27.0%
	2010	3,455,035	4.9%	211,541	2.1%	16.3	2.7%	1,324,870	5.7%	0	1	4,779,905	5.1%	155,295	4,935,200	6.5%	1,217.5	3.2%	1,232.3	-7.3%
	2011	3,405,918	-1.4%	215,968	2.1%	15.8	-3.4%	1,359,513	2.6%	0		4,765,431	-0.3%	258,285	5,023,716	1.8%	1,196.4	-1.7%	1,279.8	3.9%
	2012	3,527,379	3.6%	221,419	2.5%	15.9	1.0%	1,438,153	5.8%	9,196	1	4,974,728	4.4%	247,392	5,222,120	3.9%	1,243.4	3.9%	1,331.7	4.1%
	2013	3,643,683	3.3%	227,346	2.7%	16.0	%9.0	1,520,033	5.7%	21,330	132.0%	5,185,046	4.2%	257,886	5,442,933	4.2%	1,295.6	4.2%	1,388.2	4.2%
	2014	3,769,984	3.5%	233,606	2.8%	16.1	0.7%	1,612,145	6.1%	36,495	71.1%	5,418,624	4.5%	269,615	5,688,239	4.5%	1,353.7	4.5%	1,450.0	4.5%
	2015	3,899,999	3.4%	240,053	2.8%	16.2	0.7%	1,707,599	2.9%	52,615	44.2%	5,660,213	4.5%	281,607	5,941,819	4.5%	1,412.9	4.4%	1,511.2	4.2%
	2016	4,031,746	3.4%	246,638	2.7%	16.3	%9.0	1,804,239	2.7%	67,358	28.0%	5,903,344	4.3%	293,667	6,197,010	4.3%	1,472.6	4.2%	1,574.1	4.2%
	2017	4,166,805	3.3%	253,429	2.8%	16.4	%9.0	1,902,582	2.5%	81,292	20.7%	6,150,679	4.2%	305,974	6,456,654	4.2%	1,533.4	4.1%	1,637.7	4.0%
	2018	4,305,665	3.3%	260,473	2.8%	16.5	0.5%	2,002,686	5.3%	100,069	23.1%	6,408,421	4.2%	318,895	6,727,316	4.2%	1,597.3	4.2%	1,704.8	4.1%
pə		4,450,220	3.4%	262,692	2.8%	16.6	%9.0	2,109,802	5.3%	120,352	20.3%	6,680,374	4.2%	332,449	7,012,823	4.2%	1,664.5	4.2%	1,776.1	4.2%
joə		4,600,941	3.4%	275,097	2.8%	16.7	%9.0	2,224,248	5.4%	147,014	22.2%	6,972,203	4.4%	347,060	7,319,263	4.4%	1,736.7	4.3%	1,852.0	4.3%
roj,		4,756,692	3.4%	282,769	2.8%	16.8	%9.0	2,342,219	5.3%	171,898	16.9%	7,270,810	4.3%	361,858	7,632,668	4.3%	1,810.0	4.2%	1,927.7	4.1%
d		4,913,585	3.3%	290,497	2.7%	16.9	%9.0	2,462,504	5.1%	196,251	14.2%	7,572,339	4.1%	376,843	7,949,182	4.1%	1,884.1	4.1%	2,004.9	4.0%
	2023	5,073,461	3.3%	298,392	2.7%	17.0	0.5%	2,584,754	2.0%	220,603	12.4%	7,878,818	4.0%	392,068	8,270,886	4.0%	1,959.3	4.0%	2,083.4	3.9%
	2024	5,236,655	3.2%	306,501	2.7%	17.1	0.5%	2,708,638	4.8%	245,629	11.3%	8,190,922	4.0%	407,514	8,598,437	4.0%	2,035.8	3.9%	2,163.3	3.8%
	2025	5,404,686	3.2%	314,824	2.7%	17.2	0.5%	2,837,324	4.8%	263,214	7.2%	8,505,224	3.8%	423,099	8,928,323	3.8%	2,112.9	3.8%	2,244.6	3.8%
	2026	5,577,690	3.2%	323,365	2.7%	17.2	0.5%	2,970,804	4.7%	279,511	6.2%	8,828,005	3.8%	439,171	9,267,176	3.8%	2,192.2	3.8%	2,323.5	3.5%
	2027	5,740,127	2.9%	331,312	2.5%	17.3	0.4%	3,102,012	4.4%	295,809	5.8%	9,137,948	3.5%	454,582	9,592,530	3.5%	2,268.0	3.5%	2,398.1	3.2%
	2028	5,893,070	2.7%	338,657	2.2%	17.4	0.4%	3,230,046	4.1%	312,999	5.8%	9,436,114	3.3%	469,358	9,905,472	3.3%	2,340.8	3.2%	2,472.2	3.1%
-	2029	6,043,531	2.6%	345,773	2.1%	17.5	0.4%	3,357,713	4.0%	325,427	4.0%	9,726,672	3.1%	483,851	10,210,523	3.1%	2,412.0	3.0%	2,544.7	2.9%
	2030	6,191,825	2.5%	352,732	2.0%	17.6	0.4%	3,485,235	3.8%	335,632	3.1%	10,012,692	2.9%	498,013	10,510,705	2.9%	2,481.5	2.9%	2,617.9	2.9%
ЯS	2001-2010		4.5%		4.3%		0.2%		5.5%		ļ		4.7%			4.8%		5.3%		4.1%
ÞΑ	2011-2020		3.4%		2.7%		0.7%		2.6%		ì		4.3%			4.3%		4.2%		4.2%
1	2021-2030		3.0%		2.5%		0.5%		4.5%		7.7%		3.6%			3.6%		3.6%		3.5%

¹ Winter peaks correspond to the period November of the current year to March of the succeeding year. The 2010 winter peak reflects a forecasted value, based on normal weather.

R. W. Beck, Inc. 12/12/2011

Exhibit A-1

PEC 2011 Load Forecast - High Growth Case

Historical and Projected Energy Sales by Customer Class, NEL, and Demand - PEC w/o CENTEX (Calendar Year 2001-2030)

Щ			Residential	ial			Non-residential	ential	Spot Loads	oads	TOTAL SALES	ALES	DISTRIB.	TOTAL NEL	NEL		PEAK DEMAND	EMAND	
			Avg.		Sales/								LOSSES			Summer		Winter	
Calendar S.	Sales	%	Cust.	%	Cust.	%	Sales	%	Sales	%		%			%	Peak	%	Peak ¹	%
3	(MWh)	Chg	(#)	Chg	(MWh)	Chg	(MWh)	Chg	(MWh)	Chg	(MWh)	Chg	(MM)	(MWh)	Chg	(MM)	Chg	(MM)	Chg
2,3	2,329,326	1	144,730	ı	16.1	ı	821,357	ï	0	į	3,150,683	1	85,641	3,236,324	1	766.9	1	858.9	1
ζ,	2,415,447	3.7%		6.1%	15.7	-2.3%	884,625	7.7%	0	į.	3,300,071	4.7%	192,348	3,492,419	7.9%	841.1	9.7%	920.6	10.7%
2,	2,579,628	6.8%		5.2%	16.0	1.5%	936,744	2.9%	0	1	3,516,371	%9.9	153,025	3,669,396	5.1%	921.6	%9.6	805.9	-15.2%
7,	2,594,570	%9.0		5.3%	15.3	-4.4%	981,067	4.7%	0	1	3,575,637	1.7%	191,073	3,766,710	2.7%	907.9	-1.5%	935.5	16.1%
7	2,829,912	9.1%	177,261	4.2%	16.0	4.6%	1,065,826	8.6%	0	1	3,895,738	80.6	182,976	4,078,714	8.3%	1,013.9	11.7%	1,044.3	11.6%
ζ,	2,943,517	4.0%	186,337	5.1%	15.8	-1.1%	1,123,369	5.4%	0	ı	4,066,886	4.4%	146,184	4,213,070	3.3%	1,039.4	2.5%	1,118.3	7.1%
w [°]	3,047,376	3.5%		2.0%	15.6	-1.4%	1,132,020	%8.0	0	1	4,179,397	2.8%	219,050	4,398,446	4.4%	1,013.0	-2.5%	1,025.0	-8.3%
ന്	3,227,419	2.9%	202,633	3.6%	15.9	2.2%	1,264,701	11.7%	0	(1)	4,492,121	7.5%	209,547	4,701,668	%6.9	1,103.3	8.9%	1,046.9	2.1%
က	3,295,203	2.1%	207,257	2.3%	15.9	-0.2%	1,252,916	%6.0-	0	,	4,548,119	1.2%	87,265	4,635,383	-1.4%	1,180.2	7.0%	1,329.6	27.0%
+	3,455,035	4.9%	211,541	2.1%	16.3	2.7%	1,324,870	5.7%	0	'	4,779,905	5.1%	155,295	4,935,200	6.5%	1,217.5	3.2%	1,249.1	-6.1%
	3,480,998	0.8%	219,467	3.7%	15.9	-2.9%	1,388,878	4.8%	0	1	4,869,875	1.9%	264,039	5,133,914	4.0%	1,225.2	%9.0	1,326.0	6.2%
_	3,652,879	4.9%		3.4%	16.1	1.5%	1,499,970	8.0%	9,196	1	5,162,044	%0.9	256,761	5,418,805	5.5%	1,290.5	5.3%	1,390.1	4.8%
365	3,800,863	4.1%	12000	3.4%	16.2	0.7%	1,598,554	%9.9	21,330	132.0%	5,420,747	2.0%	269,669	5,690,416	5.0%	1,354.6	2.0%	1,459.0	2.0%
.,,	3,957,824	4.1%		3.3%	16.3	0.8%	1,709,377	%6.9	36,495	71.1%	5,703,696	5.2%	283,865	5,987,561	5.2%	1,425.0	5.2%	1,533.6	5.1%
4	4,118,159	4.1%		3.3%	16.5	0.7%	1,825,295	%8.9	52,615	44.2%	5,996,069	5.1%	298,393	6,294,462	5.1%	1,496.8	2.0%	1,607.8	4.8%
4	4,280,258	3.9%		3.2%	16.6	0.7%	1,944,129	6.5%	67,358	28.0%	6,291,745	4.9%	313,083	6,604,828	4.9%	1,569.5	4.9%	1,684.5	4.8%
7	4,446,057	3.9%		3.2%	16.7	0.7%	2,066,447	6.3%	81,292	20.7%	6,593,795	4.8%	328,128	6,921,923	4.8%	1,643.8	4.7%	1,762.2	4.6%
_	4,616,273	3.8%		3.2%	16.8	%9.0	2,189,143	2.9%	100,069	23.1%	6,905,485	4.7%	343,732	7,249,217	4.7%	1,720.8	4.7%	1,842.8	4.6%
_	4,793,115	3.8%		3.2%	16.9	%9.0	2,318,313	2.9%	120,352	20.3%	7,231,779	4.7%	360,004	7,591,783	4.7%	1,801.5	4.7%	1,928.5	4.6%
+	4,977,204	3.8%		3.1%	17.0	0.7%	2,456,768	%0.9	147,014	22.2%	7,580,986	4.8%	377,485	7,958,471	4.8%	1,887.9	4.8%	2,019.5	4.7%
	5,167,450	3.8%		3.2%	17.1	0.7%	2,600,433	2.8%	171,898	16.9%		4.7%	395,293	8,335,074	4.7%	1,975.9	4.7%	2,110.9	4.5%
	5,359,692	3.7%		3.1%	17.2	%9.0	2,748,026	2.7%	196,251	14.2%	8,303,969	4.6%	413,412	8,717,381	4.6%	2,065.5	4.5%	2,204.4	4.4%
	5,555,988	3.7%		3.1%	17.3	%9.0	2,899,162	2.5%	220,603	12.4%		4.5%	431,905	9,107,658	4.5%	2,156.8	4.4%	2,299.9	4.3%
	5,756,757	3.6%		3.0%	17.4	%9.0	3,053,512	5.3%	245,629	11.3%	9,055,897	4.4%	450,756	9,506,653	4.4%	2,250.0	4.3%	2,397.5	4.2%
	5,963,703	3.6%	3.5	3.0%	17.5	%9.0	3,214,730	5.3%	263,214	7.2%	9,441,647	4.3%	469,920	9,911,567	4.3%	2,344.7	4.2%	2,497.5	4.2%
	6,177,063			3.0%	17.6	0.5%	3,382,833	5.2%	279,511	6.2%		4.2%	489,747	10,329,155	4.2%	2,442.4	4.2%	2,595.5	3.9%
	6,379,608			2.8%	17.7	0.5%	3,549,803	4.9%	295,809	5.8%	10,225,220	3.9%	508,955	10,734,174	3.9%	2,536.7	3.9%	2,689.2	3.6%
	6,572,415			2.5%	17.8	0.5%	3,714,619	4.6%	312,999	2.8%	10,600,033	3.7%	527,571	11,127,604	3.7%	2,628.4	3.6%	2,782.7	3.5%
-	6,763,221	2.9%	378,282	2.4%	17.9	0.5%	3,880,458	4.5%	325,427	4.0%	10,969,106	3.5%	545,998	11,515,104	3.5%	2,718.7	3.4%	2,875.2	3.3%
\dashv	6,952,350	2.8%	386,922	2.3%	18.0	0.5%	4,047,530	4.3%	335,632	3.1%	11,335,512	3.3%	564,189	11,899,701	3.3%	2,807.9	3.3%	2,968.8	3.3%
2001-2010		4.5%		4.3%		0.5%		5.5%		ī		4.7%			4.8%		5.3%		4.2%
2011-2020		4.1%		3.3%		0.8%		6.5%		ı		2.0%			5.0%		4.9%		4.8%
2021-2030		3.4%		2.8%		0.5%		2.0%		7.7%		4.0%			4.0%		4.0%		3.9%

¹ Winter peaks correspond to the period November of the current year to March of the succeeding year. The 2010 winter peak reflects a forecasted value, based on normal weather.

Exhibit A-1

PEC 2011 Load Forecast - Low Growth Case

Historical and Projected Energy Sales by Customer Class, NEL, and Demand - PEC w/o CENTEX (Calendar Year 2001-2030)

				Residential	ial			Non-residential	ential	Spot Loads	ads	TOTAL SALES	VLES	DISTRIB.	TOTAL NEL	EL		PEAK DEMAND	MAND	
				Avg.		Sales/								LOSSES			Summer		Winter	
	Calendar	Sales	%	Cust.	%	Cust.	%	Sales	%	Sales	%		%			%	Peak	%	Peak ¹	%
	Year	(MWh)	Chg	(#)	Chg	(MWh)	Chg	(MWh)	Chg	(MWh)	Chg	(MWh)	Chg	(MM)	(MWh)	Chg	(MM)	Chg	(MM)	Chg
	2001	2,329,326	1	144,730	1	16.1	ì	821,357	E.	0	ī	3,150,683	ï	85,641	3,236,324		766.9		858.9	Ţ
	2002	2,415,447	3.7%	153,573	6.1%	15.7	-2.3%	884,625	7.7%	0	C	3,300,071	4.7%	192,348	3,492,419	7.9%	841.1	9.7%	920.6	10.7%
	2003	2,579,628	%8.9	161,553	5.2%	16.0	1.5%	936,744	2.9%	0	1	3,516,371	%9.9	153,025	3,669,396	5.1%	921.6	%9.6	805.9	-15.2%
sal	2004	2,594,570	%9.0	170,047	5.3%	15.3	-4.4%	981,067	4.7%	0	1	3,575,637	1.7%	191,073	3,766,710	2.7%	907.9	-1.5%	935.5	16.1%
oric	2005	2,829,912	9.1%	177,261	4.2%	16.0	4.6%	1,065,826	8.6%	0	í	3,895,738	%0.6	182,976	4,078,714	8.3%	1,013.9	11.7%	1,044.3	11.6%
ist	2006	2,943,517	4.0%	186,337	5.1%	15.8	-1.1%	1,123,369	5.4%	0	ı	4,066,886	4.4%	146,184	4,213,070	3.3%	1,039.4	2.5%	1,118.3	7.1%
Н	2007	3,047,376	3.5%	195,612	2.0%	15.6	-1.4%	1,132,020	0.8%	0	1	4,179,397	2.8%	219,050	4,398,446	4.4%	1,013.0	-2.5%	1,025.0	-8.3%
	2008	3,227,419	2.9%	202,633	3.6%	15.9	2.2%	1,264,701	11.7%	0	'n	4,492,121	7.5%	209,547	4,701,668	%6.9	1,103.3	8.9%	1,046.9	2.1%
	2009	3,295,203	2.1%	207,257	2.3%	15.9	-0.2%	1,252,916	%6.0-	0	1	4,548,119	1.2%	87,265	4,635,383	-1.4%	1,180.2	7.0%	1,329.6	27.0%
	2010	3,455,035	4.9%	211,541	2.1%	16.3	2.7%	1,324,870	2.7%	0	,	4,779,905	5.1%	155,295	4,935,200	6.5%	1,217.5	3.2%	1,215.5	-8.6%
	2011	3,330,808	-3.6%	212,457	0.4%	15.7	-4.0%	1,329,976	0.4%	0		4,660,785	-2.5%	252,521	4,913,305	-0.4%	1,167.6	-4.1%	1,233.4	1.5%
	2012	3,401,893	2.1%	215,959	1.6%	15.8		1,375,772	3.4%	9,196	3.	4,786,860	2.7%	237,995	5,024,855	2.3%	1,196.3	2.5%	1,273.1	3.2%
	2013	3,486,729	2.5%	220,189	2.0%	15.8		1,440,666	4.7%	21,330	132.0%	4,948,724	3.4%	246,071	5,194,795	3.4%	1,236.3	3.3%	1,317.3	3.5%
	2014	3,582,550	2.7%	224,862	2.1%	15.9		1,513,683	5.1%	36,495	71.1%	5,132,728	3.7%	255,321	5,388,050	3.7%	1,282.1	3.7%	1,366.3	3.7%
i.	2015	3,682,403	2.8%	229,773	2.2%	16.0		1,588,205	4.9%	52,615	44.2%	5,323,222	3.7%	264,759	5,587,982	3.7%	1,328.7	3.6%	1,414.2	3.5%
	2016	3,783,972	2.8%	234,849	2.2%	16.1	0.5%	1,662,080	4.7%	67,358	28.0%	5,513,410	3.6%	274,169	5,787,580	3.6%	1,375.4	3.5%	1,463.4	3.5%
	2017	3,888,466	2.8%	240,134	2.3%	16.2	0.5%	1,735,767	4.4%	81,292	20.7%	5,705,525	3.5%	283,713	5,989,237	3.5%	1,422.6	3.4%	1,512.8	3.4%
	2018	3,996,145	2.8%	245,662	2.3%	16.3	0.5%	1,812,614	4.4%	100,069	23.1%	5,908,828	3.6%	293,925	6,202,753	3.6%	1,473.2	3.6%	1,566.2	3.5%
pə:	2019	4,108,613	2.8%	251,348	2.3%	16.3	0.5%	1,896,992	4.7%	120,352	20.3%	6,125,957	3.7%	304,735	6,430,692	3.7%	1,526.9	3.6%	1,623.1	3.6%
joə	2020	4,226,156	2.9%	257,196	2.3%	16.4	0.5%	1,986,626	4.7%	147,014	22.2%	6,359,797	3.8%	316,445	6,676,242	3.8%	1,584.8	3.8%	1,683.8	3.7%
(or	2021	4,347,635	2.9%	263,277	2.4%	16.5	0.5%	2,078,010	4.6%	171,898	16.9%	6,597,544	3.7%	328,198	6,925,742	3.7%	1,643.0	3.7%	1,743.6	3.6%
4	2022	4,469,408	2.8%	269,392	2.3%	16.6	0.5%	2,170,024	4.4%	196,251	14.2%	6,835,683	3.6%	340,010	7,175,693	3.6%	1,701.5	3.6%	1,804.3	3.5%
	2023	4,593,104	2.8%	275,636	2.3%	16.7	0.4%	2,262,286	4.3%	220,603	12.4%	7,075,993	3.5%	351,923	7,427,916	3.5%	1,760.5	3.5%	1,865.6	3.4%
	2024	4,718,998	2.7%	282,055	2.3%	16.7	0.4%	2,354,463	4.1%	245,629	11.3%	7,319,090	3.4%	363,914	7,683,004	3.4%	1,820.1	3.4%	1,927.5	3.3%
	2025	4,848,379	2.7%	288,642	2.3%	16.8	0.4%	2,449,291	4.0%	263,214	7.2%	7,560,885	3.3%	375,864	7,936,749	3.3%	1,879.3	3.3%	1,989.9	3.2%
	2026	4,981,331	2.7%	295,400	2.3%	16.9	0.4%	2,546,672	4.0%	279,511	6.2%	7,807,514	3.3%	388,121	8,195,635	3.3%	1,940.0	3.2%	2,049.5	3.0%
	2027	5,103,982	2.5%	301,588	2.1%	16.9	0.4%	2,640,498	3.7%	295,809	5.8%	8,040,289	3.0%	399,662	8,439,956	3.0%	1,996.9	2.9%	2,104.7	2.7%
	2028	5,217,389	2.5%	307,202	1.9%	17.0	0.4%	2,730,015	3.4%	312,999	5.8%	8,260,403	2.7%	410,530	8,670,932	2.7%	2,050.6	2.7%	2,158.9	2.6%
	2029	5,327,852	2.1%	312,587	1.8%	17.0	0.4%	2,817,639	3.2%	325,427	4.0%	8,470,919	2.5%	421,009	8,891,928	2.5%	2,102.2	2.5%	2,211.0	2.4%
	2030	5,435,673	2.0%	317,807	1.7%	17.1	0.3%	2,903,592	3.1%	335,632	3.1%	8,674,897	2.4%	431,057	9,105,953	2.4%	2,151.7	2.4%	2,263.7	2.4%
38	2001-2010		4.5%	9	4.3%		0.2%		2.5%		1		4.7%			4.8%		%8'3		3.9%
ÞΝ	2011-2020		2.7%		2.1%		0.5%		4.6%		į.		3.5%			3.5%		3.5%		3.5%
√	2021-2030		2.5%		2.1%		0.4%		3.8%		7.7%		3.1%			3.1%		3.0%		2.9%

¹ Winter peaks correspond to the period November of the current year to March of the succeeding year. The 2010 winter peak reflects a forecasted value, based on normal weather.

Exhibit A-2

PEC 2011 Load Forecast Historical and Projected System Peak Demand - Comparison of Scenarios

			Weather Bass				69		•					1,438.5 12.4%	1,496.8 12.4%	1,560.4 12.4%	1,629.8 12.4%	1,698.5 12.4%	1,769.3 12.4%	1,840.8 12.4%	1,916.2 12.4%	1,996.3 12.4%	2,081.7 12.4%	2,166.8 12.4%	2,253.5 12.4%	2,341.7 12.4%	2,431.6 12.4%	2,522.9 12.4%	2,611.6 12.4%	2,695.5 12.4%	2,778.7 12.4%	2,860.2 12.4%	2,942.6 12.4%		4.2%	3 5%
III (n	1	±io,	Raco											-3.6%	-4.4%	-5.1%	-5.8%	-6.4%	-7.0%	-7.6%	-8.1%	-8.6%	-9.1%	-9.5%	-10.0%	-10.5%	-10.9%	-11.3%	-11.8%	-12.2%	-12.7%	-13.1%	-13.5%			
Winter Peak (MW) ^[1]	I		Growth											1,233.4	1,273.1	1,317.3	1,366.3	1,414.2	1,463.4	1,512.8	1,566.2	1,623.1	1,683.8	1,743.6	1,804.3	1,865.6	1,927.5	1,989.9	2,049.5	2,104.7	2,158.9	2,211.0	2,263.7		3.5%	2.9%
Winter		Diff	Race											3.6%	4.4%	5.1%	5.8%	6.4%	7.0%	7.6%	8.1%	8.6%	80.6	9.5%	%6.6	10.4%	10.8%	11.3%	11.7%	12.1%	12.6%	13.0%	13.4%			
		100	Growth						5					1,326.0	1,390.1	1,459.0	1,533.6	1,607.8	1,684.5	1,762.2	1,842.8	1,928.5	2,019.5	2,110.9	2,204.4	2,299.9	2,397.5	2,497.5	2,595.5	2,689.2	2,782.7	2,875.2	2,968.8		4.8%	3.9%
			Base	858.9	920.6	802.9	935.5	1,044.3	1,118.3	1,025.0	1,046.9	1,329.6	1,232.3	1,279.8	1,331.7	1,388.2	1,450.0	1,511.2	1,574.1	1,637.7	1,704.8	1,776.1	1,852.0	1,927.7	2,004.9	2,083.4	2,163.3	2,244.6	2,323.5	2,398.1	2,472.2	2,544.7	2,617.9	4.1%	4.2%	3.5%
		PIII Funda	Base											5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%	5.2%			
		Courant	Weather											1,258.6	1,308.1	1,362.9	1,424.1	1,486.3	1,549.2	1,613.2	1,680.3	1,751.1	1,827.1	1,904.1	1,982.0	2,061.2	2,141.7	2,222.8	2,306.2	2,385.9	2,462.6	2,537.4	2,610.5		4.2%	3.6%
(WW)		L DIH												-2.4%	-3.8%	-4.6%	-5.3%	-6.0%	%9.9-	-7.2%	-7.8%	-8.3%	-8.7%	-9.2%	-9.7%	-10.1%	-10.6%	-11.1%	-11.5%	-12.0%	-12.4%	-12.8%	-13.3%			
Summer Peak (MW)			Growth											1,167.6	1,196.3	1,236.3	1,282.1	1,328.7	1,375.4	1,422.6	1,473.2	1,526.9	1,584.8	1,643.0	1,701.5	1,760.5	1,820.1	1,879.3	1,940.0	1,996.9	2,050.6	2,102.2	2,151.7		3.5%	3.0%
Summ		from from	Base											2.4%	3.8%	4.6%	5.3%	2.9%	%9.9	7.2%	7.7%	8.2%	8.7%	9.2%	89.6	10.1%	10.5%	11.0%	11.4%	11.8%	12.3%	12.7%	13.2%			
		L 132	Growth											1,225.2	1,290.5	1,354.6	1,425.0	1,496.8	1,569.5	1,643.8	1,720.8	1,801.5	1,887.9	1,975.9	2,065.5	2,156.8	2,250.0	2,344.7	2,442.4	2,536.7	2,628.4	2,718.7	2,807.9		4.9%	4.0%
			Base	766.9	841.1	921.6	6.706	1,013.9	1,039.4	1,013.0	1,103.3	1,180.2	1,217.5	1,196.4	1,243.4	1,295.6	1,353.7	1,412.9	1,472.6	1,533.4	1,597.3	1,664.5	1,736.7	1,810.0	1,884.1	1,959.3	2,035.8	2,112.9	2,192.2	2,268.0	2,340.8	2,412.0	2,481.5	5.3%	4.2%	3.6%
			Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2001-2010	2011-2020	2021-2030
							ខេះ	oric	ojs	ļΗ												pə	္သ၁ခ	loı	d				,					ЯЄ)A	∀

[1] The winter peak correspond to the period November of the current year to March of the succeeding year. The 2010 winter peak reflects a forecasted value based on normal weather conditions. The actual 2010 winter peak of 1,386.7 MW occurred in February 2011, after the end of the study period.

R. W. Beck, Inc., 12/13/2011

Exhibit A-3

PEC 2011 Load Forecast - Base Case

Historical and Projected Load Determinants and Weather Conditions

2000	
Spot	Non-
Loads	<u></u>
(L)	(MVVh)
E 1	52,214
ï	49,669
ĭ	52,251
1	32,201 66.068
ıτ	66,436
1	85,335
ī	78,376
1	066,79
	56,828
1	63.973
1	65,394
ī	57,166
1	318
,	58,185
ť	73,934
1	76,527
E	80,647
	73 599
1	70,123
	60,253
ı	64,621
1 1	68,513
	65,638
ï	67,164
1	83,605
E	79,348
1	86,014
ij	88,208
,	70,360
	62,669
1	66 464
	71.533
	65,637
	0 0
1	66,850
1	79,042
ı	78,819
1	84,760
1	94,071
į	90,207
c	83,295
j	000
	058,87

R. W. Beck, Inc., 12/13/2011

Exhibit A-3

Historical and Projected Load Determinants and Weather Conditions PEC 2011 Load Forecast - Base Case

exl	Peak Demand	0	Load Factor	-						61.0%				64.3%							62.0%					55.0%					98.1%			40.0%					_		58.5%			
ing Cent	Peak		Demand	(MM)	908	803	785	506	632	842	806	824	691	585	866	734	665	548	825	875	200	096	1,014	069	1,044	703	740				1,011			654							919	951		
System Net Requirements (Excluding Centex)		Energy	ts	(MWh)	300,637	327,938	231,855	239,442	265,534	369,622	398,029	372,585	292,964	271,061	318 054	311,103	244,164	253,557	287,770	402,124	434,369	439,044	326,768	282,161	343,931	322,071	242.837	309,250	324,799	432,415	508 620	413,181	319,380	282,799	423,006	382,072	253,895	286,332	319,672	401,639	397,057	432,266	374,784	
guiremen	uirements		Losses	(%)	2.7%	10.1%	-14.7%	4.3%	11.5%	8.71	1.5%	2.6%	-11.4%	-1.4%	4 0%	4.4%	-6.2%	2.7%	13.6%	15.6%	4.7% 7.2%	5.5%	7			14.3%		10.9%	6.1%	13.7%	8.8%		-7.7%	2.6%	16.3%			_	9.5%	16.0%	0.5%	1.3%	-3.1%	
em Net Re	Energy Requirements		Losses	(MWh)	17,271	33,180	(34, 171)	10,341	30,660	65,716 24,924	5.902	9,728	(33,447)	(3,792)	(12,795)	13,670	(15,089)	6,934	39,272	62,627	20,432	23,936	(39,828)	17,170	43,860	(13,698)	(39,958)	33,695	19,655	59,198	16,463	(34,250)	(24,622)	7,356	68,966	(16,257)	(42,219)	28,969	30,283	64,079	1,804	5,703	(11,702)	
SVS			Sales	(MWh)	283,367	294,759	266,026	229,100	202,006	350 074	392,127	362,857	326,411	2/4,853	330.849	297,433	259,252	246,623	248,498	339,497	412,854	415,108	366,596	264,991	300,071	276 133	282,795	275,555	305,144	373,217	464,037	447,431	344,001	2/5,443	354,041	398,329	296,114	257,363	289,389	337,560	290,662	426,562	386,486	
	Wh/Cust)		Total	(kWh/Cust)	1,555	1,611	1,448	1,244	1,200	1,866	2,087	1,912	1,718	1,442	1,730	1,548	1,350	1,283	1,282	1,749	2,105	2,113	1,860	1,340	1,508	1,381	1,402	1,362	1,503	1,824	2,257	2,157	1,656	1,321	1,686	1,890	1,398	1,209	1,356	1,574	1,043	1,966	1.778	
	Usage per Customer (kWh/Cust)	Non-	residential	(kWh/Cust)	4,306	4,484	4,251	4,510	6,700	5.506	5,845	5,712	5,515	4,582	4.872	4,605	4,502	4,635	4,679	5,627	5,791	6,215	5,294	4,580	4,622	4,243	4,607	4,834	5,003	5,561	6,228	6,121	5,269	4,754	4,764	5,062	4,582	4,183	4,798	4,563	5,836	5,612	5,532	
	Usage per (Residential	(kWh/Cust) (1,282	1,326	1,169	920	301	1,507	1,715	1,537	1,344	1,133	1,422	1,249	1,040	954	949	1,368	1,744	1,709	1,523	1,021	1,202	1,24	1,088	1,020	1,160	1,459	1,867	1,770	1,301	1 134	1,387	1,581	1,089	920	1,021	1,283	1,462	1,612	1,413	
			Total	(MWh)	283,367	294,759	266,026	229,100	303 906	350,074	392,127	362,857	326,411	257 283	330,849	297,433	259,252	246,623	248,498	339,497	412,864	415,108	366,596	264,991	300,071	276,133	282,795	275,555	305,144	3/3,21/	464,037	447,431	344,001	303 513	354,041	398,329	296,114	257,363	289,389	337,560	423,273	426,562	386.486	
Retail Billing Data	lectricity Sales	Spot	Loads	(MWh)	ì	E	ì	1)		1 1	ï	1	i		1		ı	i	ı	, ,	1	,	1		1	1 1		1	1		ı	,	1			,	1						1	
Retail Bil	Retail Electri	Non-	residential	(MWh)	70,799	74,117	70,560	73.200	82,500	92,864	98,769	97,362	94,083	73.589	83,278	78,855	77,232	79,710	81,029	100 412	101,430	109,280	93,342	81,149	75,820	78,849	83,004	87,535	90,854	101,464	114,378	112,952	97,799	86,790	88,656	94,543	85,919	78,899	90,822	105 671	111,856	107,765	106,577	
			Residential	(MWh)	212,568	220,642	195,465	164,133	221,392	257,210	293,358	265,496	232,327	183.694	247,571	218,578	182,020	166,913	167,469	313,546	311,433	305,827	273,254	183,842	275,770	197,283	199,791	188,020	214,290	313 013	349,660	334,479	246,202	216,724	265,385	303,787	210,195	178,464	190,007	290,078	311.417	318,797	279,908	
			Total	(#)	182,254	182,962	183,740	185 486	187,004	187,590	187,907	189,767	189,967	190,041	191,213	192,101	192,101	192,233	193,767	194, 120	196,116	196,484	197,079	197,759	198,944	199,969	201,729	202,371	202,959	204,369	205,625	207,459	207,776	209.781	209,949	210,811	211,806	212,915	01441	214,505	215,830	216,965	217,325	
	Customers	Non-	residential	(#)	16,441	16,529	16,597	16,621	16,772	16,865	16,899	17,046	17,060	17,077	17,092	17,124	17,156	17,199	17,318	17.371	17,514	17,583	17,632	17,720	17,867	17,921	18,017	18,108	18,161	18 274	18,366	18,454	18,561	18,676	18,611	18,677	18,752	18,860	10,93	19,018	19,165	19,202	19,265	
	0		Residential	(#)	165,813	166,433	167,143	168 787	170,737	170,725	171,008	172,721	173,567	173,684	174,121	174,977	174,945	175,034	176,449	176,737	178,602	178,901	179,447	180,039	181,137	182,048	183,712	184,263	184,798	186.917	187,259	189,005	189,215	191,105	191,338	192,134	193,054	194,055	194,510	195,799	196,665	197,763	198,060	
			Month		Jan-04	Feb-04	Mar-04	Mav-04	10 cm.	Jul-04	Aug-04	Sep-04	Nov-04	Dec-04	Jan-05	Feb-05	Mar-05	Apr-05	May-05	SO-IUI.	Aug-05	Sep-05	Oct-05	Nov-05	Dec-03	Feb-06	Mar-06	Apr-06	May-06	90-Inf.	Aug-06	Sep-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	11.19.07	70-Inf.	Aug-07	Sep-07	Oct-07	

Exhibit A-3

PEC 2011 Load Forecast - Base Case

Historical and Projected Load Determinants and Weather Conditions

•	THE RESIDENCE OF THE PARTY OF T								Gyo	AN JONE MA	dallellell	system Net Requirements (Excluding Centex)	ng Centey	
			Retail Electri	ricity Sales		Usage per	Jsage per Customer (kWh/Cust)	Wh/Cust)		Energy Requirements	lirements		Peak Demand	mand
			Non-	Spot			Non-					Energy Requiremen		Load
	Re	Residential	residential	Loads	Total	Residential	residential	Total	Sales	Losses	rosses	ts	Demand	Factor
(#)	_	(MWh)	(MWh)	(MWh)	(MWh)	(kWh/Cust)	(kWh/Cust)	(kWh/Cust)	(MWh)	(MWh)	(%)	(MWh)	(MM)	(%)
219,046		279,054	92,794		371,848	1,398	4,776	1,698	371,848	44,531	10.7%	416,379	1,025	54.6%
219,722		261,742	96,361		358,103	1,307	4,946	1,630	358,103	(19,511)	-5.8%	338,592	973	20.0%
220,430		101 056	91,707		204,039	1,057	4,689	1,379	304,059	(6,895)	-2.3%	297,164	822	46.7%
221,103		212,686	100,772	. 1	313.458	1 052	4,710	1,783	283,682	22,199	7.3%	305,881	767	55.4%
222 490		321 592	118 894		440.486	1 587	2,030	1, 1	440,400	47,330	13.1%	360,794	7,007	48.4%
223.564		362,120	123,356	. 1	440,466	1,00,1	5,983	1,980	440,486	/6,141	14.7%	516,627	1,081	66.4%
223,509		365,551	122,619		488 170	1,1797	6,176	2,172	483,470	(918)	-0.2% 7.4%	484,557	1,068	61.0%
223,936		331,308	121 775	1	453.083	1,137	0, - 0	2,104	466,170	10,404	0%	514,624	1,100	62.7%
		259,767	110.250		370,046	1,020	6,030	4,023	370,046	(3,3/3)	-0.8% 10.2%	449,710	1,027	60.8%
		199 150	99 566	ı	298 716	2/2,1	0,40	0,0	200,010	(34,337)	10.2%	353,680	7.98	56.5%
225,309		231 041	93,981	,	325,022	1 1 1 2 7	1,0,0	1,029	325,022	5,090	12 09%	304,413	034	90.7%
		272 673	91,785	1	364 458	1320	1,00,7	1,1	367.459	24,222	0.0%	367,700	7,0,1	46.4%
		250,072	007,10	1	000,400	670,1	1,00,1	1,010	504,450	1,340	0.4%	362,798	944	52.1%
		250,047	94,790	ı	044,040	1,21,	4,668	1,527	344,845	(7,284)	-2.2%	337,561	1,008	49.8%
		200,202	92,179	ı	300,381	1.00,1	4,534	1,328	300,381	(7,790)	-2.7%	292,591	797	49.3%
		192,915	090'06	ı	282,965	935	4,413	1,249	282,965	15,171	5.1%	298,136	733	26.5%
		227,418	103,829	1	331,247	1,101	5,072	1,459	331,247	33,129	9.1%	364,376	919	53.3%
		300,128	113,161	ī	413,290	1,450	5,515	1,817	413,290	(11,075)	-2.8%	402,215	1,148	48.7%
	4	400,629	124,555	1	525,184	1,930	6,065	2,303	525,184	20,623	3.8%	545,807	1,180	62.2%
_	V	402,070	128,884	1	530,954	1,934	6,266	2,324	530,954	35,432	6.3%	566,386	1,150	66.2%
	(1)	348,461	119,970	ı	468,431	1,673	5,832	2,046	468,431	(41,874)	-9.8%	426,557	1,102	53.8%
	- 7	238,525	104,041	j	342,567	1,144	5,056	1,495	342,567	(14,607)	-4.5%	327,960	888	49.6%
229,559		193,831	93,870	į	287,702	928	4,558	1,253	287,702	12,330	4.1%	300,032	099	63.1%
229,950		260,303	95,793	1	356,095	1,243	4,649	1,549	356,095	51,869	12.7%	407,965	1,071	51.2%
230,152		336,054	101,110	ı	437,165	1,604	4,899	1,899	437,165	23,753	5.2%	460,918	1,330	46.6%
230,271		310,773	104,329	1	415,102	1,482	5,055	1,803	415,102	47,007	10.2%	462,109	1,057	65.1%
230,928		274,177	97,474	,	371,651	1,304	4,710	1,609	371,651	(67,822)	-22.3%	303,829	964	42.4%
231,465		195,146	96,298	1	291,444	926	4,640	1,259	291,444	6,191	2.1%	297,635	645	64.1%
231,872		209,833	104,596	1	314,429	994	5,035	1,356	314,429	39,860	11.3%	354,290	869	54.8%
232,211		308,411	120,405	1	428,816	1,459	5,783	1,847	428,816	59,756	12.2%	488.571	1.032	65.8%
233,248		353,915	123,202	1	477,117	1,666	5,919	2,046	477,117	14,650	3.0%	491,767	1,086	%6.09
233,053		385,606	132,120	•	517,726	1,817	6,339	2,221	517,726	52,019	9.1%	569,745	1,217	62.9%
233,356		374,129	130,590	1	504,719	1,761	6,262	2,163	504,719	(25,955)	-5.4%	478,763	1,099	60.5%
233,624		251,201	112,246	ī	363,447	1,181	5,376	1,556	363,447	(25, 126)	-7.4%	338,321	831	54.7%
233,818		208,208	103,348	1	311,556	826	4,943	1,332	311,556	12,107	3.7%	323,663	749	%0.09
234,024	ı	247,581	99,152	,	346,732	1,162	4,744	1,482	346,732	18,856	5.2%	365,588	946	51.9%
232,626		297,342	101,795	1	399,137	1,390	5,435	1,716	399,137	41,223	9.4%	440,360	1,232	48.0%
232,806		309,244	105,959		415,203	1,445	5,640	1,783	415,203	(15,933)	-4.0%	399,270	1,189	20.0%
233,486		255,535	100,879	1	356,415	1,191	5,350	1,526	356,415	(28,669)	-8.7%	327,745	886	49.7%
234,044		215,310	100,729	1	316,040	1,001	5,323	1,350	316,040	8,508	2 6%	324 548	798	56.5%
234,506		214,519	105,672	t	320,190	995	5,564	1,365	320,190	48,000	13.0%	368 190	911	54.3%
234,877		273,648	116,769	1	390,417	1,268	6.126	1,662	390,417	93,998	19.4%	484 414	1 100	61.2%
236,008		342,599	128,343	ı	470,942	1,580	6,709	1,995	470,942	48,896	9.4%	519 838	1 122	62.3%
235,853		375,885	134,977	,	510,862	1,735	7,030	2,166	510,862	39,990	7.3%	550,852	1,196	61.9%
236,216		349,455	131,748	,	481,203	1,611	6,837	2,037	481,203	(3,494)	-0.7%	477,709	1,141	58.2%
236,534		277,491	118,702	,	396,192	1,278	6,138	1,675	396,192	(41,589)	-11.7%	354,603	874	54.5%
236,774		225,380	107,608	,	332,988	1,037	5,544	1,406	332,988	15,580	4.5%	348,568	841	27.6%
237,061		269,511	106,331		375,842	1,239	5,459	1,585	375,842	51,776	12.1%	427,618	1,165	49.3%
_	700,007	_	100,001	-	210,046	1,405	0,409	1,585	3/5,842		9//'LG	_	12.1%	12.1% 427,618

Exhibit A-3

PEC 2011 Load Forecast - Base Case Historical and Projected Load Determinants and Weather Conditions

Procession Pro												Sys	tem Net Ke	equiremen	System Net Requirements (Excluding Centex)	ng Centex	
Proceedings Proceedings Proceedings Proceedings Proceedings Procedeng Proced			ustomers			ketail Electr	icity Sales		Usage per	Customer (k	Wh/Cust)		Energy Red	uirements		Peak De	mand
Section Section Common			Non-			Non-	Spot			Non-					Energy		peo I
(4) (5) (6) (7)		Residential	residential	Total		residential	Loads	Total	Residential	residential	Total	Sales	Losses	600	ts	Demand	Factor
1,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0		(#)	(#)	(#)	(MWh)	(MWh)	(MWh)	(MWh)	(kWh/Cust)	(kWh/Cust)	(kWh/Cust)	(MWh)	(MWh)	(%)	(MWh)	(MW)	(%)
220,426, 1869 280,738 280,748	Jan-12	219,295	19,548	238,843	326,448	109,037		435,485	1,489	5,578	1,823	435,485	21,850	4.8%	457.336	1.280	48.0%
220144 1978 240301 227324 10577 91 200 200 1454 50 145	Feb-12	219,421	19,619	239,039	318,600	112,365	1	430,966	1,452	5,727	1,803	430,966	(16,538)	-4.0%	414,428	1,192	20.0%
200.064 18,80 20,71 20,71 80 302,41 1387 30,44 1387 30,44 1387 30,44 1387 30,44 1387 30,44 1387 30,44 1387 30,44 1387 30,44 1389 30,24 30,44 1389 30,44 1389 30,44 1389 30,44 1389 30,44 1389 30,44 1389 30,44 1389 30,44 1389 30,44 1389 30,44 1389 30,44 1389 30,44 1389 30,44 1389 13,44 30,44 1389 13,44 30,44 13,44 30,44 13,44 30,44 13,44 30,44 13,44 30,44 13,44 30,44 13,44 30,44 13,44 30,44 13,44 30,44 13,44 30,44 13,44 30,44 13,44 30,44 13,44 30,44 30,44 30,44 30,44 30,44 30,44 30,44 30,44 30,44 30,44 30,44 <th< td=""><td>Mar-12</td><td>220,049</td><td>19,689</td><td>239,738</td><td>262,981</td><td>106,710</td><td></td><td>369,691</td><td>1,195</td><td>5,420</td><td>1,542</td><td>369,691</td><td>(29,737)</td><td>-8.7%</td><td>339,953</td><td>919</td><td>49.7%</td></th<>	Mar-12	220,049	19,689	239,738	262,981	106,710		369,691	1,195	5,420	1,542	369,691	(29,737)	-8.7%	339,953	919	49.7%
1,000, 20,10	Apr-12	220,551	19,759	240,310	221,237	106,577	801	328,614	1,003	5,394	1,367	328,614	8,847	2.6%	337,461	830	56.5%
222.25.70 10.00 4.05.566 1.68.70 1.68.70 1.68.70 1.69.70 <	May-12	220,954	19,830	240,784	220,211	111,718	820	332,749	266	5,634	1,382	332,749	49,883	13.0%	382,632	947	54.3%
222 472 2014 145 25 202 44 1221 15 208 410 1785 6 17 2016 1489 170 50 59 59 59 1781 15 202 22 2017 15 20 2018 145 20 201	Jun-12	221,263	19,900	241,163	281,121	123,416	1,009	405,546	1,271	6,202	1,682	405,546	97,640	19.4%	503,187	1,142	61.2%
222,472 20,111 22,25 20,011 22,24 7,114 2,124 7,114 2,124 7,124 7,114 2,124 7,124 7,114 2,124 7,124 7,114 2,124 7,124 7,114 2,124 7,124 7,114 2,124 7,124	Jul-12	222,351	19,970	242,322	352,344	135,595	1,231	489,170	1,585	6,790	2,019	489,170	50,788	9.4%	539,959	1,166	62.3%
222.66.7. 20.01.11 3.42.68.3 3.60.01.00 3.60.08.00<	Aug-12	222,121	20,041	242,162	387,107	142,562	1,279	530,948	1,743	7,114	2,193	530,948	41,562	7.3%	572,510	1,243	61.9%
222.00.1 1,00.0 4,0.0.0 1,2.0.0 1,0.0 4,0.0.0 1,0.0 4,0.0.0 1,0.0 4,0.0 1,0.0 4,0.0 1,0.0 4,0.0 1,0.0 4,0.0 1,0.0 4,0.0 5,0.0 1,0.0 4,0.0 1,0.0 4,0.0 5,0.0 1,0.0 4,0.0 1,0.0 5,0.0 1,0.0 4,0.0 1,0.0 4,0.0 5,0.0 1,0.0 5,0.0 1,0.0 4,0.0 1,0.0 4,0.0 5,0.0 1,0.0 4,0.0 4,0.0 5,0.0 1,0.0 4,0.0 4,0.0 5,0.0 1,0.0 4,0.0 4,0.0 5,0.0 1,0.0 5,0.0 1,0.0 5,0.0 1,0.0 5,0.0 1,0.0 5,0.0 1,0.0 5,0.0 1,0.0 5,0.0 1,0.0 5,0.0 1,0.0 5,0.0 1,0.0 5,0.0 1,0.0 5,0.0 1,0.0 5,0.0 1,0.0 5,0.0 1,0.0 5,0.0 1,0.0 5,0.0 1,0.0 5,0.0 1,0.0 5,0.0 1,0.0 5,0.0 1,0.0 5,0.0	Sep-12	222,422	20,111	242,533	360,508	139,110	1,252	500,870	1,621	6,917	2,065	500,870	(3,636)	-0.7%	497,234	1,188	58.2%
22.3.0.2.2 2.3.4.3.9.0 2.22.4.49. 1.0.4.3 5.6.0 1.4.7.7 3.4.6.8.3 1.6.7.9 4.5.9 4.5.9 4.5.9 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.4 4.5 <t< td=""><td>Oct-12</td><td>222,677</td><td>20,181</td><td>242,858</td><td>286,455</td><td>125,303</td><td>1,172</td><td>412,930</td><td>1,286</td><td>6,209</td><td>1,700</td><td>412,930</td><td>(43,346)</td><td>-11.7%</td><td>369,584</td><td>911</td><td>54.5%</td></t<>	Oct-12	222,677	20,181	242,858	286,455	125,303	1,172	412,930	1,286	6,209	1,700	412,930	(43,346)	-11.7%	369,584	911	54.5%
255.240 20.042.2. 243.548 27.05 12.06 36.05 19.66 36.05 19.66 36.05 19.66 36.05 19.86 27.05 12.06 36.05 19.86 36.05 19.86 36.05 19.86 36.05 19.86 36.05 19.86 27.05 19.86 27.05 19.86 27.05 19.86 27.05 19.86 27.05 19.86 27.05 19.86 27.05 19.86 27.05 19.86 27.05 19.86 27.05 19.86 27.05 19.86 27.05 19.86 27.05 19.86 27.05 19.86 27.05 19.86 27.05 19.86 27.05 <td>Nov-12</td> <td>222,852</td> <td>20,252</td> <td>243,103</td> <td>232,495</td> <td>113,565</td> <td>778</td> <td>346,839</td> <td>1,043</td> <td>2,608</td> <td>1,427</td> <td>346,839</td> <td>16,228</td> <td>4.5%</td> <td>363,066</td> <td>876</td> <td>22.6%</td>	Nov-12	222,852	20,252	243,103	232,495	113,565	778	346,839	1,043	2,608	1,427	346,839	16,228	4.5%	363,066	876	22.6%
225.516 20.054 20.054 41.84 42.51 42.85 42.52 41.86 41.86 42.52	Dec-12	223,075	20,322	243,397	277,871	112,194	854	390,919	1,246	5,521	1,606	390,919	53,853	12.1%	444,772	1,212	49.3%
225.294 20.544	Jan-13	225,165	20,393	245,558	337,097	115,077	962	453,135	1,497	5,643	1,845	453,135	22,736	4.8%	475,871	1,332	48.0%
228,364 20,0544 20,0544 20,0544 20,0544 20,0542 30,0543 30,0544 30,0542 46,73 1,120 5,487 1,500 36,487 1,500 36,487 1,500 36,487 1,500 36,487 1,500 36,487 1,500 36,487 1,500 36,487 1,500 36,487 1,500 36,487 1,500 36,487 1,500 36,487 1,500 36,487 1,500 36,487 1,500 36,487 36,680	Feb-13	225,294	20,464	245,757	329,014	118,619	1,009	448,642	1,460	2,797	1,826	448,642	(17,217)	-4.0%	431,425	1,285	20.0%
2.2.8.454 2.0.060 2.7.46 1.000 5.468 1.000 5.468 1.000 5.468 1.000 5.468 1.000 4.2.816 1.000 5.468 1.000 4.2.816	Mar-13	225,939	20,534	246,473	271,593	112,678	896	385,239	1,202	5,487	1,563	385,239	(30,988)	-8.7%	354,251	928	49.7%
228,303 20,676 277,544 227,444 227,144 227,144 22,017 20,076 247,189 1,003 347,118 1,003 5,006 1,005 20,170 22,006 20,076 20,076 1,003 20,076 20,07	Apr-13	226,454	20,605	247,060	228,496	112,566	1,601	342,664	1,009	5,463	1,387	342,664	9,225	2.6%	351,888	865	56.5%
228.066 20.1/4 24.7/82 26.07 26.28 1,70 42.81 1,70 42.81 1,70 42.81 1,70 42.81 1,70 42.81 1,70 42.81 1,70 42.81 1,70 42.81 1,70 42.81 1,70 42.81 1,70 42.81 1,70 42.81 1,70 42.81 1,70 42.81 1,70 42.81 1,70 42.81 1,70 42.81 1,70 42.81 1,70 42.81 1,70 42.82 1,70	May-13	226,868	20,676	247,544	227,451	118,027	1,640	347,118	1,003	2,708	1,402	347,118	52,037	13.0%	399,155	886	54.3%
228 087 2.28 080 2.84 080 15.45 04 2.85 04 1.54 04 2.85 04 2.84 080 2.85 04	Jun-13	227,185	20,747	247,932	290,382	130,420	2,017	422,819	1,278	6,286	1,705	422,819	101,799	19.4%	524,618	1,191	61.2%
228,376 200 243,308 37,41 2,224 353,18 43,308 77,8 68,601 1,296 228,376 2,000 243,308 372,48 147,121 2,504 40,080 1,728 40,080 1,728 40,080 1,728 40,080 1,728 40,080 1,728 40,080 1,728 40,080 1,728 40,080 1,728 40,080 1,728 40,080 1,728 40,080 1,728 40,080 1,728 40,080 1,728 40,080 1,728 40,080 1,728 40,080 1,728 40,080 1,728 1,728 40,080 1,728 <	0 - I O	228,303	20,818	249,121	300,008	143,327	2,463	509,763	1,594	6,885	2,046	509,763	52,926	9.4%	562,689	1,215	62.3%
228.617 2.0.201 2.2.201 2.0.201 2.2.201 2.0.201 <t< td=""><td>Sop 13</td><td>220,000</td><td>20,060</td><td>240,933</td><td>239,908</td><td>150,731</td><td>2,228</td><td>553,197</td><td>1,753</td><td>7,216</td><td>2,222</td><td>553,197</td><td>43,303</td><td></td><td>596,501</td><td>1,296</td><td>61.9%</td></t<>	Sop 13	220,000	20,060	240,933	239,908	150,731	2,228	553,197	1,753	7,216	2,222	553,197	43,303		596,501	1,296	61.9%
228,046 21,712 25,041	Sep-13	228,370	21,960	249,330	205 963	127,121	4,00,0	322,076	1,631	6,019	2,094	522,076	(3,790)		518,286	1,238	58.2%
229,046 21,124 26,0218 27,124 26,0218 27,124 26,0218 27,124 26,0218 27,124 26,0218 27,124 26,0218 27,124 26,0218 27,124 26,0218 27,124 26,0218 27,124 26,0218 27,124 26,0218 27,124 26,0218 27,230 27,014 483,725 12,044 27,238 12,024 47,239 12,040 489,778 13,040	Nov-13	228,037	21,031	249,000	240,903	120,333	7,044	361,050	1,294	6,303	1,726	430,860	(45,228)		385,631	951	54.5%
231,486 21,744 225,684 1,724 1,224	Dec-13	229,017	21,12	250,218	287 129	118 746	2000	301,930	1,050	0,000	1,448	361,950	16,935	4.5%	378,884	914	57.6%
231,498 21,316 252,814 340,288 125,628 2,018 467,935 1,470 5,884 1,816 402,234 423,589 1,910 1,910 408,989 1,910 1,910 408,989 1,910 1,910 408,989 1,910 1,910 5,884 1,816 402,234 23,356 28,987 1,000 233,410 21,587 256,440 236,306 1,273 363,166 1,000 5,611 1,426 26% 368,166 2,6% 36,973	Jan-14	231,365	21.244	252,609	348 620	121 837	1,003	472,380	1,507	5,009	1,829	407,383	20,149	12.1%	463,732	1,264	49.3%
232,160 21,387 263,548 280,925 119,373 1,936 402,234 1,210 5,581 1,686 402,234 1,210 5,581 1,686 402,234 1,000 5,581 1,410 368,327 9,646 2,6% 367,973 905 233,140 21,489 264,40 300,435 138,299 3,861 1,287 6,402 1,734 42,034 10,044 11,287 96,685 1,000 447,597 1,003 233,414 1,286,204 300,435 138,299 3,861 1,426 256,932 9,646 2,6% 36,731 9,4% 86,857 1,246 26,831 9,4% 86,857 1,246 286,837 1,246 26,831 9,4% 86,857 1,246 28,446 1,246 26,831 36,447 1,246 26,831 1,246 2,447 1,246 36,831 1,246 2,447 1,440 1,440 1,440 1,440 1,244 1,244 1,244 1,246 26,312 36,442 1,248	Feb-14	231,498	21,316	252,814	340,289	125,628	2.018	467,935	1,470	5,894	1,070	467 935	(17 957)	4.0%	496,081	1,388	48.0%
232,890 21,459 254,150 236,367 119,292 2,667 358,327 1,016 5,559 1,410 358,327 9,646 2,733 367,973 9,048 2,673 367,973 9,048 2,734 41,287 41,287 1,019 5,811 1,426 5,6441 1,00% 41,587 1,004 41,587 1,004 41,587 1,004 41,587 1,004 41,587 1,004 41,587 1,004 41,587 1,004 41,587 2,287 36,61 1,287 2,287 36,41 1,004 41,587 2,287 36,61 1,287 41,287 2,287 36,61 1,287 36,51 2,287 36,61 1,287 36,51 36,41 1,287 41,61 2,736 2,287 36,61 2,738 36,51	Mar-14	232,160	21,387	253,548	280,925	119,373	1,936	402,234	1.210	5,581	1.586	402,234	(32,355)	%2.87	369,879	040,	40.0%
233,416 21,531 254,647 235,306 125,119 2,732 363,156 1,009 5,811 1,426 363,156 54,441 13.0% 417,597 1,034 233,441 21,633 256,044 300,435 13,829 3,831 442,094 1,287 56,003 442,094 1,287 6402 1,735 56,004 19,4% 648,231 1,245 1,245 1,245 1,245 1,245 1,245 1,245 1,245 1,245 1,245 1,245 1,246 1,246 1,245 1,245 1,246	Apr-14	232,690	21,459	254,150	236,367	119,292	2,667	358,327	1,016	5,559	1,410	358,327	9.646	2.6%	367,973	905	56.5%
233,441 21,603 255,044 300,435 138,299 3,361 442,084 1,287 6,402 1,733 442,084 106,440 19,4% 548,534 1,245 234,590 21,764 266,024 376,605 165,031 4,102 532,739 1,605 7,014 2,078 55312 9,4% 588,031 1,225 234,605 21,764 266,023 386,422 166,148 4,172 545,782 1,666 7,014 2,078 55312 9,4% 588,531 1,234 234,665 21,818 266,483 386,442 166,483 3,184 4,172 545,782 1,668 450,935 47,380 9,4% 588,531 1,294 58,732 1,294 58,733 1,294 403,599 995 236,688 1,178 426,199 1,263 5,725 1,468 47,757 4,84,912 1,440 1,440 1,440 1,440 1,440 1,440 1,440 1,440 1,440 1,440 1,440 1,440	May-14	233,116	21,531	254,647	235,306	125,119	2,732	363,156	1,009	5,811	1,426	363,156	54,441	,	417,597	1.034	54.3%
224,590 21,674 256,284 376,605 152,031 4,102 552,739 1,605 7,014 2,079 55,312 9,4% 568,051 1,270 224,565 21,746 256,093 47,362 578,077 1,786 7,355 2,257 578,017 45,246 7,386 45,246 7,386 45,246 7,386 45,246 7,386 45,246 7,386 46,259 1,547 45,246 7,386 436,912 1,554 47,256 46,259 1,547 46,247 7,386 496,573 1,547 403,599 995 234,788 48,912 1,556 426,199 58,713 1,772 403,599 995 235,736 225,736 227,766 2,586 378,848 1,058 5,811 1,474 378,848 1,725 4,866 426,199 58,713 1,276 426,199 1,772 4,84,912 1,324 238,444 1,518 5,821 1,474 378,444 1,474 378,444 1,474 378,444 1,474 378	Jun-14	233,441	21,603	255,044	300,435	138,299	3,361	442,094	1,287	6,402	1,733	442,094	106,440		548,534	1,245	61.2%
244,347 21,466 226,093 413,822 159,933 4,262 578,017 45,246 7.35 2257 578,017 45,246 7.35 1,254 7.35 1,234 1,234 234,665 21,818 266,483 366,442 160,442 1,767 2,128 645,762 1,778 450,356 1,736 1,234 234,665 21,818 266,483 306,314 140,783 1,666 450,935 1,776 450,936 1,778 403,599 957 234,685 27,804 1,263 5,725 1,666 426,199 1,775 426,199 1,775 450,936 426,199 1,263 426,199 1,263 426,199 1,264 426,199 1,264 426,199 1,264 426,199 1,265 426,199 1,264 426,199 1,264 426,199 1,266 426,199 1,276 426,199 1,264 426,199 1,264 426,199 1,264 426,199 1,264 426,199 1,264 426,199 1,	Jul-14	234,590	21,674	256,264	376,605	152,031	4,102	532,739	1,605	7,014	2,079	532,739	55,312		588,051	1,270	62.3%
2.44,020 2.1,818 2.56,823 3.85,442 1.05,148 4,172 545,762 1,564 450,935 1,775 450,935 1,775 450,935 1,775 450,935 1,775 450,935 1,775 450,935 1,775 450,935 1,775 450,935 1,775 450,935 1,775 450,935 1,775 450,935 1,775 450,935 1,775 450,935 1,775 450,935 1,775 450,935 1,775 480,977 480	Aug-14	234,347	21,746	256,093	413,822	159,933	4,262	578,017	1,766	7,355	2,257	578,017	45,246		623,263	1,354	61.9%
234,302 2,036 450,935 47,336 -11,7% 403,599 995 234,303 2,1,030 200,623 300,571 1,766 450,935 47,736 41,776 403,599 995 235,138 2,1,030 200,63 30,644 1,263 5,725 1,776 42,949 1,772 4,8% 484,912 1,32 235,138 2,2,036 297,366 200,650 360,860 1,263 3,52 488,877 4,8% 484,912 1,32 237,750 22,106 250,866 360,860 1,263 3,444 1,518 6,012 1,880 488,877 4,8% 470,116 1,400 237,780 22,106 133,332 3,218 420,574 1,219 5,691 1,434 24,757 4,8% 518,10 1,400 238,686 22,210 133,332 3,733 374,812 1,219 5,691 1,434 374,812 1,040 23,89 420,574 374,812 1,010 373,89 4	Sep-14	234,665	21,818	256,483	385,442	156,148	4,172	545,762	1,643	7,157	2,128	545,762	(3,962)		541,799	1,294	58.2%
235,353 22,033 257,364 27,045 27,046 27,047 48,974 470,116 4400 237,750 22,179 260,065 352,190 129,373 3,218 420,574 1,219 6,012 1,880 488,877 4,89 470,116 1,400 238,768 22,210 126,496 3,733 3,444 1,219 6,012 1,880 488,877 4,89 470,40 486,877 1,480 6,012 1,880 488,877 489,40 1,040 238,84 22,40 33,44 1,040 23,44 1,040 23,44 1,040 23,44 1,040<	NOV-14	235,118	21,690	250,052	300,311	140,726	3,890	450,935	1,304	6,429	1,756	450,935	(47,336)		403,599	966	54.5%
237,50 22,10 26,10 20,10 3,10 420,10 3,10 420,10 3,10 420,10 3,10 420,10 3,10 420,10 3,10 420,10 3,10 420,10 3,10 420,10 3,10 420,10 3,10 420,10 3,10 420,10 3,10 420,10 3,10 420,10 3,10 420,10 3,10 420,10 3,10 420,10 1,21 3,10 420,57 <t< td=""><td>Dec-14</td><td>235,353</td><td>22.033</td><td>257,386</td><td>240,040</td><td>126,142</td><td>2,300</td><td>370,040</td><td>1,058</td><td>5,811</td><td>1,4/4</td><td>378,848</td><td>17,725</td><td></td><td>396,573</td><td>957</td><td>57.6%</td></t<>	Dec-14	235,353	22.033	257,386	240,040	126,142	2,300	370,040	1,058	5,811	1,4/4	378,848	17,725		396,573	957	57.6%
237,887 22,179 260,065 352,190 133,332 3,355 48,877 1,480 6,012 1,883 420,574 1,470 470,116 1,430 238,568 22,251 260,819 290,719 126,637 3,218 420,574 1,613 420,574 1,613 420,574 1,400 238,568 22,251 260,819 290,719 126,637 3,733 374,812 1,023 5,669 1,434 374,812 1,039 420,574 1,046 384,902 947 239,549 22,324 261,946 243,458 132,617 3,824 379,899 1,016 5,921 1,450 379,899 56,951 1,312 420,574 1,081 239,844 22,470 262,354 310,812 146,524 4,704 462,040 1,296 6,521 1,761 462,040 111,242 19,4% 573,282 1,302 241,1064 22,354 310,812 146,524 4,704 462,040 1,266 5,21 1,	Jan-15	237,750	22,106	259,856	360,850	129.367	3,197	493 414	2,12,18	5,750	000,1	420,133	20,713	7 00/	404,912	1,322	49.5%
238,568 22,251 260,819 290,719 126,637 3,218 420,574 1,219 5,691 1,613 420,574 33,830 -8.7% 386,744 1,046 239,112 22,324 261,437 244,582 126,496 3,733 374,812 1,023 5,666 1,434 374,812 10,090 2.6% 384,902 947 239,549 22,397 261,946 243,458 132,617 3,824 379,899 1,016 5,921 1,450 379,899 56,951 1,081 2.6% 344,902 947 239,844 22,397 261,946 243,458 132,617 3,824 4,704 462,040 1,296 6,521 1,751 462,040 1111,242 19,4% 573,282 1,302 241,064 22,39 16,66 5,742 556,320 1,616 7,142 2,110 556,320 57,760 9,4% 614,081 1,413 241,141 22,68 263,830 569,68 1,616 7,142	Feb-15		22,179	260,065	352,190	133,332	3,355	488,877	1,480	6.012	1.880	488.877	(18 761)		470,176	1,400	50.0%
239,112 22,324 261,437 244,582 126,496 3,733 374,812 1,023 5,666 1,434 374,812 10,090 2.6% 384,902 947 239,549 22,397 261,946 243,458 132,617 3,824 379,899 1,016 5,921 1,450 379,899 56,951 13.0% 436,860 1,081 239,549 22,397 261,946 243,458 132,617 3,824 4,704 462,040 1,296 6,521 1,761 462,040 111,242 19,4% 573,282 1,302 241,064 22,430 428,027 16,6524 4,704 462,040 1,777 7,486 2,290 603,294 47,225 7,3% 650,519 1,413 241,141 22,688 263,830 5,945 1,616 7,186 2,290 603,294 471,059 1,312 44,148 1,143 471,059 1,312 44,148 1,143 471,059 1,312 44,14,169 1,326 2,290 603,29	Mar-15		22,251	260,819	290,719	126,637	3,218	420,574	1,219	5,691	1,613	420,574	(33,830)		386,744	1.046	49.7%
239,549 22,397 261,946 243,458 132,617 3,824 379,899 1,016 5,921 1,450 379,899 56,951 13.0% 436,856 1,081 239,884 22,470 26,354 4,704 46,2040 1,296 6,521 1,761 462,040 111,242 19,4% 573,282 1,302 241,064 22,470 26,354 4,704 46,2040 1,296 6,521 1,761 462,040 111,242 19,4% 573,282 1,302 241,064 22,543 263,607 389,573 161,005 5,742 556,320 1,616 7,142 2,110 556,320 57,760 9,4% 614,081 1,413 241,141 22,688 263,830 398,632 166,228 1,616 1,777 7,486 2,290 603,294 47,105 1,413 241,417 22,688 263,830 398,632 569,698 1,616 1,777 7,282 2,159 569,698 1,413 22,814,417 <td>Apr-15</td> <td></td> <td>22,324</td> <td>261,437</td> <td>244,582</td> <td>126,496</td> <td>3,733</td> <td>374,812</td> <td>1,023</td> <td>5,666</td> <td>1,434</td> <td>374,812</td> <td>10,090</td> <td></td> <td>384,902</td> <td>947</td> <td>56.5%</td>	Apr-15		22,324	261,437	244,582	126,496	3,733	374,812	1,023	5,666	1,434	374,812	10,090		384,902	947	56.5%
239,884 22,470 262,354 310,812 146,524 4,704 462,040 1,296 6,521 1,761 462,040 111,242 1328 1,302 241,064 22,430 28,573 16,105 5,742 56,320 1,714 2,110 556,320 57,760 9,4% 614,081 1,326 240,814 22,543 428,027 169,302 5,965 603,294 1,777 7,486 2,290 603,294 47,225 7.3% 650,519 1,413 241,417 22,688 263,830 398,632 165,228 5,639 1,512 2,159 569,698 4,143 1,777 4,143 2,159 569,698 1,413 2,159 569,698 1,413 2,290 603,294 4,71059 1,312 4,141 2,290 603,294 4,71059 1,312 4,141,169 1,312 4,141,169 1,777 4,141,169 1,312 4,141,169 1,312 4,141,169 1,326 1,326 1,326 1,326 1,326	May-15		22,397	261,946	243,458	132,617	3,824	379,899	1,016	5,921	1,450	379,899	56,951	13.0%	436,850	1,081	54.3%
241,064 22,543 263,600 389,573 1616 7,142 2,110 556,320 57,760 9,4% 614,081 1,326 240,814 22,543 428,027 169,302 5,965 603,294 1,777 7,486 2,290 603,294 47,225 7.3% 650,519 1,413 241,141 22,688 263,830 398,632 165,228 5,639 1,653 7,282 2,159 569,698 1,413 65,562 1,351 241,417 22,688 263,830 398,632 148,850 5,449 471,059 1,312 6,540 1,778 471,059 1,326 241,606 22,834 395,644 395,645 1,064 5,909 1,484 1,670 1,414,156 1,039 241,606 22,937 264,755 307,293 133,315 397 444,560 1,771 5,909 1,444,680 1,444,156 1,744,156 1,744,156 1,744,156 1,744,156 1,744,156 1,744,156 1,744,156 1,744,1	Jun-15		22,470	262,354	310,812	146,524	4,704	462,040	1,296	6,521	1,761	462,040	111,242	19.4%	573,282	1,302	61.2%
241,141 22,688 263,830 398,632 165,228 5,865 3,675 307,293 133,315 3,972 3,168 2,290 603,294 47,225 7.3% 650,519 1,413 7.486 2,290 603,294 47,225 7.3% 650,519 1,413 7.485 2,290 603,294 47,225 7.3% 650,519 1,413 7.485 2,290 603,294 47,225 7.3% 650,519 1,413 7.485 2,290 7.2% 653,690 7.3% 650,519 1,413 7.4% 650,519 7.1,7% 421,611 1,039 7.4% 650,610 7.1% 6.1% 6.1% 6.1% 6.1% 6.1% 6.1% 6.1% 6	JUI-15		22,543	763,607	389,573	161,005	5,742	556,320	1,616	7,142	2,110	556,320	57,760	9.4%	614,081	1,326	62.3%
241,141 22,000 269,630 396,632 103,228 5,839 569,688 (4,136) -0.7% 565,562 1,351 241,417 22,761 264,178 316,760 148,850 5,449 471,059 1,312 6,540 1,783 471,059 1,484 254,178 316,395 397,233 133,315 3,972 444,580 1,774 5,909 1,470 4,4780 1,774 5,909 1,470 4,4780 1,774 5,909 1,470 6,134 50 1,774 5,909 1,470 6,134 50 1,470 6,134 50 1,470 6,134 50 1,470 6,134 5,909 1,470 6,	Aug-15		22,616	263,430	428,027	169,302	5,965	603,294	1,777	7,486	2,290	603,294	47,225	7.3%	620,519	1,413	61.9%
241,506 22,834 254,755 307,293 133,315 3,972 44,560 1771 5,820 1,674 22,907 264,755 307,293 133,315 3,972 44,560 1771 5,820 1,670 1,	Oct-15		22,088	262,630	346.760	148 850	2,038	209,098	1,653	7,282	2,159	569,698	(4,136)		565,562	1,351	58.2%
2-11-10-10-10-10-10-10-10-10-10-10-10-10-	NOV-15		22,73	264,173	257 103	137 926	3,43	305,033	2.0,1	0,040	1,703	47 1,039	(49,448)	1	421,611	1,039	54.5%
	Dec-15		22,907	264 755	307,793	133 315	3,010	393,643	1,004	0000	1,490	395,645	18,511	,	414,156	999	57.6%

Exhibit A-3

PEC 2011 Load Forecast - Base Case Historical and Projected Load Determinants and Weather Conditions

	C	Customers			Retail Flectr	ricity Sales		Usage per	Gustomer (kWh/Cust)	Wh/Ciret)		Fnerny Requirements	iiremente	Finerray Requirements Desk Der	Dook Domono	mand
4									1000000	(acronical)	The state of the s		20112		I can Di	
		Non-			Non-	Spot			Non-					Energy Requiremen		Load
Month	Residential	residential	Total	Residential	residential	Loads	Total	Residential	residential	Total	Sales	rosses	Losses	ts .	Demand	Factor
	#)	#	#)	(MWh)	(MWh)	(MWh)	(MWh)	(kWh/Cust)	(kWh/Cust)	(kWh/Cust)	(MWM)	(MWh)	(%)	(MWh)	(MM)	(%)
Jan-16	244,272	22,979	267,251	373,026	136,717	4,470	514,214	1,527	5,950	1,924	514,214	25,800	4.8%	540,014	1,511	48.0%
Mar 16	244,412	23,051	267,463	364,077	140,902	4,859	509,838	1,490	6,113	1,906	509,838	(19,565)	-4.0%	490,273	1,410	20.0%
Anr. 16		23,123	260,234	262,933	133,823	4,500	438,855	1,226	5,787	1,636	438,855	(35,301)	-8.7%	403,554	1,091	49.7%
May 16		23,193	200,002	252,640	133,008	4,003	391,172	1,029	5,763	1,455	391,172	10,531	2.6%	401,702	886	26.5%
lin-16		73,207	766,802	321,000	140,131	4,770	396,587	1,023	6,023	1,472	396,587	59,453	13.0%	456,040	1,129	54.3%
1 1 2	247,474	23,009	200,002	702 734	124,020	2,070	462,000	1,004	0,034	1,787	482,006	116,049	19.4%	598,055	1,358	61.2%
A10-16		23.483	270,902	442,490	178 875	7,17	500,021	1,020	7,201	2,140	580,021	60,221	9.4%	640,243	1,382	62.3%
Sep-16		23,463	271 310	442,490	174 563	1,451	602,010	1,788	7,617	2,321	628,816	49,223	7.3%	678,039	1,473	61.9%
Oct-16		23,626	271,566	327 469	157 254	6,812	491 534	1,963	6.411	7,189	293,961	(4,312)	-0.7%	589,649	1,408	58.2%
Nov-16	248,234	23,698	271.932	265,796	142,539	4 521	412,856	1,020	6,030	7,009	491,034	(31,397)	11.1%	459,937	1,085	54.5%
Dec-16	248,482	23,770	272,253	317,686	140.833	4 965	463 484	1 279	5,0,0	1,702	412,030	63.870	4.3%	432,172	1,047	07.0%
Jan-17	250,998	23,841	274,839	385,656	144,386	5,589	535,631	1.536	6,056	1 949	535,631	26,875	7 8%	562,533	7,437	49.5%
Feb-17	251,142	23,912	275,054	376,380	148.765	5,865	531 010	1 499	6,227	1 931	531,010	(70,02)	4.0%	540,630	4,0,-	40.0%
Mar-17	251,860	23,983	275.843	310,669	141 252	5,626	457,546	1,733	5,890	26,1	757 546	(20,377)	0.4.0%	210,632	1,52,1	20.0%
Apr-17	252,435	24,053	276,489	261,351	141,051	5,593	407,995	1,035	5 864	1 476	407 995	10 984	2 6%	118 078	0000	19.70
May-17	252,897	24,124	277,021	260,135	147,831	5,729	413.694	1 029	6 128	1 493	413,694	62,004	13.0%	416,970	2,77	00.07
Jun-17	253,250	24,195	277,445	332,084	163,284	7.047	502,415	1.311	6 749	2,100	502,415	120.963	10.7%	27,0,112	7 7 7 7	04.070
Jul-17	254,496	24,266	278,762	416,212	179,368	8,602	604.183	1,635	7 392	2 167	604 183	62,330	0.4%	666,010	2, 4	62.2%
Aug-17	254,233	24,337	278,569	457,270	188,556	8,936	654,762	1,799	7.748	2,15,	654 762	51.254	7.3%	706,016	1,440	61.0%
Sep-17	254,578	24,407	278,985	425,844	183,964	8,747	618,554	1,673	7.537	2.217	618.554	(4 491)	%2.7	614,064	1,000	58.2%
Oct-17	254,869	24,478	279,347	338,365	165,681	8,175	512,220	1,328	6,769	1,834	512,220	(53,769)	-11.7%	458 451	1 130	54.5%
Nov-17	255,069	24,549	279,618	274,623	150,140	5,426	430,188	1,077	6,116	1,538	430,188	20,127	4.5%	450,316	1.086	57.6%
Dec-17	255,324	24,620	279,944	328,216	148,305	5,959	482,480	1,285	6,024	1,723	482,480	66,466	12.1%	548,947	1,496	49.3%
Jan-18	257,974	24,688	282,663	398,536	152,038	6,707	557,280	1,545	6,158	1,972	557,280	27,961	4.8%	585,242	1,638	48.0%
Feb-18	258,122	24,757	282,879	388,944	156,638	7,039	552,621	1,507	6,327	1,954	552,621	(21,207)	-4.0%	531,414	1,583	50.0%
Mar-18		24,825	283,686	321,036	148,718	6,751	476,505	1,240	5,991	1,680	476,505	(38,329)	-8.7%	438,175	1,185	49.7%
Apr-18		24,893	284,346	270,069	148,496	6,928	425,494	1,041	5,965	1,496	425,494	11,455	2.6%	436,948	1,075	26.5%
May-18		24,962	284,888	268,809	155,624	2,096	431,530	1,034	6,234	1,515	431,530	64,691	13.0%	496,221	1,228	54.3%
Jun-18		25,030	285,320	343,153	171,882	8,730	523,764	1,318	6,867	1,836	523,764	126,103	19.4%	649,867	1,476	61.2%
3ul-18		25,099	286,669	430,080	188,801	10,656	629,537	1,644	7,522	2,196	629,537	65,362	9.4%	694,899	1,500	62.3%
Aug-18		25,167	286,466	472,500	198,459	11,070	682,030	1,808	7,886	2,381	682,030	53,388	7.3%	735,418	1,597	61.9%
Sep-18		25,236	286,889	440,021	193,614	10,836	644,471	1,682	7,672	2,246	644,471	(4,679)	%2'0-	639,792	1,528	58.2%
CG-13		25,304	287,257	349,626	174,362	10,138	534,126	1,335	6,891	1,859	534,126	(26,068)	-11.7%	478,057	1,179	54.5%
NOV-18	262,158	25,373	287,531	283,759	157,997	6,729	448,485	1,082	6,227	1,560	448,485	20,984	4.5%	469,468	1,132	22.6%
Dec-18	262,421	25,441	287,862	339,131	156,057	7,390	502,579	1,292	6,134	1,746	502,579	69,235	12.1%	571,814	1,558	49.3%
Jan-19	265,124	25,508	290,632	411,782	160,014	8,318	580,113	1,553	6,273	1,996	580,113	29,107	4.8%	609,220	1,705	48.0%
Feb-19	265,276	25,575	290,851	401,896	164,885	8,729	575,510	1,515	6,447	1,979	575,510	(22,085)	-4.0%	553,425	1,649	20.0%
Mar-19		25,642	291,677	331,745	156,575	8,373	496,693	1,247	6,106	1,703	496,693	(39,953)		456,740	1,235	49.7%
Apr-19		25,709	292,352	279,095	156,369	8,263	443,728	1,047	6,082	1,518	443,728	11,946		455,674	1,121	26.5%
May-19	267,130	25,776	292,906		163,903	8,464	450,177	1,040	6,359	1,537	450,177	67,486		517,664	1,281	54.3%
our-19		25,843	293,346		181,057	10,413	546,132	1,326	7,006	1,862	546,132	131,488	_	677,621	1,539	61.2%
01-In		25,910	294,729		198,913	12,710	656,155	1,654	7,677	2,226	656,155	68,126	9.4%	724,281	1,564	62.3%
Aug-19		25,977	294,518	488,407	209,124	13,204	710,734	1,819	8,050	2,413	710,734	52,635	7.3%	766,369	1,664	61.9%
Sep-18	268,905	26,044	294,949	454,861	204,052	12,924	671,837	1,692	7,835	2,278	671,837	(4,878)		696,999	1,593	58.2%
OCI-19	269,213	26,111	295,324	361,437	183,792	12,101	557,331	1,343	7,039	1,887	557,331	(58,504)	`1	498,827	1,230	54.5%
NOV-19		26,1/8	295,602	293.363	166.569	8.032	467 963	7 080	6 363	4 582	767 063	700 70		010 000		1
	, 0000	1,000				100,0	00,	000'-	0,00	000,1	407,903	260,12	4.5%	489,858	1,182	27.6%

Exhibit A-3

PEC 2011 Load Forecast - Base Case

Historical and Projected Load Determinants and Weather Conditions

	Customers				0000		The part of the pa								
				Retail Electricity Sales	ricity sales		Usage ber	Usage per Customer (kWh/Cust	(Wh/Cust)		Energy Requirements	uirements		Peak Demand	mand
	Non-			Non-	Spot			Non-					Energy		- Pag
Residential	residential	Total	Residential	residential	Loads	Total	Residential	residential	Total	Sales	Losses	Losses	ts	Demand	Factor
(#)	(#)	(#)	(MWh)	(MWh)	(MWh)	(MWh)	(kWh/Cust)	(kWh/Cust)	(kWh/Cust)	(MWh)	(MWh)	(%)	(MWh)	(MM)	(%)
272,458	26,309	298,767	425,721	168,718	9,928	604,367	1,563	6,413	2,023	604.367	30.324	4.8%	634 691	1776	48 0%
272,614	26,374	298,988	415,502	173,849	10,792	600,142	1,524	6,592	2,007	600,142	(23,030)	ġ	577,112	1,660	50.0%
273,394	26,439	299,833	342,977	165,083	9,994	518,055	1,255	6,244	1,728	518,055	(41,672)		476,384	1,288	49.7%
274,018	26,503	300,521	288,546	164,862	10,123	463,531	1,053	6,220	1,542	463,531	12,479	2.6%	476,009	1,171	56.5%
274,519	26,568	301,087	287,217	172,801	10,369	470,387	1,046	6,504	1,562	470,387	70,516	13.0%	540,903	1,339	54.3%
274,903	26,632	301,535	366,675	190,881	12,755	570,311	1,334	7,167	1,891	570,311	137,309	19.4%	707,620	1,607	61.2%
276,255	26,697	302,952	459,589	209,701	15,570	684,859	1,664	7,855	2,261	684,859	71,106	9.4%	755,965	1,632	62.3%
275,969	26,761	302,730	504,950	220,460	16,174	741,585	1,830	8,238	2,450	741,585	58,050	7.3%	799,635	1,737	61.9%
276,343	26,826	303,169	470,269	215,108	15,832	701,210	1,702	8,019	2,313	701,210	(2,091)	%2'0-	696,119	1,662	58.2%
620,072	26,890	303,550	3/3,683	193,746	14,827	582,255	1,351	7,205	1,918	582,255	(61,120)	-11.7%	521,135	1,285	54.5%
777 461	27,020	303,832	303,302	175,585	9,841	488,729	1,095	6,514	1,609	488,729	22,866	4.5%	511,595	1,234	22.6%
200,000	07,020	504,173	302,510	173,454	10,808	546,772	1,308	6,420	1,798	546,772	75,323	12.1%	622,095	1,695	49.3%
200,030	20,007	307,138	440,227	100,400	12,165	630,210	1,572	995'9	2,052	630,210	31,620	4.8%	661,830	1,852	48.0%
280,216	27,144	307,360	429,642	183,198	12,767	625,606	1,533	6,749	2,035	625,606	(24,008)	-4.0%	601,599	1,792	50.0%
281,018	27,206	308,224	354,636	1/3,934	12,246	540,815	1,262	6,393	1,755	540,815	(43,502)	-8.7%	497,313	1,345	49.7%
281,660	27,268	308,928	298,342	1/3,6/4	11,721	483,738	1,059	6,369	1,566	483,738	13,023	2.6%	496,760	1,222	26.5%
282,175	27,330	309,505	296,957	182,010	12,006	490,973	1,052	099'9	1,586	490,973	73,602	13.0%	564,575	1,397	54.3%
282,569	27,393	309,961	379,094	201,023	14,770	594,887	1,342	7,339	1,919	594,887	143,226	19.4%	738,113	1,676	61.2%
283,959	27,455	311,414	475,137	220,809	18,029	713,975	1,673	8,043	2,293	713,975	74,129	9.4%	788,104	1,701	62.3%
283,665	27,517	311,182	522,014	232,105	18,729	772,847	1,840	8,435	2,484	772,847	60,497	7.3%	833,344	1,810	61.9%
284,050		311,629	486,142	226,437	18,332	730,912	1,711	8,210	2,345	730,912	(2,307)	~2.0-	725,605	1,733	58.2%
284,375		312,016	386,281	203,920	17,192	607,393	1,358	7,377	1,947	607,393	(63,759)	-11.7%	543,634	1,340	54.5%
284,598	27,703	312,301	313,516	184,780	11,411	509,707	1,102	6,670	1,632	208,707	23,848	4.5%	533,555	1,287	24.6%
284,883	27,766	312,648	3/4,703	182,511	12,532	569,746	1,315	6,573	1,822	569,746	78,488	12.1%	648,235	1,767	49.3%
720,732		315,535	454,782	187,080	14,105	655,967	1,581	6,723	2,079	655,967	32,913	4.8%	688,880	1,928	48.0%
6/8/187		315,760	443,841	192,715	14,803	651,359	1,542	6,911	2,063	651,359	(24,996)	-4.0%	626,363	1,866	20.0%
288,699		316,643	366,351	182,946	14,199	563,496	1,269	6,547	1,780	563,496	(45,327)	-8.7%	518,170	1,401	49.7%
289,358		317,361	308,193	182,651	13,320	504,164	1,065	6,523	1,589	504,164	13,573	2.6%	517,736	1,273	26.5%
788'887	28,062	317,949	306,759	191,394	13,643	511,796	1,058	6,820	1,610	511,796	76,724	13.0%	588,519	1,457	54.3%
280,282	28,121	318,414	391,601	211,361	16,784	619,746	1,349	7,516	1,946	619,746	149,211	19.4%	768,958	1,746	61.2%
201,120	26,101	210,801	490,000	232, 138	20,487	743,431	1,682	8,237	2,324	743,431	77,187	9.4%	820,618	1,772	62.3%
2014.00		320,413	503,220	227,000	202,12	200,4480	1,850	8,640	2,517	804,486	62,974		867,460	1,884	61.9%
200,148		320,113	300,003	247,998	40,832	086,097	1,721	8,410	2,377	760,990	(5,525)		755,465	1,804	58.2%
202,140	20,03	320,300	200,000	404 460	19,000	932,000	1,300	/66,7	3/8/1	632,866	(66,433)	ì	566,433	1,396	54.5%
292,679	28,410	321 147	387.033	194, 109	14,961	503,060	1,100	0,033	1,055	530,986	24,844	4.5%	555,830	1,341	57.6%
295 529	28.535	324 064	469,660	196 532	16,046	682,032	1,522	0,734	1,047	283,032	01,099	12.1%	6/4,750	1,839	49.3%
295,698	28,592	324,290	458.346	202,521	16,840	677 607	1,550	7,080	2,100	677 607	78,731		654 604	4,005	48.0%
296,545	28,649	325,194	378,312	192,132	16,152	586,596	1,276	6,706	1.804	586,596	(47 185)		539 411	1 459	49.0%
297,222	28,707	325,928	318.246	191,792	14.918	524,956	1 071	6,681	1,611	524 956	14 132		530,088	90,4	FG F0/
297,765	28,764	326,529	316,754	200,943	15,281	532,978	1,064	6,986	1,632	532,978	79,899	13.0%	612,877	1,520	57.2%
298,181	28.821	327.002	404,349	221,873	18,798	645,021	1,356	7 698	1 973	645,073	155 207	10.0%	800 217	1,0,7	2,00
299,648		328,526	506,768	243,648	22,946	773,361	1,691	8 437	2,354	773 361	80,297	0.4%	853,656	1,017	62.2%
299,337		328,273	556,740	256,044	23,837	836,620	1 860	8 849	2,549	836,620	65,430	7.3%	000,000	1,043	64.0%
299,744	28,993	328,737	518,459	249,726	23,332	791,518	1,730	8,613	2,248	791 518	(5,747)	%2.7	785,110	1,939	50.3%
300,086	29,050	329,137	411,941	224,835	21,923	658,699	1.373	7.739	2,001	658 699	(69 145)	-11 7%	589 554	1,077	57 5%
300,322	29.108	329,430	334,328	203,680	14,550	550 558	1 1 1 2 2	2002	1 677	000,000	01010	7 50/	570,001	1 0	57.070
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Exhibit A-3

PEC 2011 Load Forecast - Base Case

Historical and Projected Load Determinants and Weather Conditions

5	Customers			Retail Electr	ricity Sales		Usage per	Usage per Customer (kWh/Cust	Wh/Cust)		Energy Requirements	uirements		Peak Demand	mand
	Non-			Non-	Spot			Non-					Energy		700
Residential r	residential	Total	Residential	residential	Loads	Total	Residential	residential	Total	Sales	Losses	Losses	ts ts	Demand	Factor
	(#)	(#)	(MWh)	(MWh)	(MWh)	(MWh)	(kWh/Cust)	(kWh/Cust)	(kWh/Cust)	(MWh)	(MWh)	(%)	(MWh)	(MW)	(%)
303,561	29,222	332,783	484,847	206,102	17,986	708,935	1,597	7,053	2,130	708,935	35,570	4.8%	744.506	2.083	48 0%
303,734	29,279	333,014	473,153	212,250	19,550	704,953	1,558	7,249	2,117	704,953	(27,052)	-4.0%	677,901	1,950	50.0%
304,604	29,336	333,940	390,522	201,434	18,106	610,061	1,282	998'9	1,827	610,061	(49,072)	-8.7%	560,989	1,517	49.7%
305,299	29,394	334,693	328,507	201,052	16,517	546,075	1,076	6,840	1,632	546,075	14,701	2.6%	560,776	1,379	26.5%
305,857	29,451	335,308	326,958	210,617	16,918	554,492	1,069	7,152	1,654	554,492	83,124	13.0%	637,617	1,578	54.3%
306,284	29,508	335,792	417,361	232,525	20,812	650,699	1,363	7,880	1,997	650,079	161,479	19.4%	832,178	1,889	61.2%
307,791	29,565	337,356	523,060	255,312	25,404	803,777	1,699	8,636	2,383	803,777	83,453	9.4%	887,230	1,915	62.3%
307,473	29,622	337,095	574,622	268,268	26,391	869,281	1,869	9,056	2,579	869,281	68,046	7.3%	937,327	2,036	61.9%
307,890	29,679	337,569	535,096	261,616	25,832	822,545	1,738	8,815	2,437	822,545	(5,972)	-0.7%	816,573	1,950	58.2%
308,242	29,736	337,978	425,147	235,511	24,288	684,946	1,379	7,920	2,027	684,946	(71,900)	-11.7%	613,046	1,511	54.5%
308,484	29,793	338,277	345,036	213,325	16,120	574,481	1,118	7,160	1,698	574,481	26,879	4.5%	601,360	1,451	57.6%
308,792	29,850	338,643	412,344	210,626	17,704	640,675	1,335	7,056	1,892	640,675	88,259	12.1%	728,934	1,987	49.3%
311,803	29,907	341,711	500,358	215,845	19,927	736,130	1,605	7,217	2,154	736,130	36,935	4 8%	773,065	2 163	48 0%
311,982	29,964	341,946	488,299	222,292	20,913	731,504	1,565	7,419	2,139	731,504	(28.071)	-4 0%	703 432	2 095	50 0%
312,875	30,021	342,896	403,029	210,973	20,059	634,061	1,288	7,028	1,849	634.061	(51,003)	-8.7%	583 058	1,527	49.7%
313,589	30,077	343,667	339,034	210,582	17,586	567,202	1,081	7,001	1,650	567 202	15 270	2 6%	582,471	1,011	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
314,162	30,134	344,296	337,440	220,609	18,014	576,063	1.074	7,321	1,673	576,063	86.358	13.0%	662,471	1,630	77.3%
314,601	30,191	344,792	430,750	243,567	22,160	696,477	1,369	8,068	2.020	696 477	167,685	19.4%	864 162	1 962	84.0%
316,149	30,248	346,397	539,849	267,446	27,050	834,345	1,708	8,842	2.409	834,345	86,626	9 4%	920,102	1 988	62.3%
315,822	30,305	346,126	593,075	281,029	28,100	902,204	1,878	9,273	2,607	902.204	70,623	7.3%	972,827	2,113	61 9%
316,250	30,361	346,612	552,289	274,072	27,505	853,866	1,746	9,027	2,463	853,866	(6,199)		847.667	2,024	58 2%
316,612	30,418	347,030	438,815	246,733	25,871	711,418	1,386	8,111	2,050	711,418	(74,679)	-11.7%	636,739	1.570	54.5%
316,860	30,475	347,335	356,134	223,498	17,171	596,802	1,124	7,334	1,718	596,802	27,923	4.5%	624,725	1,507	27.6%
317,177	30,532	347,709	425,614	220,679	18,858	665,152	1,342	7,228	1,913	665,152	91,631	12.1%	756,783	2,063	49.3%
320,262	30,588	350,850	516,436	226,124	21,225	763,786	1,613	7,393	2,177	763,786	38,322	4.8%	802,108	2,245	48.0%
320,446	30,645	351,090	503,979	232,855	22,275	759,109	1,573	7,599	2,162	759,109	(29,131)	-4.0%	729,978	2,174	20.0%
321,363	30,701	352,064	415,961	220,976	21,367	658,304	1,294	7,198	1,870	658,304	(52,953)	-8.7%	605,351	1,637	49.7%
322,097	30,757	352,854	349,905	220,544	18,656	589,105	1,086	7,170	1,670	589,105	15,859	2.6%	604,964	1,488	56.5%
322,685	30,814	353,499	348,253	231,023	19,109	598,386	1,079	7,497	1,693	598,386	89,704	13.0%	060'889	1,703	54.3%
323,130	30,870	354,007	444,543	255,040	23,508	723,091	1,376	8,262	2,043	723,091	174,093	19.4%	897,184	2,037	61.2%
327,720	30,927	355 373	642,123	200,017	20,090	805,830	1,716	9,054	2,434	865,836	89,896	9.4%	955,732	2,063	62.3%
327 830	27,000	255,070	560,040	204,210	29,009	900,000	1,00,1	9,490	2,034	936,059	13,273		1,009,332	2,192	61.9%
325 201	31,040	356,208	752 827	260,099	23,170	730,013	1,755	9,243	2,480	886,015	(6,433)	-0.7%	879,582	2,101	58.2%
325 457	31 153	356,609	367 498	233 915	18 221	619,635	1,092	0,300	2,073	7.00,050	(976,77)	11.1%	210,100	1,630	54.5%
325,782	31,209	356,991	439,186	230,944	20,012	690,033	1,348	7,509	1,730	600,442	26,991	4.0%	705 246	1,565	27.5%
328,134	31,266	359,399	531,565	236,559	22,524	790,648	1,620	7.566	2000	790 648	39,670	7 8%	830,210	2,140	70.07
328,322	31,322	359,643	518,727	243,516	23,638	785,881	1,580	7,775	2.185	785.881	(30,158)		755 723	2 251	50.0%
329,261	31,378	360,639	428,121	231,014	22,674	681,809	1,300	7,362	1,891	681,809	(54,844)		626,965	1,696	49.7%
330,013	31,434	361,448	360,122	230,485	19,726	610,333	1,091	7,332	1,689	610,333	16,431	2.6%	626 763	1,541	56.5%
330,616	31,491	362,107	358,411	241,355	20,205	619,971	1,084	7,664	1,712	619,971	92,940	13.0%	712.911	1.764	54 3%
331,078	31,547	362,625	457,496	266,356	24,856	748,709	1,382	8,443	2,065	748,709	180,261	19.4%	928,969	2.109	61.2%
332,707	31,603	364,310	573,339	292,346	30,341	896,026	1,723	9,250	2,460	896,026	93,030	9.4%	989,056	2,135	62.3%
332,362	31,660	364,022	629,836	307,062	31,519	968,416	1,895	669'6	2,660	968,416	75,806	7.3%	1,044,223	2,268	61.9%
332,813	31,716	364,529	586,491	299,335	30,852	916,678	1,762	9,438	2,515	916,678	(6,655)	-0.7%	910,022	2,173	58.2%
333,194	31,772	364,966	465,966	269,364	29,037	764,367	1,398	8,478	2,094	764,367	(80,237)	-11.7%	684,130	1,687	54.5%
333,456	31,828	365,284	378.150	243.897	19.272	641.319	1 134	7 663	1 756	077 070	90000	7 20/	574 DOE	7	77 00
					111	, , , ; ,		00'-	00 / -	010,140	20,000	4.5%	6/1.525	0.0	2/.0%

Exhibit A-3

PEC 2011 Load Forecast - Base Case Historical and Projected Load Determinants and Weather Conditions

					Retail Bi	Billing Data					Sys	tem Net Re	quiremen	System Net Requirements (Excluding Centex)	ng Cente	Q
	0	Customers			Retail Electricity Sales	icity Sales		Usage per	Usage per Customer (kWh/Cust)	(Wh/Cust)		Energy Requirements	uirements		Peak Demand	emand
		Non-			Non-	Spot			Non-					Energy		3
Month	Residential	residential	Total	Residential	residential	Loads	Total	Residential	residential	Total	Sales	rosses	Losses	requirement fs	Demand	Factor
	(#)	(#)	(#)	(MWh)	(MWh)	(MWh)	(MWh)	(kWh/Cust)	(kWh/Cust)	(kWh/Cust)	(MWh)	(MWh)	(%)	(MWh)	(MM)	(%)
Jan-28		31,940		545,679	246,537	23,823	816,038	1,627	7,719	2,221	816,038	40.944	4.8%	856 983	2 398	48.0%
Feb-28		31,995		532,508	253,747	25,894	812,150	1,587	7,931	2,209	812,150	(31,166)	-4.0%	780,984	2,236	50.0%
Mar-28		32,051		439,502	240,682	23,981	704,166	1,306	7,509	1,910	704,166	(56,642)	-8.7%	647 524	1 751	49.7%
Apr-28		32,106		369,703	240,093	20,795	630,591	1,096	7,478	1,707	630,591	16.976	2.6%	647,567	1.592	56.5%
May-28		32,161	370,106	367,952	251,377	21,301	640,630	1,089	7,816	1,731	640,630	96,037	13.0%	736.668	1,823	54.3%
Jun-28		32,216	370,634	469,682	277,375	26,204	773,261	1,388	8,610	2,086	773,261	186.172	19.4%	959 433	2 178	61.2%
Jul-28		32,272		588,621	304,393	31,986	925,000	1,731	9,432	2,484	925,000	96,039	9.4%	1.021.038	2,77	62.3%
Aug-28		32,327		646,633	319,668	33,228	999,529	1,903	6,889	2,686	999,529	78,242	7.3%	1,077,771	2.341	61.9%
Sep-28		32,382	372,574	602,143	311,577	32,525	946,245	1,770	9,622	2,540	946,245	(6,870)	-0.7%	939,375	2.243	58.2%
Oct-28		32,438		478,409	280,339	30,620	789,367	1,405	8,642	2,116	789,367	(82,861)	-11.7%	706,506	1.742	54.5%
Nov-28		32,493		388,254	253,798	20,323	662,374	1,139	7,811	1,774	662,374	30,991	4.5%	693,365	1,672	57.6%
Dec-28		32,548		463,985	250,458	22,320	736,762	1,360	7,695	1,971	736,762	101,496	12.1%	838,259	2,285	49.3%
Jan-29		32,603		559,632	256,472	25,121	841,225	1,634	7,866	2,243	841,225	42,208	4.8%	883,433	2,472	48.0%
Feb-29		32,658	_	546,121	263,937	26,364	836,422	1,594	8,082	2,229	836,422	(32,098)	-4.0%	804,324	2,396	50.0%
Mar-29	(0.0/)	32,713		450,734	250,314	25,288	726,337	1,312	7,652	1,930	726,337	(58,425)	-8.7%	667,911	1,806	49.7%
Apr-29		32,768		379,148	249,668	21,607	650,423	1,101	7,619	1,724	650,423	17,510	2.6%	667,933	1,643	56.5%
May-29		32,823		377,350	261,368	22,132	660,850	1,094	7,963	1,749	660,850	690'66	13.0%	759,919	1,881	54.3%
Jun-29		32,878		481,676	288,361	27,227	797,263	1,394	8,771	2,107	797,263	191,951	19.4%	989,214	2,246	61.2%
Jul-29		32,933		603,647	316,408	33,234	953,289	1,738	809'6	2,508	953,289	98,976	9.4%	1,052,265	2,272	62.3%
Aug-29	3,50, 1	32,987		663,136	332,243	34,524	1,029,904	1,912	10,072	2,711	1,029,904	80,619	7.3%	1,110,523	2,412	61.9%
Sep-29		33,042	380,383	617,506	323,792	33,794	975,092	1,778	662'6	2,563	975,092	(7,079)	-0.7%	968,013	2,312	58.2%
Oct-29		33,097	380,835		291,292	31,821	813,725	1,411	8,801	2,137	813,725	(85,418)	-11.7%	728,307	1,796	54.5%
Nov-29		33,152	381,163		263,680	21,120	682,955	1,144	7,954	1,792	682,955	31,954	4.5%	714,909	1,724	27.6%
Dec-29		33,207	381,566		260,178	23,195	759,187	1,366	7,835	1,990	759,187	104,585	12.1%	863,773	2,354	49.3%
Jan-30		33,262			266,392	26,107	865,894	1,641	8,009	2,263	865,894	43,446	4.8%	909,339	2,545	48.0%
rep-30		33,316	_	559,546	2/4,113	27,398	861,057	1,601	8,228	2,249	861,057	(33,043)	-4.0%	828,014	2,467	20.0%
Mar-30		33,370	_	461,810	259,933	26,280	748,023	1,317	7,789	1,948	748,023	(60,170)	-8.7%	687,853	1,860	49.7%
Apr-30		33,425			259,230	22,148	669,839	1,106	7,756	1,741	669,839	18,033	2.6%	687,872	1,692	56.5%
May-30		33,479			271,346	22,686	680,647	1,098	8,105	1,766	680,647	102,036	13.0%	782,683	1,937	54.3%
Jun-30		33,534		493,497	299,334	27,908	820,739	1,400	8,926	2,126	820,739	197,603	19.4%	1,018,342	2,312	61.2%
Jul-30		33,588	_	618,456	328,409	34,066	980,931	1,746	9,778	2,529	980,931	101,846	9.4%	1,082,777	2,338	62.3%
Aug-30		33,642		679,398	344,804	35,389	1,059,591	1,920	10,249	2,734	1,059,591	82,943	7.3%	1,142,535	2,482	61.9%
Sep-30		33,697	388,027	632,643	332,995	34,640	1,003,278	1,785	9,971	2,586	1,003,278	(7,284)	-0.7%	995,994	2,379	58.2%
Oct-30		33,751		502,634	302,235	33,022	837,890	1,417	8,955	2,157	837,890	(87,955)	-11.7%	749,935	1,849	54.5%
Nov-30		33,806		402,907	273,555	21,917	703,379	1,149	8,092	1,809	703,379	32,909	4.5%	736,288	1,776	57.6%
Dec-30	355,369	33,860	389,229	487,463	269,890	24,071	781,424	1,372	7,971	2,008	781,424	107,649	12.1%	889,073	2,423	49.3%

Exhibit A-3
PEC 2011 Load Forecast - Base Case
Historical and Projected Load Deferminants and Weather Conditions

Month (#) Jan-00 Apr-00 Ay-00 Jun-00 Aug-00 Sep-00 Oct-00 Nov-00 Beb-01 Aug-01 Aug-01 Aug-01 Aug-01 Sep-01 Jun-01 Aug-01 Sep-01 Sep-01 Aug-01 Aug-01 Sep-01 Aug-02 Apr-02 Apr-02	313 146 85 30					The second secon	NAME OF TAXABLE PARTY.			
## ## ## ## ## ## ## ## ## ## ## ## ##	313 146 85 30					Peak	Peak	Peak	Prior Day	Prior Day
#) 		CDD	ПОДН	CDD	Peak Date	Hour	Day High	Day Low	High	Low
	313 146 85 30	(#)	(#)	(#)			늄	늉	늉	늄
Apr-00 May-00 Jun-00 Jun-00 Sep-00 Oct-00 May-01 Jun-01 Jun-01 Jun-01 Sep-01 May-01 Nov-01 Nov-01 May-01 Sep-01 Aug-01 Aug-01 Aug-01 Aug-01 Aug-01 Aug-01 Aug-01 Aug-01 May-02 Apr-02 May-02	30	23	193	23	01/02/00	7	09	27	55	32
Apr-00 May-00 Jul-00 Sep-00 Oct-00 Nov-00 May-01 Jul-01 Jul-01 Nov-01 Nov-01 Nay-01 Sep-01 Sep-01 Sep-01 Aug-01 Sep-01 Nov-01 May-02 May-02 May-02	88,,,	133	294	51	01/30/00	ω α	47	26	4 5	e :
May-00 Jun-00 Aug-00 Sep-00 Oct-00 Nov-00 Dec-00 Jun-01 Jun-01 Jun-01 Jun-01 Sep-01 Sep-01 Sep-01 Sep-01 May-01 May-01 May-01 May-02 May-02 May-02 May-02	1 1 1	198	8 %	180	03/1/00	υ α	ر د د د د د د د د د د د د د د د د د د د	7 47	8 8	4 5
Jun-00 Aug-00 Sep-00 Oct-00 Nov-00 Dec-00 Jun-01 Apr-01 Aug-01 Aug-01 Sep-01 Sep-01 Sep-01 Nov-01 May-01 Aug-01 Sep-01 Nov-01 May-01 Nov-01 May-01 May-02 Apr-02	1 1	443	;	386	05/24/00	2 60	96	2 2	20 00	77
Jul-00 Aug-00 Sep-00 Oct-00 Nov-00 Jan-01 Jun-01 Jun-01 Jun-01 Jun-01 Jun-01 Jun-01 Jun-01 Jun-01 Jun-01 Aug-01 Sep-01 Sep-01 Sep-01 Aug-02 May-02 May-02	,	206		516	02/30/00	2 &	96	74	6 6	73
Aug-00 Sep-00 Ooct-00 Jan-01 Jun-01 Aug-01 Sep-01 Dec-01 Jan-02 Apr-02 May-02		681	,	929	07/15/00	17	107	76	106	75
Sep-00 Oct-00 Jan-01 Jan-01 May-01 Jun-01 Jun-01 Jun-01 Jan-02 Sep-01 Oct-01 May-02 May-02	1	694		671	08/12/00	17	104	9/	103	73
Oct-00 Jan-01 Jan-01 May-01 Jun-01 Jun-01 Jun-01 Jun-01 Sep-01 Oct-01 Jan-02 Feb-02 Mar-02 May-02	υ (508	, 6	654	09/04/00	17	110	79	108	9/
Dec-00 Jan-01 Mar-01 May-01 Jul-01 Jul-01 Sep-01 Oct-01 Jan-02 Feb-02 May-02 May-02	20 2	2/0	251	209	10/03/00	18	94	73	94	65
Jan-01 Mar-01 Apr-01 May-01 Jun-01 Jun-01 Aug-01 Sep-01 Oct-01 Dec-01 Jan-02 Feb-02 Mar-02 May-02	599	2 ,	470	2 2	12/12/00	- 8	31	28	25	5 %
Feb-01 Mar-01 Apr-01 May-01 Jun-01 Jun-01 Aug-01 Sep-01 Oct-01 Jan-02 Feb-02 Mar-02 May-02	509	3	611	T	01/02/01	တ	38	98	35	9 6
Mar-01 May-01 Jun-01 Jun-01 Aug-01 Sep-01 Oct-01 Dec-01 Jan-02 Feb-02 Mar-02 May-02	258	17	303	16	02/10/01	ω	45	29	71	38
Apr-01 Jun-01 Jun-01 Aug-01 Sep-01 Oct-01 Dec-01 Jan-02 Feb-02 Mar-02 May-02	309	4	245	2	02/28/01	19	26	38	75	26
May-01 Jun-01 Jul-01 Aug-01 Sep-01 Dec-01 Jan-02 Feb-02 Mar-02 May-02	72	192	96	176	03/27/01	19	51	43	28	46
Jul-01 Jul-01 Aug-01 Sep-01 Oct-01 Dec-01 Jan-02 Feb-02 Mar-02 May-02	1	362	2	273	05/20/01	<u>~</u> 4	9	89 1	83	7
Aug-0-1 Sep-0-1 Oct-0-1 Nov-0-1 Jan-0-2 Feb-0-2 Mar-0-2 Apr-0-2 May-0-2		930		275	05/12/01	2 0	80 5	/3	96	9 6
Sep-01 Oct-01 Nov-01 Dec-01 Jan-02 Feb-02 Mar-02 May-02		199		731	08/12/01	7 0	102	1.0	20,00	12
Oct-01 Nov-01 Dec-01 Jan-02 Feb-02 Mar-02 Apr-02 May-02	~	374	£	468	08/25/01	1	101	78	66	74
Nov-01 Dec-01 Jan-02 Feb-02 Mar-02 Apr-02 May-02	32	138	27	147	10/24/01	16	92	65	85	73
Dec-01 Jan-02 Feb-02 Mar-02 Apr-02 May-02	137	79	26	9/	11/20/02	7	74	45	73	46
Jan-02 Feb-02 Mar-02 Apr-02 May-02	365	24	315	31	11/28/02	19	61	36	49	38
Mar-02 Apr-02 May-02	373	24	462	ω (01/03/02	1 /	46	26	45	30
Apr-02 May-02	240		040	0 0	20/10/20	~ 1	50 2	တ္က မ	51	35
May-02	27	279	570	500	02/2//02	- α	. c	C7 09	45	30
	i ,	411	3 ,	398	04/29/02	2 6	0 6	8 2	6 6	7.7
Jun-02	,	538		545	06/13/02	18	96	73	97	1/2
Jul-02	,	247	1	497	07/24/02	18	96	74	96	74
Aug-02	1	637		630	08/23/02	17	96	9/	26	11
Sep-02	. 00	451	, ,	519	08/26/02	1 9	102	75	100	9/
NOV-02	247	5 5	172	407	11/04/02	> 6	40.4	5 6	6	7.5
Dec-02	368	_ ω	372	- ∞	12/06/02	6	2, 2,	9 6	20.00	3 2
Jan-03	477	2	466	2	01/24/03		46	26	42	30
Feb-03	386	9	378	9	02/24/03	19	40	26	78	9
Mar-03	170	56	241	22	02/25/03	တ	30	24	40	26
Apr-03	75	202	29	148	04/24/03	18	96	99	80	64
May-03	,	475	1	427	05/16/03	18	66	9/	92	75
20-unc		519	ľ	504	06/23/03	18	26	79	96	77
50-IDC	,	621	1	588	07/14/03	9 9	26	75	66	72
Sen-03		000		629	08/07/03	1 2	108	77	103	75
Oct-03	7	247		269	09/27/03	1	001	67	8 6	ر د 9
Nov-03	143	111	86	155	11/24/03		54	33 6	3 23	2 4
Dec-03	308	17	299	2	12/17/03	7	89	35	28	. 4

R. W. Beck, Inc., 12/13/2011

Exhibit A-3
PEC 2011 Load Forecast - Base Case
Historical and Projected Load Determinants and Weather Conditions

			Aus	tin - Camp	Austin - Camp Mabry Weather Conditions	ather Co	nditions			
	Calendar Month	r Month	LCRA Bill	LCRA Billing Month		PEC	PEC Peak Day	Conditions	ns	
						Peak	Peak	Peak	Prior Day	Prior Day
Month	HDD	CDD	HDD	CDD	Peak Date	Hour	Day High	Day Low	High	Low
	#	(#)	#	(#)			늄	dЕ	dF	dЕ
Jan-04	340	18	305	24	01/06/04	7	38	29	48	36
Mar-04	6/s	- c	412	٦ ٦	02/13/04		37	33	47	37
Apr-04	988	145	38	157	02/26/04	- ^	79	35	49	39
May-04	200	367	3 ~	270	05/19/04	- 4	ò &	‡ £	0 8	740
Jun-04		447	' '	499	05/31/04	1	9 6	2/8/	8 6	1 1
Jul-04	,	563	1	517	07/17/04	17	86	73	63	73
Aug-04		571	,	222	08/05/04	17	101	76	66	17
Sep-04	1	458	×	521	08/25/04	18	96	77	95	77
Oct-04	4	348	4	327	10/19/04	17	92	9/	88	76
Nov-04	164	3	111	108	10/29/04	17	88	72	98	71
Jan-05	359	၀ ဇ္	335	ا ا	12/24/04	ത o	45. 4	76	43	24 8
Feb-05		19	315	19	02/04/05	0 1	. r.	38	, y	3, 60
Mar-05		39	184	19	03/17/05		65	37	22	42
Apr-05	29	116	53	104	04/22/05	17	88	99	8	29
May-05	5	309	7	250	05/22/05	17	96	72	97	29
Jun-05	į	562	r	535	06/17/05	18	26	73	97	73
0-inc		159	£ 3	617	07/03/05	17	101	72	102	9/
Sep-05		590		618	08/23/05	2 7	50.	1 9	5 5	13
Oct-05	36	223	21	342	09/25/05	17	107	2 2	5 6	
Nov-05		127	86	125	11/17/05	7	9	31	28	
Dec-05		9	408	15	12/08/05	0	36	23	51	
Jan-06	202	12	190	13	01/18/06	7	73	36	29	
Peb-06		16	326	12	02/19/06	တ ၊	37	78	39	
Apr-06	ה ה	021	28.00	700 705	03/24/06	~ 07	89 8	34	57	9 [
May-06		389	02 .	307	04/1/06	2 7	9 6	7.7	6 6	6/
Jun-06	1	536		554	06/13/06	- 6	101	75	9 8	10 7
Jul-06	ï	662	1	605	07/18/06	9 2	103	2.2	102	1.1
Aug-06	ı	739	į	736	08/17/06	18	103	9/	104	76
Sep-06	, 6	463	, (548	08/25/06	17	103	78	104	76
Nov-06		242	7,0	783	14/24/06	76	93	77	8 8	65
Dec-06		24	262	28 28	12/04/06		5.4	60	23 8	4 ¢
Jan-07		4	504	4	01/16/07	7	3 6	29	38	5 6
Feb-07	m	20	418	4	02/16/07	7	99	24	45	29
Mar-07		107	92	82	03/05/07	7	72	34	63	35
Apr-07	82	113	82	114	04/07/07	50	20	34	69	20
May-07	1	331	ı	292	05/14/07	18	90	92	9	29
70-IIII	1	204		465	06/19/07	20 0	99 9	7,8	92	1 76
Aug-07	. 1	932		612	08/12/07	<u>ν</u>	4 00	9/	93	11
Sep-07	1	497		525	70/60/60	1	001	10/	9 9	19
Oct-07	23	307	9	407	09/27/07	19	95	74	6 6	75
Nov-07		104	101	108	11/24/07	18	47	40	48	40
Dec-07	342	59	313	58	12/17/07	7	28	30	55	30

R. W. Beck, Inc., 12/13/2011

Exhibit A-3
PEC 2011 Load Forecast - Base Case
Historical and Projected Load Determinants and Weather Conditions

			Austin		Gamp Mahry Weather Conditions	ather Co	nditions			
	Calendar Month	r Month	LCRA Bill	2	o diam	PEC	PEC Peak Day	/ Conditions	ons	
						Peak	Peak	Peak	Prior Day	Prior Day
Month	HDD	CDD	HDD	CDD	Peak Date	Hour	Day High	Day Low	High	
	#	(#)	#)	(#)			Ъ	늄	ЧЬ	ЧF
Jan-08	458	4 6	476	14	01/20/08	ω ι	26	25	20	30
Mar-08	132	82	163	77	02/01/08	~ 0	63	28	61	40
Apr-08	25	173	22	191	04/22/08	2 6	6	2 2	S 90	4 6
May-08		463	4	341	05/23/08	17	100	78	95	75
Jun-08		681		693	06/19/08	18	101	75	103	74
Jul-08	ı	929		644	07/21/08	18	102	78	101	75
Aug-08		665		683	08/03/08	17	105	75	102	78
Sep-08	. 00	4/5	,	544	09/02/08	1 48	101	75	97	74
Nov-08	118	277	104	77	11/17/08		93	38	92	98
Dec-08	373	21	349	12	12/15/08	19	29	31	79	09
Jan-09	365	18	317	28	01/14/09	19	64	30	26	37
Feb-09	155	51	249	20	01/29/09	7	28	28	52	28
Mar-09	142	113	130	138	03/02/09	7	69	33	63	34
Apr-09	33	164	66	107	04/22/09	<u>~</u> 4	94	64	93	61
Jun-09		654		5/5 613	05/08/09	Σ α	9/ 10F	4 1	91	75
90-Inc	f	766	,	744	07/08/09	2 8	106	78	101	6/
Aug-09	ī	755	1	779	08/23/09	16	105	78	103	9/
Sep-09	വ	411	2	491	08/26/09	16	104	75	103	9/
Oct-00	43	168	25	226	09/27/09	17	93	89	92	65
90-you	133	97	95	88	11/18/09	∞ (72	49	99	40
Jan-10	500	,	432	,	01/00/10	∞ α	20	25	4 4	53
Feb-10	489	1	538	1	02/16/10	^	59	30	57.5	33
Mar-10	190	10	225	2	02/25/10	7	64	32	54	32
Apr-10	18	137	41	106	04/23/10	18	88	62	73	64
May-10	ï	431	1	351	05/07/10	, 17	96	7	92	64
Jun-10	1	581	<u>n</u>	577	06/23/10	9 i	96	75	98	75
Jul-10 A10-10		743		202	01//1/10	1/0	98	75	97	76
Sep-10	ì	481	,	575	09/01/10	2 6	9 6	79	107	6/
Oct-10	7	212		233	09/25/10	14	92	73	9	74
Nov-10	156	84	109	111	10/25/10	19	88	70	87	29
.lan-11	475	0 1	400	2 4	01/61/71	,	70	30	S &	3/
Feb-11	319	18	328	9 6			55	30	53	34
Mar-11	163	29	171	49			59	35	54	37
Apr-11	44	147	22	142			06	99	84	63
May-11	7	323	4	316			93	71	06	70
- I-III.		493	, ,	527			86 6	75	96 8	74
Aug-11	ī	610	ı	629			104	78	101	1 2
Sep-11	2	439	_	537			100	76	66	75
Oct-11	32	207	16	266			94	71	91	70
Nov-11	205	51	131	83			61	38	62	43
ב- ב- ב-	5	2	340	7	_		55	RZ.	25	34

Exhibit A-3
PEC 2011 Load Forecast - Base Case
Historical and Projected Load Determinants and Weather Conditions

	Pr	FOW	5																																							
JS.	Prior Day	High	r č	53	54	84	06	96	66	101	66 6	91	52	40	53	54	5 6	96	66	101	99	62	52	40	5.4	8 8	06	96	101	66	91	62	25	53	54	84	06	96	2 68	- 66	9 9	
PEC Peak Day Conditions		Day Low	ב כ	30	32	99	71	75	9/	78	76	7 %	78	25	30	32	7 8	75	9/	78	7.7	38	29	25	32	99	71	75	78	9/	71	38	22 62	30	35	99	71	75	0 / 0	2/	7.2	
Peak Day	Peak	Day High	5	55	29	06	93	86	100	104	9 3	99 6	53	40	22	90	60 60	86	100	40,5	96	6	53	40	20 00	06	93	98	104	100	94	61	200	55	59	06	93	86 6	201	9	94	5
PEC	Peak	Hour																																								
	Book Dote	Peak Date							÷						¥																						=					
ig Month		(#)		0 0	49	142	316	227	299	629	286	200	20	13	19	142	316	527	299	659	266	83	50	<u>6</u> 6	49	142	316	527	629	237	266	83	7 7	5 6	49	142	316	52/	659	537	266	
LCKA Billing Month	<u>0</u>	HUD (#)	700	328	171	22	4	ı	ı	1	- 4	134	340	400	328	771	4	<u>I</u>	,	,	16	131	340	400 328	171	22	4			_	16	131	400	328	171	25	4			_	16	
Month	ú	(#)		- 81	29	147	323	495	605	610	439	51	13	7	9 2	147	323	495	605	610	207	51	<u>ن</u> 3	/ 8	29	147	323	495	610	439	207	51	2 1	- 81	29	147	323	495	610	439	207	
Calendar Month	2	HUD (#)	475	319	163	44	7	1	ř	,	7 %	205	406	475	319	163	2	ı	,		32	205	406	319	163	44	2	1 1	ı	2	32	205	475	319	163	4	7	1		2	32	11 miles
	<u> </u>	Month	21-ng	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13 Apr-13	May-13	Jun-13	Jul-13	Aug-13 Sep-13	Oct-13	Nov-13	Dec-13	Jan-14 Feb-14	Mar-14	Apr-14	May-14	11-14 11-14	Aug-14	Sep-14	Oct-14	Nov-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Aug-15	Sep-15	Oct-15	,

Exhibit A-3

PEC 2011 Load Forecast - Base Case Historical and Projected Load Determinants and Weather Conditions

	Prior E	늉																																										
ડા	Prior Day High	дþ	40	53	24	84	06	96	66	101	66	91	20	40	53	54	84	06	96	99 7	66	91	62	52	9 5	S 5	8	06	96	66	101	9 6	62	52	40	53	24	000	96	66	101	66	9	62
Condition	Peak Dav Low	늉	25	30	35	99	7	75	9/	78	9/	2 2	8 8	25	30	35	99	7	75	78	76	71	38	59	25	35	99	71	75	76	2 / 8	7 7	38	29	25	9 0 1	သို့	7 8	75	9/	78	9/	71	38
PEC Peak Day Conditions	Peak Day High	JP JP	40	22	29	06	93	86	100	104	100	96	- 53	40	22	29	06	93	98	104	100	94	61	53	40	20 00	06	93	86	100	40.7	98	61	53	40	22	6 G	88	86	100	104	100	94	61
PEC	Peak																																											
	Peak Date																																											
ng Month	CDD	(#)	13	19	49	142	316	527	299	629	537	500	2 8	13	19	49	142	316	776	659	537	266	83	20 5	13	49	142	316	527	599	537	266	83	20	13	9 6	142	316	527	299	629	537	266	00
LCRA Billing Month	H H	(#)	400	328	171	57	4	1			- 9	9 7	340	400	328	171	22	4		ı	_	16	131	340	328	171	22	4		5		- 1	131	340	400	328	72	4	1			- (16	127
Month	CDD	(#)	7	18	29	147	323	495	605	610	439	707	7 2		18	29	147	323	480 808	610	439	207	21	1 13	- ά	29	147	323	495	605	439	207	51	13	<u></u>	2 2	147	323	495	605	610	439	707	
Calendar Month	HDD	(#)	475	319	163	44 (N	î		1	N C	32	406	475	319	163	44	2		ì	2	32	205	406	319	163	44	2	ī	1		32	205	406	475	318	3 4	2	,	i	1	7 6	32	117
	Month		Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	NOV-10	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-1/	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18 Feh-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Mar 10	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	OCI-19	NOV-19

Exhibit A-3
PEC 2011 Load Forecast - Base Case
Historical and Projected Load Determinants and Weather Conditions

	Colonda	Colondar Month	Aus	tin - Camp	Austin - Camp Mabry Weather Conditions	ather Co	nditions			
	calellus	MOIII	LCNA DIII	LCAA DIIIIII IIIOIIIII		PEC	PEC Peak Day	Conditions	us	
						Peak	Peak	Peak	Prior Day	Prior Day
Month	HDD	CDD	HDD	CDD	Peak Date	Hour	Day High	Day Low	High	
	(#)	(#)	(#)	(#)			늉	ЯÞ	dF	늉
Jan-20	475	7	400	13			40	25	40	27
Feb-20	319	9 6	328	19			55	30	23	34
Mar-20	103	200	171	94 6			29	32	25 2	37
May-20	‡ °	323	0.0	247			06 8	3 6	8 6	9 2
Jun-20	1	495	,	527			200	7.	08 0	2 7
Jul-20		605	ì	599			100	76	0 6	7.7
Aug-20	ı	610	r	629			104	78	101	12
Sep-20	2	439	_	237			100	2/	66	75
Oct-20	32	207	16	266			94	71	91	70
Nov-20	205	51	131	83			61	38	62	43
Dec-zu	400	5 7	340	7 70			53	29	52	34
Feb-21	319	18	328	0 0			55	30 8	5 2	34
Mar-21	163	29	171	49			59	35	54	37
Apr-21	44	147	22	142			06	99	84	63
May-21	2	323	4	316			93	71	06	70
Jun-21	ī	495	3	527			86	75	96	74
72-Inc		605	1	599			100	76	66	75
Sep-21	'	010	1	659			104	78	5 4	77
Oct-21	32	207	- 1	766			001	71	8 6	c / C
Nov-21	205	51	131	83			61	- 88	6 6	0 4
Dec-21	406	13	340	20			53	29	52	34.5
Jan-22	475	_ ,	400	13			40	25	40	27
Feb-22	319	8 6	328	9			55	30	23	34
Mar-22	163	27	1/1	4 49			29	35	54	37
May-22	‡ ~	323	/c \	247			08	99	8 6	93
Jun-22	1	495	,	527			ဂ ထိ	75	S 8	7 7
Jul-22	ì	909	,	299			100	2/	66	75
Aug-22	1	610		629			104	78	101	77
Sep-22	2 5	439	- !	537			100	9/	66	75
Oct-22	32	207	10,	7,00			94	7 3	9 9	20
DAC-22	406	- 6	340	8 6			10	8 8	29	43
Jan-23	475	2 ~	400	13			80	25	32	\$ 6
Feb-23	319	18	328	19			55	30	53	34 5
Mar-23	163	29	171	49			59	35	54	37
Apr-23	44	147	57	142			06	99	84	63
May-23	7	323	4	316			63	71	06	20
Jun-23	î b	495		527			86 6	75	96	74
2d-23 0.10-23		900		980			9 5	9 6	6 6	2 1
Sep-23	2	439	'	537			5 5	2 / 2	5 8	77
Oct-23	32	207	16	266			96	7.7	9 8	2 2
Nov-23	205	51	131	83			61	38	62	43
Dec-23	406	13	340	20			53	29	52	34

Exhibit A-3
PEC 2011 Load Forecast - Base Case

Historical and Projected Load Determinants and Weather Conditions

	-		Aus	tin - Camp	Austin - Camp Mabry Weather Conditions	ather Co	nditions			
	Calenda	Calendar Month	LCKA BIIII	CRA Billing Month		PEC	PEC Peak Day Conditions	Conditio	ns	
Month	HDD	CDD	Ê	CDD	Peak Date	Peak	Peak Dav High	Peak	Prior Day Hinh	Prìor Day
	(#)	(#)	(#)	(#)			dF		나p	4F
Jan-24	475	7	400	13			40	25	40	27
Feb-24	319	18	328	19			22	30	53	34
Mar-24	163	20	171	49			29	35	54	37
Apr-24	44	323	5/	346			06 8	99	8 8	63
Jun-24	1	495	,	527			28 8	75	08 8	2 7
Jul-24	ī	605	1	599			100	76	06 6	7.5
Aug-24	п	610	ı	629			104	78	101	12
Sep-24	2	439	~	537			100	9/	66	75
Oct-24	32	207	9,	266			94	71	91	70
Nov-24	205	57	131	83			61	38	62	43
Jan-25	475	2 ~	400	13			22	25	25	48 6
Feb-25	319	18	328	19			22	9 08	53	34.
Mar-25	•	29	171	49			29	35	54	37
Apr-25	4	147	22	142	×		06	99	84	63
May-25	2	323	4	316			93	71	06	70
Jun-25	0 1	495	į	527			86	75	96	74
25-IDC		900	ı	288			100	76	66	75
Sep-25		439		537			4 5	9/	5 8	77
Oct-25	32	207	16	266			94	7.2	9 6	2 0 2
Nov-25	.,	51	131	83			61	38	62	43
Dec-25	406	13	340	50			53	29	52	34
Jan-26 Feb-26	319	~ K	400	5 5			40	25	40	27
Mar-26	163	29	171	49			2 2	35 35	22	3.4
Apr-26	4	147	57	142			8 6	99	4 8	93
May-26	2	323	4	316			93	71	06	2 2
Jun-26	1	495	1	527			86	75	96	74
Jul-26	C.	605	ī	599			100	9/	66	75
Sep-26		439	,	628			104	78	101	77
Oct-26	32	207	- 16	266			94	7.7	99	0 2
Nov-26	(1	51	131	83			61	38	62	43
Dec-26	406	13	340	20			53	29	52	34
Jan-27	475	<u>~</u> ;	400	5 3			40	25	40	27
N2r 27	319	18	328	9 0			55	30	53	34
Apr 27	00.7	7 00	1/1	94 t			29	35	54	37
May-27	‡ °	323) C	346			0.60	92	8 6	9 0
Jun-27	,	495	,	527			2 8	75	06	7 7
Jul-27		605		599			100	76	o	7 7
Aug-27	ı	610	ì	629			104	78	101	2
Sep-27	2	439	~	537			100	9/	66	75
Oct-27	32	207	16	266			94	71	91	20
Nov-2/	202	57	131	83			19	88 8	62	43
1) 	2	250	24	_		- -	28	70	34

Exhibit A-3
PEC 2011 Load Forecast - Base Case
Historical and Projected Load Determinants and Weather Conditions

			Aus	tin - Camp	Austin - Camp Mabry Weather Conditions	ather Co	nditions			
	Calendar Month	r Month	LCRA Billing Month	ng Month		PEC	PEC Peak Day Conditions	Conditio	us	
						Peak	Peak	Peak	Prior Day	Prior Day
Month	HDD	CDD	HDD	CDD	Peak Date	Hour	Day High	Day Low	High	Low
	(#)	(#)	(#)	(#)			늉	늉	늄	늉
Jan-28	475	7	400	13			40	25	40	27
Feb-28	319	18	328	19			22	30	53	34
Mar-28	163	29	171	49			29	32	54	37
Apr-28	44	147	22	142			06	99	84	63
May-28	7	323	4	316			93	7	06	20
Jun-28	Į.	495	ſ	527	Ta .		86	75	96	74
Jul-28	1	909	1	299			100	9/	66	75
Aug-28	!	610	,	629			104	78	101	77
Sep-28	7	439	_	537			100	9/	66	75
Oct-28	32	207	16	266	12		94	71	91	70
Nov-28		51	131	83			61	38	62	43
Dec-28		13	340	20			53	29	52	34
Jan-29		7	400	13			40	25	40	27
Feb-29	319	18	328	19			22	30	53	34
Mar-29	•	29	171	49			29	35	54	37
Apr-29	44	147	25	142			6	99	84	63
May-29	2	323	4	316			93	71	90	70
Jun-29	ı	495	1	527			86	75	96	74
Jul-29	ľ	605	ı	599			100	2/	66	75
Ang-29	•	610	,	629			104	78	101	77
Sep-29		439	~	537			100	9/	66	75
Oct-29	32	207	16	266			94	7	9	70
Nov-29	202	51	131	83			61	38	62	43
Dec-29	406	13	340	20			53	29	52	34
Jan-30	475	7	400	13			40	25	40	27
Feb-30	319	18	328	19			52	30	53	34
Mar-30	163	29	171	49			29	35	54	37
Apr-30	44	147	22	142			6	99	84	63
May-30	7	323	4	316			93	71	06	70
Jun-30	1	495	ı	527			86	75	96	74
Jul-30	ĩ	909	1	599			100	9/	66	75
Aug-30	ī	610	1	629			104	78	101	77
Sep-30		439	Υ-	537			100	9/	66	75
Oct-30		207	16	266			94	71	91	70
Nov-30	202	51	131	83			61	38	62	43
Dec-30	406	<u>6</u>	340	20			53	29	52	34

Exhibit B ECONOMIC DATA



Exhibit B-1

Historical and Projected Economic Trends in the PEC Tri-County Region^[1]

Mid-range Economic Growth Case

							Gross D	omestic	Pers	onal	Persona	Income
			House	holds	Non-		Product			(\$2005;	per Hou	
	Populati	on (Ths)	(TI	าร)	Emplo	yment	\$1	VI)	\$1	VI)	(\$20	05)
	<u>Value</u>	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chg	<u>Value</u>	% Chg
1992	277.8	-	97.2	-	72.1	-	5,002	-	6,403	-	65,891	_
1993	290.9	4.7%	101.6	4.6%	77.5	7.5%	5,469	9.3%	7,034	9.9%	69,221	5.1%
1994	308.3	6.0%	107.3	5.6%	84.5	9.0%	6,037	10.4%	7,621	8.3%	71,019	2.6%
1995	325.5	5.6%	114.0	6.3%	92.7	9.7%	6,730	11.5%	8,530	11.9%	74,795	5.3%
1996	346.1	6.3%	121.9	6.9%	101.1	9.0%	7,487	11.2%	9,324	9.3%	76,466	2.2%
1997	365.1	5.5%	129.0	5.8%	107.3	6.1%	8,370	11.8%	10,322	10.7%	80,011	4.6%
1998	385.3	5.5%	136.4	5.8%	114.9	7.1%	9,556	14.2%	11,747	13.8%	86,110	7.6%
1999	408.5	6.0%	143.2	5.0%	132.3	15.2%	11,685	22.3%	13,055	11.1%	91,181	5.9%
2000	434.9	6.5%	150.5	5.1%	141.9	7.2%	12,622	8.0%	14,213	8.9%	94,435	3.6%
2001	463.6	6.6%	160.2	6.4%	146.0	2.9%	12,855	1.8%	14,460	1.7%	90,287	-4.4%
2002	487.3	5.1%	168.1	5.0%	147.9	1.3%	12,949	0.7%	14,110	-2.4%	83,927	-7.0%
2003	507.5	4.2%	174.8	4.0%	152.0	2.7%	13,817	6.7%	14,606	3.5%	83,536	-0.5%
2004	529.6	4.4%	182.1	4.2%	157.9	3.9%	14,995	8.5%	15,573	6.6%	85,497	2.3%
2005	556.4	5.1%	190.6	4.6%	176.6	11.9%	17,026	13.5%	17,223	10.6%	90,367	5.7%
2006	588.2	5.7%	200.8	5.3%	188.8	6.9%	18,520	8.8%	18,708	8.6%	93,183	3.1%
2007	623.0	5.9%	212.5	5.8%	203.7	7.9%	20,019	8.1%	20,485	9.5%	96,419	3.5%
2008	656.9	5.4%	222.8	4.9%	209.9	3.0%	20,799	3.9%	21,979	7.3%	98,649	2.3%
2009	683.2	4.0%	229.0	2.8%	209.8	-0.1%	20,971	0.8%	22,179	0.9%	96,841	-1.8%
2010	712.6	4.3%	237.6	3.7%	215.6	2.8%	22,249	6.1%	23,309	5.1%	98,106	1.3%
2011	742.0	4.1%	246.3	3.6%	225.2	4.4%	23,364	5.0%	24,917	6.9%	101,185	3.1%
2012	771.8	4.0%	256.3	4.1%	236.3	5.0%	24,716	5.8%	26,573	6.6%	103,696	2.5%
2013	802.3	3.9%	266.9	4.1%	247.7	4.8%	26,160	5.8%	28,454	7.1%	106,611	2.8%
2014	833.4	3.9%	278.0	4.2%	259.1	4.6%	27,682	5.8%	30,602	7.6%	110,090	3.3%
2015	865.4	3.8%	289.3	4.1%	269.9	4.2%	29,197	5.5%	32,711	6.9%	113,066	2.7%
2016	898.2	3.8%	300.8	4.0%	280.7	4.0%	30,814	5.5%	34,946	6.8%	116,164	2.7%
2017	931.8	3.7%	312.7	3.9%	291.4	3.8%	32,465	5.4%	37,192	6.4%	118,956	2.4%
2018	966.4	3.7%	324.9	3.9%	302.3	3.7%	34,209	5.4%	39,547	6.3%	121,736	2.3%
2019	1,001.8	3.7%	337.3	3.8%	313.4	3.7%	36,055	5.4%	42,155	6.6%	124,964	2.7%
2020	1,037.9	3.6%	350.1	3.8%	324.8	3.6%	37,971	5.3%	44,918	6.6%	128,298	2.7%
2021	1,074.7	3.6%	363.3	3.8%	336.4	3.6%	40,007	5.4%	47,759	6.3%	131,456	2.5%
2022	1,112.4	3.5%	376.6	3.7%	348.2	3.5%	42,160	5.4%	50,691	6.1%	134,593	2.4%
2023	1,150.7	3.4%	390.2	3.6%	360.2	3.4%	44,371	5.2%	53,689	5.9%	137,584	2.2%
2024	1,190.1	3.4%	404.2	3.6%	372.6	3.4%	46,687	5.2%	56,758	5.7%	140,422	2.1%
2025	1,230.4	3.4%	418.6	3.6%	385.5	3.5%	49,163	5.3%	60,038	5.8%	143,443	2.2% 2.0%
2026	1,271.7	3.4%	433.3	3.5%	398.8	3.5%	51,685	5.1%	63,419	5.6%		
2027	1,310.2	3.0%	447.1	3.2%	411.1	3.1%	54,103	4.7%	66,669		149,109	1.9%
2028	1,347.3	2.8%	460.0	2.9%	423.0	2.9%	56,467	4.4%	69,930	4.9%	152,036	2.0%
2029	1,383.3	2.7%	472.4	2.7%	434.5	2.7%	58,822	4.2%	73,214	4.7%	154,967	1.9%
2030	1,419.0	2.6%	484.7	2.6%	446.0	2.6%	61,277	4.2%	76,519	4.5%	157,874	1.9%
Average P	ercent Ch	nange										
2001-2010		4.4%		4.0%		4.0%		5.6%		4.9%		0.8%
2011-2020		3.8%		4.0%		4.2%		5.5%		6.8%		2.7%
2021-2030		3.1%		3.3%		3.2%		4.9%		5.4%		2.1%

^[1] The Tri-County Region comprises Comal, Hays, and Williamson Counties.

Source: IHS Global Insight, December 2010 Forecast; High and Low Cases developed by SAIC

Exhibit B-2

Historical and Projected Economic Trends in the PEC Tri-County Region [1]

High Economic Growth Case

			House	holde	Non-	form		omestic (\$2005;	Pers Income		Personal per Hou	
	Populati	on (Ths)	Tiouse (Ti		Emplo		\$1		si si		(\$20	
15 100000000	Value	% Chg	Value	% Chg	Value	% Chg	<u>Value</u>	, % Chg	<u>Value</u>	% Chg	Value	% Chg
4000											65,891	
1992 1993	277.8 290.9	- 4.7%	97.2 101.6	- 4.6%	72.1 77.5	- 7.5%	5,002 5,469	- 9.3%	6,403 7,034	- 9.9%	69,221	- 5.1%
B .	308.3	6.0%	107.8	4.6% 5.6%	84.5	9.0%	6,037	10.4%	7,034	8.3%	71,019	2.6%
1994 1995	325.5	5.6%	114.0	6.3%	92.7	9.7%	6,730	11.5%	8,530	11.9%	74,795	5.3%
1996	346.1	6.3%	121.9	6.9%	101.1	9.0%	7,487	11.2%	9,324	9.3%	76,466	2.2%
1997	365.1	5.5%	129.0	5.8%	107.3	6.1%	8,370	11.8%	10,322	10.7%	80,011	4.6%
1998	385.3	5.5%	136.4	5.8%	114.9	7.1%	9,556	14.2%	11,747	13.8%	86,110	7.6%
1999	408.5	6.0%	143.2	5.0%	132.3	15.2%	11,685	22.3%	13,055	11.1%	91,181	5.9%
2000	434.9	6.5%	150.5	5.1%	141.9	7.2%	12,622	8.0%	14,213	8.9%	94,435	3.6%
2001	463.6	6.6%	160.2	6.4%	146.0	2.9%	12,855	1.8%	14,460	1.7%	90,287	-4.4%
2002	487.3	5.1%	168.1	5.0%	147.9	1.3%	12,949	0.7%	14,110	-2.4%	83,927	-7.0%
2003	507.5	4.2%	174.8	4.0%	152.0	2.7%	13,817	6.7%	14,606	3.5%	83,536	-0.5%
2004	529.6	4.4%	182.1	4.2%	157.9	3.9%	14,995	8.5%	15,573	6.6%	85,497	2.3%
2005	556.4	5.1%	190.6	4.6%	176.6	11.9%	17,026	13.5%	17,223	10.6%	90,367	5.7%
2006	588.2	5.7%	200.8	5.3%	188.8	6.9%	18,520	8.8%	18,708	8.6%	93,183	3.1%
2007	623.0	5.9%	212.5	5.8%	203.7	7.9%	20,019	8.1%	20,485	9.5%	96,419	3.5%
2008	656.9	5.4%	222.8	4.9%	209.9	3.0%	20,799	3.9%	21,979	7.3%	98,649	2.3%
2009	683.2	4.0%	229.0	2.8%	209.8	-0.1%	20,971	0.8%	22,179	0.9%	96,841	-1.8%
2010	712.6	4.3%	237.6	3.7%	215.6	2.8%	22,249	6.1%	23,309	5.1%	98,106	1.3%
2011	756.6	6.2%	251.1	5.7%	233.2	8.1%	24,441	9.8%	26,065	11.8%	105,847	7.9%
2012	794.9	5.1%	263.9	5.1%	247.8	6.3%	26,115	6.9%	28,077	7.7%	108,815	2.8%
2013	832.9	4.8%	277.1	5.0%	262.1	5.8%	27,916	6.9%	30,364	8.1%	112,224	3.1%
2014	871.2	4.6%	290.6	4.9%	276.3	5.4%	29,832	6.9%	32,979	8.6%	116,249	3.6%
2015	910.3	4.5%	304.3	4.7%	289.7	4.9%	31,772	6.5%	35,596	7.9%	119,763	3.0%
2016	950.1	4.4%	318.2	4.6%	303.0	4.6%	33,856	6.6%	38,396	7.9%	123,428	3.1%
2017	991.0	4.3%	332.5	4.5%	316.2	4.4%	36,012	6.4%	41,256	7.4%	126,785	2.7%
2018	1,032.8	4.2%	347.2	4.4%	329.6	4.2%	38,187	6.0%	44,146	7.0%	130,149	2.7%
2019	1,075.8	4.2%	362.2	4.3%	343.3	4.2%	40,501	6.1%	47,353	7.3%	134,011	3.0%
2020	1,119.5	4.1%	377.6	4.3%	357.3	4.1%	42,920	6.0%	50,772	7.2%	138,009	3.0%
2021	1,164.2	4.0%	393.5	4.2%	371.6	4.0%	45,502	6.0%	54,319	7.0%	141,838	2.8%
2022	1,209.9	3.9%	409.7	4.1%	386.0	3.9%	48,247	6.0%	58,010	6.8%	145,666	2.7%
2023	1,256.6	3.9%	426.1	4.0%	400.8	3.8%	51,089	5.9%	61,817	6.6%	149,356	2.5%
2024	1,304.5	3.8%	443.1	4.0%	416.0	3.8%	54,084	5.9%	65,750	6.4%	152,899	2.4%
2025	1,353.7	3.8%	460.5	3.9%	431.9	3.8%	57,297	5.9%	69,972	6.4%	156,661	2.5%
2026	1,404.2	3.7%	478.5	3.9%	448.2	3.8%	60,599	5.8%	74,357	6.3%	160,332	2.3%
2027	1,451.8	3.4%	495.4	3.5%	463.4	3.4%	63,814		78,635		163,830	2.2%
2028	1,498.0	3.2%	511.4	3.2%	478.2	3.2%	66,999	5.0%	82,974	5.5%		2.3%
2029	1,543.2	3.0%	527.0	3.1%	492.6	3.0%	70,206	4.8%	87,384	5.3%		2.2%
2030	1,588.1	2.9%	542.4	2.9%	507.0	2.9%	73,567	4.8%	91,866	5.1%	175,019	2.2%
Average P	ercent Ch	nange										
2001-2010		4.4%		4.0%		4.0%		5.6%		4.9%		0.8%
2011-2020		4.4%		4.6%		4.9%		6.5%		7.7%		3.0%
2021-2030		3.5%		3.6%		3.5%		5.5%		6.0%		2.4%

^[1] The Tri-County Region comprises Comal, Hays, and Williamson Counties.

Source: IHS Global Insight, December 2010 Forecast; High and Low Cases developed by SAIC

Exhibit B-3

Historical and Projected Economic Trends in the PEC Tri-County Region [1]

Low Economic Growth Case

			n en e	L de	N			omestic		onal	Personal per Hou	
	Populati	on (The)	House (Ti		Non-	yment		: (\$2005; VI)	Income \$1		(\$20	
	Value	% Chg	Value	% Chg	Value	% Chg	Value	"/ % Chg	Value	, <u>% Chg</u>	<u>Value</u>	% Chg
4000	l ——		••••••									
1992	277.8	4.770/	97.2 101.6	4 60/	72.1 77.5	- 7.50/	5,002	- 9.3%	6,403 7,034	- 9.9%	65,891 69,221	- 5.1%
1993	290.9	4.7%		4.6%		7.5%	5,469				1	2.6%
1994	308.3	6.0%	107.3	5.6% 6.3%	84.5 92.7	9.0% 9.7%	6,037 6,730	10.4%	7,621 8,530	8.3% 11 <i>.</i> 9%	74,795	5.3%
1995	325.5	5.6% 6.3%	114.0 121.9	6.9%	101.1	9.7%	7,487	11.5% 11.2%	9,324	9.3%	76,466	2.2%
1996	346.1	5.5%	121.9	5.8%	101.1	6.1%	8,370	11.2%	10,322	10.7%	80,011	4.6%
1997 1998	365.1 385.3	5.5%	136.4	5.8%	114.9	7.1%	9,556	14.2%	10,322	13.8%	86,110	7.6%
1999	408.5	6.0%	143.2	5.0%	132.3	15.2%	11,685	22.3%	13,055	11.1%	91,181	5.9%
2000	434.9	6.5%	150.5	5.1%	141.9	7.2%	12,622	8.0%	14,213	8.9%	94,435	3.6%
2000	463.6	6.6%	160.2	6.4%	141.9	2.9%	12,022	1.8%	14,213	1.7%	90,287	-4.4%
2001	487.3	5.1%	168.1	5.0%	147.9	1.3%	12,833	0.7%	14,110	-2.4%	83,927	-7.0%
2002	507.5	4.2%	174.8	4.0%	152.0	2.7%	13,817	6.7%	14,606	3.5%	83,536	-0.5%
2003	529.6	4.4%	182.1	4.0%	157.9	3.9%	14,995	8.5%	15,573	6.6%	85,497	2.3%
2004	556.4	5.1%	190.6	4.6%	176.6	11.9%	17,026	13.5%	17,223	10.6%	90,367	5.7%
2006	588.2	5.7%	200.8	5.3%	188.8	6.9%	18,520	8.8%	18,708	8.6%	93,183	3.1%
2007	623.0	5.9%	212.5	5.8%	203.7	7.9%	20,019	8.1%	20,485	9.5%	96,419	3.5%
2008	656.9	5.4%	222.8	4.9%	209.9	3.0%	20,799	3.9%	21,979	7.3%	98,649	2.3%
2009	683.2	4.0%	229.0	2.8%	209.8	-0.1%	20,971	0.8%	22,179	0.9%	96,841	-1.8%
2010	712.6	4.3%	237.6	3.7%	215.6	2.8%	22,249	6.1%	23,309	5.1%	98,106	1.3%
2011	727.3	2.1%	241.4	1.6%	217.2	0.7%	22,288	0.2%	23,769	2.0%	96,523	-1.6%
2012	748.7	2.9%	248.6	3.0%	224.9	3.5%	23,317	4.6%	25,069	5.5%	98,577	2.1%
2013	771.7	3.1%	256.7	3.3%	233.3	3.7%	24,404	4.7%	26,543	5.9%	100,997	2.5%
2014	795.6	3.1%	265.4	3.4%	241.9	3.7%	25,532	4.6%	28,225	6.3%	103,931	2.9%
2015	820.5	3.1%	274.3	3.4%	250.1	3.4%	26,622	4.3%	29,826	5.7%	106,368	2.3%
2016	846.2	3.1%	283.4	3.3%	258.3	3.3%	27,772	4.3%	31,496	5.6%	108,901	2.4%
2017	872.7	3.1%	292.8	3.3%	266.5	3.2%	28,918	4.1%	33,129	5.2%	111,127	2.0%
2018	899.9	3.1%	302.5	3.3%	274.9	3.1%	30,231	4.5%	34,949	5.5%	113,323	2.0%
2019	927.9	3.1%	312.4	3.3%	283.5	3.1%	31,609	4.6%	36,957	5.7%	115,917	2.3%
2020	956.3	3.1%	322.6	3.2%	292.2	3.1%	33,023	4.5%	39,064	5.7%	118,587	2.3%
2021	985.3	3.0%	333.1	3.3%	301.2	3.1%	34,512	4.5%	41,199	5.5%	121,073	2.1%
2022	1,014.8	3.0%	343.6	3.2%	310.3	3.0%	36,073	4.5%	43,373	5.3%	123,520	2.0%
2023	1,044.9	3.0%	354.3	3.1%	319.6	3.0%	37,653	4.4%	45,560	5.0%	125,812	1.9%
2024	1,075.6	2.9%	365.3	3.1%	329.2	3.0%	39,291	4.3%	47,766	4.8%	127,945	1.7%
2025	1,107.0	2.9%	376.6	3.1%	339.2	3.0%	41,029	4.4%	50,105	4.9%	130,226	1.8%
2026	1,139.1	2.9%	388.1	3.1%	349.5	3.0%	42,771	4.2%	52,481	4.7%	132,396	1.7%
2027	1,168.6	2.6%	398.8	2.7%	358.8	2.7%	44,392	3.8%	54,702		134,388	1.5%
2028	1,196.6	2.4%	408.5	2.4%	367.8	2.5%	45,935	3.5%	56,887	1	136,526	1.6%
2029	1,223.5	2.2%	417.9	2.3%	376.4	2.3%	47,437	3.3%	59,043	3.8%		1.6%
2030	1,249.9	2.2%	426.9	2.2%	385.0	2.3%	48,987	3.3%	61,172	3.6%	140,729	1.5%
Average P	ercent Ch	nange										
2001-2010		4.4%		4.0%		4.0%		5.6%		4.9%		0.8%
2011-2020		3.1%		3.3%		3.4%		4.5%		5.7%		2.3%
2021-2030		2.7%		2.8%		2.8%		4.0%		4.5%		1.7%

^[1] The Tri-County Region comprises Comal, Hays, and Williamson Counties.

Source: IHS Global Insight, December 2010 Forecast; High and Low Cases developed by SAIC

Exhibit C FORECAST EQUATION OUTPUT



Table C - 1
Forecast Equation Variable Index

VARIABLE NAME	DESCRIPTION
Economic Variables	
Average Income	Average Income per Household in the Tri-County Area (\$2009)
Households	Household Counts in the Tri-County Area
Personal Income	Total Personal Income in the Tri-County Area (\$2009)
PR_ELRES	Real Average Residential Price of Electricity
PR_NGRES	Real Average Residential Price of Natural Gas
Weather Variables	
ACMBCCDD	Cooling Degree Days: Base=65 dF (LCRA Billing Cycle Basis)
ACMBCHDD	Heating Degree Days: Base=65 dF (LCRA Billing Cycle Basis)
ACMCDD	Cooling Degree Days: Base=65 dF (Calendar)
ACMHDD	Heating Degree Days: Base=65 dF (Calendar)
PKCDD70	Peak Day Cooling Degree Days: Base=70 dF
PRCDD70	Prior Day to Peak Cooling Degree Days: Base=70 dF
PKMINH50	Positive Difference Between 50 dF and Peak Day Minimum
WPRHDD60	Weighted Average Heating Degree Days (70% peak day, 20% prior day, 10% 2 days prior)
Other Variables	
A_NRACF	Non-residential Sales Adjustment/Correction Factor:
	May-99 = 1.0; Jun-99 = -1.0
A_LACF	Losses Adjustment/Correction Factor:
	Nov-00 = 1.0; Feb-01, Mar-01 = -0.5
AR	Autoregressive Residual Term (of given lag)
С	Constant Term
DLOG	First-differenced Natural Log
LOG	Natural Log
MA	Moving Average (of given period)

Table C - 2

Forecast Equation Output - Residential Customers

Dependent Variable: DLOG(CUST_RES)

Method: Least Squares

Sample (adjusted): 1991 2010

Included observations: 20 after adjustments Convergence achieved after 12 iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Variable	Cocincient	Sta. Elloi	Cotatione	11001
DLOG (Households)	0.8219	0.2070	3.971	0.001
Binary: Year=2000	0.0220	0.0061	3.584	0.002
AR(1)	0.8964	0.1271	7.052	0.000
R-squared	0.8368	Mean depen	ident var	0.0526
Adjusted R-squared	0.8175	S.D. depende	ent var	0.0190
S.E. of regression	0.0081	Akaike info c	riterion	(6.655)
Sum squared resid	0.0011	Schwarz crite	erion	(6.506)
Log likelihood	69.552	Hannan-Quir	nn criter.	(6.626)
Durbin-Watson stat	1.814		5	

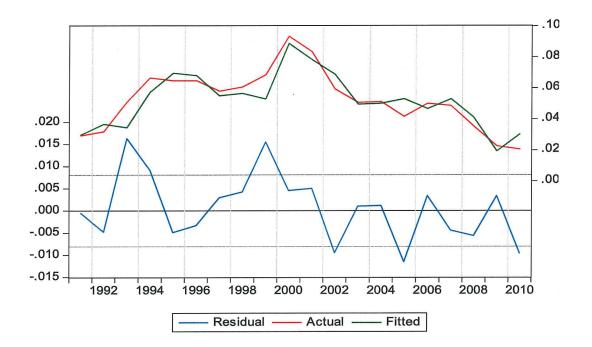


Table C - 3

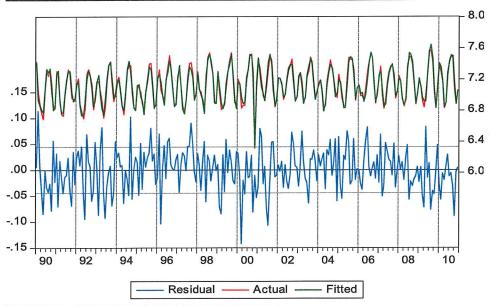
Forecast Equation Output - Residential Average Use (Simplified)

Dependent Variable: LOG(USE_RES)

Method: Least Squares

Sample (adjusted): 1990M01 2010M12
Included observations: 252 after adjustments
Convergence achieved after 6 iterations

Convergence achieved after 6 iteratio	TIS			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	4.306	0.385	11.194	0.000
LOG(Average Income)	0.229	0.034	6.713	0.000
LOG(@MOVAV(PR_ELRES,12))	(0.146)	0.050	(2.917)	0.004
LOG(@MOVAV(PR_NGRES,12))	0.032	0.039	0.825	0.410
W_ACMCDD ^[1]	0.00046			
W_ACMCDD(-1) ^[1]	0.00084			
W_ACMHDD ^[1]	0.00055			
W_ACMHDD(-1) ^[1]	0.00088			
Binary: Apr	(0.048)	0.013	(3.554)	0.001
Binary: May	(0.081)	0.015	(5.258)	0.000
Binary: Jun	(0.027)	0.012	(2.217)	0.028
Binary: Nov	(0.065)	0.013	(4.871)	0.000
Binary: Dec	(0.109)	0.016	(6.967)	0.000
Binary: Date=Nov-00	(0.731)	0.046	(16.003)	0.000
Binary: Dec (2003 & Beyond)	0.106	0.023	4.562	0.000
AR(1)	0.198	0.067	2.963	0.003
R-squared	0.920	Mean depe	ndent var	7.124
Adjusted R-squared	0.917	S.D. depend	dent var	0.223
S.E. of regression	0.064	Akaike info	criterion	(2.611)
Sum squared resid	1.001	Schwarz cri	terion	(2.471)
Log likelihood	338.992	Hannan-Qu	inn criter.	(2.555)
F-statistic	309.292	Durbin-Wat	son stat	1.939
Prob(F-statistic)	0.000			



^[1] Parameters correspond to the period beyond 2000. See following page for further information.

Table C - 4

Forecast Equation Output - Residential Average Use (Full Equation)

Dependent Variable: LOG(USE_RES)

Method: Least Squares

Sample (adjusted): 1990M01 2010M12 Included observations: 252 after adjustments Convergence achieved after 6 iterations

Convergence achieved after 6 iteration	5			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	4.306	0.385	11.194	0.000
LOG(Average Income)	0.229	0.034	6.713	0.000
LOG(MA(PR_ELRES,12))	(0.146)	0.050	(2.917)	0.004
LOG(MA(PR_NGRES,12))	0.032	0.039	0.825	0.410
W_ACMCDD	0.00020	0.00004	4.979	0.000
W_ACMCDD(-1)	0.00104	0.00004	23.996	0.000
W_ACMHDD	0.00033	0.00005	6.656	0.000
W_ACMHDD(-1)	0.00122	0.00005	23.429	0.000
W_ACMCDD*(Binary: Year>2000)	0.00026	0.00005	5.383	0.000
W_ACMCDD(-1)*(Binary: Year>2000)	(0.00020)	0.00005	(4.137)	0.000
W_ACMHDD*(Binary: Year>2000)	0.00022	0.00006	3.419	0.001
W_ACMHDD(-1)*(Binary: Year>2000)	(0.00034)	0.00006	(5.620)	0.000
Binary: Apr	(0.048)	0.013	(3.554)	0.001
Binary: May	(0.081)	0.015	(5.258)	0.000
Binary: Jun	(0.027)	0.012	(2.217)	0.028
Binary: Nov	(0.065)	0.013	(4.871)	0.000
Binary: Dec	(0.109)	0.016	(6.967)	0.000
Binary: Date=Nov-00	(0.731)	0.046	(16.003)	0.000
Binary: Dec (2003 & Beyond)	0.106	0.023	4.562	0.000
AR(1)	0.198	0.067	2.963	0.003
R-squared	0.920	Mean depe	endent var	7.124
Adjusted R-squared	0.917	S.D. depend	dent var	0.223
S.E. of regression	0.064	Akaike info	criterion	(2.611)
Sum squared resid	1.001	Schwarz cri	terion	(2.471)
Log likelihood	338.992	Hannan-Qu	ıinn criter.	(2.555)
F-statistic	309.292	Durbin-Wa	tson stat	1.939
Prob(F-statistic)	0.000			

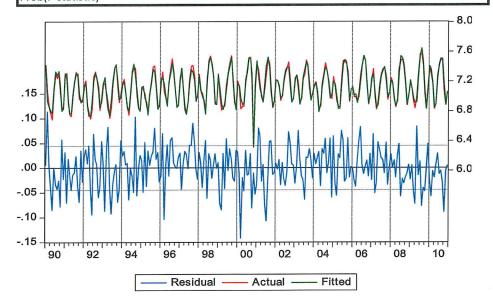


Table C - 5

Forecast Equation Output - Non-Residential Sales

Dependent Variable: LOG(Non-Residential Sales)

Method: Least Squares Date: 05/10/11 Time: 10:04

Sample (adjusted): 1997M03 2010M12 Included observations: 166 after adjustments Convergence achieved after 9 iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	2.913	0.675	4.318	0.000
LOG(Personal Income)	0.830	0.071	11.652	0.000
W_ACMCDD	0.00018	0.00003	5.779	0.000
W_ACMCDD(-1)	0.00041	0.00003	12.070	0.000
W_ACMHDD*(Binary: Year>2000)	0.00008	0.00004	1.890	0.061
W_ACMHDD(-1)	0.00018	0.00004	4.409	0.000
Binary: Date>Jul-00	0.159	0.034	4.624	0.000
Binary: Feb	0.027	0.014	1.958	0.052
Binary: Dec	(0.068)	0.019	(3.654)	0.000
Binary: Dec (2003 and Beyond)	0.073	0.025	2.897	0.004
A_NRACF	0.168	0.028	5.934	0.000
AR(1)	0.391	0.076	5.134	0.000
AR(2)	0.332	0.077	4.336	0.000
R-squared	0.975	Mean depe	ndent var	11.247
Adjusted R-squared	0.973	S.D. depend	dent var	0.299
S.E. of regression	0.049	Akaike info	criterion	(3.123)
Sum squared resid	0.366	Schwarz cri	terion	(2.880)
Log likelihood	272.229	Hannan-Qu	iinn criter.	(3.024)
F-statistic	502.208	Durbin-Wat	tson stat	2.044
Prob(F-statistic)	0.000			

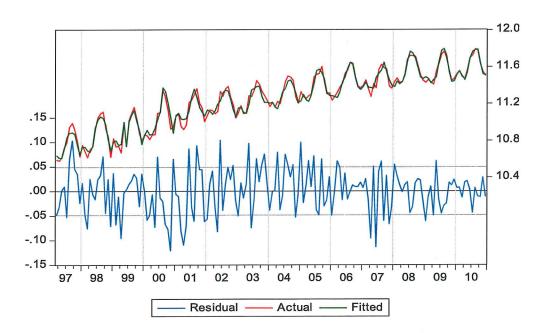


Table C - 6

Forecast Equation Output - Distribution Losses

Dependent Variable: LOSSFACT

Method: Least Squares Date: 06/22/11 Time: 16:45

Sample (adjusted): 1997M01 2010M12 Included observations: 168 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
la l				
С	0.034	0.011	3.171	0.002
W_ACMBCCDD	0.00064	0.00004	15.980	0.000
W_ACMCDD(-1)	(0.00054)	0.00004	(12.514)	0.000
W_ACMBCHDD	0.00069	0.00004	15.580	0.000
W_ACMHDD(-1)	(0.00065)	0.00005	(14.309)	0.000
Binary: Mar, Jul, Aug, Sep	(0.054)	0.010	(5.139)	0.000
Binary: Oct	(0.093)	0.017	(5.497)	0.000
A_LACF	0.328	0.036	9.060	0.000
R-squared	0.856	Mean depe	ndent var	0.040
Adjusted R-squared	0.850	S.D. depend	dent var	0.111
S.E. of regression	0.043	Akaike info	criterion	(3.398)
Sum squared resid	0.299	Schwarz cri	terion	(3.250)
Log likelihood	293.473	Hannan-Qu	inn criter.	(3.338)
F-statistic	135.844	Durbin-Wat	son stat	1.788
Prob(F-statistic)	0.000	Δ.		

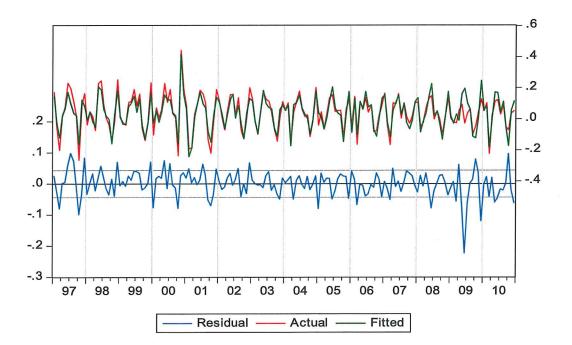


Table C - 7

Forecast Equation Output - Load Factor

Dependent Variable: LOAD FACTOR

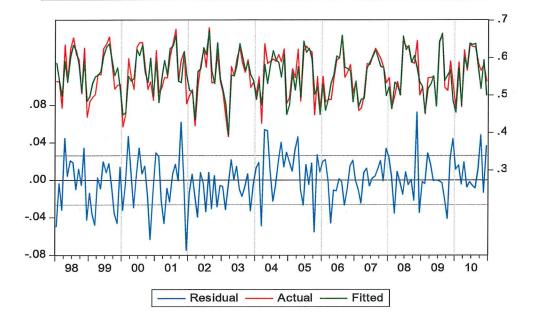
Method: Least Squares Date: 06/22/11 Time: 17:07

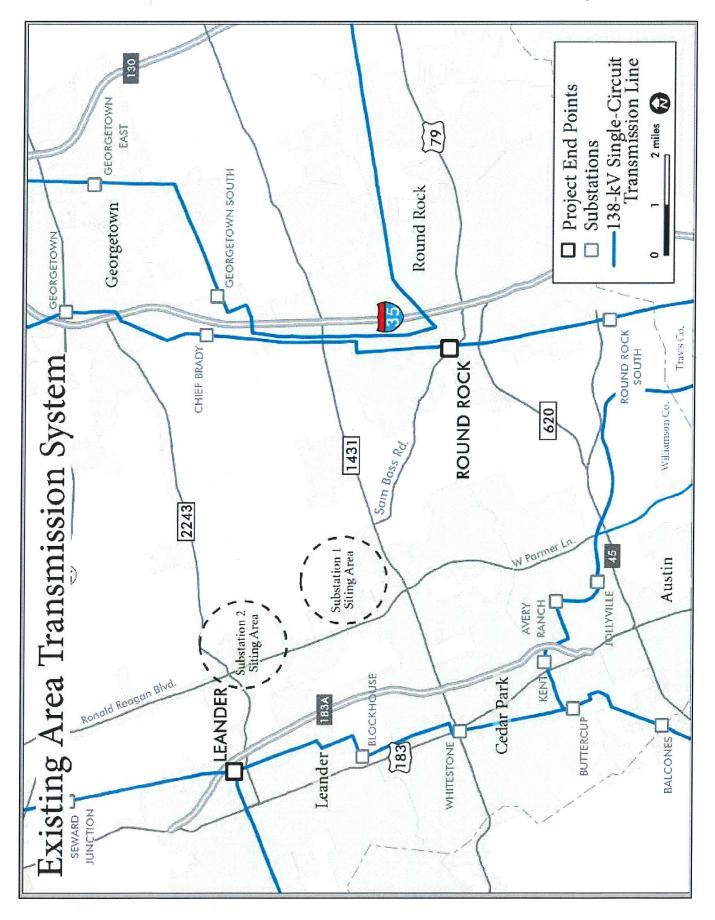
Sample (adjusted): 1998M01 2010M12 Included observations: 156 after adjustments

HAC standard errors & covariance (Bartlett kernel, Newey-West fixed

bandwidth = 5.0000)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
_				
С	0.557	0.011	48.938	0.000
W_ACMBCCDD	0.00045	0.00004	11.758	0.000
W_ACMBCHDD	0.00037	0.00004	8.997	0.000
W_PKCDD70	(0.00799)	0.00111	(7.177)	0.000
W_PRCDD70	(0.00356)	0.00122	(2.918)	0.004
W_PKMINH50	(0.00753)	0.00090	(8.416)	0.000
W_WPRHDD60	(0.00230)	0.00065	(3.525)	0.001
Binary: Jan	0.016	0.008	2.104	0.037
Binary: May	(0.025)	0.007	(3.284)	0.001
Binary: Sep	(0.014)	0.006	(2.300)	0.023
Binary: Nov	0.044	0.012	3.617	0.000
Binary: Fri Morning	0.021	0.006	3.649	0.000
Binary: Date=Jun-09	(0.125)	0.004	(30.973)	0.000
R-squared	0.832	Mean depe	ndent var	0.557
Adjusted R-squared	0.818	S.D. depend	lent var	0.062
S.E. of regression	0.026	Akaike info	criterion	(4.353)
Sum squared resid	0.099	Schwarz crit	terion	(4.099)
Log likelihood	352.568	Hannan-Qu	inn criter.	(4.250)
F-statistic	59.140	Durbin-Wat	son stat	1.840
Prob(F-statistic)	0.000			





LOCATION OF DIRECTLY AFFECTED PROPERTIES (MAPS)

(LOOSE)

Tract ID	Structures	Segments Title	Title Last Name	First Name Suf	Suffix Address 1	Address 2 Ad	Address 3 City		State Zip	Tax ID
A-001; A-002; G-006; H-009; U4- 002; V4-003; V4-011; V4-017; V4-3 026	_	A, B; B6; C; G; H; H6; U4; V4	Leander City Of		PO 80x 319		l lei	Leander T.	TX 78646-0319	R031277; R108637; R505880; 9 R513725; R515433; R517894; R521163; R521164; R542628
A-003		A; D	House	Franklin R	1659 Kc 450		Jur	Junction	TX 76849	R031325
A-004	1; 2	A; D; E; F	First Baptist Church		PO Box 187		Le	Leander	TX 78646-0187	7 R031254
A-005		A; D; E; F	Pedernales Electric Cooperative Inc		Attn: Prop Tax Dept	PO Box 1	lot	Johnson City T.	TX 78636-0001	1 R031338
A1-001, A1-002, A1-003, A1-006; A1-007, A1-008, A1-010, A1-011; 1227, 1228 15-045	.227; 1228	A1; I5; J5	A C Weir Properties Ltd		303 Ridge Run Dr		Ge	Georgetown T.	TX 78628-8264	R040828; R040829; R091315; 4 R307086; R337203; R472552; R523502; R543988; R543989
A1-004; A1-005; A1-009; A1-012; A1-013; B1-009; Lody 7,15-001; K5-001; K5-003; K5-006; K5-007; K5-011; M5-001; V2-001; X2-005		A1; A3; A3a; B1; B3; E6; IS1; S1; SN; M5; M5; O5; P9; O5; T2; U2; U3; V2; W2; W2a; X2; V2; Z; Z2	Texas Crushed Stone		PO Box 1000		95	Georgetown T.	TX 78627-1000	R039298; R040297; R040298; R040819; R040826; R051324; R307083; R307084; R311269; R34450; R420119; R4258; R473348
A1-014		A1	Barton Grady & Rose Real Estate Lp & Carrie A Barton-Smith		401 Cr 111		Ge	Georgetown T.	TX 78626	R472556
A1-015; S-001; S-002; Z-004 12	1221	A1; B1; S; Y; Z	Laredo Wo Ltd		C/O Galo Properties	1175 W Bitters Rd Ste	Ste 100 Sar	San Antonio T.	TX 78216-7606	8 R502431
A2-001 15	158	A2; D2; V5	Crossley	C H & Patsy	PO Box 1117		Ro	Round Rock T.	TX 78680-1117	7 R037964
	157	A2		Ellen M	6725 Outer Ave		Le			
A2-003		A2		Cleveland H Jr & Francis E	3420 Cr 175		Le			
A2-004				Joseph & Carolyn	6600 Acacia Dr		le.			
A2-005	54	AZ; V5 A2	Powell	Gary K & Sally P	6/24 Outer Ave		e le	Leander	TX 78641-9384	4 KU3/966
		A2	nstreiter	Shawn P & Amy	6601 Acacia Dr		Le			
	156	A2		Christopher R & Aranya	6701 Acacia Dr		Le			
		A2		David M	6900 Acacia Dr		Le		TX 78641	R037968
A2-010 15	155	A2	Williams	Jeremiah D & Leslie A	6875 Acacia Dr		Le	Leander	TX 78641-9369	
A2-011		A2: 21		Raymond Joseph & Dale R	7225 Acadia Dr		Le			R037941
A3-001 73	739	A3	Ellison	Willis W	2957 Desert Candle Dr		R	Rock	TX 78681	R501691
A3-002; A3-049; A3-050; 03- 002; 03-013; 03-057		A3; A3a; F3; O3; U3	is Ranch Master Assoc		Attn: Pamco	PO Box 200145	Au		TX 78720-0145	i e
	38	A3		leffrey M & Amy C	2961 Desert Candle Dr		Ro			
A3-004	737	A3	Dickerson	Jennifer Panther & Brant	3077 Portulaca Dr		Ro	Round Rock T.	TX 78681-2451	1 R501688
44-007, 44-056, 44-070, 13-001, 63-104, 63-115, 13-007, 13-098, 13-205, 13-236, 13-233, 13-233, 12- 306, W2-045; Y2-182		A3, A3a, A4, B4, B4a, D1, D3, D3a, E8, E1, F3, G1, G3, H3, I3, N3, O3, R5, T2, U2, U3, U3, W2, W2a; Y2	nd Rock		221 Main St		<u>8</u>			
A3-006 73	736	A3	Hernandez	Indalecio M & Rachel A	3073 Portulaca Dr		Rc	Round Rock T.	TX 78681	R501687
A3-00/		A3			3072 Portulaca Dr		RC.			K501/19

ie Project	Habitable Structures	
Leander-Round Rock 138-kV Transmission Lin	Directly Affected Landowner List Including Tract IDs and	

Tract ID	Structures	Segments	Title Last Name	First Name	Suffix Address 1	Address 2	Address 3 City	State Zip	Tax ID
			Shaban	Ashraf Abu & Havat A	3069 Portulaca Dr			TX 78681	R501686
		A3	Schell		3068 Portulaca Dr		Round Rock		R501718
	734	A3	Bartelson	Richard T & Randi L	3065 Portulaca Dr		Round Rock	TX 78681	R501685
		A3	Crownover	Spencer F	3064 Portulaca Dr		Round Rock	TX 78681	R501717
	733	A3		Bill D & Barbara J	3061 Portulaca Dr		Round Rock		R501684
A3-013	100	A3	Orourke	Kristin	3060 Portulaca Dr		Round Rock	TX 78681	R501716
		A3	Nieto	John & Amy	3037 Por wiada Di		ROUTIU ROCK	Ī	KOULDES
A3-015		A3	Chinnam	Chandra & Satyavathi Yerukala	3056 Portulaca Dr		Round Rock	TX 78681	R501715
	731	A3	Porterfield	John & Vicky	3053 Portulaca Dr		Round Rock		R501682
		A3	Veeramasuneni	Surendra & Sridevi	3052 Portulaca Dr		Round Rock		R501714
A3-018 7	730	A3	Short	Billy R Jr	3049 Portulaca Dr		Round Rock	TX 78681	R501681
		A3	ini	Krishna	3048 Porulaca Dr		Round Rock		R501713
A3-020 7	729	A3	Prater	Nilon & Jennifer	3045 Portulaca Dr		Round Rock	TX 78681	R501680
		A3		Murali	3044 Portulaca Dr		Round Rock		R501712
	728	A3	Brandon	Aaron W & Jessica A	3041 Portulaca Dr		Round Rock		R501679
	101	A3	Logue	Morgan A & Andrea L	3040 Portulaca Dr		Round Rock	1X /8681	R501/11
		A3	Gay	Marron V 8. App. B	3037 Portulaca Dr		Round Rock	TX 70601	KSUID/8
A3-026	726	A3	Scott	Shawn I & Marnia M	3033 Portulaça Dr		Round Bock	TX 78681	NSOL/10 RE01677
		CF.	3000	SHAWII L'& MAIIIG IVI	SOSS FOI MIRCA DI		NOUTIN NOCK	Ī	NOTOCA .
A3-027		A3	Paidimarri	Kishore & Krishna S Konkimalla	3032 Portulaca Dr		Round Rock	TX 78681-2451	R501709
	725	A3	Grav	William S & Heather J	3029 Portulaca Dr		Round Rock	TX 78681	R501676
		A3	Kalayapalli	Ramprasad R	3028 Portulaca Dr		Round Bock		R501208
A3-030	724	A3	Millen	Sean M. Molly A	3025 Portulaca Dr		Round Bock	Ť	R501675
		A3	Hurtado	Juan F & Michelle E	3024 Portulaca Dr		Round Rock	TX 78681	R483886
		A3	Brown	Harold F & Debra K	3021 Portulaca Dr		Round Rock	T	R483834
	722	A3	James	David Alan Jr & Leigh Ann	3017 Portulaca Dr		Round Rock		R483833
			Siddavatam Prasad & Sailaja				1		
As-034	17/	A3	Chadaram irustees of siddayatam & Chadaram Liv Tr		SOLS Portulaca Dr		KOUNG KOCK	1A /8681	K483832
A3-035		A3	Nandula	Vithal & Srilatha Vangala	3009 Portulaca Dr		Round Rock	TX 78681-2451	R483831
A3-036; I3-225; O3-112; W2-030	541; 716; 717; 718; 719; 720	A3; A3a; I3; O3; W2; W2a	Round Rock Isd		1311 Round Rock Ave		Round Rock	TX 78681-4999	R312429; R414066; R462687; R502459
A3-037 7	715	A3	Ward	Ryan P & Erin E	2601 Covington Pl		Round Rock	TX 78681	R418708
	714	A3; A3a	Polak	Tab	2603 Covington Pl		Round Rock	TX 78681-2285	R418707
		A3; A3a	Moser	Robert G & Linda N	2604 Covington Pl		Round Rock	TX 78681-2285	R418706
		A3; A3a	Stewart	Robert D	2602 Covington Pl		Round Rock		
A3-041 7	711	A3	Overton	Kerry L & Anita R	2600 Covington Pl		Round Rock		_
		A3	Fohl	Steve & Lourdes	2701 Covington Pl		Kound Kock	1X /8681	K418 /03
A3-043	710	A3	Shanklin	Elizabeth Denise & Brian Farris	2703 Covington Pl		Round Rock	TX 78681-2286	R418702
A3-044		A3; A3a	Allen	Shawn R	2705 Covington Pl		Round Rock	TX 78681	R418701
	707	A3; A3a	Haney	Juan T & Sharon D	2706 Covington Pl		Round Rock		R418700
A3-046		A3	Messing	Jeffrey Paul	2704 Covington Pl		Round Rock	TX 78681	R418699
A3-047	902	A3	Caldwell	Thomas Howard & Robin	2702 Covington Pl		Round Rock	TX 78681	R418698
A3-048		Δ3	Blankenshin	Thomas & Lauren	2700 Covington Pl		Round Rock	TX 78681	8418697
A3-051		A3		Jeffery J & Carol G	3333 Goldenoak Cir		Round Rock		R429385
	704	A3	986	Jason C & Jennifer R	3329 Goldenoak Cir		Round Rock	TX 78681-2292	R429386
		A3		Laura A & Luther M	3002 Pointe PI		Round Rock	Ť	R429449
A3-054 7	703	A3	Leon	Rafael I & Blythe S	3325 Goldenoak Cir		Round Rock		R429387
		A3	Davis	John A & Glenda L	3001 Briar Oak Ln		Round Rock	TX 78681	R429435
		A3		Louis C	3321 Goldenoak Cir		Round Rock		
	701	A3	Moriarty	Don & Nancy	3317 Goldenoak Cir		Round Rock	TX 78681-2292	R429389
		A3	Bridges	Jeffrey M & Angela D	3313 Goldenoak Cir		Round Rock	TX 78681	R429390
A3-059 6	869	A3	Lee	Leon Z & Ngocdung T Nguyen	3002 Briar Oak Ln		Round Rock	TX 78681-2294	R429460
		A2. A22	44.80	Christophor	2200 Goldsons Vir		dood barrod	TV 795.91	B429391
A3-061	695	A3, A3d	Cordon	Marco A Ir & Mary B	3262 Goldenoak Cir		Round Rock	Ť	
		A3: A3a	Hermeckar	Franklin Scott & Lisa D	3305 Goldenoak Cir		Round Rock	TX 78681-2292	
		A3: A3a	Davalt	James E & Anna	3301 Goldenoak Cir		Round Rock		R429393
A3-064 6	693	A3; A3a	9.	John Michael & Heather H	3269 Goldenoak Cir		Round Rock	TX 78681	
		A3		Phillip & Sandra	3265 Goldenoak Cir		Round Rock		R429395
A3-066		A3		John E & Kristin A	3261 Goldenoak Cir		Round Rock	TX 78681-2291	R429396

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201; A3-070; A3-081; A3-084; A3-090; A3-091; A3-092; A3-093; G A3-094; A3-099; N3-190; N3- 201; N3-202; N3-203; N3-204; G N3-205; N3-205; N3-204; N3- 208; N3-211; N3-212; N3-213; N3-214; N3-215; N3-216; N3- 229; Y2-055	774; 577; 590; 229;	eg	Standard Pacific Of Texas Inc		Attr. John Bohnen	11001 Lakeline Blvd	Bidg J, Ste 100	Austin	XT 787.17		R345071; R511317; R520582; R520587; R520588; R520589; R520590, R520591; R520595; R520591; R53297; R532978; R532979; R532982; R532983; R532987; R532986; R532985; R533987; R532986; R532985; R533987; R532986; R532985;
9	688	A3	Kumar	Rajiv	107 Alondra Way			Round Rock		81 R520655	55
9	691	A3	Nikam	Kunal & Amruta Salekar	111 Alondra Way			Round Rock	TX 78681		54
		A3	Kankanala	Vikram & Swathi Vemula	117 Alondra Way			Round Rock	TX 78681	81 R520652	52
A3-072, Y2-005; Y2-053; Y2-081; Y2-103; Y2-105; Y2-109; Y2-113; Y2-126		A3; A3a; O5; P5; W2; Y2; Z2	Sendero Springs Homeowners Association		C/O Realmanage	9601 Ambergien	Ste 150	Austin	TX 78729		R415882; R415853; R415905; R415906; R415907; R462224; R511276; R511303; R520601
A3-073; A3-120; A3-131; A3-135; A3-146; A4-004; E4-009; E4-011; N3-043; N3-044; N3-133; O3- 062; O3-113; Y2-072; Y2-129		A3; A33; A4; B3; D4; E4; N3; O3; O5; P5; Q5; W2; Y2; Z2	Brushy Greek Mud		16318 S Great Oaks Dr			Round Rock		-5685	ROSS 107: ROSS 142; ROSS 351; ROGS 709; R2 7255; R429654; R423 34; R4513 19; R451972; R473 344; R501461; R511287; R520564; R520602
9		A3; A3a	Perry	Mark R & Monica	739 Cascada Ln			Round Rock			00
9	989	A3	Mopuri	Srinivas & Vijaya	114 Alondra Way			Round Rock		81 R520644	44
	585	A3 A3· A3a	Ullrich	Chris	118 Alondra Way			Round Rock	TX 78681	81 R520645 81 R520599	45
		A3; A3=	122000000000000000000000000000000000000	Raghavendra Prasad & Deepa	יין המיינים ביי			, and an			6 66
۵		A3; A3a	surapuraju	Nunapalli	731 Cascada Ln			Kound Kock			98
		A3	Salgado	Gary & Carol	3086 Blazing Star Dr			Thousand Oaks			43
9		A3; A3a	Muthuvelu	Bharathkumar	729 Cascada Ln			Round Rock	,		97
9	682	A3; A3a	Chacko	Binoj & Sherly	725 Cascada Ln			Round Rock			96
		A3	Kam	Yoo Hong & Mi-Kyung	720 Cascade Ln			Round Rock	TX 7868		41
		A3	Bommanaboina	Srinivas & Mamatha Jangti	716 Cascada Ln			Round Rock	TX 78681	81 R520640	40
9	680	A3; A3a	Valappil	Sivaprasad Pattanmaru	717 Cascada Ln			Round Rock	TX 78681		94
		A3	Padhi	Prasanta & Subrata Panda	712 Cascada Ln			Round Rock			39
9	629	A3; A3a	Kalro	Ravinder & Soujanya Masna	713 Cascada Ln			Round Rock	TX 78681	81 R520593	93
9	678	А3	Boddu	Karunakar Reddy & Haritha R	104 Farola Cv			Round Rock	TX 78681	81 R520592	92
		A3	Yadav	Abhishek & Nutan Kumari	103 Farola Cv			Round Rock	TX 78681	81 R520586	98
A3-096, N3-192, N3-193; N3- 194, N3-195, N3-196, N3-197; 6 N3-198, N3-199, N3-200	672; 931	A3; A3a; N3	Standard Pacific Homes Inc		11001-1 Lakeline Blvd #100			Austin	TX 78717		RS20585; RS36853; RS36854; RS36855; RS36856; RS36857; RS36858; RS36859; RS36860; RS36869
9		A3; A3a	Mohan	Manoj & Sreevidhya Ajayan	565 Cascade Ln			Round Rock	Ħ		84
9	029	A3; A3a	Sathy	Manoj Soman & Anu Manoj	561 Cascada Ln			Round Rock	TX 78681	81 R520583	83
9	899	A3; A3a	Kaza	Venkata Priyatham & Esha Rao Lingamaneni	553 Cascada Ln			Round Rock	TX 78681	81 R520581	81
† 		1	-						1		

Tract ID	Structures	Segments Title	Last Name	First Name	Suffix Address 1	Address 2 Address 3	City	State Zip	Tax ID
			Urbanski	Stephen Henry	e Oak Loop		Round Rock	TX 78681-2115	R092165
		A4	Preece	Lynette C	1715 White Oak Loop		Round Rock		
	1175; 1176	A4	Boardwalk At Sam Bass Inc		1920 Darden Hill Rd		Driftwood	Ť	_
A4-024	1184; 1186	A4	One Way Baptist Church Inc	lim & Monti	2107 Hairy Man Rd		Round Rock	TX 78681-1880	R055174
	1103	A44	Baimaker	Bandall & Leah	2501 Hally Mail NO		Leander		_
	1174	A4	Murphy	Patrick Michael	PO Box 2243		Round Rock		
	1173	A4	Graham	Lucas & Jennifer	10021 Lexington Ave Ne		Albuquerque	NM 87112-1506	
	1172	A4	Christ	Michael J & Jason Peebles			Austin		R061921
A4-030	1171	A4	Gilmer	J Davis & Mary S	5114 Balcones Woods Dr Ste 307-139		Austin	TX 78759	R061922
	1170	A4	Curl	Margarita L	7603 Blue Jay Ct		Georgetown		
A4-032; A4-038	1167; 1169	A4	Menefee	Randy L	1717 Horseshoe Cir		Round Rock		R061924; R061926
A4-033		A4		Michael P	30026 Woodthrush Pl		Hayward	T	R061964
A4-034		A4		Sigitredo H & Maria C	907 Pepperell Ct		Austin		
A4-035	4400	A4	Dowe	Michael A Jr & Sarah L	188 Lemens Ave		Hutto	TX 78634-3435	R061966
	1162	744 7.4		Carolyn Nay	2203 Halify Iviali Ku		Round Rock		
A4-037	1166	744	Willer	Wesley E	PO Box 1086		Pound Bock	, ,	
	1100	***	Nickel Coatt	Ciristine & John C	20E Morar Dr		Priordiff	TV 70660 2043	NO01927
A4-040		744	SCOIL	EII IK	ZOS INDIGIT DI	TCC # OOC O at 1 acceptant OOC	Driation	T	NU01928
A4-041	1164	A44	Disoni	Sean	GSO NW SATES	2900 Atlaetsoff Lit C-200 # 233	Seattle	WA 98107	R061929
	1165	***	Dridoniy Limited Damorchin	Seall	EZ40 Chandian Book Dr.		Austin	T	NOC1930
	1165	A44	Prideaux Limited Parnership		S/ 10 Standing Rock Dr		Austin	Ť	RUBINSI
	1163	A4	Cagle	Joel S	III 2300 Whitlow Cv 2302		Round Rock	TX 78681-1847	R061932
A4-045	1180; 1181	A4	Smith	Christopher E Jr & Sandra Kay	2309 Hairy Man Rd		Round Rock	TX 78681	R056322
	1161	AA	Thate	Авшеда	8505 Ocelot Cv		Round Rock		
A4-047	1160	A4	Landi	Robert C	133 30Th Ave		San Mateo	CA 94403-2712	R061934
	1162	A4	Antov	Tzvetan L & Antonia N	PO Box 81216		Austin		
	1158	A4	Brown	Jeannine F	PO Box 7805		Horseshoe Bav		
	1150		Pickerill Laurie Trustee Of Barbara		C Carpin days C		A Comment		70064 0004
	6611	W#	Jean Swenson Management Trust		Z44 Calliologe DI		New bi dulliers		VCGT00V
	1157	A4	12Properties Llc Series A		117 Tallstar Dr		Lakeway	П	R061938
A4-052	1156	A4	Pineda	Zacharia P & Lisa M	129 Costa Rica Ave		Burlingame		R061939
	1155	A4	Reynaga	Marcos I	16238 Ranch Road 620 N	-	Austin	TX 78717-5212	R061940
	1154	A4	Hartmann	Gabriel & Phillip Madison & Mary Madison	38711 Jonquil Dr		Newark	CA 94560	R108802
A4-055	1178; 1179	A4	Gonzalez	Jorge I	2211 Hairy Man Rd		Round Rock	TX 78681	R056321
		A4	Hubert	Chris & Natalie	2400 Creek Bend Dr		Round Rock		R061989
	1153	A4	Harris	William P & Francine L	2403 Creek Bend Cir		Round Rock		R061945
A4-059		A4	Lewis	Corri & Nelson	2405 Creek Bend Cir	-	Round Rock	7	R061946
A4-060		A4	Jackson	James David	2501 Creek Bend Cir		Round Rock		R061947
A4-061		A4	Mcmaster	Steven & Dorothy	2503 Creek Bend Cir		Round Rock		R061948
A4-062		A4	Smith	Sheila I & Roy Brenton	2505 Creek Bend Cir		Round Rock	Ì	R061949
A4-063		A4		Thomas J & Vickie	2507 Creek Bend Cir		Round Rock	T	R061950
A4-064		A4	Dockery	Bryan & Pamela	2509 Creek Bend Cir		Round Rock	TX 78681-1853	R061951
A4-065		A4	i	Michael R & Lori C	2511 Creek Bend Cir		Round Rock	Ť	_
A4-067		A4		Margaret D	2603 Creek Bend Cir		Round Rock	Ť	
A4-068		A4	vorth	Wm & Cheryl Trustees W&C	2605 Creek Bend Cir		Round Rock		
				Wadsworth Livin				Ť	
A4-069		A4. B4. B4 NO. 110	Morgan Cmith Warn Man Terreton	Lawrence D	2507 Creek Bend Cir		Round Rock	TX 79681-1844	R096/42
A4-0/1		D4; D44; N3;	SIIIILII Vera Mae ITUStee		DA SCAIII BASS NO		Noulla Nock	Ì	N035221
A4-071		A4; B4; B4a; N3; U3	The James Carson and Vera Mae Smith Trust, dated May 15, 1995		C/O Ms Vera Mae Smith, Surviving Trustor	2511 Sam Bass Rd	Round Rock	TX 78681-1807	R055221; R055222
A4-071		A4; B4; B4a; N3; U3	The James Carson Smith "Trust B" Bypass Trust		C/O Ms Vera Mae Smith, Surviving Trustor and Trustee	2511 Sam Bass Rd	Round Rock	TX 78681-1807	R055221; R055222
A4-072; A4-073; U3-001; U3-002	1018; 1019	A4; B4; B4a; N3; U3	Hunt	Mark W & Kathy S	3005 Cajuiles Dr		Pflugerville	TX 78660-5094	R051359; R055236; R310504; R485152
A5-001	104	A5. B5.11	Hogge Robert C & Alexie C Co-Trs Of		101 Creek Meadow Cv		leander	TX 78641	R424912
		17 (50 (50	Hogge Family Trust		***************************************				
A5-003; A5-020; C5-001	105	A5; B5; C5; D5; D6; E5; F5; K1; L1; M1	Borho	Curtis C	2151 County Road 175		Leander	TX 78641-1605	R031535; R031536; R031542; R032270
A5-004			Reid	Justin Derek & Lindsey	PO Box 145		Cedar Park	П	R493041
A5-005			Putman	Donald Lloyd & Rosemary	201 Fort Mabry Loop		Georgetown	TX 78628	R493042
A5-006			Sanchez	Neil James & Karen Marie	205 Fort Mabry Loop		Georgetown	TX 78628-7200	R493043

Cltrat	Christinos	Commonte	Q#:E	ome N to	vi#ii3	Address 1	Addrace 2	(H)	Ctato Zin	AI V.T.
					IdvI		7		•	28528-7200 R493044
A5-008				not	Grady K & Jennifer R	213 Fort Mabry Loop		Georgetown		
A5-009					Joshua N & Delisa L	217 Fort Mabry Loop		Georgetown		
A5-010					3rian & Robin	231 Fort Mabry Loop		Georgetown		
A5-011				Rve	James D	235 Fort Mabry Loop		Georgetown	TX 78628	78628 R493048
A5-012					Sonny & Heather Nelson	239 Fort Mabry Loop		Georgetown		
A5-013					leremy & Laura A	517 Purtis Creek Ln		Georgetown	Ĺ	
	103	A5		o	Craig A & Karon K	100 Creek Meadow Cv		Leander		1663
A5-015		A5			leremy K	110 Creek Meadow Cv		Leander		
A5-016	102	A5		nyer	Kelsey & Stephen	1920 County Road 175		Leander	,	78641-1672 R424903
A5-017; O3-149; O3-150		A5: J1: O3: Y4			John W III & Glenda N	2409 Deer Trail Cir		Round Rock		
							=			
A5-018		A5	Ī	ns	Skyler E	1955 Cr 175		Leander	Ī	
A5-019		A5	Ī		Larry J & Anna			Leander		78641-1674 R424904
A5-021				Lincoln	Elaine C	2100 County Road 176	=	Georgetown	TX 78628-	8-7132 R408259
A6-001; L-001; L-006		A6; C6; F6; L; M; N; P		Mahendru	Devidass & Swaran	9708 Oxaus Ln		Austin	TX 78759	78759-7766 R054292; R442210; R473653
A6-002; A6-006; A6-008; A6-011; C6-002; C6-003; K-007; X5-003; Z5-001	34	A6; B6; C6; E; J; K; L4; S4; X5; Z5		Mahendru	Vivek MD	7109 Villa Maria Ln		Austin	TX 78759	R031279; R031280; R031286; 78759-7776 R031285; R031318; R031347; R319481; R462377
A6-003; K-008; L-010	23	A6; K; L		Mahendru	Vivek & Lisa K	7109 Villa Maria Ln		Austin	TX 78759	78759-7776 R031297; R031398; R473651
A6-004; L-015		A6; L		Subramanian Ltd		17502 Whippoorwill Trl		Lago Vista	TX 7864	78645-9735 R031339; R473650
A6-005; L-016		A6; L			Michael D & Sandra L	3709 Goodnight Trl		Leander	-	8641-3648 R031350; R473649
A6-007; L-022	33	A6; L		Presidential Rv & Boat Storage Llc		2905 Bryco Cv		Round Rock	TX 7868:	78681-2254 R031348; R433130
A6-009; L-025; L-026; Q2-004	245	A6; 12; 12; L; Q2		Cedar Park Vfw #10427 Post		8760 Fm 2243		Leander	TX 78641	1 R031314; R375914; R433126; R433127
A6-010; K-019; K-020		А6; К		Sig Properties Lic		3709 Goodnight Trl		Leander	TX 78641	1 R031316; R086402; R525765
A6-012	31; 32	A6		Easley Harry S & Nella R Family Trust		14300 Ronald W Reagan Blvd		Leander	TX 7864	78641-2541 R375860
B-001	2;6	A; B; C; G; I; Y5	Ms.	n	Mercy Stack	PO Box 200995		Austin	TX 78729	78729-0995 R051592
	2;6			Budrich	Kathy Sherman	PO Box 200995		Austin		
B-001		A; B; C; G; I; Y5	Ms.		Betty Jo Sherman	PO Box 200995		Austin	Ť	78729-0995 R051592
	5:6		Ms.	Hoisager	Mary Martha Lowrance Molly Stack	PO Box 200995		Austin	TX 78729	/8/29-0995 R051592 78729-0995 R051592
					Christie Sherman	PO Box 200995		Austin	Ť	
			Mr.	Lowrance	John B	PO Box 200995		Austin	Ħ	
B-001	2;6	A; B; C; G; I; Y5			Sheryl	PO Box 200995		Austin	Ì	
			Ms.	Robertson L	Laminda "Mindy" Stack	PO Box 200995		Austin	TX 78729	78729-0995 R051592 78729-0995 R051592
				nan	Robert "Ron" F	PO Box 200995		Austin		
					Charles S	PO Box 200995		Austin	Ħ	П
B-001	5; 6	A; B; C; G; I; Y5		Stack	John Elbert	PO Box 200995		Austin	Ì	
			Ä.		Marcus	PO Box 200995		Austin	TX 78729	78729-0995 R051592
					Mary	PO Box 200995		Austin	Ť	
					Michael	PO Box 200995		Austin		
B-001	2;6	A; B; C; G; I; Y5				PO Box 200995		Austin	Ì	
			Mr.	Stack	Robert Don "Skipper"	PO Box 200995		Austin	TX 78729	78729-0995 R051592
					Jan	PO Box 200995		Austin	Ť	
B-001	5:6	A; B; C; G; I; Y5	MIS.	Wade	Agnes Stack Stevens Estate	PO Box 200995		Austin	TX 78720	787.20-0995 R051592
			244			Executor of the Estate of Agnes Stack	100000t XO4 O4	1		
		٥, ر, ط, ۱, ۲۵			VICTOREL E	Stevens Wade, deceased	TO BOX 200333	Masul		
81-001	1226	B1	Ţ		lerry E	443 Doe Run		Georgetown	7 1	9642
	1007	B1	Ţ		Iravis J & Calley Callahan	440 Doe Run		Georgetown		
B1-004		B1		Van Hyfte	Jerold B	353 Fawnridge St		Georgetown	TX 78628	78628-9694 R352870
B1-005		B1		Kestler	Lisa C & David & Cheryl Ann arson	290 Buck Bnd		Georgetown	TX 78628	8 R048244
B1-006	1223	B1		Richey	Robert D Jr & Alisa L	294 Buck Bnd		Georgetown	TX 78628	9696
			Ms. Ellison		Vitty H Graeber	299 Buck Bend RD		Georgetown	Ħ	

Tract ID	Structures	Segments	Title Last Name	First Name Suffix	Suffix Address 1	Address 2 Addres	Address 3 City St	State Zip	Tax ID
81-007	1222	81	Kitty H & Stephen P Ellison		299 Buck Bend Rd		Georgetown	78628	R048243
B1-008		81	Whelan	Lawrence & Tracy	PO Box 1179		Cedar Park TX	78630	R048242
B1-010				Stefan	275 Buck Bend			Ė	R048241
B1-011			nson	Thomas M & Virginia J	271 Buck Bend				
B1-012			Jasek	Randall & Karen	265 Buck Bend		Georgetown TX	78628-9696	R048239
81-013				Margaret	259 Buck Bend			T	_
B1-014			u	Don & Snelley	243 Buck Bend		Ī	78628-9696	K048237
B1-015				Shari Hunt	24.3 Buck Bend 2107 Agarita		Round Bock TX		
81-017			Hunt	Sonald E	221 Buck Bend		_	Ť	R048234
				ROBERT V & LINDA G RANGEL	7				
81-018				KEVOCABLE IRUSI	ZIS BUCK Bend		Georgetown	9799/	KU48233
81-019			Mehrens	Mitchell Oliver & Stacy Renee	344 Patricia Rd		Georgetown	78628	R379676
B1-020			Rogers	John G & Lacey	330 Patricia Rd				R491428
B1-021			Bunn	Clifford D	328 Patricia Rd		Georgetown	78628	R038547
B1-022			Swilling	John B & Marguerite A	320 Patricia Rd		Georgetown T	78628	R038546
81-023; 81-024			Sedlor	Robert & Tina Ison	112 Antler Rd		Georgetown T	78628	R099248; R396899
B1-025				Dustin G & Jolene M	110 Antler Dr		Georgetown TX		R038542
B1-026; B1-028; B1-029; B1-030,			Reich	Richard A & Rayleen M					R307106; R307105; R307103; R307104; R307111
100 00				000000000000000000000000000000000000000	705 El Barco		ana	75901	0,1
B1-02/			Williams	Gene P & Mary B	39 / Unititle St 151 County Board 176		Vidor	79638-7135	K30/110
B1-032				JAMES D	151 County Road 176		IMI		Т
B2-001	195	B2; E2	Of Lash Family Trust		1110 County Road 272		Leander TX		
B2-002	194	B2; E2; K2		Leland & Patricia	1180 County Road 272			Ť	
B2-003	196; 197	B2; E2; K2	Sree Sai Ganesh Llc		401 Buck Ridge Rd		ırk	T	
B2-004; K2-019			Warren Glenn R Trustee		C/O Rick Warren	601 County Road 180	Leander	78641-3126	R031407; R505450
B2-005; B2-007		B2	Cab-Com 32 Lp		2207 Lake Austin Blvd		Austin	78703-4547	R528462; R528463
B2-006			Reserve At Caballo Ranch Condominiums		103 County Road 180		Leander	78641	R529941
B2-008		B2	Richard G & Suzanne M		5 County Road 180			Ħ	
B2-009	193	82	our	Ray Jr	500 Innwood		own		R031503
B2-010; B2-011	192	B2		Phillip	14100 Ronald W Reagan Blvd		ŗ		
B2-012		B2	Rauhut	J Brent	4201 Cat Mountain Dr		Austin TX	78731-3704	. R031490
B2-013; E2-002; E2-003; E2-010; E2-011; E2-013; E2-014; E2-015; E2-017		B2; E2; F2	Caballo Ranch Investment Lp		901 S Mo Pac Expy	Ste 1-200	Austin	78746-5908	R054293; R472259; R495553; R501784; R501785; R501787; R501788; R501789]
B2-014; B2-018; B2-019		B2	B Bonnet Investment Lp		C/O Daniel Mcfall	16927 Mouse Trap Dr	Round Rock TX	78681	R495554; R495555; R495556
B2-015			Taylor	Janet Leigh	10 County Road 180		Leander		
B2-016		B2		Charlotte M	8 Cr 180		Leander	78641	R334675
B2-017		B2		Noe	14301 Ronald Reagan Blvd				R334674
B2-020; C2-001	190; 191	A2; B2; C2; F2; G2; H2; I2; L2; N2; O2; X1; Y1; Z1	Burleson	Russell Austin	865 Mayfair Way		Sykesville	MD 21784-6124	R031492; R375725
B2-021		B2	Reagan Ranch Llc		PO Box 161984		Austin	78716	R485440
B2-022; B2-023; B2-025; B2-027; B2-029; B2-030; B2-031		B2; L5; R1; U1; U1a	George Don Ray Tr & Philip C Joseph		2904 Richard Ln		Austin	(78703	R315959; R315964; R315969; R315975; R315979; R315984; R485238
B2-024		B2	Texas White House Llc		9113 Castle Pines Dr		Austin	78717	R031488
B2-026		B2	Thomas	Ken & Annette Boyle-Thomas	14500 Ronald W Reagan Blvd		Leander		R430184
B2-028		B2; L5; U1	Bonnet	Vernon Lynn	301BarTDr		Florence	76527-4447	R031485

Directly Affected Landowner List Including Tract IDs and Habitable Structures
Dir

100 100	Tract ID	Structures	Spaments	Title I ast Name	First Name	Suffix Address 1	Address 2	Address 3 City	45	State Zin	Tax ID
		structures		le Last Name	FIRST NAME	SUITIX Address 1		Address 3 City	Sic	diz aı	lax ID
	B3-001; B3-002; B3-003; C3-001;		A3; A3a; B3; C3; D3;								R039330; R040293; R055402;
1	C3-002; E3-001; H3-008; K5-002;	1250; 1251;	D3a; E3; F3; G3; H3; K5;	Georgetown Railroad Co Inc		PO Box 529		Georg			R323899; R324904; R332149;
101 (11) (11) (12) (12) (12) (12) (12) (12)	N3-003, N3-003, N3-010,	7675	W2a: X2: Y2: Z2								R353750; R403872; R449730;
600 MATERIAN STATE OF STATE OF THE STATE OF		_									R485355
1975 1975			B4; B4a; F4; S5	Schilling	Florence R	2200 Falcon Dr		Round	~	78664	R302330
1970 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,			B4; B4a; F4; S5	Faltesek	Roy L & Lourdes	2202 Falcon Dr		Round		78681	R302329
1875 1874			B4; B4a; F4; S5	Ortega		2204 Falcon Dr		Round		78681	R302328
			B4; F4; S5	Smith	elle Nicole	2201 Falcon Dr		Kound	Ī	70504	K302639
			84; F4; S5	Bunch	EFIC	2203 Falcon Dr		Kound		Ť	K302640
1975 14 14 14 14 14 14 14 1		1085	84; F4	Mcdonald	Lyle & Myra	2205 Falcon Dr		Kound		Ť	K302641
		1095	B4; F4	Berry	Robert W Jr & Carolyn R	1010 Wren ct		Kound		Ť	K302664
1979 10 k k ka Control of Management Control of Management 10 k k k k Control of Management 10 k k k k 10 k k k k k 10 k k k k k k k k k k k k k k k k k k k		1004	B4; F4	Vogi	Kevin & Michaela	12.12 Parrot Irl		Kound		1	K302642
1977 Re late Control of the Control of Con		1081	B4; B4a		Robert S & Joanne M	2300 Falcon Dr		Kound	Ī	70001 2754	K30232/
1977 Die Bestellen Gewenstellen (1974) Die Michael Gewenstellen (1974) Die Michael Gewenstellen (1974) Die Michael Gewenstellen (1974) Die Michael (1974) Onder Gewenstellen (1974) Die Michael (1974) Onder Gewenstellen (1974) Die Michael (1974) Onder Gewenstellen (1974) Die Michael (1974)		1030	54; 54a		Timestry 6 Malling K	2302 Falcott Df		Round		70001-2734	K302326
1975 See See See Section of A to before the Contraction of A to be contracted at the Contraction of A to See See See See See See See See See Se		1078	B4; B4a	, in	Ilmothy A & Melissa K	2304 Falcon Dr		Kound		78681	K302325
137 64 8-b Control of Profession From State S		10/6	B4; B4a		Douglas Duane	2306 Falcon Dr		Kound		78681	K302324
1977 Like Lish Interact Significant Control 1971 To like Lish Double Root Note Lish Note Lish </td <td></td> <td>1075</td> <td>B4; B4a</td> <td>Cotrustees Of The Rogers Revoc</td> <td></td> <td>2308 Falcon Dr</td> <td></td> <td>Round</td> <td></td> <td></td> <td>R302323</td>		1075	B4; B4a	Cotrustees Of The Rogers Revoc		2308 Falcon Dr		Round			R302323
1977 146 Lead Months Frequency 2011 (See 1) 1 Months Frequency 2011 (See 1) 1 Months Frequency 1 Months 1 Months <td></td> <td></td> <td></td> <td>Living Trust</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>				Living Trust							
937 84 k b4 Free from the control of th		1073	B4; B4a	Reed	Stephen C	2310 Falcon Dr		Round		78681	R302322
		1071	B4; B4a	Hammock	Emerson & Kristin	2312 Falcon Dr		Round		_	R302321
		1068	B4; B4a	Etter	Neil A & Elizabeth	2314 Falcon Dr		Round	,	Ė	R302320
			B4	Moreland	Robert F & Linda B	1211 Parrot Trl		Round			R302623
1007 68 Charmon Charmon Charmon Distriction of the control of t		1083	84	Hillyer	Jessica E & Mark A	1213 Parrot Trl		Round		78681	R302624
1977 644 Professor Control Rocket TAY 1984 12-17 Found Rock of TAY 1988-12-17 77 788-18-17 1977 64 Good Secret Control Rock of TAY 2014 14 2127 5 South Act of TAY 2014 14 77 788-18-17 77 788-18-17 1974 64 Good Secret Control Rock of TAY 2014 14 127 5 South Act of TAY 2014 14 77 788-18-17 77 788-18-17 1972 64 Good Secret Control Rock of TAY 2014 14 127 5 South Act of TAY 2014 14 77 788-18-17 77 788-18-17 1972 64 Activity Control Rock of TAY 2014 14 127 5 South Act of TAY 2014 14 77 788-18-17 77 788-18-17 1970 64 Activity Control Rock of TAY 2014 14 127 5 South Act of TAY 2014 14 77 788-18-17 77 788-18-17 1970 64 Activity Control Rock of TAY 2014 14 127 5 South Act of TAY 2014 14 77 788-18-17 77 788-18-17 1970 64 Activity Control Rock of TAY 2014 14 127 5 South Act of TAY 2014 14 77 788-18-17 77 788-18-17 1970 64 Activity Control Rock of TAY 2014 14 127 5 South Act of TAY 2014 14 77 78-18-17 77 78-18-17 <t< td=""><td></td><td>1082</td><td>B4</td><td>Cameron</td><td>Kimberly & Marco D</td><td>1215 Parrot Trl</td><td></td><td>Round</td><td></td><td></td><td>R302625</td></t<>		1082	B4	Cameron	Kimberly & Marco D	1215 Parrot Trl		Round			R302625
1077 864 Ontmother Divinities Final situation of the control of the		1079	B4	Powers	Steve T & Leann M	2301 Falcon Dr		Round			R302626
	B4-021	1077	B4	Rysdyke	Ernest L & Betty F	2303 Falcon Dr		Round			R302627
1002 64 Control Rock of Daily Market 173 Bibly White CT 173 Bibly White CT 173 Bibly White CT 173 Bibly White CT 77 Miles Control Rock CT 77 Miles Control Rock CT 77 Miles CT 1072 Jah Franker CT Market C Market C Market CT Market CT 1202 Option and Back CT	B4-022		B4	Oommen	Tibu P & Shilpa K Mathew	1209 Bobwhite Ct		Round			R302628
1972 64 Another Double & Bound of & Bound Workshop 1002 October Bound of Bound of Bound Workshop 1002 October Bound of Bound Bound of Bound Bou	B4-023		B4	Grosser	Jeff M & Julie K	1210 Bob White Ct		Round		78681	R302638
1072 644 Cultulum Mondrade Both David LOGAS CORR VINE DEPT CORR VINE DEPT CALIDAR No. Ordinarios Bistoria Dept TAY TO CORRIGATION ACTUAL TAY CORRIGATION TAY TO CORRIGATION		1074	B4	Mader Donald A & Donna W Mader Trustees Of Mader Family Trust		202 Apache Mountain Ln		Georgi			R302601
1070 Bit and Meward Heward Mound face & John Dawl 1270 Deleveed Bad Resident Promise Bods TX 5861-7379 1069 Bet Bad Herder James & Anther Marger 2205 Deleveed Bad Repuil Bods TX 78641 TX 78641 1067 Bet Bad Herder James & Anther Marger 2205 Deleveed Bad Repuil Bods TX 78641-779 1067 Bet Bad Herder Danglery Repuil Bods TX 78641-779 TX 78641-779 1069 Bet Bad Herder Danglery Acry & Carp Res Dr 2205 Res Dr TX 78641-779 TX 78641-779 1069 Bet Bad Herder Danglery Acry & Carp Res Dr TX 78641-779 TX 78641-779 1069 Bet Bad Transport Arch & Carp Res Dr TX 78641-779 TX 78641-779 TX 78641-779 1069 Bet Bad Transport Arch & Carp Res Dr TX 78641-779 TX 78641-779 TX 78641-779 1069 Bet Bad Transport Arch & Carp Res Dr TX 78641-779 TX 78641-779 TX 78641-779 1061 Bet Bad <td></td> <td>1072</td> <td>B4</td> <td>Callahan</td> <td>Sherry A</td> <td>10624 Oak View Dr</td> <td></td> <td>Austin</td> <td>X</td> <td>78759-4508</td> <td>R302602</td>		1072	B4	Callahan	Sherry A	10624 Oak View Dr		Austin	X	78759-4508	R302602
1670 84 Archier Howard Activate 1500 Board Board Activate 1500 Board Activate Activate 2500 Board Activate Activate 2500 Board Activate Activate 2500 Board Board Activate A		1070	B4	Howard	ce & Jo	1209 Oakwood Blvd		Round			R302603
1,069 84 Articler James D B Santing A 12070 Salvanod Build Articler 17, 1868 1 1,067 84,84a Dickerson James D B Santing 12050 Salvanod Build Articler 17, 1868 1 1,067 84,84a Dickerson James D B Santing Articler D Santing A					Howard					T	
1067 84 Honozott Jatob Ambert Menger 1205 Galler Book 18, 484 Discussion 1205 Galler Book 18, 184 Discussion 18, 184 Page 12, 173 Page 12		1069	B4	Archer	James D & Sandra A	1207 Oakwood Blvd		Round		Ť	R302604
1067 Big Beath Understand Libbridge Fig Beath Understand Libbridge Fig Beath Concernance Annual Concernanc		100	B4	HICKOCK		1205 Oakwood Blvd		Round		78681	R302605
1049 Rept Postaria Montail C & Lind A Author A Card Factor D II A CRAST CATALITY 1050 84,844 Terreit Anthory R & Chary R & C		1067	84; 84a	Dickerson	Juanita	2400 Falcon Dr		Kound		78681-2/19	K302319
106.9 Big Bash Fronting Rock Fronting Rock Fronting Rock Try 788-81 Try 10.05 Beb Beb		1064	B4; B4a	Daughtry		2402 Falcon Dr		Kound		78681-2/19	R302318
1155 Bay, Bash Hotte District Annah Ke Linet Annah		1063	B4; B4a	Hoskins	Ronald G & Linda A	2404 Falcon Dr		Kound		79591-2/19	R30231/
1055 84-8 Front COUNTY-TIME CAST Factor Dr. Account of the control of the cont		1060	B4; B4a	lerrel		2406 Falcon Dr		Kound		79591	K302315
105.5 64, 64a Inchment Authrony F & Liba A 2412 Billon Dr. Authrony F & Liba A 2412 Billon Dr. Authrony F & Liba A 2412 Billon Dr. Round Rock TX 78681.2719 105.5 84, 84a Berry David M & Elaine E (Edwards 2414 Billon Dr Round Rock TX 78681.2719 105.1 84, 84a Dahmer Lyvette Lyst Faleon Dr Round Rock TX 78681.2719 104.0 84, 84a Ridde Lot-3 Reader Round Rock TX 78681.2719 104.0 84 Ana Ridde Lot-6 Reader Reader Reader Reader TX 78681.2719 104.0 84 Ana Ridde Lot-6 Reader Reader Reader TX 78681.2719 104.0 84 Reader Reader Reader Reader TX 78681.2719 104.0 84 Reader Reader Reader Reader TX 78681.2719 104.0 84		1059	D4; D4d	Tomos	Dortye Allin	2406 Falcott Di		Pound		70601	N302313
1052 B4, B4a Swort David M & Elisation Draw of M & William F Swor III 2414 Faicon Dr Round Rock TX 76851.2739 1052 B4, B4a Swort Amanda W & William F Swor III 2415 Faicon Dr Round Rock TX 78681.2739 1051 B4, B4a Dahmer Lyrette 2425 Faicon Dr Round Rock TX 78681.2739 1048 B4, B4a Ridde Jereny Allen & Hather Michal 2425 Faicon Dr Round Rock TX 78681.2739 1048 B4 Name Marco Antonio 2425 Faicon Dr Round Rock TX 78681.2739 1046 B4 Bad Bad Round Rock TX 78681.2739 1046 B4 Bad Round Rock TX 78681.2739 1048 B4 Round Rock TX 78681.2739 1048 B4 Round Rock TX 78681.2739 1044 B4 Round Rock TX 78681.2739 1044 B4 Round Rock Round Ro		1055	B4, B4a	Morone	Anthony F. Lies A	2410 Falcoll DI		punou		Ť	N302314
105.2 B4, B4a Swor Amanda We William F Swor III 2416 Falcon Dr Professor Protein Tyrette August Falcon Dr Protein Round flock TY 78681-2719 105.9 B4, B4a Patel Diljo G & Yogeshwari 2418 Falcon Dr Round flock TY 78681-2719 1046 B4, B4a Riddle Lereny Allen & Heather Michel 2426 Falcon Dr Round flock TY 78681-2719 1046 B4 Saeger Kristin Navacudul H 2426 Falcon Dr Round flock TY 78681-2755 1046 B4 B4 Bad Hughes Jason T & Stephanie D 2436 Falcon Dr Round flock TY 78681-2755 1046 B4 B4 Round flock TY 78681-2755 Round flock TY 78681-2755 B4 Paker Nongilin Jason T & Stephanie D Za32 Falcon Dr Round flock TY 78681-2755 B4 Paker Paker Yong Jin Jason Ball Jason Ball Jason Ball		1053	B4; B4a	Berry	David M & Elaine E Edwards	2414 Falcon Dr		Round		Ť	R302312
1052 B4, B4a Swort Amanda W & William F Sworr in Upfall 2416 Falcon Dr Pound Rock TX 78681-2719 1045 B4, B4a Dahmer Lymette 2420 Falcon Dr Amanda W & William F Sworr in Upfall 2420 Falcon Dr Round Rock TX 78681-2719 1046 B4 Saeger Kristin 2422 Falcon Dr 2422 Falcon Dr Round Rock TX 78681-2719 1046 B4 Saeger Kristin 2428 Falcon Dr Round Rock TX 78681-2759 1046 B4 Saeger Kristin 2428 Falcon Dr Round Rock TX 78681-2755 1046 B4 Round Rock TX 78681-2755 Round Rock TX 78681-2755 1047 B4 Round Rock TX 78681-2755 Round Rock TX 78681-2755 1048 B4 Round Rock TX 78681-2755 Round Rock TX 78681-2755 1048 B4 Round Rock TX 78681-2755 Round Rock											
1051 B4, B4a Dahmer Lynette 2438 Falcon Dr A 186 Falcon Dr A 186 Bal 1-273 Bal 1-		1052	B4; B4a	Swor	Amanda W & William F Swor III	2416 Falcon Dr		Round			R302311
1449 B4; B4a Patel Dilip G & Vogeshwari 242Falcon Dr A22Falcon Dr Round Rock TX 78681-2759 1045 B4; B4a Riddle Javenty Allen & Heather Michel 242Falcon Dr Round Rock TX 78681 1045 B4 Sneger King A32Falcon Dr A24Falcon Dr Round Rock TX 78681-2759 1045 B4 Bad Hughes Jason T & Stephanie D A32Falcon Dr Round Rock TX 78681-2759 B4 B4 Hughes Jason T & Stephanie D A32Falcon Dr Round Rock TX 78681-2759 B4 Round Rock TX A38Falcon Dr A34Falcon Dr Round Rock TX 78681-2759 B4 Park Yong Jin Jason T & Stephanie D A34Falcon Dr Round Rock TX 78681-2759 B4 Park Park Homeowners Assoc B600 Great Hills Trl Ste 100F Round Rock TX 78681-2756 B4 Dichurch Shehry B Jason T & Beeld		1051	B4; B4a	Dahmer	Lynette	2418 Falcon Dr		Round		78681-2719	R302310
1048 B4; B4a Riddle Jeremy Allen & Heather Mitchel 242 Falcon Dr Page Round Rock TX 78681 1047 B4 Sseger Kristin 242 Falcon Dr 242 Falcon Dr Round Rock TX 78681-7759 1045 B4 Bari Maksudul H 242 Falcon Dr 242 Falcon Dr Round Rock TX 78681-7755 1045 B4 Round Rock TX 78681-7755 Round Rock TX 78681-7755 B4 Park Round Rock TX 78681-7755 Round Rock TX 78681-7755 B4 Park Yong Jin 2432 Falcon Dr 2434 Falcon Dr Round Rock TX 78681-7755 B4 Park Yong Jin A134 Falcon Dr Ste 100E Round Rock TX 78681-7755 B4 B4 Dokreek Homeowners Assoc 9600 Great Hills Tri Ste 100E Austin TX 78681-7756 B4 B4 Cook Legh Stean 12100 Hummingbridt Round Rock		1049	B4; B4a	Patel	Dilip G & Yogeshwari	2420 Falcon Dr		Round		78681-2719	R302309
1047 B4 Nava Marco Antonio 2424 Falcon St Round Rock TX 78681 1045 B4 Saeger Kristin 2426 Falcon Dr 2426 Falcon Dr Round Rock TX 78681-2759 1045 B4 Bari Maksudul H 2428 Falcon Dr 2428 Falcon Dr Round Rock TX 78681-2755 1044 B4 Robinson Jennifer 2432 Falcon Dr 2434 Falcon Dr Round Rock TX 78681-2755 B4 Park Ponkrier Yong Jin 2434 Falcon Dr Ste 100F Round Rock TX 78681-2755 B4 Park Ponkrier Monchan Asset TX 78681 TX 78681 B4 Dokrieek Shehriar Allasvandi Po Box 763 Box 763 <t< td=""><td></td><td>1048</td><td>B4; B4a</td><td>Riddle</td><td></td><td>2422 Falcon Dr</td><td></td><td>Round</td><td></td><td></td><td>R302308</td></t<>		1048	B4; B4a	Riddle		2422 Falcon Dr		Round			R302308
1046 B4 Saeger Kristin 4226 Falcon Dr A226 Falcon Dr A226 Falcon Dr A226 Falcon Dr A226 Falcon Dr A228 Falcon		1047	B4	Nava	Marco Antonio	2424 Falcon St		Round		Ť	R302307
1045 B4 Bari Maksudul H 2428 Falcon Dr Round Rock TX 78681-275 1044 B4 Hughes Jason TR Stephanie D 2436 Falcon Dr Round Rock TX 78681-275 84-48 Round Rock Round Rock TX 78681-275 TX 78681-275 84-48 Joh Park Homeowners Assoc 9600 Great Hills Trl Ste 100E Austin TX 78759-6303 1065 B4 Obekreek Homeowners Assoc 9600 Great Hills Trl Ste 100E Austin TX 78759-6303 1065 B4 Upchurch Shehrlar Allasvandi P0 Box 763 Box 763 Round Rock TX 78681 1066 B4 Cook Legel Stand 1200 Hummingbird Ct Round Rock TX 78681-735 1061 B4 Herrison Herrison Herrison 1200 Hummingbird Ct Round Rock TX 78681-735 1063 B4 Herrison Herrison Legel Stand Rock Round Rock		1046	B4	Saeger	Kristin	2426 Falcon Dr		Round		Ė	R302306
1044 B4 Hughes Jeannfer Jeannfe		1045	B4	Bari	Maksudul H	2428 Falcon Dr		Round		78681-2719	R302755
B4 Robinson Jennifer 2432 Falcon Dr A326 Falcon Dr Round Rock TX 786811-2755 B4 Park Yong Jin 2434 Falcon Dr 2434 Falcon Dr Round Rock TX 786811 B4 Shekhi Shahriar Allaxandi Po Box 763 Round Rock TX 78759-6303 B4 Upchurch Shehriar Allaxandi Po Box 763 Round Rock TX 786811 B4 Cook Lefeb Susan 1200 Hummingbird Ct Round Rock TX 78681-736 B4 Brant Lesse C & Bobbi Ballard 1200 Hummingbird Ct Round Rock TX 78681-736 B4 Harrison Herrison Herrison Herrison Round Rock TX 78681-736 B4 Cook Lefe State Local Rock Round Rock TX 78681-736 B4 Round Rock TX Round Rock TX 78681-736 B4 Local Rock Round Rock TX 78681-736 B4 Round Rock <td></td> <td>1044</td> <td>B4</td> <td>Hughes</td> <td>ģ</td> <td>2430 Falcon Dr</td> <td></td> <td>Round</td> <td></td> <td>Ħ</td> <td>R302754</td>		1044	B4	Hughes	ģ	2430 Falcon Dr		Round		Ħ	R302754
B4-048 B4 Park Yong Jin 2434 Falcon Dr Ste 100F Round Rock TX 78681 B4-048 1043 B4 Oakcreek Homeowners Assoc 9600 Great Hills Trl Ste 100F Austin TX 78759-6303 1065 B4 Oppfulurch Sherty B 1210 Oakwood Blwd Round Book TX 78681 1066 B4 Cook Legeb Susan 1200 Hummingbirdt Round Rock TX 78681-736 1061 B4 Brants Jesse C& Bobbi Ballard 1200 Hummingbirdt Round Rock TX 78681-736 1063 B4 Herrison Herrison Herrison Round Rock TX 78681-736 1063 B4 Herrison Round Rock TX 78681-736 1064 B4 Herrison Round Rock TX 78681-736			B4	Robinson	Jennifer	2432 Falcon Dr		Round		Ė	R302753
B4-048 1043 B4 Austrier Homeowners Assoc 96.00 Great Hills Trl Ste 100E Austrier TX 78759-6303 1065 B4 Upchurch Shehry B 12.10 O-Bwxood Blwd Round Rock TX 78681 1067 B4 Cook Leigh State Robbi Ballard 12.00 Hummingbird Ct Round Rock TX 78681-736 1061 B4 Brants Jesse C& Bobbi Ballard 12.00 Hummingbird Ct Round Rock TX 78681-736 1058 B4 Harrison Herrison Herrison Herrison Herrison Round Rock TX 78681-736	B4-046		84	Park	Yong Jin	2434 Falcon Dr		Round	>	78681	R302750
1065 B4 Shekhi Shahriar Allasvandi PO Box 763 Manchaca TX 78652 1066 B4 Upchurch Sherny B 12.10 Oakwood Blvd Round Rock TX 78681 1062 B4 Cook Leigh Susan 12.09 Hummingbird Ct Round Rock TX 78681 1061 B4 Brant Less C & Bobbl Ballard 12.07 Hummingbird Ct Round Rock TX 78681-2736 1058 B4 Herrison Herrison Herrison Herrison Round Rock TX 78681-2736 1059 B4 Herrison Less C & Bobbl Ballard 12.06 Hummingbird Ct Round Rock TX 78681-2736 1059 B4 Herrison Less C & Bobbl Ballard 12.06 Hummingbird Ct Round Rock TX 78681-2736		1043	B4	Oakcreek	Homeowners Assoc	9600 Great Hills Trl	Ste 100E	Austin		78759-6303	R302741; R302745
Jubs B4 Underfast Namichaed TX 78652 1066 B4 Upchurch Sherring Allasyandi 12/0 Akwood Bish Round Rock TX 78681 1067 B4 Cook Legit Susan 12/0 Hummingbird Ct Round Rock TX 78681.2736 1061 B4 Brant Less C & Bobbi Ballard 12/0 Hummingbird Ct Round Rock TX 78681.2736 1058 B4 Harrison Herrison Herrison Round Rock TX 78681.2736 1059 B4 Lebraco Round Rock TX 78681.2736 TX 78681.2736						6 6		3			
1366 84 Dipchurch Sherry B 12300 above of BMd Sherry 13400 above of BMd 13400 above of BM		1065	B4	Shiekhi	Allasva	PO Box 763		Manch		78652	R302580
1062 B4 Cook Legh Susan 1209 Hummingbird Ct Round Rock TX 78681.2736 1061 B4 Brant Jesse C & Bobbi Ballard 1200 Hummingbird Ct Round Rock TX 78681.2736 1058 B4 Herrison Perman Remark Rick 1206 Hummingbird Ct Round Rock TX 78681.2736 1058 B4 Chorac Rock Round Rock TX 78681.2736		1066	B4	Upchurch	Sherry B	1210 Oakwood Blvd	1	Round		Ť	R302581
10b1 B4 Harrison Herrison L20 Hummingbird ct L20 Hummingbird ct Round Rock 17 78681-2736 1058 B4 Harrison Herrison Herrison Round Rock TX 78681-2736 1058 B4 Choar Round Rock TX 78681-2736 1072 B4 Choar Round Rock TX 78681-2736		1062	B4	Cook	Leigh Susan	1209 Hummingbird Ct	<u> </u>	Round		Ť	R302582
1.03 04 1.04 1.05 1.		1061	B4 DA	Brant	Jesse C & bobbi ballatu	1207 numingaria Ct		Round		Ť	
		1050	84	Cleas	Rrian S & Rebecta A	1208 Hummingbird Ct		Round		Ť	

Tract ID	Structures	ments	Title Last Name	First Name Suffix	_	Address 2 Address 3	_	State Zi	Zip T	TaxID
B4-055	1054	B4	Frohman	Steven E & Janice M	1209 Canary Ct		Round Rock	X X	78681-2735 R	R302592
B4-056		B4	Walker	Rodney J & Lisa E	1207 Canary Ct		Round Rock			302593
84-057		B4	Hale	Curtis Clark Jr & Melanie Martin Hale	1206 Canary Ct		Round Rock	χĻ	78681-2734 R	R302600
B4-058	1050	84	Zhang	Tong	2421 Falcon Dr		Round Rock	TX 78	78681 R	R302558
B4-059		B4	Young Stephen & Lisa Yamashiro- Young Trustees Of Young & Yamashiro-Young Fam Tr		2595 Rollingwood Dr		San Bruno	8 8	94066 R	R302559
B4-060		B4	Critz	Alberto & Ivnn N	2425 Falcon Dr		Round Rock	XL XL	78681-2720 R	B302560
B4-061	1042	B4	Schneider	Melvin G	2600 Starling Dr		Round Rock			R302812
B4-062		84	Estrabo	Ronald Cabaddu & Tara M	2602 Starling Dr		Round Rock		78681-2728 R	R302813
	1041	84		Rocky & Ashlei	2604 Starling Dr		Round Rock			R302814
B4-064		B4	uı	David A & Virginia P	2606 Starling Dr		Round Rock		78681-2728 R	R315090
B4-065		B4		Richard J & Jennifer L	2608 Starling Dr		Round Rock			302815
B4-066		B4	Barber	William Bruce	2610 Starling Dr		Round Rock	TX 78	78681-2728 R	R302816
B4-067		84	Smith	Floyd L	1303 Cardinal Ln		Round Rock			302818
B4-068		B4	Krech	Jeffrey M & Nancy B	1302 Cardinal Ln		Round Rock		2732	R302740
B4-069; B4-070; B4-090; B4-091; B4-092; N3-027; N3-045; N3- 115; N3-141	1040	A4; B4; B4a; N3; U3	Fern Bluff Mud		C/O General Manager	7320 Wyoming Spgs	Round Rock	×	R 78681-4309 R	R055345; R055352; R336044; R356308; R365503; R420644; R423055; R431077; R431078
B4-071		B4	Stone Canyon Owners Assn Inc		C/O Goodwin Management, Inc	PO Box 203310	Austin	XT X	78720-3310 R	R351580
B4-072		B4	Doncaster	Brent Guy & Susan Kay Hunter- Harvey	18105 Whitewater Cv		Round Rock	χĻ	78681 R	R351582
B4-073	1039	84	Bowen	Bradley G & Paula B	18109 Whitewater Cv		Round Rock	XT	78681-3594 R	R351583
	1038	B4		Neil & Kathleen D	18113 Whitewater Cv		Round Rock	Ė		R351584
B4-075	1037	B4		Jennifer & Clifton	18117 Whitewater Cv		Round Rock		78681-3594 R	R351585
	1036	B4		Andrew & Viria	18121 Whitewater Cv		Round Rock			R351586
	1035	B4	Oldag	Darren L & Kerry L	18205 Whitewater Cv		Round Rock	XT 28	78681 R	R351588
	1034	B4; B4a	Tagtow	Robert A & Virginia P	18209 Whitewater Cv		Round Rock			R351589
	1033	B4; B4a	savarese	Patrick & Catrine A	18213 Whitewater Cv		Round Rock			R351590
B4-080	1032	84; 84a	Kavoossi	All A	1821/ Whitewater Cv		Round Rock	× }	78581-3401 R	K351591
	1031	B4, B4a	Malker	Farrell A & Barbara I	18225 Whitewater Cv		Round Bock			351592
B4-083	1029	B4	Kindla	William J & Frances R	18224 Whitewater Cv		Round Rock	X X	78681-3401 R	R351594
B4-084		B4	Heath	Clint Douglas & Rebecca Viktorin	18220 Whitewater Cv		Round Rock	χĻ	78681 R	R351595
B4-085		B4	Pearson	Keith H & Annette	18216 Whitewater Cv		Round Rock	XT X	78681-3401 R	R351596
B4-086		B4	Struble	Stephen R & Jacki L	18212 Whitewater Cv		Round Rock		78681-3401 R	R351597
B4-087		84	Walker	Kenneth S	18208 Whitewater Cv		Round Rock			R351598
B4-088		B4	Horton	Richard & Judith S	18204 Whitewater Cv		Round Rock	X X	78681-3400 R	R351599
84-089		B4	Alonzo Tamalyn M Trustee Of Alonzo Living Trust		18200 Whitewater Cv		Round Rock	TX 78	78681 R	R351600
B4-093; G3-001; G3-009; G3- 021; G3-030; G3-053		B4; G3; H3; I3	Wood Glen Prop Owners Assoc		9600 Great Hills Tri	Ste 100E	Austin	XT SZ	R R R	R344966; R379713; R400094; R400109; R404407; R419857
B4-094	1028	B4; B4a	Friedel	Jeanmarie	8721 Sea Ash Cir		Round Rock	Ė	78681-3424 R	R379813
	1027	B4; B4a	Kirchner	Roger & Christine	8719 Sea Ash Cir		Round Rock			R379814
	1026	B4; B4a	Griffin	Daniel Drew	8717 Sea Ash Cir		Round Rock			R379815
	1025	B4; B4a	Varga	Keith A & Beverly M	8715 Sea Ash Cir		Round Rock	X Z	78681-3424 R	R379816
B4-098	1024	B4; B4a	Riquelmy	Tina Gayle	8713 Sea Ash Cir		Round Rock	T		379817
B4-099		B4; B4a	Kwon	Young	8711 Sea Ash Cir		Round Rock	Ī		R3 79818
B4-100		B4	Adams	John C & Cynthia M	8709 Sea Ash Cir		Round Rock	×	78681-3423 R	R3 79819
B4a-001; B4a-002; B4a-003; F4a- 001; K4-007	1177	A4; B4; B4a; D4; F4; F4a; K4; S5	Sauls	Clarence L & Mildred	PO Box 34		Round Rock	XX XX	78680-0034 R	R056320; R319299; R374926; R374927; R533967
B4a-004 B5-001	101	A4; B4; B4a; N3; U3 B5	Swayze Lawrence	Donald Miles Christopher E & Sara A	C/O Judy Swayze 111 Creek Meadow Cv	PO Box 221	Kingsland Leander	X X	78639-0221 R 78641 R	R374717 R424911
B6-001; B6-004	29; 30	A6; B6; G; L; Z5	Miranda	Daniel Ramirez & Candelaria	8770 Ranch Road 2243		Leander	XT X	78641-1623 R	R327095; R433125
B6-002; G-003		B6; G; L	Davis Cemetery		FM 2243		Leander	XT XT	78641 R	R382088; R382089
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Tract ID	Structures	Segments	en	Last Name	First Name Suf	Suffix Address 1	Address 2	Address 5 City	10	ordie 41p	-ax ID
B6-003 - X5-001 - Z5-002	10.20	V5. 75		pd +a				-	VT.		B031203: B318744: B327081
B0-005; A3-001; Z3-002	19; 20	A0, B0, J, A3, 23		ובא ואווא רמוום רום		PO BOX 030		רנים			RUSIZSS, RSIO/44, RSZ/UGI
C-001		C; H; I		r 30LP		PO Box 28429		Austir		Ť	R315588
C-002					Gregory B & Tiffani A	1023 Overlook Bnd		Lea	Leander		R387854
C-003		ے د	L	Brake Critz	R Edward	140 Ilmberiand CI		Ben	Sentonville VA	76133-5411	K031235
C-003		, (M		Carolyn	4275 Cadiz DR		For			R031235
C-003		0 0		Son	Elizabeth A	140 Timberland CT		Ben			R031235
C-003		0	T		Peggy	1301 W 9th 1/2 ST	Apt 201	Austin			R031235
C-003				western Foundation	1000	PO Box 542016		Omaha			R031235
C-003		٠	Mr		M seme	Tructee of James M Zanzi Bevocable Truct	1837 W Wahancia AVE	j			B031235
-2003		ر			Jallies IVI	ilustee oi jailles M Zalizi Revocable Ilust	1637 W Wabalisia AVE	5			KU31233
C1-001; F1-002	68	C1; D1; E1; F1; H; H1; O		Behrens	John A	16070 Ronald W Reagan Blvd		Leal	Leander	78641-2577	R031530; R473472
200-6-		C2- E2- E2- G2	I	Tx Walker Investments I Ic		PO Box 982		100	TX	78646	B375363
2-002	100	C2. E2. E2. G2. V1. V1	I	A Walkel IIIVestillerius Liu	Jonnifor M E	2736 Galona Hills Loon		Poil	Pound Bock TV	, ,	N3/3303 B031403: B351381
C2-003, 12-133	661	C2, E2, F2, G2, A1, T1	I		Douglas I	57.30 Galeria mins LOOP 6711 Acadia Dr		NOU Red I			R031499, R331381 R037952
			I		1			3			100
C2-005			_	Nagle	Shelly J & Sharon K Sandercock	226 Cale Dos		Ma	Marble Falls TX	78654	R037951
			_		& Steven G Millegan						
C2-006				Unger	Alan F & Teri	6311 Acacia Dr		Leal	Leander TX	78641-9311	R037950
2-007				nann	Roger A & Lynne A	408 Cisco Cv		Ced	Cedar Park TX	78613	R037949
C2-008					David A	6501 Acacia Dr		Lea	Leander TX	78641-9305	R037948
C2-009					John & Traci L	6551 Acacia Dr		Lea	Leander TX	78641-9305	R037947
5-002		C5; D5; F5; M1				Attn: Mitch Friedman, Pastor	700 Cr 179	Lea			R497495
C2-003		C5		Pittman	James Michael & Kara Leigh	115 Valley View Dr E		Lea	Leander	78641-9291	R038338
5-004		B5; C5; D6; K1			Raymond E & Donna	113 Valley View Dr E		Lea			R038337
CS-005		B5; C5; D6; K1		Uebelhor	Maurice & Cynthia A Wilkins	111 Valley View Dr E		Lea	Leander	78641-9291	R038336
20000	40	46.06.04	I	4:	lo choise	A 7 A F 4 Down of W Down of the Party of the		-	A.E.	CC 2C 44 3057	07.61600
C6-004	Q.	A6: C6: S4	I	mpos	Albino	17420 Ronald W Reagan Blvd		Lea		Ť	R334860
C6-005 · C6-006		A6. C6. S4			l Hell	17480 Bonald W Beagan Blvd		Oab.	hwn		R334859- R473785
			Ī			0				T	
C6-007; C6-008; L4-011; N4-001		L4; M4; N4; O4; P; P4; Q; Q4; R; R4; S; S4; T; V		Kuchera	Roy L & Alice F	7650 Ranch Road 2243		Lea	Leander	78641-1648	R032110; R334856; R334858; R473775
C6-009; C6-010		84		United Bear Creek Storage Lp		2001 Bryan St	Ste 2050	Dallas	as TX	75201-3074	R334857; R473776
1-001	91	D1: F1: G1		Barbosa	Antonio Jr & Marcia	PO Box 979		Leal	Leander	78646-0979	R031577
1-002	06	C1; D1; F1; G1; H; O	I	ng Impressions Inc		3805 Sky Ln		Rou	ock	Ė	R031556
D1-003	88	D1; F1; G1		Witbeck	John Van	140 Copper Ln		Lea	Leander TX	Ė	R031222
12-001	238	D2; K4			nton	3600 County Road 175		Lea			R031498
D2-002				Tadlock .	Weldon & Sherri Hutchison	6400 Acacia Dr		Leal	Leander	78641	R037958
23 003	756	N3. K4	I	0 1	adiock	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		100	VT Jood borro	70564	B031400
D2-003	/67	DZ; N4	I		Albino A 9. Coring A	EDO Acacio Dr		NOW Lea		Ť	NO31499
22-004		02	I		Cleveland H Ir & Frances F	3450 Cr 175		Lea Par			R037959
2-006	236	D2	I	Dunaway	Kevin	3440 County Road 175		Lea			R529049
D2-007	235	A2; D2; V5			CH	PO Box 1117		Rou	Round Rock TX	Ĺ	R031494
3-001	1313	D3; D3a; E3; G3		en	Nathan & Melissa	1004 Waimea Ct		Rou			R478471
3-002		D3; G3			Karl & Jennifer	1007 Waimea Ct		Rou			R478474
D3-003	1312	D3; D3a; E3; G3			Nicholas	1008 Waimea Ct		Rou			R478470
3-004		D3; G3		enship	Andrew J	1011 Waime Ct		Rou			R478475
3-005	1311	D3; D3a; G3	J		Larry D & Helen C	1012 Waimea Ct		Ron	Round Rock TX		R478469
3-006	1309	D3; G3		Pepper	Jeffery M	1015 Waimea Ct		Rou	nd Rock TX	78681-2434	R478476
D3-007	1310	D3; D3a; G3		Muhammad	Mussadaq & Saima Mussadaq	1016 Waimea Ct		Rou	Round Rock TX	78681	R478468
δUU-CI	1307	D3: G3	I		Sydlad & Lacon	1019 Waimea Ct		200			RA78A77
3-009	1308	D3: D3a	I	ope	Arturo T & Karen	1020 Waimea Ct		Rou	nd Bock	, ,	R478467
D3-010		D3	I	ier	John Douglas	3213 Andice Path		Rou	Round Rock TX	T	R462041
D3-011	1305	D3			Craig & Lisa	1023 Waimea Ct		Rou		Ī	R478478
n3-012	1306	D3: D3a		boom	Charles Wendell & Beverly Ann Ir	1024 Waimes Ct		108	Round Bock	78681-2434	8478466
370 0		500				70 70 70 70 70 70 70 70 70 70 70 70 70 7					20000000
D3-013	1303	D3		Hutchings	Jeff H & Sarah R	1100 Castle Path	+	Kou	Round Rock TX		R461978 R478449
13-U14	1303	D3: D3a			Nyle & midiy	1100 Waimea Bnd		Roll		78681	R478449 R478465
72-0T2	1201	00,000			כמופו יי	TTOO MAINING DITO	i i	321			77740

Tract ID	Structures	Seaments	Title Last Name	First Name Suffix	Address 1	Address 2 Address 3	City	State Zin		Tax ID
	1261								81	R440849
	1259	D3; D3a	olomew	Mark E & Susan G	1624 Westend PI		Round Rock	TX 78		R440850
	1258	D3; D3a		Michael & Tracie	1620 Westend PI		Round Rock		2334	R440851
D3-078	1256	D3; D3a	Andrew	Steven G & Machelle Lynn	1616 West End Pl		Round Rock	T		440852
	1257	D3		Jeffrey & Heather	1612 West End Pl		Round Rock	T	78681 F	R440853
D3-080		D4: E4:	١.	Winired	C/O Wast end Pl	AEOA Board Cours	Round Rock	T		440854
D4-001		D4, F46	Schultz-Smith	Diagno Christine	1402 Pearl Cv	1304 reall Cove	Round Bock	ν ×	78681-1908	R093323
D4-002	1204	D4: F4		David F & Vicki I	1404 Pearl Cv		Round Rock	Ť		R093527
D4-004	1203	D4; E4		Ronald L & Patricia A	2901 Quail Run Dr		Round Rock	Ė		R080222
D4-005	1202	D4: F4	Herring	Rodnev I. & lovce	1502 Pearl Cv		Round Rock			093530
D4-006	1206	A4: D4: E4	Vanoverloop Donald B & Karen		1504 Pearl Cv		Round Rock	XL XL	78681-1967	R093531
	1205	A4: D4: E4	Steensma	Kvle & Jean C	1506 Pearl Cv		Round Rock			R093532
	1194	A4; D4; E4	Samuel	Koshy & Saramma George	14001 Avery Ranch Blvd	1104	Austin	Ė		R538100
	1192-1193	A4 D4 F4	Lina Creek Itd & Cerra Vista Corn		13018 Besearch Blvd	44S	Austin	XL XL	78750	B055234
	0000 (-000							T		
D4-010		A4; D4; E4		Nancy Ann			Round Rock	X :		R055235
D6-001	100	85; C5; D6; K1	Shepherd	Michael David	125 Creek Meadow Cv		Leander	× ×	78641-1663	K424910
D6-002 D6-003: V4-002		D6: K1: X4: Y4: 74		Duc I & Josephine H	3514 Galena Hills Loop		Round Rock	Ť	1032	R424899: R424900
E-001: K-022		E: J: K	Larson Commercial Llc		PO Box 249		Leander			R031585: R031589
			Champion Emogene Indiv 8, ac							
E-002		E; J; K	Trustee		PO Box 266		Leander	XT 82	78646-0266 F	R031580
E-003; E-018; F-006; J-003; X5- 015; Y5-001	15; 7; 8	A; D; E; F; J; K; X5; Y5	Fab-Con Products Inc		PO Box 249		Leander	XT XE	78646 F	R031252; R031253; R031283; R473389; R473394; R508107
E-004; J-001; X5-002	17; 18	E; J; X5; Z5	Mauck	Richard E & Karla Mauck	1530 Shenandoah Dr		Cedar Park	7X XT	78613 F	R031284; R324449; R508106
E-005; X5-004		E; X5	Golden	Bobby & Christine	2773 Hero Way		Leander	1X 78	78641-1629 F	R031281; R525687
E-006; E-007; X5-006		E; X5	Marburger	Barry	2739 Hero Way		Leander	7X XT	78641-1515 F	R031290; R051362; R508105
E-008		ш	Velchoff	James G & Deborah K	1970 County Road 270		Leander	7X 78	78641-1646 F	R340105
E-009	14	ш	Golden Sun Enterprise		2689 Hero Way		Leander	İ		1508104
E-010; E-011; E-012; E-013		Е	Fm 269 Investors Llc		PO Box 1969		Leander	XX XE	78646 F	R330612; R395316; R508101; R508102
E-014; X5-009		E; X5	Motley	Merry E	PO Box 512		Cedar Park	XT	78630-0512 F	R457570; R508103
E-015		ш	Neely	Robert G & Patricia Joan	2611 Hero Way		Leander	XT XE	78641-1510 F	R361264
E-016	13	ш		Blaise T & Janice K	1501 County Road 269		Leander	Ė		R031288
E-017; E-019		В		Frederick A	903 Palos Verdes		Leander	'	8825	.031256; R102630
E-020; E-021		F	Rb 270 Partnership		6918 Burnet Rd		Austin	X X	78757 F	R461858; R505807
E2-001		E2; F2; J3; K2	Diamond K Plus Ltd		PO Box 306		Kound Kock			1462 / 21
E2-004; E2-006; E2-007; E2-021; E2-023; U1-028		B2; E2; L5; R1; U1; U1a	Caballo Ranch Hoa Inc		C/O Certified Management - Austin	9600 Great Hills Trl, Ste 100E	Austin	ž ž	78759-6303 F	R495435; R495436; R495477; R495550; R501799; R522597
E2-005			Felder	Lester J & Frauke Bartels	1706 Camino Alameda		Leander	TX 78	78641 F	R495437
E2-008		E2	Mcquiddy	Arthur R & Svetlana V Mitroshina	209 Alabaster Caverns Dr		Georgetown	XT	78628 F	R501782
E2-009		E2	Trahan	Aurora & Brandon	3114 Madisina Dr		Leander	TX 78	78641 F	R501783
E2-012; U1-002; U1-008; U1- 034; V1-008; V1-021; V1-023; V1- 032; V1-037	169; 175; 179; 185	E2; U1; U1a; V1; V1a	Scott Felder Homes Llc		6414 River Place Blvd	Ste 100	Austin	X X	78730-1158 F	R501786; R535387; R535400; R535418; R535422; R535424; R535436; R535445; R535467
E2-016		E2	Mott	Ronald & Cynthia	3100 Madisina Dr		Leander	TX 78	78641 F	R501790
E2-018			Hahn	Randall Eugene & Rhonda Lynn	1703 Manada Trl		Leander	XT XE	78641 F	R501792
E2-019			Mood	Jim D	1705 Manada Trl		Leander	XT XE	78641-2644 F	R501793
E2-020			Arnett	James R & Shannon F	3101 Madisina Dr		Leander			R501808
E2-022	1	E2	Crown Castle Gt Company Llc		4017 Washington Rd Pmb 353		Mcmurray	PA 15	15317-2520 F	R031483
E2-024		E2	Dunford	Douglas Ando & Ellen	950 County Road 272		Leander	X W		031479

Sagments Title Last Name Fire	First Name	Address 1	Address 2	Addrace 3	City	State Zin	TavID	
Kurly Bird Properties Llc		n Bass Rd			nd Rock		R055205	
Butler Jason		2015 Red Oak Cir						
	Gangadharan & Ponnamma	1813 Rusty Nail Loop						
0		1815 Rusty Nail Loop				Ì		
	Veronica I & Joseph A Sloan	1817 Rusty Nail Loop			Round Rock	TX 78681-1975	1975 R312940	
Wahi	Marilyn Z	1821 Rusty Nail Loop			Round Rock	<u> </u>	+-	
exasinc		1106 Clayton Ln	Ste 400W	`	Austin	TX 78723	R035351; R055203; R312786; R312787; R420184	03; R312786; 84
A4; D4; E4 Alori Properties-4318 Bullcreek-Bas Ltd		509 Oakland Ave			Austin	TX 78703-5113	5113 R447749	
A4; D4; E4 Sej Asset Management & Investment Company		C/O 7-Eleven Inc, One Arts Plaza	1722 Routh St	Ste 1000	Dallas	TX 75201-2506	2506 R064891	
	Sharon Ruth	1901 Hunters Trl			Round Rock	TX 78681-1959	1959 R064896	
Mccauley	Kevin J & Maureen T	1903 Hunters Trl						
A4; D4; E4 Schultz Schultz	Brian L & Barbara K	PO Box 593		1	Round Rock	TX 78680-0593	0593 R064894	
A4; D4; E4 Neves Alla	Allan Keeling & April	1907 Hunters Trl		1	Round Rock			
Le	Michelle & Long H	1909 Hunters Trl			Round Rock	TX 78681-1959	1959 R064892	
C2; C5; D5; E5; F5; G5; R9; M1; S1; V1; V1a; Roberts Roberts Ma W1; X1; Y1; Z1	Mary Frances	28217 Honeysuckle Dr			Damascus	MD 20872-1314	1314 R031533; R031534; R365466	34; R365466
E5; M1; N1; O1 Gehan Homes Ltd		Two Addison Circle	15725 N Dallas Pkwy	Ste 300 /	Addison	TX 75001	R522807; R522806; R522809; R522810; R522842; R523843; R222844; R533376; R533379; R533380; R533381; R533382; R533383; R533381; R533392; R533393; R53403; R533404;	08; RS2 2809; 42; RS2 2843; 78; RS3 33 79; 81; RS3 33 82; 84; RS3 33 92; 03; RS3 3404;
E5; M1; N1; Q1; Q1; S1 Pecan Greek (Leander) Hoa		14050 Summit Dr	Ste 113-A		Austin	TX 78728-7134	R522806; R522827; R522841; 7134 R533386; R533409; R533417	27; R522841; 09; R533417
CS: DS: FS: FS: M1 Katusak	Pit	3624 Journey Pkwy			leander	TX 78641	R031572	
Cantwell	p	9800 Fm 2243				TX 78641	R031255	
F; X5; Y5 Walker We	Weldon Stephen & Tammy	PO Box 982			Leander	TX 78646-0982	0982 R031389; R448912; R484387	12; R484387
	a	1204 Oak Hollow Dr			Leander	TX 78641-2351	-	
nport	Michael L & Lois E	PO Box 975					_	
Bott Rick Vo Che	Rick E & Sharon Kaydean Chau V	1101 Cr 177 1031 County Road 177			Leander Leander	TX 78641	R031540 2525 R031541	
C1; D1; E1; F1; H; O Rockpoint Church		C/O Jerry Shayne O'Brien, Senior Pastor	280 Twin Cedars Road				R496905	
C1; D1; E1; F1; H; O Rockpointe Church		PO Box 950		_	Leander	,,	R496905	
Larue	Mark C & Ellen H	850 County Road 177			Leander	TX 78641-2534	2534 R031555; R49267	71
Larue Real Estate Holdings Lp		850 Cr 177			Leander	TX 78641	R031554; R419133; R419135	33; R419135
C2; E2; F2; G2 Moore Jim	immie W	801 Moore Ln		Ū	Cedar Park	TX 78613-6916	6916 R031475; R318984; R338531	84; R338531
Alexander Lew	Lewis V & Lacy A	554 County Road 272		0	Cedar Park	TX 78613-6935	6935 R514487; R514488	88
Crumley James M & Sandra Keeton & Jerral Boling & Theresa Brownson		516 Chisholm Valley			Round Rock	TX 78681	R315788	
	Richard A	2100 Crosscreek Trl			Round Rock	TX 78681-:	1820 R055162	
Sovran Acquisition Limited Partnership		6467 Main St			Williamsville	NY 14221-5890	5890 R055163	
Sundance Sam Bass Ltd		2880 W Pioneer Pkwy	Ste A	`	Arlington	TX 76013-5960	5960 R452109	
E4; F4 a; G4; H4; 14; 14; T5		PO Box 170158			Austin	TX 78717	R052407; R102506; R310483	06; R310483
Carson Mic	Michael P & Monica L	8631 Sea Ash Cir			Rock	TX 78681-	3423 R379824	
	hael P & Monica L	8631 Sea Ash Cir				Round Rock	Rock TX	Rock

Leander-Round Rock 138-kV Transmission Line Project	Directly Affected Landowner List Including Tract IDs and Habitable Structures
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Tract ID	Structures	Segments	Title L	Title Last Name	First Name S	Suffix Address 1	Address 2	Address 3 City		State Zip	TaxID	
			_		& James E	2100 Mockingbird Dr			nd Rock	TX 78681-2706	2706 R302527	
F4-060		F4	_		Raymond T & Linda L	1200 Parrot Trl			Round Rock			
F4-061		F4	_	Higdon	Reggie D	1202 Parrot Trl			Round Rock	TX 78681-2747	2747 R302647	
F4-062		F4	Ŭ		Michael	1204 Parrot Trl						
F4-063		F4			Todd & Rhonda	1206 Parrot Trl				T		
F4-064		F4 E4		Patterson	Garry D & Sharon	1208 Parrot Irl				TX 78681-2/4/		
F4-066	1097	F4			5	1208 Bobin Trl			Round Rock	TX 78681-2738	2738 R302665	
F4-067	1099	F4			Eric Joseph & Susan Marie	1206 Robin Trl						
F4-068	1101	F4			Donald & Rebecca	1204 Robin Trl					T	
F4-069	1103	F4			Prakash V & Linda J R	1202 Robin Trl				TX 78681-27	2738 R302669	
F4-070	1104	F4	Ī	mbe	Richard & Mary Q	1200 Robin Trl				7	R3	
F4-071	1102	F4; F4a			Lane C & Michelle L	1201 Robin Trl						
	1100	F4; F4a				1203 Robin Trl						
	1098	F4; F4a	0,		Andre	3450 Chaparral Dr				Ť		
F4-074	1096	B4; F4; F4a; S5	Ī		Patsy Davis	1207 Robin Trail			Round Rock	1.		
	1094	B4; F4; F4a; S5		ams	Julie	1209 Robin Trl						
F4-076	1093	B4; F4; F4a; S5			lacki L & Kav J	1211 Robin Trl						
F4-078	1090	a; S5	Ms.		DeborahJ	1215 Robin TRL			Round Rock	Ė	R302678	
F4-078	1090			h J & Estate Of Gary		1215 Robin Trl			Bound Bock		R302678	
				William Davis								
F4-079	1089	B4; B4a; D4; F4; F4a; S5	0,	Shifman	Amanda	1217 Robin Trl			Round Rock	TX 78681	R302679	
F5-002; F5-005; F5-009; F5-010; F5-048; F5-049		F5	<u> </u>	Catalina Ranch Homeowners Assoc Inc		C/O Southwest Management Services	PO Box 342585		Austin	TX 78734	R542154; RE R542175; RE	R542154; R542173; R542174; R542175; R542268; R542271
F5-003; F5-007; F5-008; F5-011; F5-013; F5-014; F5-015; F5-016; F5-017; F5-018; F5-019; F5-020; F5-024; F5-027; F5-028; F5-029; F5-026; F5-027; F5-028; F5-029; F5-030; F5-031; F5-032; F5-034; F5-035; F5-039; F5-038; F5-039; F5-040; F5-041;		ñ	, and the second	Catalina Ranch UC		Attn: Harris & Straub	29.29 W 5Th St	Ste A	Fort Worth	7X 76107	R542155; R R542155; R R542164; R R542170; R R542170; R R54217; R R542217; R R542217; R R542217; R R542217; R R542217; R	R542155; R542156; R542157; R542158; R542159; R542166; R542161; R542162; R542166; R542167; R542168; R542166; R542176; R542161; R542171; R542171; R542177; R54211; R542121; R542214; R542215; R54216; R542214; R542215; R542216; R542214; R542215; R542216; R542217; R542216; R54226; R542221; R542226; R542277; R542223; R542226; R542237;
F5-004; F5-012; S-028	106	F5		The Brohn Group Llc		8140 N Mopac Expy	Ste 4-270		Austin	TX 78759-8864		R529450; R542213; R542270
F5-006; F5-044; F5-045; H-035; V-	69	F5; H; N4; O4; P; P4; Q; Q4; R; R4; T; U; V; V4; W		Leander I S D Trustee		PO Box 218			Leander	TX 78646-0218		R031265; R032134; R507775; R507776; R507777
F5-022		F5	Ŭ	Centerra Homes Of Texas Llc		PO Box 92769			Austin	TX 78709-2769	2769 R542218	
F5-046; F5-047; R1-007		F5; G1; R1		Burleson Ranches Ltd		28217 Honeysuckle Dr			Damascus	MD 20872-1314		R031575; R485247; R506005
F5-050, G1-001; G1-029; G1-030; G1-031; G1-032; G1-033; G1- 034; G1-051; G1-052; G1-053; G1-054; G1-055; G1-056; G1- 057; G1-058; G1-059; G1-060; G1-061; R1-005; R1-006		D1; F1; F5; G1; R1		Joseph Land & Cattle Co Ltd		2904 Richard Ln			Austin	TX 78703-1636		R031210; R031552, R392170; R392171; R392173; R392173; R392174; R392175; R392176; R392177; R392175; R433458; R485235; R485239; R485240; R485241; R485245; R485246;

Tract ID	Structures	Segments Title	Title Last Name	First Name Suff	Suffix Address 1	Address 2	Address 3 City		State Zip	TaxID
F6-001; F6-007; F6-008; F6-009; E-002; L-002; L-004; L-005	36; 37; 38; 39	C6, F6, G6, H6; L; M; N; P; U4; V4	Beasley Tract Lp		Attn: Jeremy Smitheal	100 Congress Ave	Ste 1450	Austin	TX 78701-4072	R031239; R031247; R031271; 72 R031272; R031274; R037215; R443611; R473637
F6-002; F6-003; F6-006; N3-147; N3-158, N3-159, N3-60; N3- IG, T2-063; T2-064, T2-065; T2- 076; U3-003; V5-001; W5-026; W5-028		A2; A4; B4; B4a; D2; E6; F6; G6, H6; K4; N; N3; O3; T1; T2; U3; V5; W5	Williamson County		Attn: Williamson County Auditor	710 S Main St Ste 301		Georgetown	TX 78626-5703	R031496; R031502; R031561; R037219; R037220; R055339; R403047; R403049; R407588; R477246; R418434; R463462; R472264; R473628; R539444;
F6-004			Simmons	Richard L & Gina M	9 Windemere E			Leander	TX 78641-1619	19 R037178
F6-005			Toungate	Ernest Loyd & Lori	83 Ridgmar Rd				Ė	
G-001; G-002		B6; G; L	Henthorne	Lajuana Jean	701 Henthorne Way					44 R031315; R031367
G-004; G-005; L1-007; P1-002; P1-003; P1-005; P1-009; P1-009; P1-010; P1-014; P1-015; P1-020; P1-021; P1-023; P1-025; P1-003; P1-004; P1-005; P1-006; P1-007; P1-009; P1-010; P1-011; P1-015; P1-010; P1-010; P1-011; P1-015; P1-010; P1-010; P1-011;	134; 135; 140	B6; E6; G; L; P1; Q1; T1	Meritage Homes Of Texas Lic		8920 Business Park Dr	Ste 250		Austin	TX 78759-7622	R031257; R031532; R433136; R526457; R526461; R526644; R52647; R526500; R526504; R526505; R532207; R532208; R532230; R532212; R532228; R532236; R532256; R532284; R532264; R532265; R532287; R532264; R532265; R532287; R532286; R532286; R532287; R532286; R53286; R532287; R532286; R532302; R532303; R532304; R534384;
G-007; G-008		9	Generations Ministries Inc		PO Box 280			Cedar Park	TX 78630-0280	30 R433137; R502299
G-009; G-010; G-011		9	Hudson	Michael N	8670 183A Toll Rd			Leander	TX 78641-1521	21 R031365; R330897; R433138
G-012 G-013; G-014		9 9	Leander Volunteer Fire Dept First State Bank Central Texas		PO Box 222 PO Box 6136			Leander Temple	TX 78646-0222 TX 76503-6136	22 R031287 36 R433144; R519276
G1-002; R1-008		F5; G1; R1 Ms.	٩	Rosemary Neely Hazlewood	C/O PERSONAL ADMINISTRATORS INC	3939 Bee Caves RD	Bldg C100	Austin	TX 78746-6429	29 R485234; R510081
G1-002; R1-008		F5; G1; R1 Ms.		Androniky P	C/O PERSONAL ADMINISTRATORS INC	3939 Bee Caves RD	Bldg C100			
G1-002; R1-008 G1-002: R1-008		F5; G1; R1 Ms.	Hazlewood	Christy Patterson James Merton	C/O PERSONAL ADMINISTRATORS INC	3939 Bee Caves RD 3939 Bee Caves RD	Bldg C100	Austin	TX 78746-6429	29 R485234; R510081 29 R485234: R510081
G1-002; R1-008				Jimmie Lea aka Jimmie Lea Chris	C/O PERSONAL ADMINISTRATORS INC	3939 Bee Caves RD	Bldg C100	Austin		
G1-002; R1-008		F5; G1; R1 Mr.	Hazlewood	John Andrew	C/O PERSONAL ADMINISTRATORS INC	3939 Bee Caves RD	Bldg C100	Austin		П
G1-002; R1-008			Hazlewood	Leslie Travis	C/O PERSONAL ADMINISTRATORS INC	3939 Bee Caves RD	Bldg C100	Austin	TX 78746-6429	
G1-002; R1-008		F5; G1; R1 Mr.		Robert Mason	C/O PERSONAL ADMINISTRATORS INC	3939 Bee Caves RD	Bldg C100		TX 78746-6429	29 R485234; R510081
G1-002; R1-008		F5; G1; R1 Mr.	Hazlewood	William Duncan	C/O PERSONAL ADMINISTRATORS INC	3939 Bee Caves RD	Bldg C100		П	П
G1-002; K1-008		F5; G1; K1	Hazlewood Residential Residential	William P Et Al	C/O Real Manage	3939 Bee Caves Rd, Bldg C100		Austin	TX 75370-0128	29 R485234; R510081 28 R514751: R514769
04 004			Community Inc		1. 10 11 0 1 1 20 1 20 1 1 1 1 1 1 1 1 1 1	000##====			T	
G1-004 G1-005			Gautschi	Beese B	2236 Julia Ln	FOURTH F100F #400		Leander	TX 78641	2/ RS14//1 R523555
G1-006			Brugh		2232 Julia Ln					R523556
G1-007			Но	Vi T & Oanh T Nguyen	2228 Julia Ln			Leander	TX 78641	R523557
61-008			Millner	Chris & Karen	2224 Julia Ln 2220 Iulia In				TX 78641	R523558
G1-010			Gaslin	Gizette S	2212 Julia Ln					
G1-011			Donaldson	Clinton W & Kate E	2208 Julia Ln			ark		R523561
G1-012			Warth	William D	2200 Julia Ln					
G1-013			Khan Bandali Builders & Estate	Khalid & Krista	2541 Leonards Pass	6		_		
61-014		61	Developers Ltd		7817 ROCKWOOD LN	Ste 300		Austin	/8/2/	K492660
G1-015; G1-028; G1-035; G1- 037; G1-047		G1	Cold Springs Homeowners Association Inc		C/O Realmanage	PO Box 701088		. Dallas	TX 75370-1088	R495575; R495576; R495607; R495608; R495793
			1				_		+	1

	Structures	Segments T	Title Last Name	First Name Su	Suffix Address 1	Address 2	Address 3 City		State Zip	TaxID
G1-016			Patel	Siddharth	2116 Granite Springs Rd		1	Leander	TX 78641	R495620
G1-017			Meintrup	David & Tatiana	2112 Granite Springs Rd		_	eander	TX 78641	R495619
61-018			Scott	Genevieve & Marta M Mendez	2108 Granite Springs Rd			Leander	TX 78641	R495618
G1-019			Kaloustian	Monica A & Eugene	2104 Granite Springs Rd		_	Leander	TX 78641	R495617
G1-020			Groves	Kevin Arthur	PO Box 28490		ď	Austin	TX 78755	R495616
G1-021			Head	Bobby J & Martha C	2024 Granite Springs Rd			eander		R495615
G1-022			Gaines	Charles L & Alice L	2020 Granite Springs Rd			Leander		R495614
G1-023			Gamez	Carlos I & Eyair G	2016 Grante Springs Rd		_	Leander	TX 78641	R495613
G1-024			Silliti	Pamon B & Norma A	2012 Granite Springs Nu			eander		R493012
GI-023			robez	Namon R & Norma A	2006 Graffile Springs Rd			regular	Ť	R493611
GI-026			Lenart	Aleksandra A & John K	2000 Cranite Springs Rd		-	eander	T	R495610
61-02/			Breckling	Kobert & Patricia	2000 Granite Springs Rd			Leander	1X /8641-2606	K495609
G1-036; H-022; H-025; H-028		G1; H	Carlton	J Preston & Gayle	PO Box 32			Cedar Park	TX 78630-0032	R031230; R514531; R514538; R520230
61-038			Matias	Nicholas T & Veronica N	1936 Granite Springs Bd			eander		R495577
G1-039			Brauer	Martin J & Leona J	1932 Granite Springs Rd			Leander	TX 78641	R495578
G1-040			White	Bryant I & Emily J	1928 Granite Springs Rd			Leander		R495579
G1-041			Farrar	Jennifer & David	1924 Granite Springs Rd		_	Leander		R495580
G1-042			Mcpherson	Daniel R & Frances C	1920 Granite Springs Rd		1	Leander	TX 78641	R495581
G1-043			Dharmaraj	Pradeep Samuel D & Amy Ruth	1916 Granite Springs Rd			Leander	TX 78641	R495582
G1-044			Goldsberry	Ine D & Inellen S	1912 Granite Springs Rd			leander	TX 78641	R495583
G1-045				Devon	1908 Granite Springs Bd			Leander		R495584
G1-046			Spexarth	Matthew J & Jayme M	1904 Granite Springs Rd			Leander		R495585
G1-048: G1-049		G1	Glad Tidings Assembly Of God Inc		2700 Northland Dr		٩	Austin		R031223: R319362
,									T	
G1-050	200	D1; F1; G1	Ccmccoy Lic		37 Sundown Pkwy		4	Austin		R031220
		C2; F2; G2; H2; L2 C2: F2: G2	Renfro	Dermis Kay Darlene	106 Shady Oak Dr			Georgetown	TX 78628-8330	R333/23; R33/918 R332630
G3-002: N3-114: N3-120		G3: H3: I3: N3	Scott Felder Ltd Partnership		C/O Ryland Homes	1101 Arrow Point Dr	Ste 101	Cedar Park		R055347: R379697: R403771
				1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			T			
G3-003		G3	Mccormick	Charles O & Susan E	2035 Woodglen Dr		<u> </u>	Round Rock	T	R360840
63-004		G3; H3	Watson	Foy & Gloria	1312 Becca Teal Pl		2 0	Round Rock	TX 78681	R405334
63-006		63	Knight	Maryin R & Bernadette S	2505 Donner Path			Round Rock		R400078
		33	Crimmins	Geoffrey M & Denise	2509 Donner Path			Round Rock		R400079
	1433	63	Schauberger	Wilfred W & Joyce M	2511 Donner Path		В	Round Rock	TX 78681	R400080
		G3	Goodrum	Shayne M & Michelle R	2657 Henley Dr		В	Round Rock	TX 78681-2240	R400096
G3-011	1442	63	Fitzgerald	Russell O & Rose M	2655 Henley Dr		æ	Round Rock	T	R400095
		G3	Speer	Stephanie & Michael E	2512 Donner Path		2 1	Round Rock	T	R400081
	1429	63	Whetstone	Kerry C & Christine	2510 Donner Path		<u>ac</u> (Round Rock		R400082
G3-015		63	Melsh	Iohn M & Beatrice F	2508 Donner Path		2 0	Kound Kock San Antonio	TX 78209-3302	R400083
		3 6	Norris	Grea T & Gloria I	2651 Haplay Dr		0 4	Bound Bock		R400093
	1427	63	Jones	Jerry M & Anna M	2031 Herriey Dr 2649 Henley Dr		2 02	Round Rock		
		G3	Del Mercado	Alejandro Vazquez	2647 Henley Dr			Round Rock		
		53	Sopher	Roger & Lisa	2645 Henley Dr		8	Round Rock		R400090
	3	G3	Brahosky	Stephen A & Jodi M	2643 Henley Dr		В	ound Rock	TX 78681-2240	R400089
		G3	Blauser	Jeffrey S & Rebecca K	2658 Henley Dr		æ	Round Rock	TX 78681-2240	R400117
		G3	Ogle	Rex Earl Jr & Nora Gay	2656 Henley Dr		2	Round Rock		R400116
	1439	63	Mooney	Randall & Elizabeth L	2654 Henley Dr		2	Round Rock	T	R400115
		63	Hassel	Lisa M & Michael E	2803 Loncola Ct		2	Round Rock	Ì	R400114
		63	Budjaja	Taminun & Yuhua Lee	2805 Loncola Ct		2	Round Rock	TX 78681-2239	R400113
		G3	Oneal	Robert E III & Dorothy L	2807 Loncola Ct		2	Round Rock		R400112
		G3	Tucker	Jeffrey L & Donna M	2809 Loncola Ct		2	Round Rock	T	R400111
	1434	G3	Banks	John T	2811 Loncola Ct		2 0	Round Rock	TX 78681	R400110
		500	Duvail	Nicole II	27 UL WOIRIII CV		2 0	Round Rock	TV 70501	R400108
		55	Garlander	Mark & Lica	2640 Henley Dr		2 0	Round Rock	, ,	R400099
		63	Bitner	Jerry E & Florence M	2703 Wolkin Cv			Round Rock		R400107
		G3	Hause	Stephen R & Shelley D	2702 Wolkin Cv		-	Round Rock	Ĺ	R400100
		63	er	Carla L & Terry	2705 Wolkin Cv		8	Round Rock		R400106
G3-037	1419	G3		Mark & Sylvian M	2704 Wolkin Cv		В	Round Rock		R400101
		G3		James Don & Leslie Lynn	2707 Wolkin Cv		2	Round Rock	TX 78681-2238 R400105	R400105
		63		Julian Curtis & Sharon L	2706 Wolkin Cv		2	Round Rock		R400102

	ures	gments	litte Last Name			Address 2 Address 3	City .	te	laxib
63-040	1410	60	Viella	Alan M. 8. Kathari	27.09 WOIKIII CV		Round Bock	TV 70601	K400104
		63	Mallory	Philip F & Ruth H	27.08 WOINIT CV 2843 Chatelle Dr		Round Rock	İ	R390840
G3-043		63	Pan	Chenwei Oscar & Wei-Chung	2103 Burnie Bishop Pl		Cedar Park	TX 78613	R390839
G3-044		G3	Ault	Michael & Loretta	2917 Cuero Cv		Round Rock	TX 78681-2316	R431053
G3-045	1411	G3	Sammon	Alvis & Phyllis	2913 Cuero Cv		Round Rock	TX 78681-2316	R431054
G3-046	1410	G3	Науеѕ	Stuart W & Tiffany D	2909 Cuero Cv		Round Rock	TX 78681-2316	R431055
G3-047	1409	G3	Patton	Vera L & Watson M Howell Jr	2905 Cuero Cv		Round Rock	TX 78681	R431056
G3-048	1408	63	Wehring	Billy	2901 Cuero Cv		Round Rock	TX 78681	R431057
G3-049		63	Butz	Kenneth J & Monique	2844 Chatelle Dr		Round Rock	Ė	R390841
G3-050	1413	63	Leara	William D	2842 Chatelle Dr		Round Rock	TX 78681-2237	R390842
G3-051	1412	63	Ragsdale	Gordon L & Judith C	2840 Chatelle Dr		Round Rock		R390843
G3-052		G3	Clements	William R III & Nancy D	2838 Chatelle Dr		Round Rock	TX 78681	R390844
G3-054	1405	G3	White	Linda G & George A	3000 Las Colinas Way		Round Rock		R440911
G3-055; G3-056; G3-086; H3-068 1455; 1457		G3; H3	Hidden Glen Hoa Inc		C/O Goodwin Management, Inc	PO Box 203310	Austin	TX 78720-3310	R414328; R430970; R440912; R440933
				0 0 1	/***		1	1000	
G3-03/	1307	65	Petersoni	Scott C & Susall IVI	3008 Lds Collings Wdy		Round Bock	TV 70001-2337	N440910
		03	Memoria	Reggis Milliam D & Karon H	3012 Las Colinas Way		Round Rock	Ť	R440909
63-059		3 69	Russey	Roppie F & Patricia I	3010 Las Collinas Way		Round Rock	Ť	8440907
63-061		6 6	Hope	Tanat	3020 Eas Collinas Way		Round Bock	Ť	8440906
G3-062		63	Pham	Joseph Q& Maryn Q	2912 Cuero Cv		Round Rock	Ť	R431048
G3-063	1407	63	Ager	Michael & Sheerin	2904 Cuero Cv		Round Rock		R431047
		63	Neal	Donald H & Frances J	2900 Cuero Cv		Round Rock	TX 78681-2316	R431046
		G3	Gallia	John & Jessica H	2925 Plantation Dr		Round Rock		R430978
G3-066	1404	G3	Oblouk	Raymond Francis & Wendy Ann	2605 Plantation Dr		Round Rock	TX 78681	R430997
730 53		5	1 N	O Shark O	NO 20 professional Contractions			Ť	OFOCCAG
63-06/	1403	63	Marrara	Mark & Repecca	2921 Plantation Dr		Round Rock	TX 78681	R430979 R43096
63-069		63	Kindred	alcoin	2905 Laurel Grove Way		Round Rock	Ť	8430994
G3-070	1401	63	Ashraf	Salman & Samaa A	2613 Plantation Dr		Round Rock	Ė	R430995
G3-071	1402	G3	Haley	Nathan E & Patina	2610 Plantation Dr		Round Rock	TX 78681-2311	R430962
G3-072		63	Coates	Ronald L Jr & Jessica	2614 Plantation Dr		.,	TX 78681	R430963
G3-073	1399	G3	Varkey	Vipin & Thara Viswanath	2618 Plantation Dr		Round Rock	TX 78681	R430964
G3-074	1398	G3	Hoffman	Reva V & Janet M Hope & Dusti	2622 Plantation Dr		Round Rock	TX 78681	R431006
G3-075	1396	G3	Grand	Stephen P & Anna Wang	2900 Laurel Grove Way		Round Rock	TX 78681	R431040
	1397	63	Owen	Scott Robinson & Stephanie	2904 Laurel Grove Wav		Round Rock	TX 78681	8431005
				Marie				T	
63-077	1394	03	St George	Michael M & Laura M	2705 Plantation Dr		Round Rock	TV 79691	R431029
		6	P. C. C. C. C. C. C. C. C. C. C. C. C. C.	Stephanie Ann & Matthew	ביים וומושווש ביים וומושווש ביים וומושווש ביים וומושווש ביים וומושווש ביים וומושווש ביים וומושווש ביים וומושווש ביים וומושווש ביים וומושווש ביים וומושווש ביים וומושווש ביים וומושווש ביים וומושווש ביים ביים וומושווש ביים ביים ביים ביים ביים ביים ביים ביי				V+31030
	1395	63	Kohl	David	2626 Plantation Dr		Round Rock	TX 78681	R431007
G3-080		63		Janet C & Davey	2630 Plantation Dr		Round Rock	TX 78681	R431008
G3-081	1392	G3		Jeffrey C & Rachel L Fox	2634 Plantation Dr		Round Rock	Ť	R431009
G3-082		G3	Blankenship	Patricia Ann	3736 Doral Dr		Longmont	CO 80503	R431010
G3-083		63	lewar	Jeegar & Kathryn E	2704 Plantation Dr			Ť	R431011
63-084	139.1	63	Crisweil	James A & Dawn M	2708 Plantation Dr		Round Rock	TX 78681-2312	R431012 B431013
	138/	6 6	Chaffin	Tamara A & Michael C	3011 2c Colinac Way			ľ	8440932
		6 8	Gardner	David & Halev	1101 Celtic Cv			Ť	8440931
G3-089	1382	63	Rodden	Georgia C & William Jr	1105 Celtic Cv		Round Rock	TX 78681-2333	R440930
63-090		63	Patel	Harshal K	1100 Celtic Cv		Round Rock		R440926
G3-091		G3	Gesch	Walter Mark & Robbin	1104 Celtic Cv		Round Rock	Ė	R440927
G3-092	1380	63	Roup	Robert William & Kimberly Ann	1109 Celtic Cv		Round Rock	TX 78681-2333	R440929
			:		4				
G3-093	1378	G3	Leonardi	Joseph & Janet M	1108 Celtic Cv		Round Rock	Ť	R440928
		[33	8	Bimal C & Viraj B	1105 Coronado Cv			TX 78681-2339	R440924
		63	Clark	Nichard H & Jahe D David Oscar & Mari M	1113 Coronado Cv		Round Rock		R440923 R440922
	1375	G3	lee	Eric & Kimberly	1117 Coronado Cv		Round Rock	TX 78681	_
63-098		63		Robert	1121 Coronado Cv		Round Rock		
			-		-				

Tract ID	Structures	Segments Title	Last Name	First Name Suffix	Address 1	Address 2 Address 3	is 3 City	State Zip	TaxID
63-099	1372	63	King	Carl E Jr & Erika A Herman-King	1125 Coronado Cv		Round Rock	TX 78681	R440919
G3-100	1370	63	Westall	Laurence B & Susan L	17411 Serene Dr		Morgan Hill	CA 75037	R440918
G3-101	1371	G3		Xiaoshu & Ganjie Mao	1116 Coronado Cv		Round Rock	TX 78681-2339	
G3-102	1373	63		Thomas A & Jessica	1112 Coronado Cv		Round Rock	TX 78681	
G3-103 G3-105		63	Sullivan	Brian D & Courtney L	1108 Coronado Cv 1117 Native Garden Cv		Round Rock	TX 78681-2339	9 R440915 6 R452420
	0	3 3						Г	
G3-10b	1369	63	all	Harish S & Shubha Prakashan	434 Galleria Dr	Apt 8	san Jose		K452419
G3-107	1960	63	Bolin	Kellie	1120 Native Garden Cv		Round Rock		R452411
G3-109	1365	69 69	Gordon	Allurew A & Stephanie R	1124 Native Garden Cv		Round Rock	TX 78681-2376	
G3-110	1367	63	Watzke	John & Kim	1129 Native Garden Cv		Round Rock	Ė	
G3-111	1363	63	Dieterle	Christian	1128 Native Garden Cv		Round Rock		R452413
G3-112	1366	63	Mclain	Jay F & Stephanie M	1133 Native Garden Cv		Round Rock	TX 78681	R452416
G3-113	1364	G3	Arguijo	Felix & Alyson	1136 Native Garden Cv		Round Rock		6 R452415
G3-114	1362	63	Lawhorn	Courtney Crim & Justin C	1132 Native Garden Cv		Round Rock	T	
G3-116		63	Shimanek	Robert J 111 & Alexandra C	1021 Hidden Glen Dr		Round Rock	T	_
G3-117	1361	63		Anthony T & Nhu Pham	1017 Hidden Glen Dr		Round Rock		R452398
63-118	1350	63	Quick	Stevenson & Michelle	1000 Lidden Glen Dr		Round Bock	TV 79691-2374	
G3-119 G3-120	1358	63 63		Ronald B Ir & Jatopna	1005 Hidden Glen Dr		Round Bock	Ť	
G3-120	1357	3 8	Kecler	Craig & Kriston M	and Hidden Glen Dr		Round Rock	TX 78681-2474	A R460547
G3-122	1356	63		David M & Sonva B	903 Hidden Glen Dr		Round Rock		
G3-123	1355	G3	Stevens	Sean C & Kristin E	901 Hidden Glen Dr		Round Rock		R460549
G3-124		G3	Mendoza	Jose Angel & Alia Trevino	3201 Andice Path		Round Rock	Ī	R462044
G3-125		G3	Stowers	Kenneth & Irma	3205 Andice Path		Round Rock		
G3-126	1323	G3	Bauer	Jason G & Diane M	3200 Napali Ct		Round Rock	TX 78681-2433	
G3-127	1322	G3			3204 Napali Ct		Round Rock	TX 78681	R478480
G3-128	1321	63	Shifman	Jennifer L & Nadav	3201 Napali Ct		Round Rock		
G3-129	1320	D3; G3	Rubenstein	Robert B	3208 Napali Ct		Round Rock	TX 78681	R478481
G3-130	1318	63	Wernli	Christian Todd & Ladonna Lynn	3209 Napali Ct		Round Rock	TX 78681-2433	3 R478482
			Frederick T Edgerton Trustee Of						
G3-131	1319	63	The George C Edgeton Revocable		3205 Napoli Ct		Round Rock	TX 78681	R478483
63-132	1316	D3: D3a: G3	Wallace	Michael	1003 Walmea Ct		Round Rock	TX 78681	8478473
G3-134	1354	G3	Craig	Wavne & Lisa	3200 Sanibel Ct		Round Rock		R478408
G3-135	1352	63	Sivapitchai	Ezhil & Murali Perumalraj	3204 Sanibel Ct		Round Rock		
G3-136	1351	G3		James H & Debra S	3208 Sanibel Ct		Round Rock	TX 78681-2432	2 R478410
G3-137	1349	D3; D3a; E3; G3		Heath A & Virginia L	3212 Sanibel Ct		Round Rock		
G3-138	1353	63	Bellville	Keith R & Colette M	848 Hidden Glen Dr		Round Rock		
G3-139		63	e	Cory D & Charlotte S	844 Hidden Glen Dr		Round Rock		
G3-140	1350	E3; G3		Vince A Jr & Ashley C	3223 Sanibel Ct		Round Rock		
	0,00	E3; G3	Kiley	Matthew P & Julie M	3227 Sanibel Ct		Round Rock	TX 78681-2432	2 R478436
G3-142	1314	D3; D3a; E3; G3		Frederick H III & Danielle IVI	3215 Sanibel Ct 1000 Waimea Ct		Round Rock		
		E4: F4: F4a: G4: H4: I3:							
G4-001; I4-001; X2-002		14; J4; T5; X2	Oncor Electric Delivery Company		Attn: State & Local Tax Dept	PO Box 219071	Dallas		
G4-002	1676	E4; G4; H4; I3; J4	Gapko	Debra	5312 Travis Oaks Dr		Marble Falls	TX 78654-3560	
	1675	E4; G4; H4	Spears	Jeffrey	1809 Sylvia Ln		Round Rock	TX 78681	R300957
	16//	E4; G4; H4; I3; J4	Guardado	Carlos	1802 Somerset Dr		Round Rock	TX 79681-2800	
	1678	G4, 15; J4	Gonzalez	Dorouny Lavier & Ma Dolores	1805 Sylvia In		Round Rock	TX 78681	
H-001	86:87	C1: D1: H: O	Sorenson	Michael & Benita	10996 F Crystal Falls Pkwy		Leander		
н-002	81	C1; D1; H; O		Tommy A & Kathleen A	PO Box 113		Leander	TX 78646-0113	
Н-003	85	I	Payton	Danny J & Helene M	10990 E Crystal Falls Pkwy		Leander	TX 78641-2248	8 R031224
Н-004	80	Ξ	na Llc		2288 Park Place Cir		Round Rock	İ	
H-005	0	Ξ:	Martin	Raiph D & Bethany B	403 Scarlet Maple Dr		Cedar Park		1 R031225
H-006	19	E 3	Holloway	James L & Linda	10020 E Crystal Falls Pkwy		Leander	TV 78641-2258	
H-008	78	c I	Anderson	Celeste H	10965 F Crystal Falls Pkwy		Leander	TX 78641	8 K342827
H-010		==	Crystal Falls Business Park Llc		13760 Noel Rd	Ste 1020	Dallas	TX 75240	R031217
н-011		Ξ	Mcdaniel	Emelie C	610 Mistywood Cir		Cedar Park		
н-012	83	I	Harris	Teresa Cole & Harold Dwight	10952 E Crystal Falls Pkwy		Leander	TX 78641-2248	8 R031209
Н-013	82	Ξ.	Utz	Christopher Lee	PO Box 1487		Leander	TX 78646-1487	7 R051556
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Class	Christings	Cormonte	- ·	oweN to		Suffix Addrage 1	Addrose 2	Addross 2	43	Ctato Zin	CI ^cL
					Charles & Margarette				Georgetown	TX 78628-1134	т
H-015		I		n	Bryan & Dan Krueger	1406 Jefferson St			Bastrop		
н-016		I	تد	Bell	Danny & Kenneth M & Carrie L	PO Box 126			Cedar Park	TX 78630-0126	26 R435538
н-017		н	9	Ganninger	Mark E & Dana L	15700 Palomino Ranch Dr			Leander	TX 78641-2868	68 R432774
H-018		н		Williamson County Humane Society		10930 E Crystal Falls Pkwy			Leander	TX 78641-2248	48 R031208
Н-019	77	т	Ħ	T2C LIC		12426 Boheme Dr			Houston		R432773
н-020		I	1	Bell Crystal Properties Llc		1300 W Whitestone Blvd	Bldg K		Cedar Park	TX 78613	R432772
Н-021		I	, v	Atmos Energy Corporation Fka Lone Star Gas Company		5420 Lbj Frwy	Ste 1800		Dallas	TX 75240	R498050
H-024	75; 76	т			Douglas J & Chong S	8304 West Dr			Leander		П
Н-027	74	Ŧ	υ,	Simpson	Kenneth L	10907 E Crystal Falls Pkwy			Leander	T	58 R031354; R432766
H-029	73	I			Cathy Lynne David O & Mary I	10850 E Crystal Falls Pkwy			Leander	TX 78641	R031202
H 031: H 032		: 3		P41 CZ		500 Bardor C+			Auctin		BE36373. BE34406
п-031, п-033				SWIIS Z/ Z LLU		302 Baylor 3t			Austill	T	
H-032	71.77	I I		Bld Crystal Springs Llc		8601 Ranch Road 2222	Bldg 1, Ste 150		Austin	TX 78730-2304	04 R526321
	70, 72	: I		Crystal Falls Ortho Lic		5900 Padre Cv			Austin		_
н-037		Ξ	_	Premas Global Leander 1 Llc		2888 Loker Ave E	Ste 212		Carlsbad	CA 92010-6685	85 R432784
Н-038		п		The Richard W And Linda J Davis		10760 E Crystal Falls Pkwy			Leander		
. H-040		н	Ī	Global Leander Llc		2888 Loker Ave E	Ste 212		Carlsbad	Ŭ,	П
	68	Ŧ	_	u	Maneed	1704 Burning Tree Ln			Plano		
H-042		= :			Thomas A	11402 Bristle Oak Tri			Austin	Ť	08 R031270
H-043		= =			BarneyJ	2200 Southwest Euro	0005 =45		Leander	Ť	
H-045		: I		ic Parkway Crossing Ltd		12750 Merit Dr	Ste 1175		Dallas	TX 75251	R543182
Н-046		I		Crystal Falls Ltd		12750 Merit Dr Ste 1175			Dallas	Ī	R489217
H-047; H-048		н	-		Craig	3215 Gilbert St			Austin	TX 78703-2221	
н-049		I	_	Parsley	Alan Craig & Carla Renee	351 Private Road 920 # 2			Leander	TX 78641-1645	
H-050; H-051	55; 56; 57; 58; 59; 60; 61; 62; 63; 64	I		Dill	George	12001 Cactus Bnd			Austin	TX 78727-6503	03 R482693; R482700
H-052; H-053	65; 66; 67	Ξ		ife Church Inc		1393 E Woodview Dr			Leander	TX 78641	R031373; R031374
H-054; H-055		I		Talan Lic		111 Marshall Ct			Georgetown	TX 78628	R031361; R512974
950-н		I	_ 0, _	Bw & Carlene Pruett Family Trust & Samuel & Ida Nell Pearson Family Trust		PO Box 316			Leander	TX 78646	R031358
H1-001		C1; E1; F1; H1			Grady R & Amy J	808 County Road 177			Leander	TX 78641-2534	34 R507838
H1-002; O-001	96	C1; D1; E1; H; H1; I1; K1; O; V4		Jackson	Lee A	16100 Ronald W Reagan Blvd			Leander	TX 78641-2578	78 R032116; R473809
H1-003	97	H1		Bruce	Grady R & Amy J	II 808 County Road 177			Leander	TX 78641-25	34 R505595
H1-004; K1-008; K1-009		H1; I1; K1	<u>بد</u>	Evans	Chantal Diane & Robert B Evans	5800 Marilyn Dr			Austin	TX 78757	R031560; R473470; R473471
H3-001	1496	Н3		laksch	ToddA	1253 Lacey Oak Loop			Round Rock	TX 78681-2179	79 R361073
	1495	Н3		Good	Matthew D & Jessica R Gaston	414 Central Dr			Georgetown	TX 78628	R361074
	1494	Н3		Martinez	Brian T	2000 Lacey Oak Cv			Round Rock		
	1493	H3			Michael David	2002 Lacey Oak Cv			Round Rock		
H3-005	1492	H3	1	Oneal Roger Brian & Kimberly		2004 Lacey Oak Cv			Round Rock	TX 78681-2182	82 R361077
	1431	H 13			Casey Ann	2005 Lacey Oak Cv			Round Bock		
H3-009		H3		m Trail Developers Venture		1001 Fannin St	Ste 4700		Houston		
H2 010	1407	C3. H3	- 1		Sil-1	1210 Bott may be			Jood barry	TV 706.01.22.42	43 8405335
	1488	G3; H3			Menelaus Manos & Tracy M	1308 Becca Teal Pl			Round Rock	Ť	
	1490	G3; H3	ш		Daniel L Jr & Linda J	1306 Becca Teal Pl			Round Rock		
	1489	G3; H3; I3	-	ell	Mitchell & Laura	1304 Becca Teal Pl			Round Rock		
	1486	G3; H3; I3	1		John D & Kimberly G				Round Rock	TX 78681	
H3-015	1485	H3	1	Schneider Finnigan	David R & Shanna M	1300 Becca Teal Pl		_	Round Rock	TX 78681-2242	
	1483	H3			Monday N	2403 Dylan Garrett Cv		_	Round Rock	TX 78681-2245	45 R405342
	1482	Н3	Ť		Leah & Scott	2405 Dylan Garrett Cv			Round Rock		
H3-019	1481	Н3	1	Gipson	Ronald D & Dorothy W	2407 Dylan Garrett Cv		4	Round Rock	TX 78681-22	45 R405344

Leander-Round Rock 138-kV Transmission Line Project	Directly Affected Landowner List Including Tract IDs and Habitable Structures	

										<u>c</u>
H3-020	structures 1479	Segments III	Title Last Name Shenpard	an & Lynette Marie	Suffix Address 1	Address 2	Address 3	Bound Bock TX	State 21p TX 78681-2245	I day I D
		2		Sheppard						
H3-021, H3-067; I3-042; O3-190; V2-002; X2-006; X2-007; X2-008; Y2-154	1253; 1254; 1255	H3; I3; K5; L3; M3; O3; Q2; R2; S2; V2; X2; Y2	City Of Round Rock		221 E Main St			Round Rock TX	х 78664-5299	R097930, R300919, R329746; R351010; R351011; R405326; R405372; R424710
Н3-022	1477	Н3	Sauls	Wavne J & Melissa P	2408 Dvlan Garrett Cv			Round Rock TX	x 78681-2245	8405346
	1476	Н3	Williams	James E V & Claudia Fg	2406 Dylan Garrett Cv				-	R405347
	1478	H3	Fontenot	Donna Ruth & Robert	2404 Dylan Garrett Cv					R405348
	1480	Н3	Ponder Donald H & Cynthia Y Trustees Of The Donald H Ponder Survivors Trust		2402 Dylan Garrett Cv					R405349
Н3-026		H3	Freedom Mortgage Corporation		C/O Loancare Llc	3637 Sentara Way	Ste 303	Virginia Beach VA	A 23452	R405350
н3-027			Jeter	Leann & Warren	2501 Christine Rose Ct				x 78681	R405351
		Н3	Fregia	Barrye B & Tracy L Travis	2503 Christine Rose Ct					R405352
	1475	Н3	Mcquillan	Jason S & Amanda L	2505 Christine Rose Ct				7	R405353
Н3-030	1474	Н3	Gill	Lawrence E & Melissa P	2506 Christine Rose Ct			Round Rock TX		R405354
	1473	H3	Hargrove	Robert D	2504 Christine Rose Ct			Round Rock TX	X 78681-2244	R405355
	14/2	H3	Lort	William Bandar & Maria	2502 Christing Boog Ct				Ť	R405356
H3-033			Shepherd	Shane F & Corrine B	1316 Recra Teal Pl			Round Rock	Ť	R405337
нз-035			Houston	Roderick D & Laura M Deddens	PO Box 1388					R405331
				(Rs)						
Н3-036			Heistand	Raymond D II & Karen S Heistand	1320 Becca Teal Pl			Round Rock TX	x 78681-2242	R405330
Н3-037			Douriet	Daniel & Gaby	1322 Becca Teal Pl			Round Rock TX	x 78681-2242	R405329
н3-038			Cohen	Richard & Debra L	1324 Becca Teal Pl					R405328
Н3-039			Yeager	Kurt & Laura S	1326 Becca Teal Pl				Ì	R405327
		H3	Kenny	Daniel P & Khristie K	2675 Henley Dr				T	R405358
	1471	H3	Durham		2677 Henley Dr					R405359
H3-042	14/0 1460	H3	Cortosbador	David A & Jean M	2676 Henley Dr			Round Rock IX	70501	R405350
H3-043	7400	2 2	Costelloadel	7 H	2670 Henley Di			Pound Bock		M403301
H3-045		H3	Nolen	Daniel E III & Nina W	2701 Michelle Lynne Cv				<u> </u>	R405363
H3-046	1468	H3	Skinner	John A & Katie	2703 Michelle Lynne Cv					R405364
	1467	Н3	Brock	James & Noreen	2704 Michelle Lynn Cv			Round Rock TX	x 78681	R405365
Н3-048	1466	Н3	House	Eddis R & Barbara L	2702 Michelle Lynne Cv					R405366
		Н3	Bryan	Rex & Stacie	2700 Michelle Lynn			Round Rock TX	Ī	R405367
	1465	H3	Solum	Wayne Edward & Lela T	1343 Becca Teal Pl				1	R405368
	1464	H3	B&E Ventures Lic		4301 W William Cannon	Ste B150 # 234			T	R405369
	1463	H3	Sharp	Timothy F & Shelle A	1349 Becca Teal Pl					R443073
H3-054			Montoya	Lydia J & Jesus Kevin & Kellie	1332 Becca Teal Pl			Round Bock	X 78681-2242	R405312 R405313
			Long William D & Leslie A Trs Of		50000					
H3-055			Living Trust		1334 Becca Teal Pl			Kound Rock	`	R405314
Н3-056			Kiemsteadt	Cynthia A	1336 Becca Teal Pl					R405315
H3-057			Mcneil	David L & Jeanne M	1338 Becca Teal Pl			Round Rock TX	Ť	R405316
H3-059			Dibari	John T & Sandra M	1342 Becca Teal Pl				78681	R405318
H3-060			Legrant	Robbe S & Sean C	1344 Becca Teal Pl				T	8405319
Н3-061		H3	Clawson	Casey W & Elizabeth V	1346 Becca Teal Pl					R405320
H3-062		Н3	Bhoi	Ananth N & Vidva Pandarinath	1348 Becca Teal Pl			Round Rock	x 78681	R405321
			c						Ť	
H3-063		H3	Sexton	Ray L III & Diane Kallus	1350 Becca Teal Pl			Round Rock TX	× 11	R405322
H3-065	1459	H3	Williams	Shanna David W & Michelle G	1354 Becca Teal Pl			Round Rock TX	78681	R405323
H3-066	1458	H3	Hughes	Bandall A & Julie K	1356 Becca Teal Pl					R405325
		H3	Frans	Allen Marvin	2836 Plantation Dr					R430969
н3-070	1456	H3	Antoine	Glen C & Ametra J	2832 Plantation Dr					R430968
Н3-071		H3	Chapman		ation			Round Rock TX	x 78681	R430967
	1454	Н3	Malluhi	Qutaibah	3419 Shiraz Loop					R430966
	1453	H3	Mcinerney	James P & Charlene L	2820 Plantation Dr					R430965
H3-074	1452	H3	Ward	Terri L	2816 Plantation Dr				TX 78681	R431028
	1451	H3	Walker	Kent E & Sarah M	2812 Plantation Dr			Round Rock TX		R431027 R431026
	1400	CLL CLL	סכוובוס	רפויץ כ ע לחיכי ביי	4000 FIGURA UOTI				Ī	N431020

1449	Н3	Title	Last Name	First Name Suffix		Address 2	Address 3	City Round Bock	State 21p TX 78681	1p Tax ID R431025
1448		H		Bradley A & Kelli M	2800 Plantation Dr			Round Rock	Ħ	-2313
	H3	1	sachs	Derrek & Lindsay	2752 Plantation Dr			Round Rock	Ì	
1447	H33	\prod	Meek	Douglas & Kelly	712 Hidden Glen CV			Round Rock	TX 78681	78681-2422 R460574
1446	H3		Mckerlie	Murray & Nicola	713 Hidden Glen Cv			Round Rock		-2422
	H3		Du	Xiaoyang	805 Folsom Cv			Round Rock	Ħ	
1445	H3	Ţ		Kenneth J & Dana L	801 Folsom Cv			Round Rock	T	
1444	£ £	1	Figurell	James A & Dolly A	800 Folsom CV			Round Rock	TX 78681	/8681-2420 R4605/5
1346	133			Roger F & Lawanda London	815 Hidden Glen Dr			Round Rock		
1345	H3		Abraham	Teil T & Beenu M	812 Hidden Glen Dr			Round Rock	TX 78681	R460545
1343	C3: E3: H3		Darling	Matthew J & Rebecca M	3267 Sanibel Ct			Round Rock	Ť	-2432
1342	C3; E3; H3		Karges	Douglas W & Frankie H	3268 Sanibel Ct			Round Rock	Ī	
1462	Н3		Knorre	Frederick J & Susan M Friksen	2306 Live Oak Cir			Round Bock	TX 78681	R379567
701-	2				2000 can ca			NOON DIRECT		
	H3	F	Keiser Interests Llp		1100 W Old Settlers Blvd	600 Levington Ave	1 33	Round Rock	TX 78681	R324945
			Rhi Inc & Edmond Inestment		3	200	3			
			Group Inc		227 Billingford Dr			Katy	TX 77450	77450-1461 R475074
1460; 1461	1 H3		Faith	Missionary Baptist	1561 Sam Bass Rd			Round Rock	TX 78681	
	Н3		American Freightways Corp		PO Box 840			Harrison	AR 72602	72602-0840 R395788
	H3		Group 1 Realty Inc		800 Gessner	Ste 500		Houston	TX 77024	R543377
	Н3		Austin Mka Investments Ltd		13401 Ranch Road 620 N			Austin	TX 78717	78717-1020 R344967
	C3; E3; H3	Ī	Behrens	Bessie May	PO Box 2529			Round Rock	TX 78680	R325601
H6-001; N-001; N-002; N-003; N- 006; O-002; O-008; U4-001; V4- 027; V4-028; V4-029	C1; C6; F6; G6; H6; L; M; N; O; P; U4; V4		Reagan & Fm 2243 Ltd		100 Congress Ave	Ste 1450		Austin	TX 78701	R032118; R032122; R037216; R037217; R037228; R004385; R504655; R506731; R509659; R512374; R516399
	ij		Leander Developers 4 Ltd		PO Box 249			Leander	TX 78646	78646-0249 R403524
244	12; J2; K4; Q2; T2		Wiseman	Sue	3900 County Road 175			Leander		
241	12; J2; K4; Q2; T2	Ms.	Galloway	Gladys Katherine	C/O Nancy Sue Wiseman	3900 County Road 175		Leander	İ	
241	12; J2; K4; Q2; T2		Galloway Gladys K Etal		C/O Nancy Sue Wiseman	3900 County Road 175		Leander		78641-1603 R031466
241	12; J2; K4; Q2; T2		McCann	Joe Edgar	C/O Nancy Sue Wiseman	3900 County Road 175		Leander		
241	12; J2; K4; Q2; T2	Ms.	Wiseman	Nancy Sue	C/O Nancy Sue Wiseman	3900 County Road 175		Leander		
233; 234	12	Ī	Fuller	-	6200 Acacia Dr			Leander		. [
232	12	Ī	Merritt	William D & Janice L	6201 Acacia Dr			Leander	TX 78641	78641-9370 R037953
	H2; I2; K3; L3; N2; O2; P2; R2		3975 Whitestone Investments Lp		5113 Southwest Pkwy	250		Austin	TX 78735	R468194; R468195
	13; 14		Michaelsen	Scott H & Sheila	500 Whistlers Walk			Cedar Park	TX 78613	78613-6996 R070156
1693	G4; 13; 14; J4]	Flores	Jose Roberto & Vanessa M	1701 Somerset Dr			Round Rock		
1690	G4; 13; 14; J4		Johnson	John Sidney	C/O George Andrew Webb Trust	1002 Aqualine Cove		Round Rock	-	
1691	64; 13; 14; 14	\int	Lusk	Jerome K & Guadalupe B	1627 Peachtree Valley Dr			Round Rock	TX 78681	-1940
1692	64; 13; 14; 14	1	159.0	Jeremy W & Raren D	17 125 Ennis Iri			Austin	Ť	78/1/ R092641
1684	13		Moreno		1621 Peachtree Valley Dr			Round Rock	Ť	
	13			Angela	1619 Peachtree Valley Dr			Round Rock	Ť	
	13		Lancaster	Douglas G & Judith A	1617 Peachtree Valley Dr			Round Rock	TX 78681	R092637
	G4; 13; 14; J4		Clark	Bob Estate	C/O Louise S Clark, Indep Exec	105 Sheraton Dr		San Antonio		
	64; 13; 14; 14	Mr.		Robert Christopher	105 Sheraton Dr			San Antonio	TX 78209	78209-5452 R086183
	G4; 13; 14; J4		Estate of Louise S Clark, Deceased		C/O R Christopher Clark	105 Sheraton Dr		San Antonio	TX 78209	78209-5452 R086183
	64.12.14.14	MAC	+01	Anelo and collect	10E Choraton Dr			Can Antonio	Ť	20200 5452 0086183
1605	64; 13; 14; 34		Holt	Mellisa Ann Clark	1636 Beachtree Valley Dr		1	San Antonio	1	T
1686	G4, 13, 14, J4		Miller	Paul A & IIIIa M	1620 Peacifice Valley DI			Round Rock	Ť	
1607	04, 13, 14, 34		United Total Control of Control o	Ohristophor E	1622 Beachtree Valley DI			Pound book	Ť	Т
1007	54, 13, 14	1	Harrington	Christopher E	1622 Peacitive Valley Dr	+	 -	Kouria Rock	T	
1688	13	1	Amachigh	Shina L & Margaret	717 Oak View Cv			Georgetown		
1689	13			Peter	3202 Clumpgrass Cv			Austin		
	13		Rhodes	Frank P & Karen E	1616 Peachtree Valley Dr			Round Rock	TX 78681	78681-1939 R092650
	13			Ubaldo	1615 Somerset Dr			Round Rock		
1680	G4; 13; J4		Leblanc	Kori K	1712 Somerset Dr			Round Rock		
1681	G4; 13; J4			William C	1801 Sylvia Ln			Round Rock	Ė	
1682	G4; I3; J4	Ĺ		Jav B & Cassandra M	1708 Somerset Dr	+	L	Round Rock	Ť	2062
1664	::(::(::	ſ				_				

Leander-Round Rock 138-kV Transmission Line Project	ctly Affected Landowner List Including Tract IDs and Habitable Structures	
Leand	, Affect	

Striictiires	Seaments	Title	last Name	First Name	x Address 1	Address 2	Address 3 City	1	Zip	×
1641	13							×		R312897
1611	13		Cloud	Ashley Rose	1510 Lantern Light Dr		Round Rock	¥	78681	R312865
1610	13		Wollin	Kimberly M	1508 Lantern Light Dr		Round Rock	ΧŢ	78681-1978	R312863
1609	13		Garcia	Paul L	1506 Lantern Light Dr		Round Rock	X	78681	R312861
1606	13		_	David L & Neva J	1509 Hollow Tree Blvd		Round Rock	Ϋ́	78681-1965	R312808
	13	Mr. &	McRight	William C and Betty S	1507 Wildwood		Round Rock	¥	78681	R312811
	13		Mcright	Wm C & B S Mcright & Wm C & S D Shepard	1507 Hollow Tree Blvd		Round Rock	¥	78681-1965	R312811
	13	Mr. &	Shepard	William C & Shirley D	1507 Wildwood		Round Rock	¥	78681	R312811
	13		Osullivan	Andrea & Robert Gardner	1800 Hollow Tree Blvd		Round Rock	¥	78681-1968	R312772
13-092; 13-093; 13-094	13		Bellamy	Gary	1705 Hunters Trl		Round Rock	¥	78681-1912	R312803; R312804; R312807
1587	13		Franks	Teresa Lyn	1602 Hollow Tree Blvd		Round Rock	¥	78681-2865	R312802
1586	13		Zhlebinkova	Silvia T	1600 Hollow Tree Blvd		Round Rock	¥		R312801
1585	13		Gonzalez	Rufino & Maria F	3400 Cortes PI		Round Rock	¥	9995	R312800
13-098 1584	E) [3		Ide	Kelli & Morgan	1508 Hollow Tree Blvd		Round Rock	¥ }	78681	R312799
	CN (C)		nelidirks	K Naicil	37.00 Fowdernorn Di		NOUTE NOOR	<u><</u>	1000/	NO39201, N312730
	13		Arbuckle	Dennis	1733 Ryon Ln		Round Rock	¥ i		R312797
1605	13		Oliver	Kenneth E & Donell Baird	7806 Nutmeg Cv		Austin	ž į	78750-7805	R064994
1603	<u> </u>		Bellamy	Gary & Cindy	1705 Hunters Tri		Round Rock	× À	78681-1912	R064995
1603	2 2		Douglas	Karah Ellan	1703 Hunters III		Pound Bock	<u> </u>	79691	N064998
1582	2 2		Michella	Debra I	1611 Hinters Tri		Round Bock	<u> </u>	78681-1914	R064998
1581	5 2		Aleman	Lena G & Joe G	1609 Hunters Tri		Round Rock	×	78681	R064999
1580	13		Murray	Mary F	1607 Hunters Trl		Round Rock	¥	78681-1914	R065000
1579	13		Brown	Mitchell L & Bonnie M	1605 Hunters Trl		Round Rock	X	78681-1914	R065001
	13		Easterwood	Michael B	1603 Hunters Trl		Round Rock	ΧL	78681	R065002
1577	13		Warfield	Frank H & Barbara A	1601 Hunters Trl		Round Rock	¥	78681-1914	R065003
1575	13		Uhrich	Constance A	1701 Indian Camp Tri		Round Rock	ž i	78681-1915	R065004
15/3	13		Davila	Errain & Irma A	1706 I at a Tree		Round Rock	× }	78681-1915	KU650U5
1571	2 2		Bealliall	Margaret E	1706 Laugo II Ce		Pound Bock	<u> </u>	79691-1932	NOS2301 POESOOS
13-115:13-117	2 2		Sweet	Robert Lewis & Diana Fav	1710 Latigo Trce		Round Rock	<u> </u>	78681-1932	R092562; R092563
1569	13		Drawer		1707 Indian Camp Trl		Round Bock	ř	78681-1915	8065007
	2						200	<u> </u>	CT CT T000	10000
1567	13		Seaman		1709 Indian Camp Trl		Round Rock	ž ž	78681	R065008
200	13		Willams	Richard C & Georgia A	1/12 Laugo Irce		Round Bock	<u> </u>	79681-1932	K092584
1564	13		West	Clav	1714 Lation Tree		Round Bock	<u> </u>	78681-1909	R092565
1600	5 2		Valle	Frnest C & Maria I	1801 Fawn Ridge Tri		Round Bock	ž	78681-1948	R064952
1578	2 2		Mcintyre	Mark & Diana K	1600 Hunters Tri		Round Rock	×	78681-1913	R064965
1598	13		Gunter	John A	1803 Fawn Ridge Trl		Round Rock	¥		R064953
1576	13		Cruse	Jimmy B & Maria E	1700 Indian Camp Trl		Round Rock	¥	78681-1916	R064964
1596	13		Griffith	James W	4000 Sendero Springs Dr		Round Rock	X	78681-1677	R064954
1574	13		Flanders	Eric I & Julie G & Judith	1702 Indian Camp Trl		Round Rock	ř	78681	R064963
6	2		1 1 2	Steadham			-	À	10000	1100000
1527	2 2		NIII B	Timothy M & Theresa M	1704 Indian Camp Tri		Pound Bock	<u> </u>	79691-1916	NO64933
1502	C C		Domina	Soon W	1275 Calactic Bl		Coatlo Bock	٤ ٤	70001-1910	NOC4302
1592	13		Berzins	Sean V	13/5 Galactic Pi		Castle Rock	3 2	80108	KU64956
15/0	5 5		Martinez	Joe & Lucinda	2451 Feather Ln		New Braunteis	≤ À	79594 4949	KU64961
1590	13		Huey	Inomas B Jr & Margaret	1811 Fawn Ridge Irl		Kound Rock	×	78681-1948	K064957
1568	2 2		Guzman	Michael & Deborah	1/08 Indian Camp Irl		Kound Rock	× À	79591-1916	K064960
1388	13		Mines Richard I & Marianne R	VICKI A	1813 Fawn Ridge Iri		Kound Kock	<u>×</u>	78081-1948	KU04938
1566	13		Cotrustees Of The Wines Revocable		1613 Hermitage Dr		Round Rock	ř	78681	R064959
	13		Brock	William R & Shirley A	1706 Hunters Trl		Round Rock	¥	78681-1911	R064939
1601	13		Beasner	Clair Daniel III And Tami J &	1800 Fawn Ridge Trl		Round Rock	¥	78681	R064938
	!			Mario Nagar						
C	13		П	Sue C	1703 Stagecoach Tri		Round Rock	×	78681-1832	R064935
1599	<u> </u>	Mrs.		Sybil Kay	1802 Fawn Ridge Trail	1000 Form Did control	Round Rock	× À	78681-1947	R064937
1599	13			7 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Sybii Kay Patton	1802 Fawn Ridge I'rl	Kound Rock	× À	78681-1947	K064937
1597	13		Mcdonald	Yvette Z & Michael M	1939 Augusta Ct		Round Rock	×	78681-2173	R064936
								, 1		0001000

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Seorgetown Georgetown

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Seorgetown

520 Susana Dr

C/O Mr and Mrs Donald & Caren Paull

620 Susana Dr 520 Susana Dr

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Paull Donald & Caren (Le) & As Co-Tr Of Donald & Caren Paull Living Trust

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R098352

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Georgetown

78259-0105 F 08530-1641 F 08530-1641 F 78633-4453 F

San Antonio
Lambertville
Lambertville
Georgetown
San Antonio
Georgetown
Georgetown

PO Box 591106
35 Perry ST
35 Perry St
112 Westbury Ln
2551 Gato Del Sol
513 Debora Dr

Archie Don Jr & Holly H Linda K & Gilbert R Mitchell & Sherry Oscar Jr & Eliamar

Herrera Donald G and Caren J Paull, Co-Trustees of the Donald & Caren Paull Living Trust dated May 12,

102 Tanza Ct

Kallus 104 Tanza Court Series

skeaton Realty Llc kallus

1248 1247 1247 1246

1249

15-004

Tract ID	Structures	Segments	Title	Last Name	First Name Suffix	Address 1	Address 2	Address 3	City	State	Zin	Tax ID
13-201	S Paragraphic	13		Peeples			700000		Round Rock		581-2237	R084331
13-202		13	Po	Fonlupt	Angelique Gimenez & Thomas	2001 Chestnut Cir			Round Rock	X	78681 R	R084325
13-203	1545	13	В	nzy	Douglas & Lynn A	2003 Chestnut Cir			Round Rock	ĭ	78681-2149 R	R084322
13-204	1546	13	Pit	Pittenger	David F & Pamela J	2002 Chestnut Cir			Round Rock			R084316
13-206	1531	13	∑ .	Myrick	Walter Asbarry	1907 Chaparral Dr			Round Rock	ž ž	78681 R	R084292
13-20/	1527	13 13	3 5	Carrell	Michael F & Rebecta D	2001 Chaparral Dr			Round Bock			RU84287
13-208	1525	2 2	Ξ̈́	Marrone	James I & Kareen D	2005 Chaparral Dr			Round Rock			R084268
13-210	1523	13	Ö	Graff	Ernest W & Cheryl A	2007 Chaparral Dr			Round Rock		2144	R084265
13-211	1521	13	Se	Seiter	Jan P	2009 Chaparral Dr			Round Rock			R084256
13-212	1519	13	Ä	adding	Justin C	2011 Chaparral Dr			Round Rock			R084255
13-213	1516	13	Ha	Harmel	Jim & Vanessa	2013 Chaparral Dr			Round Rock	X	2144	R084249
13-214		13	W,	Wood Blvd	City of Round Rock	221 Main St			Round Rock	X		
13-215		13	Se	Seguin	Michael D & Kandy M	1602 Woods Blvd			Round Rock		-2150	R044034
13-216	1514	13	Ro	Romero	Chara Green & Jorge	2100 Chaparral Dr			Round Rock			R043999
13-217	1512	13	Sh	Shackelford	Henry H Jr & Shirley F Allen	2102 Chaparral Dr			Round Rock			R044032
13-218	1515	13	B.	Brandt	Bradley C & Sharon E	2101 Chaparral Dr			Round Rock		78681-2147 R	R084243
13-219	1513	13	Vo.	Youseti	Fatemeh	2103 Chaparral Dr			Round Rock			R084241
13-220	1511	13	Ä	KISINBEL	Christing Ann & Charles Filgens	1145 HIII County Road 1458			Itasca			084238
13-222	1510	13	Sh	Shipman		2016 Oak PI			Round Rock	¥	78681-2185 R	R361128
13-223	1509	13	Ka	Kaiser	Colton J & Kelly J	2014 Oak Pl			Round Rock			R361127
13-224		13	Er	Erickson	Donald W & Teresa A	2012 Oak Pl			Round Rock		-2185	R361126
13-227	1508	13	Sc.	Schneider	Geraldine	1206 Chinquapin Ct		J	Round Rock		78681 R	R361111
13-228		13	E.	Euhus	Cory	1207 Chinquapin Ct			Round Rock			R361112
13-229	1507	13	Se	Seevers	Andy Ray & Karen D	1204 Chinquapin Ct			Round Rock			R361110
13-230	1506	13	ď	Duran	Jonathan & Angela	1202 Chinquapin Ct			Round Rock			R361109
13-231	1505	13	Se	Seaborn	Julie Anne	1200 Chinquapin Ct			Round Rock	×	78681-2178 R	R361108
13-234; 13-245		G3; H3; I3			Oak Hollow Inc	PO Box 163265			Austin	¥	78716-3265 R	R360712; R36
13-235	1502	13	FIC	Floyd	Phillip	1902 Oak Hollow Dr			Round Rock	×	78681 R	R361055
13-236	1503	13	Sn	Smith	George S & Linda	1904 Oak Hollow Dr			Round Rock			R361056
13-237	1504	13	Ga	Garcia	Dominique	1906 Oak Hollow Dr			Round Rock		-2180	R361057
13-238		13	ช	Gutierrez	Ricardo & Mayda	1908 Oak Hollow Dr			Round Rock			R361058
13-239	1500	G3; H3; I3	ő	Obrien	Alan D & Brenda	1260 Lacey Oak Loop			Round Rock	T		R361069
13-240	1501	13	5 2	Olvera	Ricardo & Blanca	1258 Lacey Oak Loop			Kound Rock	T	78681-2179 R	K361068
13-241	1400	13 C3. L13. 13	N W	NIXON	Margaret Yvonne	1256 Lacey Oak Loop			Round Rock	T		K361067
13-242	1499	G3; H3; I3	W 4	Walker	David P & Elleen F	1259 Lacey Oak Loop			Round Rock	Ī		K351070
13-243	1498	G3: H3: I3	4	Abbatischio	Michael & Janice	1257 Lacey Oak Loop			Round Bock	<u>۲</u>		R361072
15-001		15: J5: K5	La	Laubach W W Trust	3	8400 Shenandoah Dr			Austin		-5741	R092297
15-002		15	H	Hughes Lera B Estate		PO Box 5838			Austin	×	78763-5838 R	R039319
15-002		15	Ms. Ro	Rost	Ellen Courtney	8404 Emerald Hill Dr			Austin	¥	78759 R	R039319
15-002		15	Mr. Sh	Shia	GeorgeJ	Co-Trustee of the Lera Brock Hughes Trust	3345 Bee Caves RD	STE 104	Austin	¥	78746-5463 R	R039319
15-002		15	Mr. Tro	Troutman	Forrest N	Co-Trustee of the Lera Brock Hughes Trust	3345 Bee Caves RD	STE 104	Austin	¥	78746-5463 R	R039319
15-003		<u>r</u>		Boyd	Donnia & Kandall	No 2			Georgetown	T		8008353
500-61		2	í	DAG.	Anthony I P. Ingo East Bood	100 181128 51			Octobe town:	П		22220

				First Name	Suffix Address 1	Address 2	Address 3 City	State Zip	a x
15-012	1243	15							R098424
15-013	1242	15	Fagan	Matthew J & Karen M	516 Susana Dr		Georgetown		R098425
15-014	1241	15	Walters	Allison R	514 Susana Dr		Georgetown	TX 78628	R098426
15-015	1240	15	Hand	David A & Marie A	105 Linda Ct		Georgetown	TX 78628	R098427
15-016	1239	15	Durell	David J & Emily R	104 Linda Ct		Georgetown		R098428
15-017	1238	15	Hansen	Steven A & Beverly J	103 Linda Ct		Georgetown	TX 78628	R098429
15-018		15	Field	Lauren & Bryan J	101 Linda Ct		Georgetown	TX 78628	R098430
15-019		15	Mclaughlin	Michael & Christa	519 Susana Dr		Georgetown	TX 78628-8817	R098326
15-020		15	Milot	Paul J & Anne-Marie	517 Susana Dr		Georgetown	TX 78628-8817	R098327
15-021		15	Boyd	Margie M	515 Susana Dr		Georgetown	TX 78628-8817	R098328
15-022		<u> </u>	Georgetown Isd		603 Lakeway Dr		Georgetown		R040921
15-023			Smith	Melba F	104 S Ridge Ct		Georgetown	786	8049815
					Social Control of the			T	
15-024			Dalrymple	James	102 S Ridge Ct		Georgetown	TX 78628-8226	R049817
15.035		<u>u</u>	2000	Pobort W. & Erancino I	100 S Bidon Cir		Googgaphan	UCC0 0C302 VT	B0.408.20
15.025		2 4	Elicksoll Do La Voca	Malica & Bishard	1003 Nidge Cil		George	1	NO45830
020-61		0 !	De La vega	Mellssa & Richard	TOT SOUTH KINGE CIL		uwojagioan		KU497.38
15-02/	1237	15	Juenis 1910 Lic		1918 Leander Rd		Georgetown	1X /8628-8835	R31/649
15-028		15	Gte Telephone Operations		Attn: Verizon Southwest	PO Box 152206	Irving		R317650
15-029		15	Burkhart	Brian Keith	415 South Ridge Cir		Georgetown	TX 78628	R049753
15-030		15	Hertel	Gary & Cecilia	417 S Ridge Cir		Georgetown	TX 78628-8216	R049754
15-031	1236	15	Enis	James	431 Patricia Rd		Georgetown	TX 78628	R049736
15-032		15	puodng	Javier & M Patricia Nava-	119 Red Oak Ct		Georgetown	TX 78628-8247	R351726
			-	DuodnQ			,	T	
15-033	1235	15	Kelly	Jacqueline L & Kerry E	117 Red Oak Ct		Georgetown	TX 78628-8247	R351725
15-03/	1234	ŭ	Craft	a joint & O bleace	7 Yeo Loak C+		Georgetown	TX 786.28-82.47	R35172A
+50-C	+671	2	i di	NOTIGIA C & EIST	TTO Ned Oak Ct		George Gown		N331/24
15-035	1233	15	Colletti Dennis P Trustee Of The Dennis P & Janene C Colletti Living Trust	8 0	113 Red Oak Ct		Georgetown	TX 78628	R351723
15-036	1232	15	Vidales	Jose Luis & Lidia	21851 Eccles St		Canoga Park	CA 91304-2505	R351722
15-037	1231	15	Kimber	Walter L & Gayle A	109 Red Oak Ct		Georgetown	TX 78628-8247	R351721
15-038	1230	51	Herrera	Allison Marie & Albert Iii	107 Red Oak Ct		Georgetown	TX 78628	R351720
15-039; S-023; S-024		15; S	City Of Georgetown		PO Box 409		Georgetown	TX 78627-0409	R054284; R477340; R481485
15-040		15	Parish	Kevin E & Lindsay R Whittington	105 Oakmont Ct		Georgetown	TX 78628	R304048
15-041	1229	<u>r</u>	Thomas Fred & Charlotte B		103 Oakmont Ct		Georgetown	TX 78628-8208	B3040.47
15-042	6444	5	Bargainer	Timothy A & Annette L	101 Oakmont Ct		Georgetown	T	R304011
15-043		15	Stull	Wilma	103 Riverview Dr		Georgetown		R304124
15-044		15	Texas Parks Recreation Foundation	lon	PO Box 409		Georgetown	TX 78627-0409	R304123
2000		71 - 12	Georgetown		40 design M 1 6 6 6	000	o significant	T	0170010
J-002	16	A1; 15; 35 E; 1; K	Lamy 2243 Ltd Droptini J W & Jan		1/1/ W Sixth St 2999 Hero Way	Ste 390	Austin Leander	TX 78641-1628	K500156 R031285
11-001; 11-002; 5-033		A5; I1; J1; L4; M4; N4; O4; P4; Q; Q4; R; R4; S; T; U; V; V4; W4; X; X4; Y; Y4; Z4	Csm-Mason Family Lp		75.15 Stone Cliff Cir		Austin	TX 78731	R032112; R032113; R032121
13-001		J3; K3; M2	Cedar Park Automotive Ltd		3909 E Central Texas Expy		Killeen	TX 76543	R475129
13-002	228; 229	J3; K3; M2	Amaral Julia R Trustee Of Julia R		PO Box 1450		Nevada City	CA 95959	R475128
13-003	227	13	Bfpc-Austin Llc		PO Box 382.99		Dallas	TX 75238-0299	R475127
J3-004; J3-005		£(f	Sealy Whitestone Llc		333 Texas St	Ste 1450	Shreveport	15	R314530; R318983
									RA31102 - RAA2A03 - RA51A0A -
J3-006; N3-243; N3-251; N3-278; N3-282; N3-284; N3-287		J3; N3	Cedar Park City Of		450 Cypress Creek	Bldg 1	Cedar Park	TX 78613	N451102, N442403, N451404, R457447; R461659; R461675; R472292
13-007		13	Ms. Chernosky	Patricia Ann	162615THST		Hempstead	TX 77445-5863	R314532
13-007		13		Janice Annette	C/O Patricia Ann Chernosky	1626 15TH ST	Hempstead	İ	R314532
13-007				BobbyLee	C/O Patricia Ann Chernosky	1626 15TH ST	Hempstead		R314532
J3-007			Mr. Moore	Doyle Randic	C/O Patricia Ann Chernosky	1626 15TH ST	Hempstead	TX 77445-5863	R314532
13-007	177	133	Moore Doyle Randic Etal		C/O Patricia Ann Chernosky	1626 15Th St	Hempstead		R314532
900-57	717	Cr.	OCC COW FRINWRY EIL	1	407 Ethniuge	+	Masuu	1	N32/4/6

1								417			<u> </u>
Iract ID	215; 216; 218;	gments	Whiteston	e Parmer Development	FIIST NAME SUMIX	Address 1	7	Address 3 City		e e	laxiu
13-009	219; 220	13	Llc				Ste 111	Αr			R536955
J3-010	214	13	Rve Partners Ltd	ners Ltd		3322 Longmire Dr	Ste 300	Co	College Station TX	77845	R442401
J3-011		13	Randolph	Randolph-Brooks Federal Credit Union		1 Randolph Brooks Pkwy		Liv	Live Oak TX	78233-2416	R517844
J3-012		J3; K2	Honeyco	Honeycomb Enterprises Llc		501 Honeycomb Rdg		Au	Austin	78746-5326	R505953
J3-013	213	13	Universit	University Federal Credit Union		PO Box 9350		Au			
J3-014 K-001	212	J3; K2; N3 K· I 4· S4	Oxhart Ltd Ssa Investn	Oxhart Ltd		1917 Arroya Rd		D S	Dalhart TX	79022	R442399
K-002; K-003; K-004; K-005		K; L4; S4	Greene		Shari Carmody	17601 Ronald W Reagan Blvd		Le			R031758; R097980; R098017;
K-006		~	Singleton		David Allen	PO Box 984		Le	Leander	78646-0984	
K-009; K-010	24	~	Price		David Lee & Joanna	3556 Hero Way		Lei			
K-011		¥	Bradley	<u>-: 0</u>	Jack Scott & Amy L& Brian Gregory Holmes	3486 Hero Way		Le	Leander	78641	R405780
K-012	21; 22	~	Presler L.	en L Tr Of The		PO Box 175		Le	Leander TX	78646-0175	R031352
K-013		~	Olson	Olson	rian & Charity M	Gregory & Hattie E Olson	PO Box 2665	Ce	Cedar Park TX		R418533
K-014		×	Hoskins		Charles G & Patricia C	3350 Hero Way		Lei		78641-1632	
K-015		×	Hoskins	O	harles Todd & Terry Lynn	3304 Hero Way		re'			R449650
K-016; K-017; K-018		¥	Miller	ב	Larry G & Leslie M	3250 Hero Way		Lei	Leander TX	78641-1631	R508113; R508114; R508115
K-021		~	Carter	S	Stella	PO Box 958		Ce	rk		
K1-001		B5; C5; D6; K1	Kane		tichard	109 Valley View Dr		e le	Leander	78641	R038335
X1-002	g	B5; C5; D6; K1; X4; Y4;	Dono		David N.S. Anno I	200 County Dood 177		פֿ ע			
NT-003	66	24	adou		avid iv & Allie L	343 COUNTY NORU IV		ונ			1424030
K1-004		K1	Mackinlay		Brian & Mark Webb	105 E Valley View Dr		. Fe	-		
K1-005		KI	Prewitt		Edwin A Jr Markus M	C/O Jeanne Prewitt May	5302 N Scout Island Cir	Ar.			
K1-007; K1-010		H1; I1; K1; V4; W4; X4	Thomas		oger Gerald & Dianne	480 County, Road 177		Le	Leander	78641-2532	R031564; R032131
K2-001; K2-002; K2-009		J3; K2; N3	Faro Llc			PO Box 2494		Σ	Midland	79702	R357656; R425496; R519095
K2-003; K2-004; K2-005		K2	7-Eleven Inc	Inc		1722 Routh St	Ste 1000	Da	Dallas TX	75201-2506	R502515; R502516; R505326
K2-006		K2	3Dc Ron	3Dc Ronald Reagan Blvd Llc		6801 River Rd	108	S	Columbus GA		R521248
K2-007			Pisces Foods Lp	oodsLp		1504 W 6Th St		Ar		T	
K2-008		K2	Walmart	Walmart Real Estate Business Trust		2001 Se 10Th St		Be	Bentonville AR	72716-0550	R521246
K2-010; K2-011		K2	Krienke		Theophil Jr & Sharon R	PO Box 306		Ro	Round Rock TX	78680-0306	R418509; R519111
K2-012; K2-013		B2; E2; K2	Krienke	<u></u>	R	PO Box 306		Ro	Rock		
K2-014		K2	Westban	Westbank Development Llc		4200 Waters Edge Cv		Au	Austin TX	(78731-5139	R538910
K2-015		К2	Spanish (Spanish Creek Development Inc		4801 Mondonedo Cv		Au	Austin TX	78738	R537944
K2-016; K2-017; K2-018			Lansford Lansford	Lansford Daniel C & Ralph E Lansford & Lansford Family Lp		100 Old East County Road 180		.e.	Leander	78641	R031404; R327159; R435546
K3-001; K3-003; L3-016		J3; K3; L3; M2; O2; P2; R2	Cedar Pa	Cedar Park Land Lp		13492 N Highway 183	120-236	Pη	Austin TX	78750-2252	R050817; R102399; R327186
K3-002		J3; K3; M2	Cleo Bay	Cleo Bay Imports Ltd		3907 E Cen-Tex Expy		Kil	Killeen TX	76543	R315794
K4-001; K4-002; K4-003	240; 242	12; J2; K4; Q2; T2	Davis	<u>ĭ</u>	Judith L	463 Chimney Cove Dr		Ĕ	Marble Falls TN	78654-3339	R031497; R031501; R524515
K4-004	239	D2; K4	Romp N Run Holdings I Ic	Romp N Run Ranch Real Estate		3700 Cr 175		Le	Leander	78641	R031500
K4-005			Eckart		teve	PO Box 170309		Au			R037956
K4-006			Shepherd		Stephen C & Sonja D	6310 Acacia Dr		Lei			
K5-008		KS.	Lcra Trar	ission Serv Corp		C/O Lcra	3700 Lake Austin Blvd	Au			_
L-007			Sommerteld	eld	John David & Tyla Fay Jack W Jr & Betty A	101 Windemere W PO Box 747		Me	Mercedes TX	78641-1625	R037149
F-009	35	-1	Mahendru		Devidass	9708 Oxaus Ln		PΛ	Austin		R031397
1-011			Mc Keithlev		Fvelvn	2500 CB 258		į	liherty Hill	78642	4/2
L-011		1 1			Susan Presley	3530 Four Trees Dr		Ň	rd		N/A
L-011		1			Ken	McKelvey	3530 Four Trees Dr	W			
L-011		4-	Ms. Wiley		Hazel L Flizabeth A	1105 Madrone Trail		e le	Leander TX		N/A 8037152
L-013			Johanne	sen	Frederik O J & Tammy R	127 Windemere W		Lei			R037153

Tract ID Structures	Segments .	Title	e	9		Address 2 Addre	Address 3 City	State		TaxID
L-014				Jeffrey M	133 W Windemere		Leander	¥:	78641	R037154
1.017			Moore	Mark Andrew	819 Rystrom Run		Chesapeake	¥ À	23320-3583	R473644
L-018 L-019		Ĭ	of Leander	William Edward	L43 N Windemere C/O Gerald Agiewich	109 Randolph	Georgetown	××	78646	R091801
L-020	1		Covert Paul Blanton (Rs) & Cynthia Shadd Covert (Rs)		PO Box 1449		Leander	¥	78646-1449	R037156
L-021; L-023	1	Ī	Nk Land Investments Lic		PO Box 572		Burnet	ř	78611-0572	R031304; R433132
L-024	1		Hill Country Fellowship		8754 Ranch Road 2243		Leander	¥	78641-1623	R433129
L1-001; O1-020; Q1-001; W5-030	A5; B5; E6; L1; M1; N1; O1; P1; Q1; S1; T1; W5		Simpson	Peggy Borho	2855 County Road 175		Leander	¥	78641-1654	R031570; R338810; R338811; R525814
L1-002; L1-003; P1-001; P1-022; T1-001; T1-002; T1-008; T1-012; T1-016	L1; N1; P1; Q1; 71		Trais At Shady Oak Residential Community		8920 Business Park Dr	Ste 350	Austin	¥	78759	RS26456; PS 26465, RS2 6466; RS26467; RS32209; RS32256; RS32283; PS32305; RS32306
L1-004			Edhara	Satish Chandra & Pushyami Garimidi	2213 Blended Tree Ranch Dr		Leander	¥	78641	R526468
11-005		Ī	Katapally	Praveen	2209 Blended Tree Ranch Dr		Leander	¥	78641	R526469
L1-006				Henry A & Elena Rea	2205 Blended Tree Ranch Dr		Leander	X	78641	R526470
11-008			Golden	Leroy D II & Jennifer	4121 Trinity Woods St		Leander	Ϋ́	78641	R526472
11-009; 11-012	11		Parkside At Mayfield Ranch Mud		C/O Sue Brooks Littlefield	100 Congress Ave Ste 1300	Austin	¥	78701-2744	R489465; R493082
L1-010				Mike A & Anna	109 Admiral Nimitz Ct		Georgetown	X	78628	R489473
L1-011	A5; B5; L1		Parkside At Mayfield Ranch Ltd		1011 N Lamar Blvd		Austin	ř	78703-4991	R494159
L1-013		_	Parkside At Mayfield Ranch Master Community Inc		PO Box 342585		Austin	ř	78734	R493081
L1-014				Shane T & Patricia A	141 Fort Mabry Loop		Georgetown	X	78628-7199	R493035
11-015				Nicole	145 Fort Mabry Loop		Georgetown	ΥÀ	78628	R493036
L1-016 L1-017		Ī	Hudson J	Mark & Jennifer Jason & Stacy	149 Fort Mabry Loop 153 Fort Mabry Loop		Georgetown	××	78628	R493038
L2-001 210	J3; K3; L2; M2	ľ			Attn: Premier Animal Hospital	3651 E Whitestone Blvd	Cedar Park	¥	78613-6923	R456804
L2-002 209	J3; K3; L2; M2		3621 Whitestone Blvd Llc		2055 Third Ave	Ste 200	San Diego	5	92101	R456805
L2-003 207; 208	L2; M2	_	Toro Grande Business Condominiums		C/O Toro Grande Owners Association, Inc	300 Brushy Creek # 401	Cedar Park	¥	78613	R461211
L2-004 206 L2-005 205	L2; M2 L2		1200 Toro Grande Llc Toro Grande Futbol Llc		1200 Toro Grande Blvd 2708 S Lamar Blvd	Ste 200A	Cedar Park Austin	<u> </u>	78613	R456807 R456808
	12			Stacy L & B Hunter Shadburne		Ste 105	Cedar Park	¥	78613	R475171
L2-007 204	L2		Splash Swimming Partners Lp		1310 Toro Grande Blvd		Cedar Park	¥	78613	R475172
L2-008; L2-009 203	12		Junior Volleyball Assoc Of Austin		425 Woodward St		Austin	¥	78704	R475173; R475174
				Billie Mae Ragan	C/O Dennis Moore	1600 Toro Grande Dr	Cedar Park	¥	78613-7581	R314541
12-010 202				Dale	C/O Dennis Moore	1600 Toro Grande Dr	Cedar Park	Ϋ́	78613-7581	R314541
	1.2	Mr.	Moore	Dennis	1600 Toro Grande DR	1600 Toro Grando Dr	Cedar Park	× }	78613-7581	R314541
				Steve	C/O Dennis Moore	1600 Toro Grande Dr	Cedar Park	¥¥	78613-7581	R314541
	L2		oy Estate		C/O Dennis Moore	1600 Toro Grande Dr	Cedar Park	¥	78613-7581	R314541
L3-001 752	L3; M3; O3		ın	Klaus	5301 Thousand Oaks Dr		Round Rock	¥	78681-1314	R037896
	L3; M3; O3			Daniel T & Darlene W	1601 Kramer Ln		Austin	ž į	78758	R037897
13.003 750	2		Mckenzie	Mark S & Claudia D	2403 Engage Column		Round Rock	× À	78680-1503	R037934
	13			Michael & Mican C	2403 Spanish Oak Tri		Round Rock	××	78681-1313	R037910
L3-006 748	L3	ĺ	h	David J	2402 Spanish Oak Trl		Round Rock	¥	78681-1311	R037911
	F3		rd		2400 Spanish Oak Trl		Round Rock	¥	78681	R037912
	13			Jennifer A & Glenn E Muniz	119 Raley Rd		Cedar Park	ř	78613	R037981
L3-009 746	13		wood		125 Raley Rd		Cedar Park	ΥÀ	78613	R037982
	13		Chantal	Robert A & Irisha Kene Matthew I & Geraldine A	127 Kaley Kd 129 Raley Rd		Cedar Park	××	78613	K300064
L3-012	2 22	ľ			110 Martins Cv		Cedar Park	ř	78613-7668	R488844
	L3		þ	Khaldoun A B & Elizabeth	100 Martins Cv		Cedar Park	¥	78613	R488843
	13	Ĭ		Michael C & Stacy W	230 Raley Rd		Cedar Park	ΥŘ	78613-6911	R037990
L3-015 743	L3	ſ	Williams	Steve L & Carolyn G	220 Raley Rd		Cedar Park	<u> </u>	78613-6911	R080982
	3]		riorenum r	ZIU naiey nu		רבחמו נמוע	<u> </u>	10013-02-44	KU3/552

Tract ID Str	Structures	Segments Ti	Title Last Name	First Name Suffix	x Address 1	Address 2 Address 3 City	City	State Zip	TaxID
			Fu	Owen W	13012 Tilghman Trl		Austin		-4635
L3-019		13	Burns	Heather M & Eric W Ramon & Emma	108 Raley Rd		Cedar Park	TX 78613	78613 R499144
13-021-13-022-023		13: B3	Galloway	G Katherine Mccann	AO30 F Whitestone Blvd		Coder Dark		
L3-U21, L3-U22, L3-U23		L3, N2	Calloway	o naurelline Miccallin	+030 E WILLESTOILE BIVO		Cedal rain		
L4-001			162 Parker Ranch Holdings Ltd Highland Homes - Austin Ltd		2622 Commerce St 5601 Democracy Dr Ste 300	F12	Dallas		75226-1402 R346187 75024-3674 R529486
14-003				Staley Jr & Monica M	305 Old Pecan Ln		Leander	TX 78641	
L4-004				Matthew F & Michelle M	309 Old Pecan Ln		Leander		
L4-005			M & R Lewis Land Holdings Inc		1801 Ocean Dr		Corpus Christi	TX 7840	78404-1867 R333724
14-006			Hansen	Allen P	355 County Road 264		Leander		-
L4-007 L4-008		14	Mcarthur	Karen Jeanette	354 County Road 264 200 County Road 264		Leander		/8641-1620 R462/24 78641-1620 R310659
72		4		Carol Stipanovic & Michael	121 Creekview Cir		leander		
				Robert Mize	0000 MC00		A.:.+in	T	
L4-010			narvey	Jay & Michelle	8924 JOACHIM EN		Austin	T/9/ Y	. [
L4-012; L4-013; L4-014; L4-015		K; L4; S4	Moore	Jimmy & Elsa	9409 Mesa Verde Cir		Waco	TX 7671:	76712-6480 R473778
L4-016 25;	25; 26	K; L4; S4	King	Franklin L & Barbara	17600 Ronald W Reagan Blvd		Leander		78641-1671 R032144
L4-017		14	Albrecht	William S & Paradee	17640 Ronald W Reagan Blvd		Leander	TX 78641	R032146
L5-001; L5-002		B2; L5; R1; U1; U1a	Bad Land Inc		1501 Cr 256		Liberty Hill	TX 78642	R514458; R514459
M1-002		M1; 01	Pilgrim	Clinton P & Laura Kathleen	3809 Carya Dr		Leander	TX 78641	L R533385
M1-005		M1	Adusumalli	Hanumantharao & Naga C	3800 Carva Dr		Leander	TX 78641	R533389
				Jampani					
M1-007		M1	Buddha	Naveen Kumar & Geetanjali Saragadam	3728 Carya Dr		Leander	TX 78641	L R533388
M1-009		M1	Barnett	Charlotte Dugas & Richard A	3720 Carua Dr		Leander	TX 78641	L R533387
M1-013		M1	Botla	Ganesh & Siva Lakshmi	3709 Carya Dr		Leander	TX 78641	
M1-023		M1	Murki	Srikanth & Sabitha Komeravelli	2316 Millbrook Loop		Leander	TX 78641	L R522845
111-024	2	NA1	Villarroal	Dodro E & Laura I	2317 Milhrook Loop		Loopdor	T	DE222011
M1-025	2	M1	Dasi		2321 Millbrook Loop		Leander	TX 78641	
M1-026 1111		M1	Bicknese	Sue A & John E	2325 Millbrook Loop		Leander		
M1-027		M1	Yenumula	Narendar Reddy & Hima B Poreddy	2329 Millbrook Loop		Leander	TX 78641	R522814
M1-028		M1	Lee	Pauline	2333 Millbrook Loop		Leander	TX 78641	L R522815
M1-029 108		C5; D5; M1	10	Anna	3617 Journey Pkwy		Leander	TX 7864	78641-2581 R031531
	230; 231	G2; H2; I2; J3; K3; L2; L3; M2; N2; O2; P2; R2	Whitestone Boulevard Ltd		1408 Rivercliff Rd		Spicewood		78669-2649 R314538; R314539; R314540; R347509
	.1	L3; M3; O3	Cockle	John D & Seantel M	5410 Thousand Oaks Dr		Round Rock		
		M3	vasser	Amy & Chris Kjeldsen	5401 Sam Bass Rd		Round Rock		-1319
M3-003 740	0	M3; S2; Y2		Melinda	5411 Sam Bass Rd		Round Rock	T	
M3-004; R2-009		M3; Q2; R2; S2; Y2	Urbanczyk	M A & Linda G	3001 Spanish Oak Trl		Round Rock	TX 7868:	78681-1322 R037927; R037938
M4-001 28:	28; 42	L4; M4; N4; R4; S	Lewis Ronald G & Madeline K Trustees M & R Lewis Living Trust		1801 Ocean Dr		Corpus Christi	TX 7840	78404-1867 R032147
N-004; N-005		M; N; P	Southwestern Bell Telephone Lp		Property Tax Department	909 Chestnut St Rm 36-M-01	St Louis	MO 6310	63101-3002 R327126; R473808
N1-001 133	13	M1; N1; O1	Russell	Jane Simpson & John R Russell	2310 County Road 175		Leander	TX 7864	78641-1658 R407805
N1-002		11	Ledbetter	Paul G & Christy D	2300 County Road 175		Leander	TX 7864	78641-1658 R407804
N3-001; N3-002	123	A4; B4; B4a; N3; U3	Guenther	Karen Sparks	PO Box 1629		Estes Park	CO 8051	80517-1629 R074879; R393204
N3-003; N3-006	12.2	N3	Thomas	Joseph Alan & Julie Ann	3001 Fox Hollow St		Round Rock	TX 7868	78681-1706 R074880; R393203
N3-004 1021	121	N3	Nicholes	Phillip B & Ja Nae	3003 Fox Hollow St		Round Rock	TX 7868:	78681-1706 R074881
					:				
N3-005; N3-007 10;	1020	N3	Logozar	Michael	3005 Fox Hollow		Round Rock	TX 78681	L R074882; R512195
N3-008; N3-009		N3	Liggett	Steven A & Kyle M	1804 Whip O Will St		Round Rock	TX 7868:	78681-1726 R074885; R329696
N3-010		N3	Brown	Rodney Allen & Lynn Ann	1803 Whip O Will St		Round Rock	TX 7868:	78681-1726 R074886
N3-011		N3	Tuxhorn	Douglas W & Kelly A	8707 Sea Ash Cir		Round Rock	TX 7868	78681-3423 R379820

Ash Cir. Ash Ci	ID Structures	S Segments	Title	Last Name F	First Name Suffix	fix Address 1	Address 2	Address 3	City	State Zip	TaxID	(ID
1014 0.0		N3			ebecca H & Steven J	8629 Sea Ash Cir					-3434	R390855
1932 40 10 10 10 10 10 10 10		N3		nc	hristopher D & Sheba M	8627 Sea Ash Cir						R390856
10.000 1		N3			eith A & Tasha R	8625 Sea Ash Cir				T		R390857
10.00 10.0	1014	N3			obin J & Sherri L	8623 Sea Ash Cir				TX 7868	3434	R390858
1935 14 15 15 15 15 15 15 1	1013	N3			obin Lynn	8621 Sea Ash Cir			Round Rock	TX 78681		R390859
10.00 10.0	1012	N3			haun	8619 Sea Ash Cir				П		90860
100 60 100	1011	N3			andra M	8617 Sea Ash Cir						R390861
1939 94 Matter & Journey (March & August & Ball Stand) RESPECT OF CONTROL OF CO	1010	N3			regory Scott & Mohra K	8615 Sea Ash Cir						R390862
1007 100 World Michael Michael Michael Month Control Ling State And Control Month Control Ling State And	1009	N3			Ivin C & Joan E	8613 Sea Ash Cir			Round Rock	TX 7868	78681-3433 R39	R390863
10.00 1.00	1008	SN N		Wood Mitchell J & Deanna L Wood		8611 Sea Ash Cir			Round Rock	TX 78681		R390864
1007 14 1 1007 14 1 1007 14 1 1007 14 1 1007 14 1 1007 14 1 1007 14 1 1007 14 1 1007 14 1 1007 14 1007 1007 14				ees OI WOOD LIVING II UST								
100 101	1007	N3			obert C & Renate	8609 Sea Ash Cir				Ì	78681-3433 R39	R390865
10.00 Process Proces	1006	N3		-	cott A & Pamela S	8607 Sea Ash Cir			J			R390866
10 10 10 10 10 10 10 10		N3			teven H & Lesley C	8605 Sea Ash Cir				,	-3432	R390867
813 Disciplination Design of Section Design of		N3			llison P & Derek S	8603 Sea Ash Cir						90868
81 Morent DOMONT & RAW WWY TOSTO SHALL CORRECT CORNING MORENT CORNING MORENT TOSTO SHALL CORRECT CORNING MORENT TOSTO SHALL CORRECT CORNING TOSTO SHALL CORRECT CORNING MORENT CORNING TOSTO SHALL CORRECT CORNING CORNING TOSTO SHALL CORRECT CORNING CO		N3			eith & Sheri	1704 Fawn Cv				TX 78681		R074889
10 10 10 10 10 10 10 10		N3			avid K & Amy W	1703 Fawn Cv			Round Rock			R074890
RS NATE (STATE OF THE CONTROL OF A CONTROL		N3			ames K Etux	1703 Deer Chase Cv			Round Rock	TX 7868	78681-1754 RO	74907
10.000 Career C		N3	Mrs.		/anda K	1703 Deer Chase Cove						R074907
10 10 10 10 10 10 10 10		N3			andell M & Holly S	1700 Deer Chase Cv			Round Rock	Ė	78681-1754 RO	R074908
10,000 1		N3				1701 Still Meadow Cv			Ų.	TX 7868	78681-1751 ROT	R074911
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100 100		S 23		-		17.05 Blue Heron Cv			Rock			R074915
(1) (1) <td></td> <td><u>}</u></td> <td></td> <td>Living Trust</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		<u>}</u>		Living Trust								
NB Perceboom Marcos de Rances 1709 Possum Trot St NB Weberboom Trochone & Fances 1700 Possum Trot St NB Herceboom Princis & Fainter 1700 Possum Trot NB Herved Memon R & Breet LT of Clinic Manage Annual Manage Annual Manage Annual Man	-035	e Z		Ragula Vitaut M & Susan M Tr Of Ragula Living Trust		1701 Blue Heron Cv			Round Rock	TX 7868	78681-1750 RO	R074916; R074917
83 Wickelom Theodolic & Frances 1702 bossum Tot St 83 Jackson Harveellung Trust Binne & Kreit 1704 bossum Tot 83 Harveellung Trust Ordologae & Frances 3601 Oak Mandow Dr Profit of & Mandow 83 Goode Ordologae & Frances 3601 Oak Mandow Dr Profit of & Mandow 84 Linton Howard L & Susan K 7000 Mills Bulf Tri Profit of & Carrier 84 Match Trone & Applie Bulf Tri Profit of & Carrier 7000 Mills Bulf Tri 84 Match Trone & Applie Bulf Tri Profit of & Carrier 7000 Mills Bulf Tri 84 Match Trone & Applie Bulf Tri Profit of & Carrier 7000 Mills Bulf Tri 84 Match Trone & Applie Bulf Tri Profit of & Carrier 7000 Mills Bulf Tri 84 Demokron French 1700 Mills Bulf Tri 1700 High Bulf Tri 84 Demokron French Bull 1700 High Bulf Tri 1700 High Bulf Tri 84 Demokron Graft & Lane & Carrier 1700 High Bulf Tri 1700 High Bulf Tri		N3		om	1arco & Clarissa	1709 Possum Trot St				TX 7868	1709	R074923
NB Hardscon Britan & Kriett 1700 Possum Trot NB Harwell Living Trust Partick & Allectie & Francés 1704 Possum Trot NB Harwell Living Trust Partick & Allectie & Francés 5607 Ola Meadono Dr NB Cates Bronder Broaden T & Chriefy N 2000 Ling Broad Trot NB Cates Partick & Allectie & Sistan R 7000 Ling Broad Trot NB Andrecker Broaden T & Chriefy N 7100 Ling Broad Trot NB Broaden Trot Partick & Sistan R 7000 Ling Broad Trot NB Broaden Trot Particker 7100 Ling Broad Trot NB Broaden Trot 7100 Ling Broad Trot NB Broaden Trot 7100 Ling Broad Trot NB Campbon Fronty 7101 Ling Broad Trot NB Broaden Richard A & Wanel C Stephen J & Sarah L 9000 Samburst Ter NB Broaden Richard A & Wanel C Carrier Broaden Richard B All Trot 7101 Ling Broad Trot NB Broaden Richard A & Wanel C Carrier B All Trot 7101 Ling Broad Trot 7101 Ling Broad Trot		N3			heodore E & Frances	1701 Possum Trot St			Round Rock		1709	R074924
N3 Hawwell Informatin R & Bantet T Tro of Patrick & Albeita & Frances 3601 Oak Meedow Dr. N3 Goode Ordone Ordone 2001 Oak Meedow Dr. N3 Cates Banto Depart & Christoph N 2002 Oak Meedow Dr. N3 Miller Paul M & Christoph N 2002 Oak Meedow Dr. Depart & Christoph N N3 Miller Paul M & Christoph N 2002 Oak Meedow Dr. Depart M & Christoph N N3 Mordon Percent Lee Traver & Anjeka 7002 Mg Burd Tri N3 Mordon Percent Lee 2002 Meedow Dr. 2002 Meedow Dr. N3 Pheego Percent Lee 2002 Meedow Dr. 7002 Mg Burd Tri N3 Pheego Devel Renning Renn Oline 2002 Suburust Ter 2002 Meedow Dr. N3 Pheego Devel Renning Renn Oline 2002 Suburust Ter 7001 Mg Burd Tri N3 Pheego Devel Renning Durf Tri 7001 Mg Burd Tri 7103 Mg Burd Tri N3 Pheego Devel Renning Devel Renning Devel Renning Devel Renning Devel Renning Devel Renning Devel Renning Devel Renning Devel Renning Devel Renning Devel Renning Devel Renn		N3			rian & Kristi	1700 Possum Trot			Round Rock	TX 78681		R074925
N3 Goode Patrick & Allecia & Francés 3601 Oak Neadow Dr N3 Crées Branch Miles Franchon T & Chricky N 3607 Oak Neadow Dr N3 Linton Houril & Schain R 7002 High Builf Tr POOR High Builf Tr N3 Motal Trave & Appellace 7002 High Builf Tr POOR High Builf Tr N3 Motal Trave & Appellace 7002 High Builf Tr POOR High Builf Tr N3 Motal Franched 7002 High Builf Tr POOR High Builf Tr N3 Campbel Franched 7100 High Builf Tr POOR High Builf Tr N3 Campbel Franched 7100 High Builf Tr POOR High Builf Tr N3 Fluckger Grant & Strant Cline 9002 Surburst Ter 9002 Surburst Ter N3 Fluckger Stephen I & Sarah L 9003 Surburst Ter 7103 High Builf Trl N3 Fluckger Grant & Lucra E 7004 High Builf Trl 7103 High Builf Trl N3 Fluckger Grant & E Surae 7003 High Builf Trl 7103 High Builf Trl N3 Akby		N3		Harwell Herman R & Janet L Trs Of Harwell Living Trust		1704 Possum Trot			Round Rock	TX 7868	78681-1709 RO	R074926
NB Cates Bizundon T & Christy N 3607 Oak Meadow Dr NB Milleer Pounder T & Christy N 3507 Oak Meadow Dr NB Banks From Moral E & Strian R 7000 High Builf Trl NB Moraledecter Ricen E & Strian R 7000 High Builf Trl NB Moraledecter Ricen E & Strian E 7100 High Builf Trl NB Campbell Front & American E & Strian E 7100 High Builf Trl NB Campbell Front & American E & Strian E 7100 High Builf Trl NB Fround Repeal Strian E & Strian E 9002 stributust Ter NB Fround Repeal Strian E & Strian E 9003 stributust Ter NB Fround Repeal Strian E & Lurin E 700 High Builf Trl NB Fround Repeal Strian E & Lurin E 700 High Builf Trl NB Fround Repeal Strian E & Lurin E 700 High Builf Trl NB Fround Repeal Strian E & Lurin E 700 High Builf Trl NB Fround Repeal 700 High Builf Trl 7100 High Builf Trl NB Froun		N3			atrick & Alecia & Frances	3601 Oak Meadow Dr			Round Rock	TX 7868	78681-2556 R05	R055360
N3 Miller Poul H & Camen 3703 Obk Meddon Dr N3 Linton Howard t & Susan R 7000 High Buff 7rl N3 Bands Keven Lee 7000 High Buff 7rl N3 Waddeler Binnis Reven Centre Centr		N3			randon T & Christy N	3607 Oak Meadow Dr			Round Rock	TX 7868		R055356
N3 Linton Howard L & Susan R 7000 High Buff Tri N3 Mordal Kordal Travis & Anjalica 7001 High Buff Tri N3 Buxdon Travis & Anjalica 7001 High Buff Tri N3 Buxdon Prempera 7100 High Buff Tri N3 Thompson David Ronald & Karen Oline 9000 Sunburst Ter N3 Flux Ager Stephen 1 & Saraht 9000 Sunburst Ter N3 Flux Ager Stephen 1 & Saraht 9000 Sunburst Ter N3 Granbell Flux Ager 700 High Buff Tri N3 Ayers Granbell Carle 7000 High Buff Tri N3 Ayers Mark A & Connie D 7101 High Buff Tri N3 Ayers Mark A & Connie D 7101 High Buff Tri N3 Ayers Chark A 8231 Lofty In N3 Ayers Chark A 8231 Lofty In N3 Chark A Reann Chark A N3 Chark A Reann Chark A N3 Chark A Reannet		N3			aul H & Carmen	3703 Oak Meadow Dr				TX 78681		42837
NB Banks Kevin Lee 7002H High Bulff Tri Control NB Model Trous & Appleica 7002H High Bulff Tri 100 High Bulff Tri NB Wadreder Britan E S Shae E 7102H High Bulff Tri 100 High Bulff Tri NB Campbell Emily 1702H High Bulff Tri 100 High Bulff Tri NB Campbell Emily 1702H High Bulff Tri 100 High Bulff Tri NB Fluckger David Ronald & Karen Oline 9000 Sunburst Ter 100 High Bulff Tri NB Fluckger David Ronald & Karen Oline 9000 Sunburst Ter 100 High Bulff Tri NB Girkson Grant E & Laura E 700 High Bulff Tri 1703 High Bulff Tri NB Girkson Grant E & Laura E 700 High Bulff Tri 1710 High Bulff Tri NB Fenney Unjin & Ving Chen Grath High Bulff Tri 1710 High Bulff Tri NB Greifert Greifert Grath High Bulff Tri 1710 High Bulff Tri NB Swainston Greifert Grath High Bulff Tri 1710 High Bulff Tri NB		N3			oward L & Susan R	7000 High Bluff Trl			Round Rock	TX 7868		R391250
N3 Workelecker Finance Anjeilica 7000 High Bluff Tri N3 Workelecker Brinde & Shiva E 7102 High Bluff Tri N3 Boxton Fremly 7102 High Bluff Tri N3 Thompson Troy 7102 High Bluff Tri N3 Finologer David Ronald & Karen Oline 9000 Sunburst Ter N3 Finologer Stephen J & Sarah L 9000 Sunburst Ter N3 Bastis Grant & Laura E 7003 Sunburst Ter N3 Beastis Grant & Laura E 7001 High Bluff Tri N3 Arers Mark & Laura E 7001 High Bluff Tri N3 Arers Charles E 7001 High Bluff Tri N3 Vitale Charles E 7001 High Bluff Tri N3 Vitale Charles E 7001 High Bluff Tri N3 Vitale Charles E 2001 High Bluff Tri N3 Swairston David Schnie D 7101 High Bluff Tri N3 Swairston David Schnie D 7201 High Bluff Tri N3 Swairston	1005	N3			evin Lee	7002 High Bluff Trl			Round Rock	TX 7868	78681-3465 R39	R391251
N3 Waldecker Binn E & Shiva E 7100 High Buff Tri N3 Buxton Jeemy C 7100 High Buff Tri N3 Campbell Emily C 7100 High Buff Tri N3 Pike 1000 Sunburst Ter 9000 Sunburst Ter N3 Filtrickger Stephen & Sarah L 9000 Sunburst Ter N3 Filtrickger Stephen & Sarah L 9003 Sunburst Ter N3 Filtrickger David & Razen Oline 9003 Sunburst Ter N3 Filtrickger David & Razen Cline 9003 Sunburst Ter N3 Filtrickger David & Cella R 9001 Sunburst Ter N3 Apers David & Cella R 9001 Sunburst Ter N3 Apers Calm E & Laura E 7001 High Buff Tri 7103 High Buff Tri N3 Apers Calm E & Laura E 7201 High Buff Tri 7103 High Buff Tri N3 Calm E & Laura E 7201 High Buff Tri 7103 High Buff Tri N3 Calm E & Laura E 7201 High Buff Tri 7103 High Buff Tri N3 Kamphuls Kenne L & Sh	1004	N3			ravis & Anjelica	7004 High Bluff Trl					-3465	R391252
N3 Butchon Jackhol Finemy C 7102 High Bild fift in Fight N3 Campbell Finite Finite Finite N3 Finite David Ronald & Raren Oline 9000 Sunburst Ter 9000 Sunburst Ter N3 Finite Stephen J. Ssrahl 9003 Sunburst Ter 9003 Sunburst Ter N3 Finite David Ronald & Raren Oline 9003 Sunburst Ter 9003 Sunburst Ter N3 Glastis Grant E & Luria E 7003 Sunburst Ter 9003 Sunburst Ter N3 Glastis Grant E & Luria E 7003 High Buff Trl 7103 High Buff Trl N3 Permey Charles E 7001 High Buff Trl 7103 High Buff Trl N3 Swainston Dawn Machelle & Clark A 8333 Lofty Ln 7103 High Buff Trl N3 Grenert Dawn Machelle & Clark A 8333 Lofty Ln 7103 High Buff Trl N3 Grenert Ramphuis Referent & Sharon M 8333 Lofty Ln 7103 High Buff Trl N3 Gariazzo Ramphuis Referent & Sharon M 8323 Lofty Ln 7104 High Buff Trl <td>1003</td> <td>N3</td> <td></td> <td></td> <td>rian E & Shiva E</td> <td>7100 High Bluff Trl</td> <td></td> <td></td> <td></td> <td>T</td> <td></td> <td>R391253</td>	1003	N3			rian E & Shiva E	7100 High Bluff Trl				T		R391253
N3 Campbell Emily 7JOA High Bluff TrI N3 Thompson Troy 9002 Sunburst Ter Pile N3 Pile Reger Stephen J & Sarah L 9002 Sunburst Ter Pile Reger N3 Sosiow Richard A & Waneli C David G & Celia R 9003 Sunburst Ter Pile Reger N3 Apers Mass Bastis Mass Bastis Mass Bastis Mass Bastis N3 Apers Mass Machelle & Clark A 1701 High Bluff Trl 1003 High Bluff Trl 1003 High Bluff Trl N3 Apers Cathy J Cathy J 1701 High Bluff Trl 1003 High Bluff Trl N3 Apers Cathy J Cathy J 1701 High Bluff Trl 1003 High Bluff Trl N3 Apers Cathy J Cathy J 1701 High Bluff Trl 1003 High Bluff Trl N3 Apers Cathy J Cathy J 1701 High Bluff Trl 1703 High Bluff Trl N3 Greinert Nain Machelle & Clark A 1701 High Bluff Trl 1703 High Bluff Trl N3 Greinert Nain Machelle & Clark A 17	1002	N3			eremy C	7102 High Bluff Trl				TX 78681		91254
N3 Information Troy floated Problem of Stage Proble	1001	N3			mily	7104 High Bluff Tri			Round Rock	Ť	78681-3469 R3	R391255
N3 Fluckiger Stephen J Scarb L 9004 Sunburst ter N3 Soslow Richard A & Wanell C Javid Scarb L 9004 Sunburst Ter N3 Gibson Grant E & Laura E 7001 High Bluff Trl 7103 High Bluff Trl N3 Ayers Mark A & Cornie D 7101 High Bluff Trl 7103 High Bluff Trl N3 Vizier Charles E 2101 High Bluff Trl 7103 High Bluff Trl N3 Vizier Charles E 2101 High Bluff Trl 7103 High Bluff Trl N3 Vizier Carby J 2201 High Bluff Trl 7103 High Bluff Trl N3 Swainston Dawn Machelle & Clark A 7201 High Bluff Trl 7103 High Bluff Trl N3 Swainston Dawn Machelle & Clark A 7201 High Bluff Trl 7103 High Bluff Trl N3 Swainston Neil D Tr & Jennifer D 8333 Lofty Ln 7103 High Bluff Trl N3 Gariazzo Gariazzo Chu Revin L & Sharon M 8331 Lofty Ln N3 Addy Debarroti 8225 Lofty Ln N3 Trevino Rogelo & Aria	0001	N3			roy	9000 Sunburst ler				Ť	3463	91256
N3 Sosfow Richard A & Wanell C Openiod & Cells R 9003 sunburst Ter N3 Bastis Gilbson Grant & Laura E 7003 High Buff Trl 7003 High Buff Trl N3 Apers Mark A & Comie D 7101 High Buff Trl 7103 High Buff Trl N3 Variants C Carby Carby & Cale A Comie D 7101 High Buff Trl 7103 High Buff Trl N3 Variants C Carby Carby & Carry A Comie D 7101 High Buff Trl 7103 High Buff Trl N3 Variants C Carby A Carry A Comie D 7201 High Buff Trl 7103 High Buff Trl N3 Cheng Linjin & Ying Chen Nall Drive A Comie D 7201 High Buff Trl 7103 High Buff Trl N3 Cheng Linjin & Ying Chen Neil Drive A Lamifer D 8335 Lofty Ln 7103 High Buff Trl N3 Kerinet T Neil Drive A Lamifer D 8335 Lofty Ln 7103 High Buff Trl N3 Kerinet T Revin Le & Sharon M 8335 Lofty Ln 7103 High Buff Trl N3 Addy Chris & Tonja 8325 Lofty Ln 7104 High Buff Trl N3 Morbes <t< td=""><td>666</td><td>N3</td><td></td><td>igor</td><td>avid Konald & Karen Oline</td><td>9002 Sunburst Ter</td><td></td><td></td><td>Round Rock</td><td>TX 78681</td><td></td><td>K39125/ R391258</td></t<>	666	N3		igor	avid Konald & Karen Oline	9002 Sunburst Ter			Round Rock	TX 78681		K39125/ R391258
N3 Bastis David G & Celia R 9001 Sunburst Ter N3 Ajers Grant E & Laura E 7003 High Bluff Trl 7103 High Bluff Trl N3 Penney Charles E 7101 High Bluff Trl 7103 High Bluff Trl N3 Svainston Dawn Machelle & Clark A 7201 High Bluff Trl 7103 High Bluff Trl N3 Svainston Dawn Machelle & Clark A 7201 High Bluff Trl 7103 High Bluff Trl N3 Cheng Linjin & Ying Chen Loakh Machelle & Clark A 7201 High Bluff Trl 7103 High Bluff Trl N3 Cheng Linjin & Ying Chen Mexin Le & Jeann Machelle & Clark A 8335 Lofty Lin 7103 High Bluff Trl N3 Greinert Mexin Le & Sharon M 8331 Lofty Lin 8335 Lofty Lin N3 Addy Debaroti 8225 Lofty Lin 8225 Lofty Lin N3 Grooks Lisa K 8232 Lofty Lin 8231 Lofty Lin N3 Mohor Steve & Lisa 8231 Lofty Lin 8231 Lofty Lin N3 Mohor Steve & Lisa 8331 Lofty Lin N3 Mohor St	966	EN S				9003 Sunburst Ter					-3463	R391259
N3 Gibson Grant E & Laura E 7003 High Bluff Trl 7103 High Bluff Trl<	266	N3			avid G & Celia R	9001 Sunburst Ter						R391260
N3 Ayers Mark A & Connie D 7101 High Bluff Trl 7103 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl </td <td></td> <td>N3</td> <td></td> <td></td> <td>rant E & Laura E</td> <td>7003 High Bluff Trl</td> <td></td> <td></td> <td></td> <td></td> <td>П</td> <td>91248</td>		N3			rant E & Laura E	7003 High Bluff Trl					П	91248
N3 Penney Charles E Charles E Charles E Charles Cark A 7103 High Bluff Tri 7104 Tri 7103 High Bluff Tri 7103 High Bluff Tri 7103 High Bluff Tri 7103 High Bluff Tri 7103 High Bluff Tri 7103 High Bluff Tri 7103 High Bluff Tri 7103 High Bluff Tri 7103 High Bluff Tri 7103 High Bluff Tri 7104 High Bluff Tri 7104 High Bluff Tri		N3			1ark A & Connie D	7101 High Bluff Trl			Round Rock			R391262
N3 Vitale Cathy J Cathy J Cathy J T/103 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff Trl 7104 High Bluff		N3			harles E		7103 High Bluff Trl			TX 7868	78681-3469 R3	91272
N3 Swainston Dawn Machelle & Clark A 7201 High Bluff Tri N3 Zhenjer Linjin & Ying Chen R337 Lofty Lin R337 Lofty Lin N3 Kamphus Kewin L& Sharon M 8331 Lofty Lin R331 Lofty Lin N3 Eaton Chris & Tonja 8331 Lofty Lin R331 Lofty Lin N3 Gariazzo Gariazzo Chiu R331 Lofty Lin R331 Lofty Lin N3 Addy Debaroti B325 Lofty Lin R325 Lofty Lin N3 Brooks Lisak B325 Lofty Lin R325 Lofty Lin N3 Mohr Steve & Lisa B321 Lofty Lin R325 Lofty Lin N3 Trevino Rogello & Nadla Gutierrez 8321 Lofty Lin R331 Lofty Lin N3 Clayton Paul H & Sharon P Rogello & Nadla Gutierrez 8311 Lofty Lin N3 Nadrianh Marth T & Robert A 8312 Lofty Lin		N3			athy J		7103 High Bluff Trl					R391272
N3 Zheng Linjin & Ving Chen keli Dir & Jennifer Dir &		N3			awn Machelle & Clark A	7201 High Bluff Trl						R391271
M3 Greinert Neil Dir & Lennifer D 8335 Lofty Ln N3 Kamphuis Kevin L& Sinnon M 8333 Lofty Ln N3 Eatonn Chris & Tonja 8331 Lofty Ln N3 Addy Reardo E & Geran And Joanna 8325 Lofty Ln N3 Addy Debaroti 8325 Lofty Ln N3 Mohr Sieve & Lisa 8325 Lofty Ln N3 Trevino Rogelio & Nadia Gutierrez 8312 Lofty Ln N3 Clayton Paul H & Sharon P Rodeilo & Nadia Gutierrez 8312 Lofty Ln N3 Nash Bodie Marth T & Robert A 8315 Lofty Ln		N3				8337 Lofty Ln			Round Rock	TX 7868	78681-3466 R3	R391261
M3 Kamphuis Kevin L & Sharon M 8333 Lofty Ln N3 Eaton Chris & Tonja 8331 Lofty Ln N3 Addy Reardo E & Geran And Joanna 8329 Lofty Ln N3 Addy Debaroti 8325 Lofty Ln N3 Mohr Stewa Lies 8321 Lofty Ln N3 Trevino Rogello & Nadia Gutierrez 8321 Lofty Ln N3 Clayton Paul H & Sharon P Rogello & Nadia Gutierrez 8321 Lofty Ln N3 Nash Naddriand Martha T'R Robert A 8312 Lofty Ln	995	N3			eil D Jr & Jennifer D	8335 Lofty Ln				TX 78681		R391278
N3 Eaton Chris & Tonja 8331.0ft/ Ln Cariazzo Cariazzo Gariazzo Gariazzo Gariazzo Gariazzo Gariazzo Gariazzo Chiu Rizardo E & Geran And Joanna Gariazzo Chiu 8329.0ft/ Ln 8321.0ft/ Ln Cariazzo Gariazzo Chiu Rizardo E & Gariazzo Chiu Rizardo E & Gariazzo Chiu Rizardo E & Gariazzo Chiu Rizardo E & Gariazzo Chiu Rizardo E & Gariazzo Chiu Rizardo E & Gariazzo Chiu Rizardo E & Gariazzo Chiu Rizardo E & Gariazzo Chiu Rizardo E & Gariazzo Chiu Rizardo E & Garia Chi	994	N3	Ц	S	evin L & Sharon M	8333 Lofty Ln			Round Rock			R391279
N3 Gariazzo Ricardo E & Geran And Joanna R329 Lofty Ln N3 Addy Debardi 8325 Lofty Ln Para Control Co	993	N3	L		hris & Tonja	8331 Lofty Ln			Round Rock	TX 7868	78681-3466 R3	91280
N3 Addy Gandazzo Chiu 637 Lofty Ln N3 Brooks Lisak 8325 Lofty Ln N3 Mohr Steve & Lisa 8321 Lofty Ln N3 Trevino Rogello & Nadia Gutierrez 8331 Lofty Ln N3 Clayton Paul H& Sharon P 8319 Lofty Ln N3 Nash Martha T & Robert A 8315 Lofty Ln	992	N3			icardo E & Geran And Joanna	8329 Lofty Ln			Round Rock	TX 7868	78681-3466 R39	R391281
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N3 Bitroots Lea R 83.25 Lufy Ln N3 Mohr Stew & Lisa 83.21 Lufy Ln N3 Trevino Rogello & Nadia Gutierrez 83.21 Lufy Ln N3 Clayton Paul H& Sharon P 83.21 Lufy Ln N3 Nash N3 Marfain N3 Marfain N3 Marfain	991	N3			ebaroti	8327 Lofty Ln			Ī	1	-3466	R391282
N3 Trevino Steve & Lisa 83.21 city Ln N3 Clayton Paul H & Sharon P Bodie Bodie N3 Natchian Robert A Bodie N3 Natchian Robert A Bodie N3 Natchian Robert A Bodie N3 Natchian Robert A Robert A Robert A N3 Natchian Robert A Robert A Robert A N3 Natchian Robert A Robert A Robert A N3 Robert A Robert A Robert A Robert A N4 Robert A Robert A Robert A N5 Robert A Robert A Robert A N5 Robert A Robert A Robert A N5 Robert A Robert A Robert A N5 Robert A Robert A Robert A N5 Robert A Robert A Robert A N5 Robert A Robert A Robert A N5 Robert A Robert A Robert A N5 Robert A Robert A Robert A N5 Robert A Robert A Robert A N5 Robert A Robert A Robert A N5 Robert A Robert A Robert A N5 Robert A Robert A Robert A N5 Robert A Robert A Robert A N5 Robert A Robert A Robert A N5 Robert A Robert A N5 Robert A Robert A N5 Robert A Robert A N5 Robert A Robert A N5 Robert A Robert A N5 Robert A N5 Robert A N5 Robert A N5 Robert A N5 Robert A N5 Robert A Robert A Robert A Robert A Robert A	066	N3			sa K	83.25 Lofty Ln						91283
N3 Clayton Paul H & Sharon P Rogelio & Madia Sulfertez 83.19 Loffy Ln N3 Clayton Paul H & Sharon P Bodie 83.15 Loffy Ln N3 Macfarland Martha T & Robert A 83.15 Loffy Ln	988	N3			teve & Lisa	8323 LOTY LN					70004 K35	K391284
N3 Nardariand Martha T's Robert A 8315 Loffy Lin Nardariand Martha T's Robert A 8315 Loffy Lin Nardariand Martha T's Robert A 8315 Loffy Lin Nardariand	986	N3			ogelio & Nadia Gutterrez	8321 Lorty Ln			Kound Kock	1X /898		91285
N3 Nacidind Marth T& Robert 8135.1/City Ln	984	N3		in Paul H & Sharon P	-	8319 Lorty Ln						91286
N3 Mactariand Martha & Robert A 8315 Lofty Ln	781	N3			odie	8317 Lorty Ln				T	3466	R391287
The state of the s	Ago	N3			lartha I & Kobert A	8315 Lorty Ln			Round Rock	1X /868		K391288

Tract ID	Structures	Segments	Title Last Name	First Name Su	Suffix Address 1	Address 2 Addr	Address 3 City	State Zip	TaxID
N3-073	926	N3	Alexander	Jennifer M	8313 Lofty Ln		Round Rock	TX 78681-3478	١
N3-074	978	N3	Chiu Bertrand Be-Chung &		Joanna Gariazzo Chiu	8311 Loftv Ln	Round Rock	TX 78681-3478	R391290
N3-075	222	N3	Bugg	Jay & Cathy	8309 Lofty Ln		Round Rock		
N3-076	926	N3	Hansel	Kevin L & Tanya E	8307 Lofty Ln		Round Rock		
N3-077		N3	Condon	Michael E & Kelly D	8305 Lofty Ln		Round Rock	Ė	R391293
N3-078		N3	Courter	Karen & Christopher Jandrain	8303 Lofty Ln		Round Rock	TX 78681	R391294
N3-079		N3	Margaret Christine Cantieri	Cantieri Michael Charles	Margaret Christine Captieri	8326 Lofty Lp	Round Rock	TX 78681-3466	B391314
N3-080		N3	Obrien	Janice M & Robert M	8324 Lofty Ln		Round Rock	Ť	_
N3-081		N3	Harvev	Glenn A & Maria L	83.22 Lofty Ln		Round Rock	TX 78681-3466	
N3-082	686	N3	Robinson	Clark Z & Jana F	8320 Lofty Ln		Round Rock	Ė	Т
N3-083	286	N3	Lai	Guixian & Yanhong Zhang	9103 Westerkirk Dr		Austin		R391318
N3-084	985	N3	Hailey	Brooke	8316 Lofty Ln		Round Rock	TX 78681	R391319
N3-085	983	N3	Yuan	Jie	4525 Hallmark Dr		Plano	Ė	R391320
N3-086	982	N3	Kraus	George F Jr & Judith A	8312 Lofty Ln		Round Rock		Т
N3-087		N3	Moran	Bryan J & Sarah K	8310 Lofty Ln		Round Rock		
N3-088		N3	Moore	Kenneth J & Sheila R	8308 Lofty Ln		Round Rock	TX 78681-3478	R391323
N3-089		N3	Alexander	Karlen S & Danielle	7410 Two Jacks Trl		Round Rock		
N3-090		N3	Roiko	John C & Connie M	7412 Two Jacks Trl		Round Rock	TX 78681-3484	
N3-091		N3	Houghton	Richard T & Denise	7414 Two Jacks Trl		Round Rock		
N3-092		N3	Hervas Nelia C & Eliseo Hervas Jr		7416 Two Jacks Trl		Round Rock		
			Irustees Of Neilia C Hervas Irust						
N3-094		N3	Redding	Xuan L & Richard P	3813 Powder Horn Dr		Round Rock	TX 78681-2532	: R059199
N3-095		N3	Carter	Nicholas A & Angel L Smith-	1104 Stillhouse Springs		Round Rock	TX 78681	R059200
N3-096		N3	te a	Martha I S	208 Adelfa Dr		Round Bock	TX 78664-6294	R059266
N3-097	896	N3	You	Jean H	216 Dulverton Cir		Folsom		
					C/O Angela Zavala McCarthy-Holthus-Texas,				
N3-098	970	N3	Bank of America, NA		TLP	1255 West 15th Street, Suite 1060	Plano	TX 75075	R059264
N3-098	970	N3	Patterson	Scott L & Estate Of Clint	3801 Powderhorn Dr		Round Rock	TX 78681	R059264
N3-099	971	N3	Z.WOD	Timothy	3703 Powderhorn Dr		Round Bock	TX 78681	R059263
N3-100	974	N3	Miller	Paul M	3701 Powderhorn Dr		Round Rock		T
N3-102	973	N3	Rolofson	Benjamin & Amber Marie	3702 Powderhorn Dr		Round Rock	TX 78681	R059260
N3-103	972	N3	Hill	Charles E	3800 Powderhorn Dr		Round Rock	TX 78681-2539	
N3-104	696	N3	Duperier	Robert Judson	8801 Pepper Rock Dr		Austin		
N3-105	296	N3	Barger	James R & Mildred E	3804 Powderhorn Dr		Round Rock		
N3-106	996	N3	Sparck	Timothy David	3806 Powderhorn Dr		Round Rock	TX 78681	R059256
N3-107	964	N3	Williams	Martha loan	2004 Peninsula Dr		Flower Mound	۲ ۲	
N3-109	963	N3	Mahan	Robert J	3812 Powderhorn Dr		Round Rock	TX 78681-2533	R059253
N3-110	962	N3	Peterson	Mathew B & Jennifer B Hefner	3816 Powder Horn Dr		Round Rock	XT	
77	061	CIV	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Anna dan dan dan dan dan dan dan dan dan		- Paris d	T	
NS-111	201	eN N	Darker	Cyliffia & Roberto Galvez	ADD W Main St	Ste 100	Round Bock	Ť	
N3-113		N3	Parker	Michael	3904 Powderhorn Dr		Round Rock	TX 78681-253	
N3-116		N3	Domeracki	Henry S & Diana L	17209 Chadwood Ct		Austin	TX 78717-2950	
N3-117		N3	Williamson County Oak Brook		C/O Goodwin Management, Inc	PO Box 203310	Austin	TX 78720-3310	R356582
N3-118		N3	Ward	Linton B & Michele	17212 Chadwood Ct		Austin	TX 78717-2950	B342937
N3-119		N3	Hartle	Christopher L & Patricia R	17012 Pagosa Springs Ct		Austin		
N3-121	957	N3	Aston	Charles G II & Nichole A	17019 Pagosa Springs Ct		Austin		
N3-122		N3	Muennink	Andrew & Kristen	17073 Conway Springs Ct		Austin	TX 78717-2989	R378553
N3-124		N3	Warriner	Justin B Jr Darline H	3803 Oakridge Dr		Round Rock		
N3-125		N3	Nicholson	Misti	3805 Oakridge Dr		Round Rock	TX 78681	R063707
N3-126; N3-127; N3-128		N3	Tripp	Marjorie	3600 Oakridge Dr		Round Rock	TX 78681-2567	R063704; R063705; R063706
N3-129	096	N3	Tripp	Phillip Andrew	3907 Oakridge Dr		Round Rock	TX 78681-257	t R063703
N3-130; N3-131; N3-132		N3	Hidden Trails 2013 Lp		14000 Rr 2243 W		Leander	TX 78641	R528733; R528734; R528735
			-	O Circles Co					
N3-133		N3		Ramona snerie & warren Duren	902 Brushy Bend Dr		Round Rock	TX 78681	R058939
N3-134		N3	Heeney	Timothy J	906 Brushy Bend Dr		Round Rock	TX 78681	R058940
N3-135		N3		Loree H	PO Box 451		Round Rock		
N3-136		N3		Jesse	912 Brushy Bend Dr		Round Rock		R058942
N3-13/		N3	Hansen	Steven b & betname	1000 Brushy Bend		Kound Kock	1X /8681-1403	

Ol treat	Striictiires	Segments	last Name	First Name	Suffix Address 1	Addrage 2	Addrace 3 City	State Zin	TavID
					1004 Bench, Boad Dr		Dound Book	TV 70501 1403	
N3-130		CN CN	Cylli Alian D & Gell		1004 Blusily Belld Di		Nound nock	T	_
	050	SN SN	Dameis	Varri Ambor	1008 Blushy Bend Dr		Pound Bock	T	
		N3	Hiemmer	Michael I & Maria M	1100 Britshy Bend Dr		Round Rock		R058946
N3-142		S S S	Pond	Scott D & Kelly A	1100 Blushy Bend Dr		Round Rock		R058948
NO-143		S. C.	DED H	Scott F & Relly A	1100 Describe Board De		Round Bock	TV 79591	N038348
N3-144		SN S	Walch Bruchy Groot Banch In	Neil Iodd & Silelley Jaile	4001 Brushy Creek Bd		Coder Park		N036349
N3-146		2 2	Walsh blushy creek hallon Lp	Christopher Ivan	4001 Brushy Creek Rd		Cedal raik		_
N3-148		2 2	Mullips Family Partnership 14d	Circopies cylin	PO Box 560248		Dallas	TX 75356-0248	48 R379650
N3-149	926	23 23	Mican	Harold M & Lisa M	17069 Conway Springs Ct		Austin		_
		N3	Polito	Robert J & Tarja A	17065 Conway Springs Ct		Austin		
		CIV	2000	Michael Wayne & Deborah	17061 County Carlott		A		02200
			W.O.Bail	Lynn	TOOT COLIMBA SPILIES		III COL	Ì	
N3-152		N3	Oneill	Bernard L & Gertrude A	PO Box 3398		Cedar Park	TX 78630-3398	98 R378549
	953	N3	Arnold	Terrance J & Nancy E	17053 Conway Springs Ct		Austin	TX 78717-2989	
N3-154	952	N3	Haines	Nancy Powell	17049 Conway Springs Ct		Austin	TX 78717-2989	89 R378547
N3-155		N3	Matas	Fernando	17045 Conway Springs Ct		Austin	TX 78717	R378546
N3-156		N3	Hefner	Mark E & Stacey L	4318 Indian Oaks		Round Rock	TX 78681-1080	
N3-157		N3	Austin		Real Estate Div	PO Box 1088	Austin	TX 78767-10	
N3-162		N3	Champion Cemetery		C/O Texas Historical Commission	PO Box 12276	Austin	TX 78711-2276	76 R431160
N3-163; N3-164; N3-178; N3-189		N3	Walsh Trails Association Of Homeowners Inc		C/O Goodwin Management, Inc	PO Box 203310	Austin	TX 78720-3310	10 R48445; R48447; R484474; R484565
	046	CZ	o contra	0 00000	AE OO Throog Associate Other		Jaco report	70543 4030	000000000000000000000000000000000000000
		No	Briscoe	Bryan J & Carlett D	4500 Infee Arrows Ct		Cedar Park	T	Т
	947	N3.	SMITH	Brian John & Amanda	4502 Inree Arrows Ct		Cedar Park	TX 78613	K484443
N3-TD/		NS	Masood	Mujanid & Anjum Gnouse	4504 Inree Arrows Ct		Cedar Park		K484442
	949	NS	Kumar	Santosn & Sandnya Kani	450b Inree Arrows Ct		Cedar Park	TX 70643 4030	Ť
		N3	warden	Kobert	4508 Inree Arrows Ct		Cedar Park		T
N3-170	951	N3	Gomez	Constancio H & Karina A Partid	4510 Three Arrows Ct		Cedar Park	TX 78613-4838	38 R484439
171 CN		2		Massac Hoses O Nossetto D	TO THE PERSON ASSESSMENT CARREST CARRE		Jack September	TV 705.13	000000
N3-172		SN S	Courtney	Krishos Kumsr	4312 IIII ee Allows Ct		Codar Park	TV 79613	N464436
	975	200	٠	Paymond	1102 Walsh Hill Tel		Codar Park	T	B484462
		200	70k3	Dramay & Tolocusi Culli	1105 Walsh Hill Tri		Codar Park		
N3-175	943	5 EZ	Chavez	Amelia M & Carlos Amado	1104 Williams Way		Cedal raik	TX 78613-4844	17454546 44 R484546
		23	Baskerville	Debbie Ann James	1102 Williams Way		Cedar Park		
		N3	Chandra	Johan & Su Hauw	1100 Williams Way		Cedar Park		R484544
N3-179	944	N3	Pham	Khanhhung Hoang & Thanh Tram Ngo	4410 Spanish Gold Ln		Cedar Park	TX 78613	R484472
N3-180	942	N3	Chou	Seurhong & Kelly Chance Todd	4408 Spanish Gold Ln		Cedar Park	TX 78613	R484473
N3-181	941	N3	Vaughan	Mark Thomas & Gloria J Loredo	4406 Spanish Gold Ln		Cedar Park	TX 78613	R484547
200	020	CZ	Pham Mai Nguyen & Kim-Loan Thi		2 - 5100 deimon 2000 60		1000	VT 70613	0 7 0 7 0
		N3	Nguyen		4404 Spanish Gold Lii		Cedar Park		K404546
N3-183	937	N3	Tucker	Bronson Tyler	11010 Domain Dr	11317	Austin	TX 78758	R484549
		2	NOW METICIAL	Salita	11 000 Jeans 1 000 Line 1 000 Jeans 1 000		Cedal		0000
	933	N3	Medina	Juan Manuel & Ana M Forero	1109 Williams Way		Cedar Park	TX 78613	R484551
N3-186		N3	Arefin	S M & Sobhani Hafiz	1107 Williams Way		Cedar Park	TX 78613	R484552
	986	N3	Raja	Asad	11400 Domain Dr	5215	Austin	TX 78758-77	.7739 R484553
N3-188		N3	Sah	Sachin & Swapna	1103 Williams Way		Cedar Park	TX 78613	R484554
N3-191	932	N3	Mcgahan	Robert & Marilyn	3951 Brushy Creek Rd		Cedar Park	TX 78613	R345077
N3-209	928	N3	Pingali	Subramanya Ravi Kiran & Devi	707 Dry Gulch Bnd		Cedar Park	TX 78613	R532981
				Anand & Srivaramangai					
N3-210	927	N3	Lakshmanan	Rajagopalan	705 Dry Gulch Bnd		Cedar Park	TX 78613	R532980
N3-217; N3-218; N3-219; N3- 220; N3-221; N3-223; N3-224; N3-225; N3-226; N3-227		N3	Great Oaks Development Llc		9111 Jollyville Road Suite 111		Austin	TX 78759	R540764; R540765; R540766; R540766; R540765; R540795; R540798; R540799; R540798; R540799

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	Salmonnic		nue Last Name	Donolomon	Addi ess. 1	Address 2	Address 3	2	31dte 21p	O X P	
222-CNI		2		Oleat Cars Development LLC	TTT 2011 Aville Mode Julie TTT		ξ.				
N3-228 N3-228		N3	Munson Ms. Munson	Cathy Sue Cathy Sue	6101 Gena Ct 6101 Gena Ct		A A	Austin T	TX 78757		R540809
N3-230; N3-231			Silverado Austin Development Ltd		2622 Commerce St		ă		TX 75226-1402		R341587; R529918
N3-232; N3-233; N3-234		N3	Wilson	Nill Sr	1627 Westlake Dr		A	Austin	TX 78746-3726		R031998; R031999; R329984
N3-235		N3	Henry	Betty B	3801 Brushy Creek Rd		ŭ	Cedar Park T	TX 78613	78613-4803 R03	R032009
N3-236; N3-239; N3-242		N3	Ranch At Brushy Greek Homeowners Association Inc		C/O Goodwin Management, Inc	PO Box 203310	Ϋ́	Austin	TX 78720	78720-3310 R47	R476887; R476888; R476940
N3-237	924	N3	Busse	Sean B	818 Arrowhead Trl		ŏ	Cedar Park			R476939
N3-238	923	N3	Craig	Stephen L & Nora L	816 Arrowhead Trl		3)		TX 78613		R476938
N3-240	922	N3	Menchaca	Hector & Erica	815 Arrowhead Trl		ŭ				5886
N3-241		N3		Arun & Shefali	813 Arrowhead Trl		ŭ				5885
N3-244		N3	in in	Michael & Leigha	601 Fallen Oaks Dr		ŏ	Cedar Park	TX 78613-	78613-7490 R47	R476876
N3-245		N3	Straub	Patrick M & Kristie M Geno	525 Fallen Oaks Dr		3 (3875
N3-246		N3		Richard	523 Fallen Oaks Dr		ŭ				5874
N3-247		N3	Burk	Michael A & Elizabeth A	521 Fallen Oaks Dr		ŏ	,			R476873
N3-248	921	N3	Cedar Park Church Of Christ		PO Box 864		ŭ	Cedar Park	TX 78630	78630-0864 R39	R392339
N3-249	869, 870, 871, 872, 873, 874, 875, 877, 877, 878, 877, 878, 877, 887, 88	N3	Paradiso Villas Condominiums		11400 W. Parmer Ln		ŏ	Cedar Park	TX 78613		R483738
	920										
N3-250		N3	Ca Silverado Llc		1508 S Lamar Blvd		A C				R433286
752-57		NS	Spectrum Group Lic Cypress Creek Montessori School		TTOST W Parmer Lii		5	J. K	T		R4/53/5
N3-253		N3	Inc		2305 Manada Trl		le	Leander	TX 78641	78641-2745 R47	R475397
N3-254; N3-255		N3	Breakaway Park Section Iv Ltd		C/O Barbara Sielaff	2911 Dover Pl	Αr	Austin	TX 78757	78757-4351 R47	R475392; R475396
N3-256	867; 868	N3	11901 Parmer Condominiums		C/O 11901 Parmer Owners Association, Inc/Austin Heath President	11901 W Parmer Lane Unit 400	ŭ	Cedar Park	TX 78613		R490890
N3-257		N3	B & L Bison Properties Llc		11951 W Parmer Ln		ŏ	Cedar Park		78613-7472 R45	R457158
N3-258	865	N3	Schara	David J & Susan M	12001 W Parmer Ln))	Park			R457157
		N3	Srinivasan	Anand & Tamara Perera	6718 Cuesta Trl		A		Ť		R457156
N3-260	863; 864	N3	Bunker	Harris	Parker Properties LLC	14942 Fm 346	Ė	Troup	TX 75789-5112		R457155
N3-261	862	N3	Parmer Oaks Condominium		C/O Parmer Oaks Condominium Owners Association, Inc	4019 Bobbin Lane	¥		TX 75001		R530226
N3-262	861	N3	Parmer Oaks Development Lp		4019 Bobbins Ln		Ac	Addison	TX 75001		R447793
N3-263		N3	Menfi Joseph & 209 Denali Pass Lp & Dreambuilder Invest Llc		1 Airport Rd		Ĭ	Hopedale	MA 01747-1501		R447805
N3-264; N3-266; N3-267; N3- 268; N3-269; N3-270		N3	Riversideca 25 Ltd		C/O Andy Reese	100 Congress Ave Ste 780	₹	Austin	TX 78701		R543561; R543562; R543563; R543565; R543566; R543567
N3-265	998	N3	Rrca Parmer Ranch Trails Lot 4 Ltd		Attn: Andrew Maebius, Riverside Resources	100 Congress Ave	Ste 1450 Au	Austin	TX 78701		R543564
N3-271		N3	1900 Lakeline Llc		1900 S Lakeline Blvd		ŭ	Cedar Park	TX 78613	R51	3506
N3-272		N3	Platinum Cedar Park Jubilee Investments Inc		1905 Leaders Ln		Le	Leander	TX 78641		R518507
N3-273		N3	Mayes Henry B Jr Trustee		PO Box 200339		A	Austin	TX 78720	78720-0339 R430204	3204

Tract ID	Structures	Segments	Title Last Name		First Name	Suffix Address 1	Address 2	Address 3 City		State Zip	Tax ID
	098		Colonia	ealty Limited Partnership		Silverado Reserve	Maa Property Tax #104601	6584	mphis		
			i	-			-	Poplar Ave	-		
N3-275		N3	Riversi	Riversideca 17 Ltd		Attn: Andy Reese	100 Congress Ave	Ste 1450	Austin	TX 78701	R539878
N3-276		N3	Fellows	ship Bible Church Of Cedar		1709 Warwick Way			Cedar Park	TX 78613	R506057
N3-277	223.226	N3	Riversi	Riversideca 58 Ltd		C/O Andy Reese	100 Congress Ave Ste 1450		Austin Glen Allen	TX 78701	R539949
; N3-281	224; 225	N3	Walker		Ronald M Trustee & Gilbert C & Michaela I Walker Trustees	8502 E Chapman Ave	Ste 618				
N3-283		N33	Colonia	Colonial Realty Lp		Silverado	Maa Property Tax#104601	6584 Poplar Ave	Memphis	TN 38138-3614	.14 R431101
N3-285		N3.	Lipt Wł	Lipt Whitestone Boulevard Lic		C/O Lasalle investment Mgmt inc	Attn: David Schreiber	200 E Randolph Dr, 44Th Fl	Chicago	IL 60601	R427550
N3-286		J3; K2; N3	Lipt Wł	Lipt Whitestone Boulevard Llc		C/O Lasalle Investment Mgmt Inc	Attn: David Schreiber	201 E Randolph Dr, 44Th Fl	Chicago	IL 60601	R451401
	222	N3	JIcp LIc			3555 Lost Creek Blvd				78735	
N3-290		J3; K2; N3 J3; K2; N3	Cedar	c Eck Lp	ואוסגוהקש	1 Cvs Dr	#8331-01		Woonsocket	RI 02895-6146	.52 R447702 46 R442398
0-003; 0-004; 0-005; 0-006; 0- 007; 0-010; 0-011; 0-012; 0- 013; 0-014; 0-015; 0-016; 0- 017; 0-018; 0-019; 0-020	94; 95	0	Toll Da	Toli Dallas Tx Lic		250 Gibraltar Rd			Horsham	PA 19044	R532634; R532635; R532635; R532637; R532665; R532666; R532665; R532666; R532677; R532669; R532669; R532677; R532671; R532672;
0-009; 0-021; 0-022; 0-023; 0- 033; 0-038; V4-007		0	Owners	Owners Association Of Sarita Valley Inc		C/O Southwest Mgmt	PO Box 342585		Austin	TX 78734-0044	R513719; R513720; R513722; 44 R513723; R513724; R513747; R513748
0-024; 0-027; 0-047; 0-057; U4-			Drees (Drees Custom Homes Lp		7300 Ranch Road 2222	Bldg 2 Ste 250		Austin	TX 78730-3233	.33 R513683; R513740; R521152; R521162; R521185
0-025			Cernin	Cernin Jimmie Trustee For Jimmie Cernin Revocable Trust		1324 Pasa Tiempo			Leander	TX 78641-3639	39 R513738
0-026			Ī		Scott & Lisa	3500 Grimes Ranch Rd			Austin	TX 78732	R513739
0-028			Oliver		Joseph & Mary H	2908 Rabbits Tail Dr					R517871
0-029			Prine		Timothy A & Lesli A	2904 Rabbits Tail Dr				TX 78641	R517870
0-030			Deand		Samuel L& Flecia IVI	2900 Rabbits Trail Dr			Leander		K517869
0-032			Harrison		Kelly R	2901 Rabbits Tail Dr			Leander	TX 78641-14	1436 R517892
0-034			Cole		Matthew J & Devra	1113 Feather Reed Dr				78641	
0-035			Mabe		Tony Lynn & Donna Ann	1109 Feather Reed Dr			Leander	TX 78641	R513717
980-0			Walker		Chauncey Weldon & Stacey Leigh	1105 Feather Reed Dr			Leander	TX 78641	R513716
0-037			Kempe	Kempema	onathan T & Erica M	1101 Feather Reed Dr			Leander	TX 78641	R513715
0-039			Reagar			100 Congress Ave Ste 1450		Ī			
0-040			Atzenhofer		Thomas J & Laurie D	2812 Rabbits Tail Dr		\int	Leander	TX 78641	
0-042			Koch		Karen K & Robert A	2804 Rabbits Tail Dr				Ť	_
0-043			Rondeau		John & Julie	2800 Robbits Tail Dr					
0-044			Mitchell		Thomas L & Bernadette	1009 Purple Moor Pass		igg	Leander	TX 78641	R513710
0-046			Drees (Drees Custom Homes Lp	dwald h & hobiii d	6225 N State Highway 161	Ste 400		Irving		R513708
0-048			Re		Andrew & Kendra	941 Purple Moor Pass			Leander		R521161
0-049			Feldkamp	qι	Jacob & Nicole	937 Purple Moor Pass		1	Leander	TX 78641	R521160
0-051			Kiesow		James A & Caryn	95.5 Purple Moor Pass 92.9 Purple Moor Pass			Leander		R521158

R405412

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2300 Masonwood Way 2302 Masonwood Way 2304 Masonwood Way 2306 Masonwood Way 2308 Masonwood Way

Gopikrishna & Rachna Mishra

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03-026

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Bruce A & Tracy M

2902 Arbor Ct 2900 Arbor Ct

Howard M Sr & Nancy Patricia

ittle

03-022 03-023

Clarence D & Linda D

Shawn
Ruben A & Melissa C
Ravi & Prasanna P Gobal
Michael J & Gina M
Michael & Eloisa G
Christian A & Rosemary

Jrugunty 3reault Willemsen Nwankpa

2316 Echo Park Dr
2304 Echo Park Dr
2304 Echo Park Dr
2304 Echo Park Dr
2304 Echo Park Dr
3108 Fox Hollow St
3112 Fox Hollow St
3112 Fox Hollow St
3112 Fox Hollow St
3107 Sam Bass Rd
3107 Sam Bass Rd
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3101 Sam Bass Rd
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Ismari & Alejandro
Revin & Ana
Johnny Ma Isma
Angelia Henderson
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Angelia Baya Batra
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Edward & Usa Garcia

					Leander-Round Directly Affected Landown	Leander-Round Rock 138-kV Transmission Line Project Directly Affected Landowner List Including Tract IDs and Habitable Structures						
Tract ID	Structures	Segments	Title Last Name		First Name Su	Suffix Address 1	Address 2	Address 3	City	State Zip	TaxID	
0-052			Oliver		James L Iii	1004 Purple Moor Pass			nder		78641-1429 R513741	741
0-053			Henry		Kevin S & Heather A	1000 Purple Moor Pass			Leander	TX 78641	1 R513742	742
0-054; 0-056; 0-063; S-006; S- 008; S-009; U4-006; U4-010; U4- 017; U4-022; U4-024; V4-020; V4	. 4	v	Granc	Grand Haven Homes Lp		11501 Alterra Pkwy	Ste 100		Austin	TX 78758	R504 R521 78758-3201 R521 R521	R504094; R504095; R504097; R521142; R521144; R521153; R521157; R521182; R521184; R521188; R521192; R521194;
770											R521198	861
0-055			Cannon		KlarkQ	940 Purple Moor Pass			Leander T	TX 78641	1 R521183	183
0-058			Kakarla		Mahesh Reddy	928 Purple Moor Pass			Leander	TX 78641	1 R521186	981
0-029			Sagar		Jaideep & Pragya Sharma	1005 Feather Reed Dr			Leander	TX 78641		744
090-0			Alber	Albert-Green D	Deeadra F	1001 Feather Reed Dr			Leander	TX 78641	R513743	743
0-061			Dopp	Doppalapudi	Raghu Babu & Lalitha	933 Feather Reed Dr			Leander	TX 78641	1 R521200	500
0-062			Aradada		Srinu Nutan S	929 Feather Reed Dr			Leander	TX 78641	R521199	661
0-064			Sanchez		Luis	921 Feather Reed Dr			Leander	TX 78641		161
0-065			Scheffer		Joseph Scott	917 Feather Reed Dr			Leander	TX 78641	R521196	961
990-0		0	Todd		Brandon & Olga Kotegova	47 Fair Oaks St			Leander	TX 78641	R037205	205
290-0		0	Todd		Brandon	PO Box 500206			Austin	TX 78750) R037204	204
890-0		0	Todd		Franklin M	903 Ridgerock Cv			Leander	TX 78641	R525995	395
690-O		0	Tolbert		Matthew Titus	71 Fair Oaks St			Leander	TX 78641	78641-9786 R037202	202
0-070; 0-071		0	360 1	360 Homes Llc		5824 Sunset Ridge			Austin	TX 78735		R037188; R473622
0-072			Карр		Joe	13007 Lamplight Village Ave			Austin	TX 78729	9 R487450	150
0-073		0; 04	Hamı	Hammond J	lames W Jr & Julliette G	14 Warfield			Leander	TX 78641	78641-9722 R037187	187
01-001	132	L1; M1; N1; O1; P1	Simpson		Mark	3958 Journey Pkwy			Leander	TX 78641	78641-2584 R031574	574

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Iract ID	structures	segments	litte Last Name			SUTIX Address 1	Address 2 Address 3	_	ıte	laxID
03-029	846	03	Š		Yogesh K & Rajni Gandha Sahu	2310 Masonwood Way		Round Rock	TX 78681	
03-030	845	03	æ	on	Rex J & Kathryn A	2312 Masonwood Way		Round Rock	TX 78681-2162	
03-031		03	¥		Catherine S	2314 Masonwood Way		Round Rock		162 R405407
03-032			0 :	Obrien	Dina P & Kenneth J	2313 Masonwood Way		Round Rock	Ť	
03-033			≥ 6		Kevin M & Irina I	2315 Masonwood Way		Kound Kock	1	R405437
03-034			- ۱۵	Deeson Person	Micrael D & Mylle A	2317 Masonwood way		Round Bock	TV 70501	
03-035			טֿ נ	cei	Bahman & Inline	2101 Decay Creet Cv		Pound Bock	Ť	101 B405406
03-037	844	03	LE		William E & Laurie M	3103 Pecan Crest Cv		Round Rock	Ť	
02020	843	203	2		Leonard N & Thais D Bass	V) trans acred 2015		Apod band		2000
03-038	040	ŝ	2		Moore	STOS FECALI CIESCOV		NOUTE NOON	Ì	
03-039	842	03	Jē			3106 Pecan Crest Cv		Round Rock	'	
03-040		03	F		David W & Shirley M	3104 Pecan Crest Cv		Round Rock		
03-041			= d	ell	Christopher T & Marjorie E	4046 Geary St		Round Rock	TX 78681	
03-042			¥ 6	rav Tal	Eric IVI & IVIEIGINE J	3100 Pecan Crest Cv		Round Rock	Ť	191 R403400
03-043			2 2		Arvind	2202 Whirming Woods Ct		Round Rock	TV 70601 21	
03-045			ž Š	Savage		3205 Whispering Woods Ct		Round Rock	TX 78681	R405397
03-046	841	03	Ő		Jeffery S & Erika Elise	3207 Whispering Woods Ct		Round Rock		
03-047	840	03	ĮĒ.	Fisher		3209 Whispering Woods Ct		Round Rock	Ť	
03-048	839	03	Bi		Lachrisha	3211 Whispering Wood Ct		Round Rock		
03-049	838	03	Zr		Oscar G	3210 Whispering Woods Ct		Round Rock		
03-050		03	Ϋ́		Larry & Dora G	3208 Whispering Woods Ct		Round Rock	TX 78681-21	
03-051			I	Hull	Scott & Brandy	3206 Whispering Wind Ct		Round Rock	TX 78681	R405391
03-052			B		Richard F & Barbara A	3204 Whispering Woods Ct		Round Rock		
03-053			Ÿ	King	George W III & Tiffany M	3307 Texana Ct		Round Rock	TX 78681	R414221
03-054		03	ŭ		James B & Krista M	3309 Texana Ct		Round Rock		
03-055	837	03	Ö	Galloway	Richard W & Shirley C	3311 Texana Ct		Round Rock	TX 78681-2272	272 R414219
03-056	836	03	Þ	Uxer	Jennifer & Matthew Toroney	3313 Texana Ct		Round Rock	TX 78681	R414218
03-058	835	03		Flippo	Jacon F & Ling M	3314 Texans Ct		Round Book	TX 78681	B414217
03-035	6	03	Ţ		Robert F Ir & Frica S	3312 Texana Ct		Round Rock		272 R414216
03-00			B		Kenneth N & Linda S	3310 Texana Ct		Round Rock	Ī	П
03-061			Ÿ		Rafael A Jr	3308 Texana Ct		Round Rock	10	
03-063	853	03	æ	n	Alan & Canay T	2002 Tonkawa Trl		Round Rock	TX 78681-1725	
03-064		03	n		Glenn L & Sherry F	3300 Arrowhead Cir		Round Rock	TX 78681-1702	R074858
03-065; 03-066		03	⊃		Rodolfo & Sabrina	3304 Arrowhead Cir		Round Rock		
03-067			Ē	The Waldecker Family Trust		3306 Arrowhead Cir		Round Rock	TX 78681-1702	.702 R074856
03-068	803	03	œ ·		Cynthia Olson	3333 Sam Bass Rd		Round Rock	T	
03-069			7 6		William A & Billie S	1905 Stonewreath Dr		Round Rock	78681	
03-070	500	c c	ž Ü	u	Phillip H	1904 Stonewreath Dr		Round Rock	70501	1/22 KU/4851
03-071	807	03	9	Garrett		3411 Sam Bass Rd		Kouna Kock	1X /8681	
03-072	801	03	ž	Korapala	Janardhana & Veda K Guggulla	3551 Sam Bass Rd		Round Rock	TX 78681-1712	.712 R531635
03-073			or		Jerret & Fariba Abolbaghael	3610 Arrowhead Cir		Round Rock		R074867
03-074		03	JC	Johnson	Matthew C & Monique M	130 Park Place Dr		Georgetown	TX 78628	R074866
03-075	800	03			Chris & Christina	3614 Arrowhead Cir		Round Rock		R074862
03-076	799	03	Ē	Thomas	Jeffrey A & Linda C	3616 Arrowhead Cir		Round Rock	TX 78681	R074861
03-077; 03-078; 03-111		03	>	Walsh Ranch Mud		1004 Mo Pac Cir	Ste 100	Austin	TX 78746-6805	805 R479581; R479771; R479889
03-029	837	03	Ď	oositted	X Carola K	3507 Alexandrite Way		April Bort		
03-080	833	03	۵.		CEric	3511 Alexandrite Way		Round Rock	TX 78681	R479579
03-081	832	03	Σ	nara	Sean T & Kelly D	3512 Alexandrite Wav		Round Rock		
03-082	831	03	Ž		Gautam & Sharmila	3515 Alexandrite Way		Round Rock		R479578
03-083	830	03	Ĭ		Paul W & Kari A	3516 Alexandrite Way		Round Rock	TX 78681	R479598
03-084	829	03	Λ		Rama & Asha L	3519 Alexandrite Way		Round Rock		R479577
03-085	828	03	A	Albertson	Allyson Therrell	3520 Alexandrite Way		Round Rock	TX 78681	R479599
03-086	827	03	Ö	Ghatty	Surya K & Surat P Sombhatla	3523 Alexandrite Way		Round Rock	TX 78681	R479576
03-087	328	03	~		Mir I & Avecha W	3524 Alexandrite Way		Pound Book	TY 78681-2437	437 B479600
03-087	825	03	ξ 13°	e	Sautam G & Sumita G	3524 Alexandrife Way		Round Rock	Ť	
03-089	824	03	Z	'n	Thong & Cindy Huyhn	3528 Alexandrite Way		Round Rock	Ť	R479601
03-090	823	03	Ÿ		Derrick D & Kimberly N	3531 Alexandrite Way		Round Rock	Ī	
03-091	822	03	Ĭ	Harter	Paul A	1450 W Grand Pkwy S	Ste G	Katy		
03-092	821	03	I		Faiyaz & Batul	3535 Alexandrite Way		Round Rock	TX 78681-2437	П

Tract ID	Structures	Segments	Title Last Name	First Name	Je s	Suffix Address 1	Address 2 Add	Address 3 City	State Zip	TaxID	
	820	03	Larkin	John P & Tamara	Tamara	3536 Alexandrite Way		Round Rock	TX 78681	R479603	503
	819	03	Deshpande	Narayan	Narayan R & Sweety Girase	3539 Alexandrite Way		Round Rock			572
	818	03	Stock	Jared E &	k Brenda J	3540 Alexandrite Way		Round Rock	T		504
	817	03	Karnes	Jeffrey S	Jettrey S & Kimberly S	3543 Alexandrite Way		Round Rock	TX 78681	2407	5/1
	816	03	Kuo	CNIN-CNI	a & Yinsien Chien	3544 Alexandrite Way		Kound Rock	Ť	Т.	5005
	815	03	Anmed	Sonail		3547 Alexandrite Way		Round Rock	TX 78681-2437	-243/ R4/95/0	0/0
03-100	813	03	Whyte	Wayne E	Wayne E & Monique B	3551 Alexandrite Way		Round Rock	Ė	7647	999
	812	03	Calderone	Luke & Lisa D	SaD	3552 Alexandrite Way		Round Rock		2437	502
03-102	811	03	Hess	Russell		3555 Alexandrite Way		Round Rock		R479568	999
	608	03	Clond	Robert Ty	Robert Ty & Diane Robin	3558 Alexandrite Way		Round Rock	TX 78681-2437		908
	810	03	Lee	Mitchell & Lade	& Ladeitra	3559 Alexandrite Way		Round Rock	TX 78681-		299
03-105	808	N 03	Mr. Martin	Alexis		5660 South Lakeshoire Drive	#212	Shreveport	LA 71119	R479566	999
	808		Mr. Martin	Dominique	ne	5660 South Lakeshoire Drive	#212	Shreveport	LA 71119		999
	808			Martin		C/O Esmerelda Baldarama	6630 Siegen Lane, Apt 2472	Baton Rouge			999
	808	03 N	Ms. Martin	Renee		3563 Alexanderite Way		Round Rock	TX 78681	R479566	999
03-105	808	03	Martin	Renee S 8	Renee S & Estate Of Jerome	3563 Alexandrite Way		Round Rock	TX 78681	R479566	999
03-106	807	03	Bhatia	Bobby &	Narendra Manchi	3567 Alexandrite Way		Round Rock	TX 78681		595
	805	03	Moore	Corbin T	Corbin T & Jennifer Leigh	3571 Alexandrite Way		Round Rock	Ť	R479564	554
	804	03	Valeriano	Ramon G		Ir 3575 Alexandrite Way		Round Rock		-2437	563
	908	03	Eggleston	Lee J & Si	hawna L	3579 Alexandrite Way		Round Rock			562
03-110		03	Clifton	Troy W &	? Tonya G	3583 Alexandrite Way		Round Rock	TX 78681-2437	-2437 R479561	561
			Fielding	John E &	John E & Margaret C	3613 Arrowhead Cir		Round Rock	TX 78681-1704		340
03-115	798	03	Whittle	Brandon T & Lis	T & Lisa	3701 Arrowhead Cir		Round Rock	TX 78681	R074841	341
	797	03	Vargas	Juan M &	k Rhonda Jan	3703 Arrowhead Cir		Round Rock			342
03-117		03	Gibbs	Richard A & A	4 & Anna M	1903 Great Oaks Dr		Round Rock	Ť		176
		03	Culp	David & Marti	Martha	1904 Great Oaks Dr		Kound Kock			5/1
	795	03	Pursley	Carolyn		3801 Sam Bass Rd		Kound Rock			891
03-120	667	03	King	Jan & Pa	Jan & Patrick Oconnell	3803 Sam Bass Rd		Round Bock	TV 70691		691
	707	5 6	Blodel	Michael	David	14322 E 640 Bd		Hopportoy.	72747 6650	6650 PO56170	/01
	793	03	Wittkower	Tom & Megan	legan	3901 Sam Bass Rd		Round Rock	Ť		174
			Burchers Louis & Martha Trsts The							Т	
		03	Burchers Family			1907 Great Oaks Dr		Round Rock	TX 78681-1558	-1558 R056166	991
03-125	792	03	Hilscher	Jay E & Joy H		3905 Sam Bass Rd		Round Rock	Ť		173
	791	03	Fitzgerald	William Pattor	atton & Gaylia	2101 Great Oaks Dr		Round Rock			178
	790	03	Williams	Deborah		2103 Great Oaks Dr		Round Rock	TX 78681-1560		171
03-128		03	Gennarelli	Gary & R	honda	2000 Great Oaks Dr		Round Rock		-1559 R450411	111
03-129	789	03	Goergen Joseph George & Barbara Anne Tr Of Goergen Family Trust	e & Barbara mily Trust		2200 Great Oaks Dr		Round Rock	TX 78681-1639	-1639 R063586	989
03-130	788	03	Savina	Anthony R & Ana	R & Ana	2103 Live Oak Cir		Round Rock	TX 78681-1549	-1549 R063587	282
	3	03	Rodriguez	Roger V & Lin	& Linda S	2107 Live Oak Cir		Round Rock			802
00 100		ŝ	30,000	Cho.	S. Ctonbon Month	2000		0	TOC 01 15 40		600
		50	Warschar	DINI LININ	irpiny & stephien wyatt	ZIO9 LIVE OAK CII		ROUTIG ROCK			500
	784	03	Hatfield	Jason & Kasey	Kasey	4009 Sam Bass Rd		Round Rock	T		523
	783	03	Taylor	Chad & J.	ennifer	4101 Sam Bass Rd		Round Rock	T		818
	787	03	Frers	Chad & Brandi		4105 Sam Bass Kd		Kound Kock		7	21/
03-138	781	03	Notgrass	Monte Blake &	lake & Allison Nagle	4109 Sam Bass Rd		Round Rock	TX 78681-1521	-1521 R035316	316
03-139	780	03	Sells	Gregory P	d	PO Box 1151		Round Rock	TX 78680-1151	-1151 R035315	315
03-140		03	Capital Hills Development	ent		3007 Live Oak St		Round Rock	TX 78681	R035313	313
03-141		03	Frve	James L		2301 Live Oak Cir		Round Rock	TX 78681-1508	-1508 R035311	311
03-142	777	03	Komm Family Trust			2307 Greenlee Dr		Austin			312
03-143; 03-144	785; 786; 787	03	Round Rock Presbyterian Church	an Church		4010 Sam Bass Rd		Round Rock	TX 78681-1569		R032008; R032019
03-145: 03-146	622	03	Brushy Creek Congregation Of	ation Of		4232 Sam Bass Rd		Round Bock	TX 78681-1569		B032021: R32 7819
			Jehovahs Witnesses								
03-147	778	03	Parker Community Christian Church	Russell D & Mi	& Mary F	1403 Pigeon View St 4300 Sam Bass Rd		Round Rock	TX 7865-1104	8665-1104 R083713 8681-1519 R032023	133
			Bushong Christine E Tru	ustee Of The				100 000			
			Christine Bushong Trust	st		241/ Deer Trail Cir		Kound Kock			
	775	03	Shavor	Sid A		7102 Wayne Ave		Lubbock	Ť		
03-154	777	03	Malone	Chappen C 8. Date	Susan L	17023 Pagosa Springs Ct		Austin Pound Bock	TX 79691	-2993 K3/8585	
	1/1	50	NOGIEL	Stephini	Correlan	4505 5011 0035 110	1	אסמוות ואספיי	1000	non.	040

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	Structures	gments	Title Last Name		Suffix Address 1	Address 2	Address 3	City	ate Zip	٦,
03-155	773	03	Wells	Rickey D & Sherry L				Round Bock	TV 70601 1522	522 K392448
03-157	7//	03	Hiff	David	4409 Sam Bass Rd			Round Rock	Ť	
03-15/		3 6	Teinert	Dennis	2401 Walsh Dr			Round Bock	Ť	
	768	03	Mauldip	David A & Martha	2405 Walsh Dr			Round Rock	Ť	
	767	03	Maxwell	Danny K & Dru Nell	2409 Walsh Dr			Round Rock	Ť	
	771	03	Counts	Steven M & Kelly D	2400 Deer Trail Cir			Round Rock	TX 78681	П
		03	Beckham	Phyllis C	2408 Deer Trail Cir			Round Rock	TX 78681-1502	١
03-163			Wagner	Melvin G & Betty A	2416 Deer Trail Cir			Round Rock	7	502 R001244
03-164			Smith	James D & Nancy	2500 Deer Trail Cir			Round Rock	Ī	
	770	O3 Ms.		Wanda Laverne Moore	4400 Sam Bass RD			Round Rock	Ė	
	022		Thomas Wanda L & Estate Of		AAOO Sam Bace Bd			April Bock	TX 786.81	B000522
	0//	ŝ	Edward Doyle Thomas Sr		THOO Sall Bass NO			NOUTE NOON		NO55 322
03-166; 03-167	769	03	Digiulio	Maria & Craig Digiulio	4412 Sam Bass Rd			Round Rock		
03-168		03	Goodman	Chris & Kim L	4416 Sam Bass Rd			Round Rock	TX 78681-1565	565 R032036
03-169		03	Conlee	Lynda & Larry Estate	1631 Cr 107			Hutto		
03-169		O3 Ms.	s. Conlee	Lynda J	1631 CR 107			Hutto	TX 78634-3009	309 R032038
03-169		O3 Mr	r. Conlee	WilliamT	1631 CR 107			Hutto	TX 78634-3009	009 R032038
03-170		O3	Mr. & Rogers	David L & Jacquelyn F	2030 Airport Road			Georgetown	TX 78628-2301	301 R032016
								•		Т
03-170		O3	Mrs Rogers	David L & Jacquelyn F	4420 Sam Bass Road			Georgetown	TX 78681-1565	565 R032016
03-170		O3 Mr.	r. Rogers	Joel T	4420 Sam Bass Road			Georgetown	TX 78628-2301	301 R032016
0										
03-170		ŝ	Joel T Rogers		2030 All politika			neor genomi	1. / 00.00-Z:	
03-171; 03-172	764; 765	03	Gessaman	Bruce & Carole	4500 Sam Bass Rd			Round Rock		
03-173			Baker	James W & Cameron	2404 Walsh Dr			Round Rock		R032633
03-174	766	03	Root	Ron & Janet	2406 Walsh Dr			Round Rock		Т
03-175	762; 763		Sibigtroth	James M	2412 Walsh Dr			Round Rock	78681-	1420 R032707
03-176		03 Mr	Mr. & Allen	Randy C & Sandra D	4607 Sam Bass Road			Round Rock	TX 78681	R413021
			O Caspan Danda Co							
03-176		03	Trustees (Le'S)Of The Allen Trust		4607 Sam Bass Rd			Round Rock	TX 78681	R413021
03-177	761	03	lobal	Kovin John	A605 Cam Bace Bd			Pour Bock	TV 79691-1410	419 B413030
(1-1)	101	5			DV 5550			NOON PURON		
03-178; 03-179		03	Lindell	John M & Janice A	2405 Mayfield Dr			Round Rock	TX 78681-1417	417 R413018; R413019
03-180	757	03	Klingemann	Michelle D & Eric C	1806 Eubank St			Georgetown	Ħ	
	760	03	Schneider	Joseph & Amadina	2404 Mayfield Dr			Round Rock	TX 78681-1472	472 R338922
03-182	759	03	Jorden	Pat O & Deborah V	4701 Sam Bass Rd	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Round Rock	T	438 R032672
	756	03	Skaggs Family Revocable Trust) post (v	C/O Ronald L Skaggs	2620 Fm 1460		Georgetown Pound Pock	TX 78626-7416	416 R032671
	755	03	Roba	Edward B & Bebecca B	4709 Sam Bass Rd			Round Rock	TX 78681-1438	T
	55.	6	200	3				200		
03-186; 03-187; 03-188	754	03	May	Pleona	4713 Sam Bass Rd			Round Rock	TX 78681-1438	438 R032666; R032667; R032668
03-189	753	L3; M3; O3 Ms.	s. LaBlanc	Marilyn C	4717 Sam Bass Rd			Round Rock	TX 78681	R032665
03-189	753	L3; M3; O3	Leblanc	Marilyn C & Estate Of Berness R	4717 Sam Bass Rd			Round Rock	TX 78681	R032665
P-001	41	C6- E6-1 - M- N - D	Giaco	Vince I & Nanette	17400 Bonald W Beagan Blyd			Georgetown	TX 78628-6815	815 R334861
P1-004	!	. (. (. (. (. (. (. (. (. (. (. (. (. (.	Guduru	Ashoka	4212 Valley Oaks Dr			Leander		
P1-006	139	P1; Q1; T1	Shaw	Jason & Shawna	2413 Blended Tree Ranch Dr			Leander	TX 78641	R526463
	138	P1; Q1; T1	Chinni	Ranjith Kumar	2409 Blended Tree Ranch Dr			Leander		R526462
			Gill	Shawn & Heather	4217 Valley Oaks Dr			Leander		R532234
	137	P1; Q1; T1	Maruthappen	Kathiresan	2401 Blended Tree Ranch Dr			Leander		R526460
	136	P1	Bitla	8	2329 Blended Tree Ranch Dr			Leander	Ť	R526459
P1-016			Rose	Robert M Jr & Cheryl	2404 Blended Tree Ranch Dr			Leander	TX 78641	R526509
P1-01/			Romero	Names T. & Philotype Thi	2229 Blanded Tree Ranch No			Leander	Ť	K526508
P1-018			Yo	Nbi-Lan	2328 Bleffued Tree Ranch Dr.			Leander	78641-1	K326307
01-002			Simpson	Billy	2750 Cr 175			Leander	78641	
Q1-003			Behrens	Aaron & Lauren	7100 Acacia Dr			Leander	İ	R037970
Q2-001		M3; Q2; R2; S2; Y2	Fred L Rubin and Frieda B Rubin		C/O Frieda B Rubin	PO Box 200339		Austin	TX 78720-0339	3339 R031462
			K&H Investments, General							
Q2-001		M3; Q2; R2; S2; Y2	Partnership Between Henry B Maves. Ir and Kathy Maves		PO Box 200339			Austin	TX 78720-0339	339 R031462
Q2-001; R2-001		M3; Q2; R2; S2; Y2 Ms	Ms. Adams	Frances Lynn Carssow	PO Box 200339			Austin	TX 78720-03	78720-0339 R031462; R031464

Tract ID	Structures	Segments	Title	Last Name	First Name Suffix	fix Address 1	Address 2	Address 3	City	State Zip	1	axID
R2-001		2 · 52 · 42			ances & William Ir				÷	_	R 95 50-02 28	R031462: R031464
		(((
Q2-001; R2-001		M3; Q2; R2; S2; Y2	Ä.	Carssow	James Patton	PO Box 200339		4 <	Austin	78/ XT	78720-0339 R	RO31462; RO31464
Q2-001; R2-001			T		William Beliton	PO BOX 200339		1 4				R031462; R031464
100 311											222	201102, 1001101
Q2-002 2	261; 262	Q2; R2; S2; Y2		Partnership		Attn : Sandra L Herberger	6467 Main St	m	Buffalo	NY 142	14221 R	R457681
Q2-003; T2-061; T2-062; Y2-155; Y2-183; Y2-185; Y2-186; Y2-187; Y2-188; Y2-192; Y2-207; Y2-231		Q2;,Y2		Vista Oaks Owners Assoc Inc		PO Box 342585		٩	Austin	XT 787	78734-0044 R	R318159; R347816; R347824; S21944; R83141; R361374; R392165; R392166; R392167; R402672; R407798; R407799
Q2-004	245	12; 12; 02			Joe E	4000 County Road 175		٦		TX 786	78641-1604 R	R031467
Q2-005						4453 Hunters Lodge Dr		~				378462
Q2-006				ns	Katherine & Juliana Goldoni	4451 Hunter Lodge Dr		2 0		T		R378463
Q2-00/					Mark	4449 Hunters Loage Dr		2 0		Ī		K3 /84 64
Q2-008	056	Q2		Callans	April	4447 Hunters Lodge Dr		2 0	Round Rock	1X X	78681-1018 R	R3 78465
	259	02			Brandon P & Christen M	4443 Hunters Lodge Dr		2 2	, ,			R378467
T2-182	352	T2				4438 Hunters Lodge Dr		2				R378499; R454518
					0 141			-		T		004000
Q2-012		i c		Clarke	Quentin C	44.36 Hunters Lodge Dr		Υ 0	Round Rock	× × ×	78681 H	K3/8498
Q2-014		77		o Alvin M Trustee Of The Alvin		11467 Raedene Way		2 5				R378500
02-015					Benton James & Karen E	4434 Hupters Lodge Dr			Round Bock	787 XT	78681	B378497
02-015		0,			Kevin	5005 F Mountain View Dr				Ť		R378469
Q2-017		3			Jeffrey & Reagan	4304 Indian Oaks		0 22	×	TX 786	.1080	R378501
Q2-018				Jackson	Debbie	4432 Hunters Lodge Dr		R			78681-1017 R	R378496
Q2-019		Q2		u	Crystal N & James	4437 Hunters Lodge Dr		~	Round Rock	TX 786		R378470
Q2-020					ChadG	4306 Indian Oaks		Δ.		T		378502
	350	i c		Dnesi	Banka & Jeanine	101 W Yale Loop			Irvine	47 57 57 57 57 57 57 57 57 57 57 57 57 57	92604-362U R	K3 /8495
Q2-023		4			Dree	4308 Indian Oaks		2 2				R378503
Q2-024				Miller	Austin Caleb & Megan Amanda	4428 Hunters Lodge Dr		~	Round Rock	7X 786	78681 R	R378494
02-025	757	03		Williams	Michael E	4433 Hinters Lodge Dr		α	Bound Bock	787	8681-1017 B	B378472
		4			Danielle M	4310 Indian Oaks						R378504
				n	James L & Amy M	4426 Hunters Lodge Dr		R				R378493
Q2-028	256	Q2			Adrian & Robert A	4431 Hunters Lodge Dr		R	Round Rock	TX 786	78681 R	378473
Q2-029				Marple	Steven C & Jacqueline C Hernandez	4312 Indian Oaks		<u>~</u>	Round Rock	7X 786	78681 R	R378505
Q2-030				Gonzalez	Gerardo	4424 Hunters Lodge Dr		R	Round Rock	TX 786	78681-1017 R	R378492
Q2-031	255	Q2				4429 Hunters Lodge Dr		R	,			R378474
Q2-032			ĺ	0	Saul & Guadalupe	4314 Indian Oaks		2 0		'	-1080	R378506
	25.4	03	Ī	S	Jeremy S Wiamie	44.20 Hunters Lodge Dr		Υ 0	Kound Rock	T		K3/8491
Q2-034 Q2-035	t	25		Baroi	David & Shikha	4427 Hainers Louge Di 4316 Indian Oaks		2 22		TX 786	78681-1080 R	R378507
Q2-036				en	Patrick	4418 Hunters Lodge Dr		æ				R378490
	253	Q2			Thomas L & Judith S	4425 Hunters Lodge Dr		2		Ė		378476
					Robert A & Melanie D	4300 Rock Hill Rd		R		Ħ	2241	R3 78487
02-039					Lee Ann & Todd	4416 Hunters Lodge Dr		2				R378489
	252	Q2		Jacobs	Scott D & Holly M	4423 Hunters Lodge Dr		~ 1	Round Rock	TX 786	78681-1017 R	R378477
	251	02			Neal D & Rebecca D	4301 Rock Hill Rd		2 0				399196
	720	77	Ī		Gary K & Snaron K	4303 KOCK HIII Ka		Y 0		Ť		K399197
02-043				Fritz	Robert I & Sandra K	441/ Hunters Louge Dr 4302 Rock Hill Rd		2 2	Round Rock	1X 786	78681-2241 R	R3 /8486 R3 992 30
02-045					Corey & Veronica	4415 Hunters Lodge Dr	+	. 2				R378485
Q2-046		T2				PO Box 770		B				R399221
Q2-047		12		Chatterton	Thomas	3713 Lagoona Dr		В	tock	TX 786	78681-2325 R	399220
Q2-048		T2			Shawn E & Nicole L	4316 Rock Hill Rd		<u>~</u>	Round Rock	TX 786		399219

Tract ID	Structures	Segments	Title Last Name	First Name Su	Suffix Address 1	Address 2	Address 3 City	State Zip	TaxID	
Q2-049	249	12; 12; 02	Hirose	Tetsuo & Denise Hirose & Denise Thomas Hirose Trustees	10701 Purg Lane Cv		Austin	TX 78733	R399198	
Q2-050	248	12; J2; Q2; T2	Mcnutt	David B & Ramona F Gaston- Mcnutt	4317 Rock Hill Rd		Round Rock	TX 78681	R399199	6
Q2-051	247	12; J2; K4; Q2; T2	Palczer	Louis	4309 Rock Hill Rd		Round Rock	TX 78681	R399200	0
R1-001; R1-002		L5; R1; U1a	Dudgeon	Patrick Hardy	14751 Ronald W Reagan Blvd		Leander	TX 78641-2586		R332409; R485237
R1-003		R1	Mcgraw Minerals Ltd & John L Robertson		PO Box 540		Jasper	TX 75951	R485236	9
R1-004		R1	Beck	Michael & Reba	14801 Ronald W Reagan Blvd		Leander			4
R1-009; R1-010			Continental Homes Of Texas Lp		10700 Pecan Park Blvd	Fourth Floor, #400	Austin	TX 78750-1227		R538726; R538727
R1-011			Howard	Luther H & Debra J	2355 Lyla Lh		Leander			n c
R1-013			Denton	Robert & Sarah Swinney	23.32 Lyla Lii 23.48 Lyla Ln		Leander	TX 78641		1
R1-014				Trey A	2344 Lyla Ln		Leander			2
R1-015			Walsh	Phillip J	2340 Lyla Ln		Leander	TX 78641		3
R1-016				Jennie & Nicolas	2336 Lyla Ln		Leander			4
R1-01/ R1-018			Badhiwala	Justin Gordhan	2332 Lyla Lh 2328 Lyla Lp		Leander	TX 78641	R514766	. 4
R2-001		R2	Fred L Rubin and Frieda B Rubin Living Trust		PO Box 200339		Austin			4
R2-001		R2	K&H Investments	General Partnership between Henry B Mayes, Jr & Kathy Mayor	PO Box 200339		Austin	TX 78720-0339	-0339 R031464	4
R2-002		R2	Schara	David J	12001 W Parmer Ln		Cedar Park	TX 78613-7767	-7767 R363928	8
R2-003; R2-005		R2	Stringer	Jud	1501 County Road 256		Liberty Hill			R037977; R363927
R2-004		R2		William E & Carolyn	101 Raley Rd		Cedar Park	İ		2
R2-006		R2	Rice	Alvin Loyd & Hazel E	4200 E Whitestone Blvd		Cedar Park	Ť	78613-6926 R037976	9
R2-00/		R2		Jared	1904 Brushy Bend Dr		Round Rock	TX 78681-1451		0 6
R2-010		R2	Equity Trust Co Custodian		Attn: Marvin A Urbanczyk Jr	3001 Spanish Oak Trl	Round Rock			8
S-003		S; Y	Georgetown Properties Ii Llc		101 N Shoreline	Ste 600	Corpus Christi	TX 78401	R500983	3
5-004		S		Jared & Kasey	2904 Saint Federico Way		Round Rock			6
S-005		S	Timmerman	Robert L	9610 Leaning Cir		Austin	TX 78730	R504098	80 1
5-007		20 0		Carlos & Manely	316 Cameron CV		Cedar Park	T		9 6
S-010		2	Evans	Konaid D	12508 Belcara Pl		Austin	1X /8/32	K504093	5
S-011; S-012; S-014; S-017; S-021		s	Escalera Ranch Owners Association Inc		C/O Goodwin Management, Inc	PO Box 203310	Austin	TX 78720-3310	3310	R392508; R392521; R392533; R481486; R504110
5-013		8; ∀	Fm 2243 Ltd		PO Box 200339		Austin	TX 78720	R031737	7
S-015; S-016	48	S; Y	Martinez	Anita & Amelia Valdez & Irene Torrez	407 Susana Dr		Georgetown	TX 78628		R031733; R031734
S-018; W2-082	502	s; w2	Bezuidenhout	Daniel A & Laura A	4012 Enchanted Rock Cv		Round Rock	TX 78681		R392509; R441195
S-019 S-020		S	Park Webb	Saung Z Kelly M & Matthew W	115 Escalera Pkwy 125 Folsom Ct		Georgetown	TX 78628-7116 TX 78628-7046	-7116 R392510 -7046 R481476	0
S-025; S-026; S-027		S	Mr. Garey	Alan Jack	6450 FM 2243		Georgetown	TX 78628		R032114; R032115; R484374
S-025; S-026; S-027		s	Garey Jack & Camille A (Le) & Tx Parks & Recreation Foundation		6450 Fm 2243		Georgetown	TX 78628		R032114; R032115; R484374
S-025; S-026; S-027		S	Texas Parks & Recreation Foundation		C/O Richardson Improvement Corporation	2100 East Campbell Road, Suite 100	Richardson	TX 75081		R032114; R032115; R484374
8-029		S	Land Buddies Llc		2929 W 5Th	Ste A	Fort Worth	Ì		
5-030	44	s		Mark A & Teresa J	7170 Ranch Road 2243		Georgetown	786	28-7140 R327426	
	43	S	Curington	Lloyd R & Paula E	7200 Rr 2243		Georgetown	TX 78628-9629		
21-002	1	E5; G5; H5; S1; V1; V1a; W1; X1; Y1; Z1		Mark E II & Irma F	7230 Acacia Dr		Leander	TX 78641-9385		R037939; R037973; R037974
\$1-002; \$1-006		E5; O1; Q1; S1	Jen Texas lii Llc		7405 Covewood Dr		Garland	TX 75044		R031571; R518872
51-004		51	Powell Sam R & Patsy L Trustees Of The Powell Living Trust		7220 Acacia Dr		Leander	TX 78641	R037972)
		1	_				=		-	

Tract ID	Structures	Segments	Title Last Name	First Name	Suffix Address 1	Address 2	Address 3 City	State Zip	TaxID	
T2-066		12	Mf Mayfield Ranch Homeowners		C/O Southwest Mgt Services	PO Box 342585	Austin	TX 7873	78734-0044 R475405	
T2-067	306	172	Weger	Frank John & Christa S	3804 Sapphire Ct		Round Rock	TX 78681	81 R475406	
	307	Т2	Collier	Sharon K	3808 Sapphire Ct		Round Rock	ΧL		
	308	Т2	Elliott	Michael	3812 Sapphire Loop		Round Rock		81 R475408	
T2-070		Т2	Coatney	David & Jean Elisabeth	3816 Sapphire Loop		Round Rock	ĭ	78681 R475409	
T2-071	350	T2	Pietrasik	Robert J & Patricia W	3815 Sapphire Loop		Round Rock	ĭ		
	311	7	Whited	Eric L & Jennirer L	3811 Sappnire Loop		Kound Kock			
T2-073	309	Т2	Harmon	Laura A & Adelaide M Harmon	3807 Sapphire Ct		Round Rock	TX 7868	78681-2427 R475403	
T2-074	310	T2	Elkjer	Matthew Albin & Nikki S	3803 Sapphire Ct		Round Rock	TX 78681	81 R475404	
T2-075: T2-077: T2-083: T2-110:			Mf Mavfield Ranch Homeowners							465250: R465280:
T2-146		12	Assoc Inc		C/O Southwest Mgt Services	PO Box 342585	Austin	TX 78734		R465281; R475421
T2-078	286	72	Blackmon	Clark J & Lisa D	4132 Massev Wav		Round Rock	XL XL	78681-2394 R465279	
	285	T2	Courson	Windell & Shin O	4128 Massey Way		Round Rock			
	284	T2	Ballis	John J & Laura K	4124 Massey Way		Round Rock			
T2-081		Т2	Jones	Steve & Brandy	4120 Massey Way		Round Rock	T	78681 R465276	
12-082 T2-084	289	1.5	Ellison	Bryon D & Brooke F	4115 Massey Way		Round Bock	TX 78681		
T2-085	288	172	Kingsbery	Amy K & Austin P	4131 Massey Way		Round Rock	Ť	-2394	
	287	T2	Hancock	Bryan Allen & Jennifer Violet	4127 Massey Way		Round Rock	TX 7868	78681-2394 R465299	
T2-087		T2	Anderson	James William & Mary Lou A	4121 Massey Way		Round Rock	TX 78681	81 R465298	
T2-088			Imran	Javaid & Iram Imran	4115 Massey Way		Round Rock			
T2-089			Heugatter	Lisa	3808 Crest Ln		Round Rock			
T2-090			Simmons	Paul Thomas	3812 Crest Ln		Round Rock	T	2392	
T2-091		F	Hiser	Austin M & Christin A	4100 Twilight CV		Round Rock	TX 78681	81 R465291	
12-092 T2-093	290	172	Mican	Robert H & Linda D	4104 I Willight CV		Round Rock	TX 78681		
	291	172	Cochran	Oliver T & Denise M	4112 Twilight Cv		Round Rock	T	-2391	
	292	T2	Sosa	Javier A & Valerie M	4113 Twilight Cv		Round Rock			
T2-096	293	T2	Pennington	Roderick James & Monica	4109 Twilight Cv		Round Rock		81 R465286	
	294	12	Peincold	Steven S. Clandia	4103 I Willight Cv		Round Bock	TX 78681		
	296	T2	Saccone	Daniel T & Melody A Ball	3836 Crest Ln		Round Rock	Ť		
	297	Т2	Latiolais	Damon W & Christy R	3840 Crest Ln		Round Rock	Ė		
T2-101			Hlavenka	Joey & Tracy	3821 Crest Ln		Round Rock			
12-102 T2-103		12	Pappin	William & Francesca	3825 Crest Ln		Round Rock	TX 79691	78681 R465260 78681-2302 B465250	
T2-104	298	T2	Rudi	Erik T & Kathleen M	4001 Madison Ct		Round Rock	Ť	.1 _	
	300	12	Lester	Nancy B & James H Wasilchen	4005 Madison Ct		Round Rock		78681-2390 R465257	
	200	c.h	1000	0 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	20			T		
T2-107	302	72	Wending	Robert Charles & Demetra	4009 Madison Ct 4013 Madison Ct		Round Rock	1	8681-2390 R465255 8681-2390 R465255	
	304	T2	Simmons	John W Jr & Lindsey M	4017 Madison Ct		Round Rock	TX 78681		
	305	Т2	James	Bartel W & Kathy E	4021 Madison Ct		Round Rock		-2390	
12-111 T2-112	301	172	Planchard	Renneth P & Melinda A	4008 Madison Ct		Round Bock			
	312	12	Tibbetts	Brandon J & Haven L	4112 Saphire Loop		Round Rock	ž	81 R475402	
T2-115	314	T2	Clark	Michael Blair & Amber Nicole	4108 Sapphire Loop		Round Rock	TX 7868	78681-2431 R475401	
				Satavahana Varma & Sitara						
T2-116	316	T2	Immalraju	Suravarapu	4104 Sapphire Loop		Round Rock	TX 78681	81 R475400	
	317	Т2	Howard	Michael D & Donna D	4100 Sapphire Loop		Round Rock			
	313	17	Johnson	John Ligi & Bindu Mathew	4109 Sapphire Loop		Round Rock	TX 78681		
T2-130	318	17	Schub	Tiffani & Danny I	4103 Sappline Loop		Round Bock	Ť	81 R475429	
		12	Senger	John A & Wanda L	3908 Crest Ln		Round Rock		-2426	
T2-122: V2-106: V2-107		T2: V3	Moder Go		1011 N I smar Blvd		Austin	787 VT	78703-4991 B055388-	PO55388: B475476: B542617
		12, 12	מווימן סף ווויכ		TOTT IN CALLIAI BING		III SON			747.3470, N342017
	320	T2	Carawan	Russell E & Brenda G	4012 Sapphire Loop		Round Rock	¥		
12-124 T2-125	322	12	Lovicott	Dominick Mindy K & Larry J Jr	4008 Sappnire Loop 4004 Sapphire Loop		Round Rock	TX 78681	81 R475474 81 R475473	Ī
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Tract ID	Structures	Segments Ti	Title Last Name	First Name	Suffix Address 1	Address 2	Address 3 City	State Zip	TaxID	
			Strickland	Laurie J & Jerry J	phire Loop			TX 78681	R475472	
		Т2	Firestone	Sarah M	3996 Sapphire Loop		Round Rock			
		T2	Muto	Daniel L & Christi M	3992 Sapphire Loop		Round Rock	TX 78681-2429		
		T2	Kenneweg	David S & Silvia T	3988 Sapphire Loop		Round Rock			
		T2	Huckins	Walter G	ir 3984 Sapphire Loop		Round Rock	TX 78681	R475468	
T2-131	334	12		Douglas A & Mindi J	3980 Sapphire Loop		Round Rock			
		-					-			
T2-133		T2	Stephens	Brian James & Michelle Kathryn	3972 Sapphire Loop		Round Rock	TX 78681-2429	.2429 R475465	
	319	Т2	Simpson	Christopher R & Christine K	4013 Sapphire Loop		Round Rock			
		T2	is	Carmen P & George F	V 6909 N Lakewood Dr		Georgetown	TX 78633-	9534 R475438	
	321	T2		Angela M	4009 Sapphire Loop		Round Rock	T		
		T2	Nichols	John J & Rachel L	4007 Crest Cv		Round Rock			
	323	T2	Akarapu	Prashanth K	4005 Sapphire Loop		Round Rock			
T2-139		T2		Robert Lee & Carmen Tym	4011 Crest Cv		Round Rock	TX 78681	R475440	
	325	112 T3		Mark S	4001 Sapphire Loop		Round Rock	Ť	L	
		12	Gomez Anthony D & Lisa M		4015 Crest CV		Kound Rock	-1X /8681-	2425 K475441	
	327	12	Milcon	Han & Jee Seon	3995 Sapprire Loop		Round Rock	TX 70601		
		7.3	Wilson	Linds C. John D	3383 Sappline Loop		Pound Bock	TV 70601	DA75 ADO	
12-144		71	Peacock		5977 Sapprine Loop	1			K475490	
T2-145		72	Highlands At Mayfield Ranch Mud		C/O Sue Brooks Littlefield	Armbrust & Brown Pllc C A 1	Congress Ave Ste 1300	TX 78701	R523429	
T2-147		Mr		Van Taylor	3901 Lagoona Dr		Round Rock	TX 78681-2359	2359 R453490	
T2-147			Read Van Taylor (Le) & Stanton Read		3901 Lagoona Dr		Round Rock	TX 78681-2359	.2359 R453490	
T2-148		T2	Murillo	Sal Benito Iii	3905 Lagoona Dr		Round Rock	TX 78681	R453491	
	335	T2	Jackson	Henry Hoyt & Sharon B	3909 Lagoona Dr		Round Rock			
T2-150			Stout	Christina S & Matthew L	3820 Octavia Ln		Round Rock	TX 78681		
T2-151		Т2	Johnson	Kathleen Elizabeth	3946 Vallarta Ln		Round Rock			
T2-152			Padres		3816 Octavia Ln		Round Rock	TX 78681-2358	.2358 R453488	
T2-153		T2	Daniels	Albert & Paula & Michele Elaine Davenpor	3942 Vallarta Ln		Round Rock	TX 78681-2355	.2355 R453494	
T2-154			Train	Kevin N & Kristina M	3812 Octavia Ln		Round Rock	TX 78681	R453487	
T2-155		T2		John A II & Karon R	3938 Vallarta Ln		Round Rock	TX 78681-2355		
T2-156			iner	Jason A & Sarah	3808 Octavia Ln		Round Rock			
T2-157		T2	Ornelas	Matthew & Maria N	3934 Vallarta Ln		Round Rock	TX 78681	R453496	
12-158		T2	Hulsey	Lukas & Casandra Byan I & Lindsov	38.04 Octavia Ln		Round Rock	TX 78681	R453485 R453497	
T2-160		3	Crooks	Larry W & Judy	3800 Octavia Ln		Round Rock		R453484	
	336	172	Cubillan	Henrique Jorge & Katharine	3949 Vallarta Ln		Round Rock		R453459	
	337	12	Evangelista	James & Melody	3945 Vallarta In		Round Bock	TX 78681	R453460	
		T2	Rivas	Kerry	3941 Vallarta Ln		Round Rock		R453461	
T2-164		T2	Joseph	Norman	3937 Vallarta Ln		Round Rock	Ī	R453462	
	340	T2	Benhumea	Carlos Rosales & Sherrie	3933 Vallarta Ln		Round Rock	TX 78681	R453463	
T2-166	341	Т2	Gharpure	Padmanabh & Vinaya	3929 Vallarta Ln		Round Rock	TX 78681	R453464	
T2-167	342	T2	Mcadams	Matthew & Rebecca	3925 Vallarta Ln		Round Rock	TX 78681-2355	.2355 R453465	
		T2	Taylor	James R	3921 Vallarta Ln		Round Rock			
T2-169		T2	Herrmann	John & Moria	3917 Vallarta Ln		Round Rock	TX 78681-2355		
	344	T2	Bailey	Gilbert R III & Cindy J	3913 Vallarta Ln		Round Rock			
T2-171		Т2	Amman	Suzanne T	3909 Vallarta Ln		Round Rock	TX 78681	R453469	
T2-172				Christopher B & Kimberly R	3905 Vallarta Ln		Round Rock			
72-173; T2-187; T2-234; T2-235; T2-257; T2-286; T2-293; U2-038; U2-043; U2-052; U2-070		72, ע2, ע5	Preserve At Stone Oak Owners Association Inc		C/O Goodwin Management, Inc	PO Box 203310	Austin	TX 78720-3310		R423778; R423810; R423830; GA R423835; R423801; R423901; R453904; R454985; R454516; R454550; R454551
T2-174			Hoffman	Chad B & Heather A	3837 Castle Rock Cv		Round Rock	TX 78681	R454526	

Leander-Round Rock 138-kV Transmission Line Project	Directly Affected Landowner List Including Tract IDs and Habitable Structures
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Tract ID	Structures	Segments	Title Last Name	First Name Su	Suffix Address 1	Address 2 Address 3	3 City	State Zip	TaxID	Q
			Raguraman	ish Krishnan			Darien	IL 6056	60561-4357 R45	R454525
12-176		T2	Denbar Michele Tr Of Michele Denbar Trust		366 Appaloosa Run		Liberty Hill	TX 7864	78642-3862 R454524	1524
T2-177	347	T2		Daryl J & Barbara	3825 Castle Rock Cv		Round Rock	TX 78681		R454523
	346	T2	0	Salomon C & Yolanda	3821 Castle Rock Cv		Round Rock		-2368	1522
T2-179	348	Т2		Marshall Scott Sr & Sylvia Jo	3817 Castle Rock Cv		Round Rock	TX 78681		1521
	349	172	Langley	Gregory Barker	3813 Castle Rock Cv		Round Rock			1520
	350	7	Wiesman	Justin & Kimberiy	8308 Jancy Dr		Austin		_	K454519
12-183	353	7.1	Grant	Gary Douglass	3801 Castle Rock CV		Kound Rock	TX 7868	78681-2368 R454517	517
	351	71	Navarrete	Antonio A & Kosa i	38.26 Castle Rock		Kound Rock		- 1	1538
12-185		7	Kill Kill Kill Kill Kill Kill Kill Kill	Jae & Mina	610 Eyre Cir		Placentia			153/
12-186			Ramsey	Tracy	3834 Castle Rock Cv		Round Rock	TX 7868	78681-2368 R454536	536
T2-188, T2-192; T2-200; T2-201; T2-202; T2-203;		12	Highlands At Mayfield Ranch Master Community Inc		PO Box 342585		Austin	TX 7873	78734-0044 R523	R523430; R523431; R523433; R523434; R528389; R528400
T2-189, T2-190; T2-191; T2-193; T2-194; T2-195; T2-196; T2-197; T2-198; T2-199; T2-304; T2-305; U5-001; W5-001; W5-006		B1; E6; T2; U2; U5	Hmr Holdings Inc		1011 N Lamar Blvd		Austin	TX 78703		R040295, R512094, R523612; R528300, R528391; R528395; R528393, R528394, R528395; R528396, R528397, R528388; R528399, R534650; R535000
T2-204	380	T2	Calvo	Benjamin	3749 Bainbridge St		Round Rock	TX 78681		R523436
12-205	382	T2	Cassidy	Michael J & Patricia L Waters	202 Walton Way	Ste 192-143	Cedar Park	TX 7861	78613-7044 R523437	1437
T2-206	384	T2	Bagh	Fares & Abeer	5600 Gorahm Glen Ln		Austin	TX 78739		R523438
T2-207	386	T2	Stallsmith	Robert L & Roena M	3737 Bainbridge St		Round Rock	TX 78681	81 R523439	3439
	388	12	Scott	Lindsey Marie & Denise Marks	3733 Bainbridge St		Round Rock	TX 78681		3440
	390	72	Telotta	Jude Neil & Jo Lea	3729 Bainbridge St		Round Rock			3441
T2-211	394	12	Farber	Samuel A Barry	3721 Bainbridge St		Round Rock	TX 78681	81 R523443	3442
		172	Adams	Rebecca G	3717 Bainbridge St		Round Rock			3444
		72	ee	Emily M & Evelyn S Lee	824 Livingston Ct		Naperville	IL 60540	40 R523445	3445
		172	Cuevas	Manuel Fric & limmy & Bomons	3709 Bainbridge St		Round Rock			3446
	403	T2	Rodriguez	Victor & Gloria G	3701 Bainbridge St		Round Rock			3448
		172	Hignite	Christopher M & Cynthia P	3750 Bainbridge St		Round Rock	Ħ		3449
T2-218		12	Blackwell	Christopher D & Rebecca	3746 Bainbridge St		Round Rock	TX 78681	81 R523450	3450
		T2	Guavdacan	Christopher S & Gina	3736 Bainbridge St		Round Rock	TX 7868		3452
		T2	Tran	Nicole	3730 Bainbridge St		Round Rock	Ė		3453
		T2	Imbriano	Michael Jr & Christine Maria	3726 Bainbridge St		Round Rock	TX 7868	78681-2472 R523454	3454
		T2	Oldendorf		Bainbridge		Round Rock		1-2472	R523455
T2-224	395	72	Ritchie	Shannon & Laura	3716 Bainbridge St		Round Rock	TX 78681	81 R523456	3456
		7	Newport	Medica Cilsula	27 TH DRILLING OF		NOON DIED			1010
T2-226	399	T2	Nivault	Stanis & Alice Nemeth-Nivault	3710 Bainbridge St		Round Rock	TX 7868	78681-2472 R523458	3458
T2-227	401	12	Baker Dan N & Linda K Trustees Of The Baker Living Trust-2006		3706 Bainbridge St		Round Rock	TX 7868	78681-2472 R523459	459
T2-228		T2	Laudenslager	Michael Jon & Eileen Mccabe	3721 Hermann St		Round Rock	TX 78681	81 R523465	1465
T2-229		T2	Mckenna	Ashley	3717 Hermann St		Round Rock	Ħ		R523464
T2-230		T2	Simmons	Violet	3713 Hermann St		Round Rock	TX 78681	81 R523463	3463
T2-231		172	Johnson	Chris & Brandy	3705 Hermann St		Round Rock		78681-2473 R523462	3462
757-71		7	Julius	חשווה א כמוווב	3/03 Permann 3t	_	Nouria moch		7C1 C/+7-TG	10401

Tract ID	Structures	Segments	Title La	Last Name	First Name St	Suffix Address 1	Address 2 Address 2	Address 3 City		State Zip	TaxID
						Life 3665 Spring Canyon TRL			Round Rock		R423890
					1 Rose			Rour			R423890
	422	72	8 4	n Angelia & Estate Of Kasein n		3665 Spring Canyon Trl		Rour	~	TX 78681-2263	R423890
T2-291	423	T2 T3-113-115	α >		Ricardo	2211 Arleen Way		San		CA 95130	R423889
	+7+	12, 02, 03	> \vec{v}		Bharati	3655 Hermann St		Rour	Round Rock	TX 78681	R530560
T2-295; T2-297; T2-298; T2-299; T2-300; T2-302; T2-303; T2-307		T2; U2; US	ن ت	Lennar Homes Of Texas Land & Construction Ltd		12401 Research Blvd	Bldg 1 Ste 300	Austin		TX 78759	R523319; R523369; R530555; R530561; R530563; R530564; R530565; R530566
T2-296		T2	×.		Tyrone D & Georgine	3647 Hermann St		Rour		TX 78681	R530562
T2-301 T5-002	1151	T2 E4; F4; F4a; G4; H4; I4; T5	<u> </u>	Lowrey D Rutledge N	Douglas A & Lori Mary Frances	3627 Hermann St 1805 Sam Bass Rd		Rour	Round Rock	TX 78681 TX 78681	R530567 R055237
U-001		U; V; W; Y	ه خه	Pyle Larry J & Doris M Trustees Of		505 Granger Rd		Geol		TX 78626	R032137
N-002		V:W:V	ک ا		Roger W	621 County Road 175		Lean	Leander	TX 78641-1641	8392186
N-003	47	T; U; V; W	В	ecker	John Wayne & Jody M	301 County Road 175		Leander			R032141
U1-001; U1-003; U1-004; U1- 005; U1-007; U1-009; U1-010; U1-031; U1-032; U1-033; V1- 006; V1-007; V1-009; V1-010; V1- 010; V1-010; V1-010; V1-010; V1- 017; V1-024; V1-024; V1-025; V1- 027; V1-028; V1-029; V1-039; V1- 046; V1-056; V1-051; V1-057; V1- 058; V1-056; V1-056; V1-057; V1- 058; V1-056; V1-060; V1-061; V1-	177; 183	E5; G5; H5; U1; U1a; V1; V1a; W1; X1; Y1	ŭ.	Felder M/l Caballo Ranch Llc		6414 River Place Blvd	100	Austin		7X 78730	R555384; R53585; R555386; R555393; R535394; R535396; R555393; R535394; R535417; R535419; R535427; R535417; R535421; R535426; R535427; R535422; R535436; R535422; R535436; R535421; R535449; R535420; R535446; R535460; R535466; R535465; R535466; R535466; R535465; R535466; R535466; R535465; R535444; R535464; R535444; R535465;
U1-006		U1	<u>a</u>	Pulluru Ja	lagan Mohan & Shiva Priya	3014 Paseo De Charros		Leander		TX 78641-2747	R535416
U1-011; U1-036; V1-005; V1- 022; V1-026; V1-031; V1-035; V1- 038; V1-047	172; 178; 180; 186	E5; G5; H5; U1; V1; V1a; W1; X1	≥	M/I Homes Of Austin Llc		6801 N Capital Of Texas Hwy	Ste 1	Austin		TX 78731-1781	R522618; R522620; R535383; R535399; R535433; R535448; R535440; R535446; R535448
U1-012	168	U1; U1a	S	Smith	Karl & Karen Glance-Smith	3011 Paseo De Charros		Leande	_	TX 78641-2747	R522630
		U1	Z.		Limin & Guoya He	3008 Paseo De Charros		Lean			R522617
U1-014	167	U1; U1a	> 0	Wempe C	Charles G & Meagan L	3009 Paseo De Charros		Leander		TX 78641-2747	R522629
	166	U1; U1a	2		Lee Carson	3007 Paseo De Charros		Leander			R522628
		UI	>		-avaughn F Jr & Janice Kay	3004 Paseo De Charros		Lean		Ħ	R522615
01-018	165	U1; U1a	Ч.	en	Marc L & Jennifer A	3005 Paseo De Charros		Lean		TX 78641	R522627
	164	U1 U1: U1a	> I	Voss Holland Ir	William B	3002 Paseo De Charros		Lean	Leander	Ť	R522614 R522626
		U1	F		Keith & Christine A	3000 Paseo De Charros		Leander			R522613
U1-022 U1-023	163	U1; U1a U1	∞ >	Raby Nu	Matt W & Julie Viet & Thuvan	3001 Paseo De Charros 2319 Manada Tri		Leander		TX 78641 TX 78641	R522625 R522592
			1					2			

Tract ID	Structures	Segments Tit	Title Last Name		Suffix Address 1	Address 2 Ad	Address 3 City	State Zip	TaxID
01-024	162	U1	Stanton	Edward & Ivy Stanton & Delma	2321 Manada Trl		Leander	TX 78641	R522593
U1-025	160	U1	Marcy	Steven A	2401 Manada Tri		Leander	TX 78641	R522594
	159	U1	Mathew	osam	4417 Pebble Beach Dr		League City	Ħ	R522595
U1-027	161	U1; U1a	Acosta	Courtney Beth & Mario I	2405 Manada Trl		Leander	TX 78641	R522596
U1-029; V1-049		L5; R1; U1; U1a; V1; V1a	Burleson Ranches Ltd & Mary Frances Roberts		28217 Honeysuckle Dr		Damascus	MD 20872-1314	R392187; R392188
U1-030		B2; L5; R1; U1; U1a	Burleson Ranches Ltd & Mfbrgp Llc & Est Of Roger Aaron Burleson Sr		28217 Honeysuckle Dr		Damascus	MD 20872-1314	R485248
U1-030		B2; L5; R1; U1; U1a	Burleson Ranches, Ltd		28217 Honeysuckle Dr		Damascus		R485248
U1-030		B2; L5; R1; U1; U1a Ms.		Mary Frances Burleson	28217 Honeysuckle Dr		Damascus		R485248
U1-035			Gatling	Roy M & Maria L	3011 Palominos Pass		Leander		R522619
U1-037			ınette	Gina Black	3007 Palominos Pass		Leander		R522621
U1-038				U-Peng & Mankee Anna Yu	3005 Palominos Pass		Leander	TX 78641	R522622
U1-039				Mark D & Linda R	3003 Palaminos Pass		Leander	Ī	R522623
	477	U2	Jc & Lore Llc		3208 Pine Needle Cv		Round Rock	TX 78681	R441266
	476	U2	Richardson	Craig & Janell	3204 Winding River Trl		Round Rock	TX 78681	R441267
	475	U2	Escobar	Albert Q & Joselito S Quirap	3208 Winding River Trl		Round Rock		R441268
	473	U2	Soria	Everardo & Jennifer	3212 Winding River Trl		Round Rock		R441269
	474	U2	Marquez	Jesus Ramos & Hildelisa V	3216 Winding River Trl		Round Rock	TX 78681	R441270
U2-006		U2	Mcclarney	Matthew A	3220 Winding River Trl		Round Rock		R441271
UZ-007, UZ-016, UZ-021; UZ-029, UZ-029, UZ-033, WZ-049, WZ-072; WZ-077; WZ-078, WZ-083; WZ-087, WZ-112		M5, N5, U2; W2, W2a	Preserve At Stone Oak Owners Assoc		C/O Goodwin Management, Inc	PO Box 203310	Austin	TX 78720-3310	R441154; R441165; R441182; R441186; R441199; R441200; R441201; R441207; R441210; R441245; R441219; R441300; R441301; R441319
U2-008	470	U2	Hickman	Austin	4105 Whitecrest Cv		Round Rock	TX 78681	R441273
	472	U2		Jose & Carolyn	4109 Whitecrest Cv		Round Rock		R441274
112-010	471	13 21	Mapley	John F & Datricia W	4113 Whitecrest Cv		Round Book	Ť	
	469	UZ			8728 Wafer Ash Wav		Austin		_
	468	UZ	Maye	David & Julie	4116 Whitecrest Cv		Round Rock		R441277
	467	U2	wan	Dilton & Lucia T	4112 Whitecrest Cv		Round Rock	TX 78681-1134	R441278
	466	U2		Sriram & Padmini	267 Loucks Ave		Los Altos		R441279
U2-015		U2		Michael & Stephanie	4104 Whitecrest Cv		Round Rock	TX 78681	R441280
U2-017		0.2	Folts Robert & Tina M & Kelly F & Tina M		4101 Pebble Ridge Cv		Round Rock	TX 78681	R441282
	464	UZ	Guzman	Ivan	4105 Pebble Ridge Cv		Round Rock		
U2-019	465	UZ		Jeffrey Alan	4109 Pebble Ridge Cv		Round Rock	TX 78681	R441284
	463	02	Satterwhite	Ryan B & Valerie M	4113 Pebble Ridge CV		Round Bock		
	461	UZ	Thurman	Kevin J & Melissa Jean	4121 Pebble Ridge Cv		Round Rock		R441287
	460	U2		Bao	4125 Pebble Ridge Cv		Round Rock	Ė	R441288
U2-025		U2	,	Reshmi E & Philip L	4120 Pebble Ridge Cv		Round Rock		R441293
U2-026		U2	Quinteros	Edgar R & Doris B	4124 Pebble Ridge Cv		Round Rock	TX 78681	R441292
	459	U2		Linda	4129 Pebble Ridge Cv		Round Rock		R441289
U2-028 U2-030	458 455	U2 U2	Deviller	Matthew A Shannon L & Angela M	4133 Pebble Ridge Cv 4139 Rocky Mountain Trl		Round Rock	TX 78681-1138	R441290 R441299
	456	UZ	re	Naveen Nagaraja & Rajani	1612 Greenside Dr		Round Rock		R441298
	1			Desai			4		
02-032	45/	02	Scott	Mary & Michael	4131 Rocky Mountain Irl		Round Rock	TX 78681	R44129/ R441246
	451	UZ		Susan R	4136 Rocky Mountain Trl		Round Rock	TX 78681	
	453	U2	nc	Sean A	4132 Rocky Mountain Trl		Round Rock		
	454	U2		Paul Jacob & Keri L	4128 Rocky Mountain Trl		Round Rock		
U2-039	448	U2	nosa	Richard	3267 Arroyo Bluff Ln		Round Rock		R423777
	447	07	Terra	Gregory R & Michelle L	3265 Arroyo Bluff Ln		Round Rock	TX 78681-2259	R423776
	443	70		Jared & bour	3203 ATTOYO DIGIT ELL		NOULIU NOCK		R423773

Tract ID	Structures	Segments	Title Last Name	First Name Su	Suffix Address 1	Address 2 Addre	Address 3 City	State Zip	TaxID
U4-019			Sreerama	Tejesvi	904 Purple Moor Pass		Leander	TX 78641	R521190
U4-020			Bayer	Sean & Amanda Boswell	900 Purple Moor Pass		Leander	TX 78641-2	876 R521191
U4-021			Bontu	Chandra Sekhar	913 Feather Reed Dr		Leander	TX 78641	R521195
U4-023			Daniels	David A	905 Feather Reed Dr		Leander	TX 78641	R521193
V1-001		V1; X1	North	Jason & Karine	3314 Vaquero Ln		Leander	TX 78641	R535379
V1-002	189	V1; X1	Dunham	Wallace Scott & Marie R	3316 Vaquero Ln		Leander	TX 78641	R535380
V1-003		H5; V1; W1; X1	Wood	Steven & Crystal	3318 Vaquero Ln		Leander	TX 78641-3263	
V1-004	187	E5; G5; H5; V1; V1a; W1; X1	Berger	Jamie M & Benjamin L	3320 Vaquero Ln		Leander	TX 78641	R535382
V1-011	184	۷1	Davenport	Samuel & Domicea J Everston	2303 Vaquero Cv		Leander	TX 78641	R535390
V1-015	182	V1: V1a	Hopkins	John R & Karen B	2306 Ponderosa Pass		Leander	TX 78641	R535395
V1-018		V1	Tambalkar	Omkar & Archana Parikh	2307 Ponderosa Pass		Leander	TX 78641	R535475
V1-019	181	V1; V1a	Zissler	Dennis F & Bethany	3207 Paseo De Charros		Leander		R535397
V1-030	176	V1; V1a	Jackson	Brian F	3119 Paseo De Charros		Leander	TX 78641	R535437
V1-033		V1	Poe	Shawn & Angela M	3114 Paseo De Charros		Cedar Park	П	R535447
V1-034	174	V1; V1a	Francis	David & Mollie A	3115 Paseo De Charros		Leander	TX 78641	R535435
V1-036	173	V1; V1a	Krohn	Marc	3113 Paseo De Charros		Leander	Ī	R535434
V1-041		V1	Gorthy	Suryanarayana & Suneetha	3106 Paseo De Charros		Leander	TX 78641-3259	259 R535443
V1-044	171	U1: U1a: V1: V1a	Dvke	Briagavutura	3105 Paseo De Charros		Leander	TX 78641	R535430
	1	51. (2. (51) (1)		Gary William & Marie Linet					
V1-048	170	U1; U1a; V1; V1a	Yost	Mcclure	3101 Paseo De Charros		Leander	TX 78641	R535428
V1-055			Bell	Jonathan D & Amber J	3115 Palominos Pass		Leander	TX 78641	R535459
V4-001; V4-002	20	11; 11; T4; V4; W; W4; X;	Stence	Jesse W	650 County Road 175		Leander	TX 78641	R032132; R032133
VA-004	27	X4; 1	7i.ret	Zachan K & Danaa C	3116 Wordgood Dace		Loandor	TV 786.41	B513703
V4-00+	ŧ	*	Whiten	Stenhania Stenhania	3110 Wedgestale rass		Leander	78641-	M313703
V4-006			Govani	Rakesh M & Teial R	3108 Wedgescale Pass		Leander	TX 78641	R513701
V4-008		۸4	Lundauist	Dean K & Lauri M	3113 Wedgescale Pass		Leander	Ī	R513704
74-009			Niehaus	Geoffrey & Kim	3109 Wedgescale Pass		Leander		R513705
V4-010			Barnes	Matthew D & Leah M	3105 Wedgescale Pass		Leander		R513706
V4-012	53	۸4	Borchgardt	Clint A & Andrea D	3116 Rabbits Tail Dr		Leander		R517864
V4-013			Tate	Brian C & Michelle M	3112 Rabbits Tail Dr		Leander	TX 78641	R517863
V4-014			niwin	Robert Bruce & Julia Elizabeth	3108 Rabbits Tail Dr		Leander	TX 78641	8517862
F 45.5									100
V4-015			Garcia	George IVI	3113 Kabbits Tall Dr		Leander	TX 78641	K51/865
V4-018			Hanna	NODELLO & Telesa L	3112 I vma Ridga Dr		Leanner		N31/866 R571133
V4-019			20000	lacoh	3108 Lyma Bidge Dr		Leander		R521132
V4-021			Pulluru	Jotheendra H & Sukanya A	3001 Silver Fountain Dr		Leander		
V4-023			Gwin Jon Alan & Julia C Gwin Trustees Of Jon & Julia Gwin Family		2913 Silver Fountain Dr		Leander	TX 78641	R521145
			Trust						
V4-024			Johnson	Serena Lynn & Roger Patterson	2909 Silver Fountain Dr		Leander	TX 78641	R521146
V4-025			Prokaski	Brian Phillip	2905 Silver Fountain Dr		Leander	Ħ	
V5-002	153	A2; D2; V5	Walker	Harvey L & Martha J	6700 Outer Ave		Leander	TX 78641-9384	
V5-003		VS	Mouser Properties Llc	1 1 1	Attn: Ed Mouser	3010 County Road 175	Leander	TX 78641	R392201
VS-004 VS-005: VS-006	144; 145; 140	71: V5: W5	Fvangelical Lutheran Synod	IIIC	FO BOX 1032/ 6 Browns Ct		Mankato	1	R381078 R443005: R443006
V5-007	Ç.	T1: V5: W5	Woitowecz	Todd P & Shari K	16617 Ennis Trl		Austin		R321440
W2-001: Y2-002		A3; O5; P5; Q5; W2;	Blevco Ii Llc		7144 Valburn Dr		Austin		R346033; R427330
		W2a; Y2; Z2	-						Т
W2-002		W2	Hammock	Sabrina & Russell	3620 Windhill Loop		Round Rock	TX 78681-1	1101 R361029
		W2	Gonzalez	Beverly Lippita V. Covin Dalo	3622 Windfill L00p		Round Rock	TV 79691	
	562	W2: W2a	Sosa		3624 Windhill Loop		Round Rock		
		W2; W2a	Pitcher	Ralph K	3628 Windhill Loop		Round Rock	TX 78681-1102	
		W2; W2a	Wachendorf	Christopher J	2162 Maha Pl		Honolulu	H	R361034
		W2; W2a	==	Alan & Laurie	3632 Windhill Loop		Round Rock	ř	
		W2; W2a	Seaton	Ian A & Donna K	3634 Windhill Loop		Round Rock	×	
W2-010	554	W2; W2a	Hebbe	Joseph H	3636 Windhill Loop		Round Rock		102 R361037
		wz, wza wz: wza	Raines	John	3638 Windhill Loop		Round Rock	<u> </u>	R361039
		W2; W2a	Zhanel	John Aaron	308 Quail Hollow Dr		Hutto	ž	R383985
		W2; W2a	Gray	Katharine	3644 Windhill Loop		Round Rock		R383986

	Structures	Segments	Title	Last Name	First Name	Suffix Address 1	Address 2 Add	Address 3 City		State Zip	TaxID	
W2-015				Trust					Je .			
	545	W2; W2a	Ī	Fugitt David S & Susan M		3648 Windhill Loop		Rou	Rock			
W2-017		W2; W2a		City Of Round Rock		C/O Planning & Community Dev	101 E Old Settlers Blvd Ste 200	Rou	Round Rock	TX 78664-2266	.66 R383992	
W2-018	542	W2; W2a	Ī	Bahm	Tracy & Fries	TODD 9417 Manitou Springs Ln		Austin	tin	TX 78717	R383989	
	543	W2			William & Gabrielle	3652 Windhill Loop		Ron		15		
W2-020	544	W2	Ť		Lisa	3604 Derby Trl		Rou		T		
	548	W.2	Ť	Fellers	Gary & Lisa Zink	3655 Windhill Loop		Kou	Round Rock	1X /8681	K384014	
WZ-022	552	W2	Ĭ		Deliecha & Paul	3821 IOD ROCK LII 3819 Ton Bock In		Rou		TX 78681	R384013	
	100	w2 W2	Ī		Hiram & Jennifer	3817 Top Rock Ln		Rou		Ť	R384011	
W2-025		w2	Ī	Mckean	Vernon W & Lois W	3818 Top Rock Ln		Rou		Ė		
W2-026	555	W2			Chung Kai	9705 Llano Estacado Ln		Austin		Ė		
W2-027	557	W2		Arcuri Anthony & Marcia &		10017 Lachlan Dr		Austin		TX 78717-4503	.03 R361052	
	260	W2	Ĭ	Gerhardstein	Eric C & Lindsay C	3623 Windhill Loop		Ron	Round Rock	TX 78681	R361051	
		W2	Ī	Barnes	Sidney P	3619 Windmill Loop		Rou				
W2-031		W2; W2a	Ħ	Continental Homes Austin L P		10700 Pecan Park Blvd	Unit 400	Austin		TX 78750-1227		
W2-032		W2	Ī	Dunlap	Robert J	4111 Natural Bridge Ct		Ron		,	R400022	
	539	W2	Ť	Olguin	Michel M & Rita	4113 Natural Brg Ct		Rou		Ť		
	540	W2	Ť	Dimicell	Jason & Jennirer	4115 Natural Bridge Ct		Kou	Kound Rock	1X /8681	K400024	
WZ-033	230	W2, W2d	ľ		Galy D & Bittally E	A 411/ Natural Drug		nou io		TV 70501 1115	75 PA00025	
	536	wz, wza w2: w2a	Ť	Shav	Shelly	4110 Natural Bridge Ct		Rou		Ť		
8	534	W2	Ĭ	Campbell	le Dian	4112 Natural Bridge Ct		Rou	Round Rock	TX 78681	R400028	
W2-039	535	W2		Vasanjee	Sunil Chunilal & Sohfeni Sunil	2253 Hamlet Cir		Rou	Round Rock	TX 78664-6132	.32 R400029	
			Ī		Tiffany Ann & Michael Paul							
	531	W2			Abar	4209 Mangrove Cave Ct		Rou	Ų		R400030	
W2-041	532	W2	Ì	Blakely	Evelyn	4211 Mangrove Cave Ct		Rou	Round Rock	TX 78681	R400031	
W2-042	533	W2; W2a		Boss Michael A & Estate Of Monique R Boss		4213 Mangrove Cave Ct		Rou	Round Rock	TX 78681	R400032	
W2-043	529	W2; W2a		Shaw	Karen K	4212 Mangrove Cave Ct		Ron	Round Rock	TX 78681-1117	17 R400033	
W2-044	530	w2		Pixler Edna L Trustee Of The Edna Lucille Pixler Revocable Trust		4208 Mangrove Ct		Ron	Round Rock	TX 78681-1117	.17 R400034	
W2-046	528	W2	İ	Trinh	Trang X & Santos R Juarez	3901 Rolling Canyon Trl		Rou	Round Rock	TX 78681-1130	.30 R441142	
	527	W2; W2a	ĺ	Christensen	Peter D & Pamela L	3905 Rolling Canyon Trl		Rou	Round Rock		R441143	
	526	W2; W2a	Ī		Douglas M	10416 Cannon Mark Way		Austin				
W2-050	523	W2; W2a	Ť	nsen	Loren C & Marlene D	3913 Rolling Canyon Trl		Rou		TX 78681-1130	30 R441145	
	521	W2; W2a	ľ		Kenneth A	3917 Rolling Canyon Irl	In: 221	Kou		T		
W2-032	518	WZ, WZG	ľ	Martinez		2025 Polling Camon	TEC 33T	nou d	Pound Book	, ,	30 PAA11A9	
	515	w2 W2	Ī		Dorothy	3929 Rolling Canyon Trl		Rou		Ť		
W2-055	514	W2 M	Mr.	Payne	Edward Michael	6215 Riverwalk LN	Unit 8	Jupi		FL 33458	R441150	
	514	W2 M	Ms.	Payne	Paulette	Life 3933 Rolling Canyon TRL Estate		Rou	Round Rock	TX 78681	R441150	
W2-055	514	W2		Payne Paulette & The Estate Of Dax Edward Payne		3933 Rolling Canyon Trl		Rou	Round Rock	TX 78681	R441150	
	513	W2	Ħ		Bo & David	2329 Village View Loop		Pflu		Ė	R441151	
	510	W2		Kirby	Thomas F & Colleen C	3941 Rolling Canyon Trl		Ron	Round Rock			
	503	W2	Ī		Jane A	PO Box 204354		Austin		•		
		W2	ľ	(a	Jerry Fred	III 4204 Mangrove Cave Ct		Rou		T	R400036	
WZ-060	525	W2			Amy J	3900 Kolling Canyon Tri		Rou			R441224	
	522	w2		Sotelo	Rachel H	3916 Rolling Canyon Trl		Rou	Round Rock	TX 78681	R441226	
	520	W2	Ī		Johnny E & June A	3920 Rolling Canyon Trl		Rou			R441227	
	516	W2	Ī		Amy Lou	3201 Canyon Ledge Cv		Ron	k	Ħ		
	517	W2	ľ	Withers	Catherine	200 Parkwest Dr		Ced				
W2-067	511	W2	Ť	Inomas	Joel F Jr & Allyn D	4308 Stone Oak Pl		Kou	Round Rock	TX 78681-1133	33 R441222	
	512	W2	Ĭ	Crowley	Christopher & Honey	3200 Canyon Ledge Cv		Rou				
	505	W2	Ī		Earl Steven	3839 Noe Ln		Rou			R441211	
	504	W2	Ī	qs	Chad E & Sunnye M	3215 Blue Ridge Dr		Ron			R441212	
W2-073	506	W2	Ť	Laich	Emily R	3212 Blue Ridge Dr		Rou	Round Rock	TX 78681	R441206	1
	207	W2	1		Rolando	3208 blue klage ur		Kon			K441205	1

<u>c</u> 1	1				4.0	·					<u> </u>
Iract ID	Structures	Segments	ine La	Name	Andronic 8, Molico Daum	Address 1	Address 2	Address 3 C	City Sta	State 21p	laxID B441304
WZ-U/3	900	7 / /	ני	hevy Levy		3204 blue Ridge Dr		E			K441204
W2-076	509	W2	Ğ	Garcia Jo	Iorge H & Maria E Rivera-Garcia	3200 Blue Ridge Dr		œ	Round Rock TX	78681-1129	R441203
W2-079	501	W2	×	Witt	Michael D & Georgia W Calloway	4000 Enchanted Rock Cv		~	Round Rock TX	78681-1127	R441198
W2-080	499	W2	Ab	Abell	Glynda D	4004 Enchanted Rock Cv		æ			R441197
W2-081 W2-084	500	W2 W2	Rig Pig	Rigg S	Sean D Terry & Ruth M	4008 Enchanted Rock Cv 4021 Enchanted Rock Cv		<u> </u>	Round Rock TX	78681	R441196 R441183
W2-085; W2-111		W2	Bri	ley	Gerald W	4041 Enchanted Rock Cv		~			R441184; R441187
W2-086		W2	H	Hudgins	Abbey	4033 Enchanted Rock Cv		2	Round Rock TX	78681-1127	R441185
W2-088	497	W2	Τħ		Eric Allen	3148 Blue Ridge Dr		R	Round Rock	İ	R441181
W2-089	496	W2	ΗV	Allen	iteven Mark	3144 Blue Ridge Dr		R		78681	R441180
W2-090	495	W2	Le.		Hannelore & Robert Smith	3140 Blue Ridge Dr		œ		7	R441179
W2-091	493	W2	La		Kamal & Deborah L	3136 Blue Ridge Dr		20 0			R441178
W2-092 W2-093	494	W2: W2a	H Le	Hilbert	Loralee	31.25 Blue Ridge Dr 31.45 Blue Ridge Dr		<u> </u>	Round Rock	78681	R4411// R441161
			: :		Vinod & Srinivas Magal & Ashok					Т	
WZ-094	492	w 2; w 2a	Ź		Thimmappa	11121 Comiso Pala Path		4		Ì	K441162
W2-095	491	W2; W2a	Po	t	Srystal H	3137 Blue Ridge Dr		œ	Round Rock TX		R441163
W2-096	489	W2; W2a	ģ	>	Joseph A	3133 Blud Ridge Dr		22			R441164
W2-098	488	W2; W2a	Be	Best B	Brady A & Elizabeth	3125 Blue Ridge Dr		E 0	Round Rock TX	78681-1128	R441166 P441167
W2-033	486	W2: W2a	S		Asha & Suresh Venukuttan	11105 Jim Thorne Ln		- V		Ť	R441168
W2-101	484	W2: W2a	Sai		Bryan Keith	3113 Blue Ridge Dr		, e	Rock		R441169
W2-102	482	W2; W2a	Pe	Pennick	vedean & John F	3109 Blue Ridge Dr		. I &			R441170
W2-103	481	W2; W2a	Sig		Willie Ed	3105 Blue Ridge Dr		æ	Round Rock TX	78681-1128	R441171
W2-104; W2-105	479	W2; W2a	Sa	Sawyer	Jason Edward & Angela Jane Alms-Sawver	3101 Blue Ridge Dr		~	Round Rock TX	78681	R441172; R441202
W2-106	478	W2	Ha	Hamilton	Horace Emery & Veronica	30222 Live Oak Trl		9	Georgetown TX	78633	R441173
W2-107	480	W2	Bri		Nicklus & Nancy	3106 Blue Ridge Dr		R			R441174
W2-109	483	W2	Ze	Zetter Adam Trustee Of Adam		628 Vereda Del Ciervo Dr		S	Santa Barbara CA	93117	R441175
W2-110	485	W2	lol lol		Aelissa K	3116 Blue Ridge Dr		2	Round Rock TX	78681	R441176
W5-002	Co.	B1; E6; U5	Be	Betts B	Brent & Suzanne Williams	437 Doe Run		. 0	Georgetown TX		R048278
W5-003		E6	토 ±	~×		1011 N Lamar Blvd		<	Austin TX	78703-4991	R523965
W5-003		F6	É	The Highlands at Mayfield Ranch,		1011 No Jamar Blvd		A	Austin	78703-4991	R523965
			Ltc								
W5-003 W5-004		E6	Ms.	Willis	Mendy Michael C & Iris F	1011 No Lamar Blvd 425 Doe Run		4 0	Austin TX	78703-4991	R523965 8048279
+ 00 CM			3					V &	Aberdeen AB11	1	
W5-005		E6	La		Berge		8Th FI Salvesen Tower	5	5PW		R048280
W5-007		E6	Ab	-		9180 Martin Rd		J (ter	14032-9300	R048281
W5-008	152	Eb F6	N _P	Neese S	Michael Koy & Pamela L	610 Whitetail Dr 613 Whitetail Dr		ی و	Georgetown TX	78628	R048283 R316634
W5-010		E6	Ν	eal	Robert H	605 Whitetail Dr		9		78628-9690	R316635
W5-011		E6	M		Nan K & Susan	105 Buck Ln		9	Georgetown TX	İ	R305328
W5-012	150	E6	Š	y nosio	Kathleen M & Jeneral B	109 Buck Ln		g	Georgetown TX	78628-7100	R305326
W5-013		F6	Alf	Afford	Swindell Jason Allen	104 Birck In		0	Georgetown	78678	B305325
W5-014			Ms. Glo	er	Evelyn	105 Axis Deer CV		, 0		Ī	R305307
W5-014		E6	ğ	Globaker	Evelyn (Le) & Kenneth S &	105 Axis Deer Cv		U	Georgetown TX	78628	R305307
W5-015	149	F6	Ę		William G & Leslie M Ford	109 Axis Deer Cv		9	Georgetown	78628-7101	R305306
W5-016		E6	Ĭ	Mceuen	Kelly R	104 Axis Deer Cv		. 0	Georgetown TX		R305305
W5-017		E6	Fle		George Earl	PO Box 447		J			R305301
W5-018	148	E6	F.		Christina E	109 Mule Deer Cv		0 0			R305297
WS-019		ED	Š		Jeff & Donna J	104 Mule Deer CV		ر	Georgetown	/8628-/102	K3U5296
W5-020		E6	o k	Knight Robert B & Karen J Trustess Of The Knight Living Trust		253 Faubion Dr		U	Georgetown	78628	R334689
W5-021		E6	S	Coleman	Reed P & Julie Rhea	247 Faubion Dr		J	Georgetown TX	78628	R334688
W5-022		E6	Rh		Richard T & Margaret A	243 Faubion Dr		g	Georgetown TX		R334687
W5-023				hy	Scott L & Bettie W	10000	4	. ن			R336128
W5-024		E6	Mr.	Griffith	Charlie Lee	C/O Mr Joseph Heaton Griffith	810 Oakwood Dr	1	Jasper	75951	R395317

Leander-Round Rock 138-kV Transmission Line Project	Directly Affected Landowner List Including Tract IDs and Habitable Structures	
le.	ectly Aff	

Tract ID	Structures	Segments		First Name Su	ıffix Address 1	Address 2 Add	Address 3 City	State Zip	TaxID	Q
W5-024		E6	Griffith Charles Lee & Vlb # 415- 087978		231 Faubion Dr		Georgetown	TX 786:	78628-9685 R395317	317
W5-025		E6	Bentley	Bruce E Jr & Linda M	225 Faubion Dr		Georgetown	TX 786:	78628-9685 R038571	571
W5-029			Williamson County		Attn: Williamson County Auditor 710 S Main St Ste 301		Georgetown	TX 786:	78626-5703 R472265	265
W5-031	147	E6; T1; V5; W5	Terrell	Lana Jo & Catherine E Mcdargh	2901 County Road 175		Leander	TX 78641		576
X-001; Y-003	51	J1; T4; W; W4; X; Y	Cannon 140 Lp		6363 Woodway Dr	Ste 600	Houston	.077 XT	77057-1758 R032	R032138; R496874
X2-003; X2-004		X2	Teco-Westinghouse Motor Co		5100 N Interstate 35	Ste A.	Round Rock	TX 786	78681-2461 R0553	R055398; R308130
XS-005		X5	Chapman H L Investments Ltd		PO Box 4109		Cedar Park			124
X5-007; X5-008		XS XE	Hardwood Products & Doors Inc		Joann Luerson Pres	PO Box 645	Leander	786,	78646-0645 R031,	R031291; R494296
X5-010, A3-011	12	\$ \$	Laine 2243 Lp Buckley	Scott M	C/O Empire Fence	1731 County Road 269	Leander	T		071
X5-013		X5	Rjs Investment Mgt Co Llc		17226 Erna Rd		London	Ħ		070
X5-014		XS	Les Construction Inc		1621 Cr 269		Leander	1X 786	78641-1513 R516137	137
XS-017	6	XS	Lutheran Sss & Tbch & Palm Valley Lc		C/O Richard Baland Chief Financial Officer	PO Box 140767	Austin	TX 78714	.14 R375302	302
X5-018				Ronnie Lee	315 Rancho Bueno Dr		Georgetown	TX 786:	'8628-9520 R367678	829.
Y-001			Mrs. Kennedy	Rebecca	PO Box 608		Georgetown	T		485
T-001		5; Y; Z	Kennedy	пшошу г	PO Box Box		Georgetown		2000	1485
Y-002		λ; γ	Mma Ranch Limited Partnership		3502 Hillbrook Dr		Austin			.735
Y-004			Flachs	Brian K & Lisa S	128 Hazeltine Dr		Georgetown			850
Y-005 Y-006; Y-007	49; 52	W; Y	George	Glenn A	631 County Road 175		Houston	TX 786	78641-1641 R032	R032136; R514052
Y2-001; Y2-025; Y2-041; Y2-043		A3; A3a; B3; O5; P5; Q5; W2; W2a; Y2; Z2	Stone Oak Homeowners Assn		C/O Goodwin Management, Inc	PO Box 203310	Austin	TX 787.	78720-3310 R3610	R361002; R361010; R361011; R361040
Y2-003; Y2-004	628	72	Nancy N Rabb Properties Ltd		2604 Sunrise Rd		Round Rock	TX 786	78665-2497 R4273	R427328; R486083
Y2-006	638	A3; P5; Y2; Z2	Parker	John L & Carol L	213 E Adelanta PI		Round Rock	TX 78681	.81 R511286	286
Y2-007	637	Y2	Ravulapati	Bharath K & Lakshmi L Pragada	209 E Adelanta PI		Round Rock	TX 78681	.81 R511285	285
Y2-008	989	Y2	Engle	Janet Christine	205 E Adelanta PI		Round Rock	Ħ		284
Y2-009	635	Y2	Bheemineni	Vijay & Anusha Marotu	201 E Adelanta PI		Round Rock	TX 78681	81 R511283	283
Y2-010 V2-011	634	Y2 V2	Shekhawat Dalla Balakrishna	Bhaskara Bhaskara	121 E Adelanta Pl		Round Rock	Ť		282
Y2-012	632	72	Lykins	Bruce	113 E Adelanta Pl		Round Rock			280
Y2-013	631	Y2	Gomez	Daniel	109 E Adelanta Pl		Round Rock			279
Y2-014	630	Y2	Christian	Jagdish Samuel & Nutan Jagdish	105 E Adelanta Pl		Round Rock	TX 786	78681-1715 R511278	278
Y2-015	629	٧2	Bala	Andy	101 E Adelanta Pl		Round Rock	TX 78681	81 R511277	777
Y2-016			Tatituri	Raja Kekhar	116 E Adelanta Pl		Round Rock	TX 78681		354
17-01/			Cildilarasekaları	Marioj N & Sustitua Apparatierii	IIZ E Adelanta Pi		MOUTIN MOCK			555
Y2-018 Y2-019			Sargent Akkaraiu	Nancy Venkata M & Saritha	108 E Adelanta Pl 104 E Adelanta Pl		Round Rock	TX 78681	81 R511352	352
Y2-020				Mohammad Amjadullah & Sobia	100 E Adelanta Pl		Round Rock	TX 786	78681-1715 R511350	350
Y2-021			Mohammed	Zorida	108 Brisa Bend Way		Round Rock	TX 78681	81 R511356	356
Y2-022			Galinato	Damian D & Norma	104 Brisa Bend Way		Round Rock	Ħ	-1781	355
Y2-023				Saket	209 Entrada Way		Round Rock	T		372
Y2-024	620	5	Phillips	Gary Phillips & Genevieve E	205 Entrada Way		Round Rock	TX 78681		373
Y2-027	619	7.2		Kevin M	3701 Top Bock Ln		Round Rock			003
Y2-028	617	Y2	Austin	Jessica & Natasha Guerra	3702 Top Rock Ln		Round Rock	TX 78681	.81 R360978	926
Y2-029	618	Y2		Gustavo & Lorena	3703 Top Rock Ln		Round Rock			004
Y2-030	615	72	Rosema	Danford J & Leslie R	3704 Top Rock Ln		Round Rock	786 XT	78681-0900 R360979	926
Y2-031	616	Y2 V3	Candela	Ricardo Jr & Alexandra C	3/05 lop Rock Ln		Round Rock	Ť	-0900	.005
Y2-032 V2-033	613	Y2 Y2	Zisman Dumlao	Alan Dennis Farl & Patrizia A	3705 Top Rock Ln		Round Rock	TX 78681	-0900	1980 1006
Y2-03-8	611	72 Y2	Gonzalez	Osiel & Maria	3707 TOP ROCK LIT		Round Rock	TX 78681	81 R360981	981
Y2-035	612	٧2	Ackley-Smith	Arvella J & Ronald J Smith	3709 Top Rock Ln		Round Rock		0060-1	200
Y2-036	609	Y2	Powers	Doretha M	3710 Top Rock Ln		Round Rock	TX 7868:	.81 R360	1982

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	Structures	ginerits	anı	Dreserve At Mayfield Banch	riist Naine	Address 1		Address 5		υ	
Y2-108		Y2	. Ü	Condominium		C/O Allen Group II, LLC	347 Highway 7 S		Oxford	MS 38655-8248	R522697
Y2-110			ė		Larry H & Celia M	4000 Risa Ct			Round Rock	TX 78681-2278	R415845
Y2-111			>		Keith	4002 Risa Ct			Round Rock	TX 78681	R415844
Y2-112		Y2	Œ	Bank Ssb		PO Box 7					
Y2-114			2		Michael R	4004 Risa Ct			. ck	TX 78681-2278	R415843
Y2-115			B	an	Rita	4100 Risa Ct				,	П
Y2-116			В	Everton		4102 Risa Ct			Round Rock	TX 78681-2277	
Y2-117			В		Fred & Robert Spellicy	4104 Risa Ct			Round Rock	TX 78681	R415840
Y2-118		Y2	ΞĊ	Hatch House Management		12916 Zen Gardens Way			Austin	TX 78732-1655	R511271
Y2-119			ی ر	Sorbet	Monica Marie	3107 Quail Run			Round Bock	TX 78681	R462216
Y2-120			, s	Wilkins	Kenneth E & Catherine T	3109 Quail Run Dr			Rock	TX 78681-1240	R462215
77				Ferguson Valerie Trustee Of		200				Ė	
12-121			В			SIII Quali kun				18081	K462214
		Y2	2	ne	Herbert L & Wanda A	3113 Quail Run Dr					
Y2-123	593	Y2	O	Cubero	Jorge Alexander	4100 Deer Tract			Round Rock	TX 78681	R462212
Y2-124; Y2-125		Y2	8	Brushy Creek Mud		16318 S Great Oaks Dr			Round Rock	TX 78681-2506	R462210; R462211
										T	T
Y2-127			r		Kevin & Michelle Jenkins	3104 Quail Run					R462203
Y2-128			ш		Gary W & Donna M	4101 Deer Tract				Ť	_
Y2-130			U		Trella Jean	3107 Oak Bend Dr				T	
Y2-131			ш.	ck	Richard Glenn	3201 Oak Bend Dr				T	\neg
72-132		7.7	4 0		Gary D & Mary L	4202 Deer Tract St			Kound Kock	1X /8681-1234	KU59944
72-133		Y.2	2 (nez	Frank	801 Flag Creek Dr			- Power	T	K059943
12-134				Valls 71	Justin Ryan & Rachael	STO4 Oak Bend Of			ROUTIG ROCK	19091	K039978
Y2-135			=	Ingram	Kenneth Marvin & Lenessa	3200 Oak Bend Dr			Round Rock	TX 78681	R059977
Y2-136		۸2	I	Наеве	Melvin I & Linda M	4206 Deer Tract St			Round Rock	TX 78681-1234	R059942
Y2-137			. Id.	eke	Terry L & Judy	4206 Oak Bend Cv				TX 78681-1226	
0			:								
Y2-138			_	Kenmar Kesidential Services Inc			Ste 100		Kound Kock	1X /8665-1006	KU59976
Y2-139		Y2	S		Jason C	4300 Deer Tract St					R059941
Y2-140			S		hilip Nathan & Lisa Reiley	3103 Elm Tri					T
	60	5	_	good	Jerry L & Carolyn A	3105 Elm Irl				Ť	7
	266	1.7	<u>د</u> ر		Minouly & Cassie	23.02 Deer Hact			Pound Bock	TV 70601 1331	RU39940
V2-143			דוי	Hudson	Welldell L	A305 Door Tract St					Т
V2-145	591	٨2	. 2		Tagos tagos	4304 Deer Tract				Ť	T
V2-146	1		I	abyH	John S & Mary W	3101 Live Oak St				TX 78681-1236	8
Y2-147			. iá			3103 Live Oak St				Ť	
Y2-148	290	Y2	I	ıton	Danny K	4306 Deer Tract St					Т
Y2-149	685	Y2	^	Vega	Sustavo Etux	4308 Deer Tract St			Round Rock	TX 78681-1222	R059937
Y2-149	589		Mrs. V		Monika	4308 Deer Tract Street				TX 78681-1222	
	588	Y2	Ь		Paul C	Live			×	TX 78681	R059936
Y2-151	587	Y2	'n		Shad & Marcy	3102 Live Oak St			Round Rock	TX 78681	R059935
Y2-152; Y2-153	584; 585; 586	Y2	> 5	Westside Church Of Christ Of		3300 Fm 1431			Round Rock	TX 78681-1075	R362183; R468297
Y2-156	280	7.5	> \ <u>X</u>		Marikn M & Douglas L	3413 Inwood Cv			Round Rock	TX 78681-1057	R361329
	582		I		Gregory A & Victoria	3411 Inwood Cv			Ĺ	Ė	R361328
	581	Y2	>	.s	Steven S & Vicki R	3409 Inwood Cv				TX 78681-1057	
Y2-159	583	Y2	I		John R				Rock	TX 78681-1057	
Y2-160		Y2	υi	Cobern	Charles L Jr & Anne H	3405 Inwood Cv				TX 78681-1057	R361325
Y2-161					kaye	3512 Flora Vista Loop				T	K347808
72-162 v2-163	629	22	ı l	Hanzich Mackler	Dana Napper	3508 Flora Vista Loop			Round Rock	TV 79691-1057	K347809
	6/6	71	4 is		Kenneth Y & Mary E	34 IS IIIWOOU CV				Ť	R361324
Y2-165			Ĭ		Richard C & Lynn S	3604 Flora Vista Loop					R347810
Y2-166		Y2	Z		Jouglas W & Deborah G	3417 Inwood Cv				Ĺ	R361331
Y2-167			B		James D & Joann S	3401 Inwood Cv			¥	TX 78681-1057	R361323
Y2-168			Í	h	David K & Michelle A	3600 Flora Vista Loop					R361304
Y2-169		Y2	ĭ		James & Sharon W	3416 Inwood Cv			Ţ	TX 78681	R361332
Y2-170		Y2	Δ L		Dean	3414 Inwood Cv			Round Rock	TX 78681	R361333
Y2-171			_ <	Association		C/O Ocwen Loan Servicing Llc	1661 Worthington Rd	Ste 100	West Palm Beach	FL 33409	R361340
Y2-172			D		Jeffrey & Hayley	3544 Flora Vista Loop			Round Rock	TX 78681	
Y2-173		٧2	2		areg & Patricia	3415 Inwood Cv			Round Rock	TX 78681-1057	R361334

Title			Address 2 Address 2	Address 3 City Austin	State Zip TX 787	726-2465	.339
Clack Chark Budd Eric E	Charles R III & Sharon F Eric E & Juanita B	3540 Flora Vista Loop 3410 Inwood Cv		Round Rock Round Rock	XX	78681-1049 R347812 78681-1057 R361335	812 .335
Moran Richard	A	3408 Inwood Cv		Round Rock	Ϋ́	78681-1057 R361336	.336
	Todd R & Beth A Vincent P & Eileen	3406 Inwood Cv 3404 Inwood Cv		Round Rock Round Rock	¥¥		338
	J & Blanca E	3536 Flora Vista Loop		Round Rock	XT		813
Romera Jesse & Mari Dillon Angelika	Jarisa G Calvo	4029 Honey Bear Loop 3528 Flora Vista Loop		Round Rock Round Rock	¥ ¥	78681 R347814 78681 R347815	814
	Σ	4008 Springwillow Ln		Round Rock			.373
García Victor	Victor R & Kristene	4010 Springwillow Ln		Round Rock	× ×	78681 R361372	372
		3732 Galena Hills Loop		Round Rock	<u> </u>		383
h	Scott C & Susan T	3734 Galena Hills Loop		Round Rock	X		382
	Virginia R	3735 Galena Hills Loop		Round Rock	¥		379
	Neal & Teresa Mai Elig	3738 Galena Hills Loop		Round Rock	ž ž		495
	Donald G & Joy L	3740 Galena Hills Loon		Round Bock	× ×	-1035	R351473
	D & Elizabeth G	3742 Galena Hills Loop		Round R	×		493
Kendrick Melv	Melvin R & Emma N	3743 Galena Hills Loop		Round Rock	X	78681-1035 R351474	474
	Steven Alan & Judith L	3744 Galena Hills Loop		Round Rock	XT		.492
Gould	Michael & Karen	3746 Galena Hills Loop		Round Rock	ζ.		.491
	pur	3800 Galena Hills Loop		Round Rock	¥		.490
Allen Samuel Kevi	Kevin	3802 Galena Hills Loop		Round Rock	ock TX 78681	81 R351489	489
Vista Oaks Corporate Park Condominiums		C/O Vista Oaks Corporate Park Condominiums Owners Assn, Linc	3401 Royal Vista Blvd, C-300	Round Rock	ock TX 78681	R508591	1591
Lopez		4315 S Summercrest Loop		Round Rock	ock TX 78681	81 R392127	127
mer	Erin & Richard R Russell	4313 Summercrest Loop S		Round Rock	Ĭ.		128
Jorge L. Jorge L. Guerra	Jorge L Donnadie u & Erica M Guerra	4311 S Summercrest Loop		Round Rock	ock TX 78681	R392129	129
Corona Jessie I	Jessie D & Charmaine A	4309 S Summercrest Loop		Round Rock	ř.	78681-1095 R392130	130
Dement Mark L & Joann Trustess Of The Dement Living Trust		4307 S Summercrest Loop		Round Rock	ock TX 78681	81 R392131	131
Laxton Forrest	Forrest L & Victoria L	4305 S Summercrest Loop		Round Rock	ock TX 78681	81 R392132	132
	Gerome & Andrea Rupram	4303 S Summercrest Loop		Round Rock	ΧĽ		:133
Garcia	Cordelia Anna & Ricardo Saiz	4317 S Summercrest Loop		Round Rock	ock TX 78681	181 R392126	126
rne	Stephen B	S Summercrest		Round Rock	ΧL	-1095	R392153
Register Lill Register Lill	Lillian Frances	4306 Summercrest Loop		Round Rock	<u> </u>	-1005	R392152 R392151
	Emily	4319 Summercrest Loop		Round Rock	ř		125
Neuven	Trinh & Le Loi	4321 Summercrest Loop		Round Rock	×	78681-1095 R392124	124
	Mark S & Farah Naz	2000 Summercrest Cv		Round Rock	¥		154
sen	David & Jessica Anne			Round Rock			155
	ott C & Patricia A	4007 Galena Hills Dr		Round Roc	¥		1843
	Armando D & Naomi N	4323 Summercrest Loop		Round Rock	X A	78681-1095 R392123	123
Klein	Steven Mill & Milliele N	4009 Galena Hills Dr		Round Bock	<u> </u>		130
Aci	Abraham & Glory	4325 Summercrest Loop		Round Rock	×	1095	122
	′ ວຽ	Summercrest C		Round Rock	ř	Ţ.	157
nn		4011 Galena Hills Dr		Round Rock	X		1841
	ssh R	15420 Fernhill Dr		Austin	Ė	78717-3854 R380840	1840
	a & Juan	4401 S Summercrest Loop		Round Rock	X	78681 R392121	121
Godwin Bryan 8	, Debra	2001 Summercrest Cv		Round R	XT		159
ın	Matthew & Claudia	2003 Summercrest Cv		Round Rock	XL		158
	Jill A P & Jerome L	4015 Galena Hills Dr		Round Rock	XL		1839
ms	Ryan S & Tarina L	4403 S Summercrest Loop		Round Rock	¥	-1096	120
	Robert W & Kristen E	4402 S Summercrest Loop		Round Rock	¥		160
pi	Brendon D & Dawn J	Galena Hills Dr		Round Rock	×	,000	150
	errnette	4405 S Summercrest Loop		Round Roc	×	.1096	119
	Benjamin Aaron & Whitney Kae	4404 S Summercrest Loop		Round Rock	¥		161
Husain Sye Horne Mis	Syed M Amir Misty Jessee & Alan	4019 Galena Hills Dr 4407 S Summercrest Loop		Round Rock	× ×	78681-2255 R392149 78681 R392118	149
		1			×-		0

Tract ID	Structures	Segments	Title	Last Name	First Name	Suffix Address 1	5.1	Address 2	Address 3 City	City	State Zin		Tax ID
Y2-243					Janelle	4406 S	4406 S Summercrest Loop			Round Rock	TX 786	81	R392162
Y2-244				Carnes Chester O & Estate Of Ilene Ann Carnes		4021 G	4021 Galena Hills Dr			Round Rock	TX 786	78681 R	R392148
Y2-245	268	Y2		Rivera	Jose & Irma Aracely	4409 S	4409 S Summercrest Loop			Round Rock	TX 786	78681-1096 R	R392117
Y2-246					Scott A & Sherry	4408 S	4408 Summercrest Loop S			Round Rock	TX 786	78681 R	R392163
Y2-247				Fothergill	Todd E & Judith L	4023 G	4023 Galena Hills Dr			Round Rock	TX 786	78681-2255 R	R392147
Y2-248		Y2		Crist	David Lawrence	6627 G	6627 Greensboro Dr			Austin	TX 787	78723 R	R392116
Y2-249				Collins	James L & Rosanne L	4410 S	4410 S Summercrest Loop			Round Rock	TX 786	78681-1096 R392164	392164
Y2-250				Hall	Brian M & Kelly S	4025 G	4025 Galena Hills Dr			Round Rock	TX 786	78681-2255 R392146	392146
Y2-251	292	Y2		Davis	Mandy	4413 S	4413 S Summercrest Loop			Round Rock	TX 786	78681 R	R392115
Y2-252	999	Y2		Dunnivan	Gerald W & Patricia	1315 P	1315 Pasa Tiempo			Leander	TX 786	78641-3639 R392114	392114
Y2-253	265	Y2		Smith	Richard D & Renee Johnson	4417 S	4417 S Summercrest Loop			Round Rock	TX 786	78681 R	R392113
Y2-254		٧2		Ngo	Thinh Viet & Hong T Nguyen	4419 S	4419 Summercrest Loop S			Round Rock	7X 786	78681 R	R392112
Y2-255				Czap	Doug & Suanne	4421 S	4421 S Summercrest Loop			Round Rock	TX 786	78681-1096 R	R392111
Y2-256				Watts	Christopher T & Edna D	4423 S	4423 S Summercrest Loop			Round Rock	TX 786	78681 R	R392110
Y2-257				Prince	Brad	4425 S	4425 S Summercrest Loop			Round Rock	TX 786	78681 R	R392109
Y2-258				Ridgway	Jeannette	4427 S	4427 S Summer Crest Loop			Round Rock	TX 786	78681 R	R392108
Y4-001		A5; J1; Y4		Tran	Julie Hong-Van & Chanh Buu Tran	81 Cou	81 County Road 177			Leander	TX 786	78641-2633 R	R424901
Z-001; Z-002		Z		Dufner	Elizabeth Ann	314 W	314 Wooded Way			Bertram	7X 786	78605 R	R472554; R473566
Z-003		Z		Faubion	Gordon W	2302 A	2302 Amy Lynn Ln			Cedar Park	TX 786	78613 R	R472555
Z-005		Z		Jwm-Moii Properties Llc		12704	12704 Harris Rd			Lees Summit	MO 640	64086-9124 R	R300029
2-00e		Z		Mjc Management Llc		12 Indi	12 Indian Wells Rd			Brewster	NY 105	10509-5201 R524678	524678
Z-007; Z-009		S; Y; Z		Whittlesey	Kenneth Patrick & Ana Rosa	1130 V	1130 Wigwam			Leander	TX 786	78641 R	R032355; R539484
Z-008		Z		Heaton	Nancy & Skip Sandell	3933 S	3933 Steck Ave	Ste B117		Austin	TX 787	78759 R	R539479
21-001	142	A2; Z1		Williams	Laura Jean	7235 A	7235 Acacia Dr			Leander	TX 786	78641 R	R037940
Z4-001	86	D6; X4; Y4; Z4		Dunn	Jay W	350 Cc	350 County Road 177			Leander	TX 786	78641-2532 R031565	031565



LCRA TRANSMISSION SERVICES CORPORATION

April 28, 2016

«FirstName» «LastName» «Suffix» «SecondName» «Address1» «Address2» «Address3» «City», «State» «Zip»

RE:

Application of LCRA Transmission Services Corporation to Amend its Certificate of Convenience and Necessity for the Proposed Leander-Round Rock 138-kV Transmission Line Project in

Williamson County, Texas

PUBLIC UTILITY COMMISSION OF TEXAS (PUC) DOCKET NO. 45866

Tract ID:

Dear Landowner:

We want you to know that LCRA Transmission Services Corporation (LCRA TSC) is requesting approval from the Public Utility Commission of Texas (PUC) to amend its Certificate of Convenience and Necessity (CCN) to construct the proposed Leander-Round Rock 138-kV Transmission Line Project in southwestern Williamson County, Texas.

All routes and route segments included in this notice are available for selection and approval by the PUC.

The proposed transmission line will connect two new substations to the existing Leander and Round Rock substations. The entire project will be about 12 to 21 miles in length, and is estimated to cost approximately \$67.8 million to \$99.6 million, depending upon the final route chosen by the PUC.

Your land may be directly affected in this docket. If one of LCRA TSC's alternative routes is approved by the PUC, LCRA TSC will have the right to build the facilities, which may directly affect your land. This docket will not determine the value of your land or the value of an easement if one is needed by LCRA TSC to build the facilities.

If you have questions about the transmission line or substation sites, you can call 800-776-5272, ext. 7051. The descriptions of the proposed routing alternatives, proposed substations sites and a map showing the proposed alternative routes are enclosed for your convenience.

The CCN application, including detailed routing maps illustrating the proposed transmission line project, substations and project area, may be reviewed on the project website at www.lcra.org/LRR, and at the LCRA office located at 3505 Montopolis Drive, Building D, Austin, Texas 78744. To make an appointment to obtain or review the map at LCRA, call 800-776-5272, ext. 7051.

As discussed in the enclosed brochure, "Landowners and Transmission Line Cases at the PUC," any one of the proposed routes, substation sites or a new combination of route segments filed in this application may be selected by the PUC. Additionally, the PUC may modify the proposed routes and segments into different configurations than those proposed, so long as they affect only noticed landowners.

The brochure (available from the PUC's website at www.puc.state.tx.us) also provides basic information about how you may participate in this docket, and how you may contact the PUC. Please read this brochure carefully. The brochure includes sample forms for making comments and for making a request to intervene as a party in this docket. The only way to fully participate in the PUC's decision on where to locate the transmission line is to intervene in the docket. It is important for an affected person to intervene because LCRA TSC is not obligated to keep affected people informed of the PUC's proceedings and cannot predict which route may or may not be approved by the PUC.

In addition to the contacts listed in the brochure, you may call the PUC's Customer Assistance Hotline at 888-782-8477. Hearing- and speech-impaired individuals with text telephones (TTY) may contact the PUC's Customer Assistance Hotline at 512-936-7136, or toll free at 800-735-2989. If you wish to participate in this proceeding by becoming an intervenor, the deadline for intervention in the proceeding is June 13, 2016, and the PUC should receive a letter from you requesting intervention by that date. Mail the request for intervention and 10 copies of the request to:

Public Utility Commission of Texas Central Records Attn: Filing Clerk 1701 N. Congress Ave. P.O. Box 13326 Austin. Texas 78711-3326

People who wish to intervene in the docket must also mail a copy of their request for intervention to all parties in the docket and all people who have pending motions to intervene, at or before the time the request for intervention is mailed to the PUC. In addition to the intervention deadline, other important deadlines may already exist that affect your participation in this docket. You should review the orders and other filings already made in the docket. The enclosed brochure explains how you can access these filings.

Thank you for your interest in this project.

Sincerely,

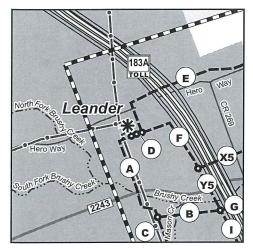
Christian Powell

C> Powell

Senior Regulatory Case Manager Lower Colorado River Authority P.O. Box 220, MS DSC-D204 Austin, Texas 78767-0220

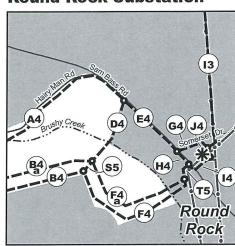
Enclosures

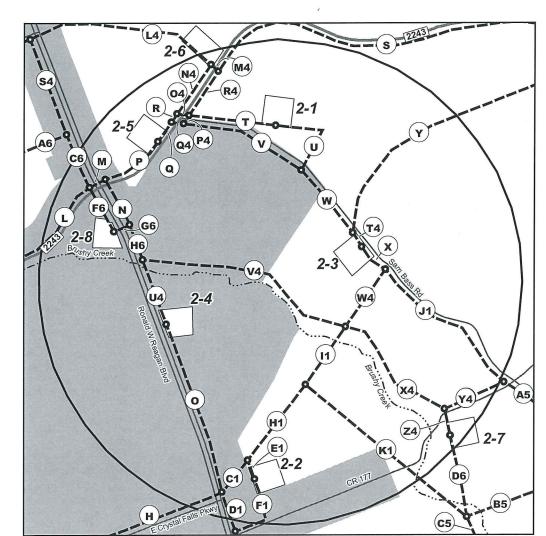




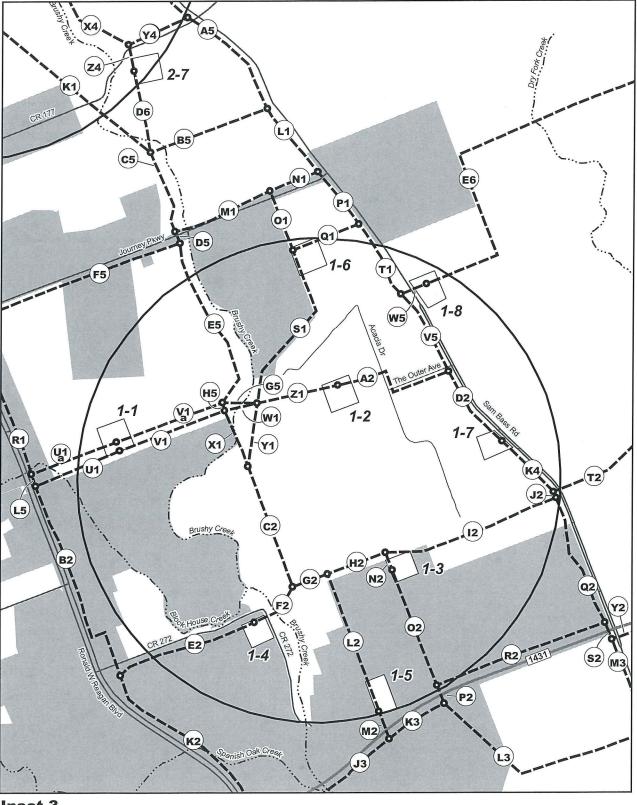
Inset 1
Leander Substation

Inset 4 Round Rock Substation





Inset 2
Substation Siting Area 2



Inset 3
Substation Siting Area 1

Leander-Round Rock 138-kV Transmission Line Project

Primary Alternative Route Segments

Project Components

Primary Alternative Route Segment, Node and Label

* ERCOT Approved Project Endpoint

Primary Substation Siting Area

Primary Substation Alternative

1-1 Study Area Boundary

Existing Utilities

Existing Transmission Line

Administrative Boundaries

Incorporated Area

Transportation

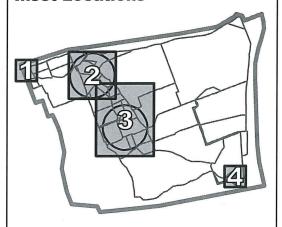
=1431 Farm to Market Road

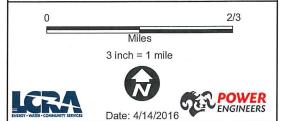
---- Major Road

Surface Water

~∵...- Stream

Inset Locations





Page 1 of 30

Leander –Round Rock 138-kV Transmission Line Project Segment Descriptions

	,
Primary Alternative Routes	Segment Combinations
1	A-B-G-L-M-P-Q-Q4-V-W-T4- 2-3 -X-J1-A5-L1-P1-T1-V5-D2- 1-7 -K4-T2-U2-M5-
	V2-X2-C3-H3-I3-J4
2	A-B-G-L-M-P- 2-5 -Q-Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5*- 1-8 -V5-D2-K4-J2-Q2- S2-Y2-Z2-P5-B3-C3-H3-I3-J4
3	A-B-G-L-F6- 2-8 -G6-H6-U4-O-D1-G1-F5-D5-M1-O1*- 1-6 -N1-L1-A5-J1-X-T4-Y-
4	Z-A1-J5-K5-X2-C3-H3-I3-J4 D-F-Y5-I-H-D1-G1-F5-D5-M1-O1*- 1-6 -N1-L1-A5-J1-X-T4-W-V-P4-R4-M4*- 2-6 -S-Z-A1-I5-K5-X2-C3-E3-G3-I3-J4
5	A-C-H-C1-E1*- 2-2 -H1-K1-B5-L1-P1-T1-W5- 1-8 -E6-B1-A1-J5-K5-X2-C3-H3-I3- J4
6	D-F-X5-Z5-A6-C6-M-N-H6-U4- 2-4 -O-D1-G1-R1-L5-B2-E2- 1-4 -F2-G2-H2-I2- J2-T2-U5-B1-A1-J5-K5-X2-C3-H3-I3-J4
7	D-E-J-Z5-B6-L-M-P-Q-R-O4-T- 2-1 -U-W-T4-X-J1-A5-L1-P1-Q1*- 1-6 -T1-V5-D2- K4-T2-U2-N5-V2-X2-C3-E3-G3-I3-J4
8	D-E-K-L4- 2-6 -N4-R-Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2-K4-J2-I2-N2- 1-3 - O2-P2-L3-O3-U3-A4-E4-H4-I4
9	D-E-K-S4-C6-M-N-H6-V4-X4-Z4*- 2-7 -Y4-A5-L1-P1-T1-V5-D2-K4-J2-I2-H2-L2- 1-5 -M2-K3-L3-O3-U3-A4-E4-G4-J4
10	D-F-X5-Z5-A6-C6-M-N-H6-V4-X4-Z4- 2-7 -D6-C5-D5-E5-H5-X1-C2-G2-L2- 1-5 -M2-K3-L3-O3-U3-A4-D4-S5-F4-T5-I4
11	A-B-G-L-M-P- 2-5 -Q-Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5*- 1-8 -V5-D2-K4-J2-Q2- S2-M3-O3-U3-B4-F4-T5-I4
12	A-B-G-L-M-P- 2-5 -Q-Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5*- 1-8 -V5-D2-K4-J2-Q2- S2-M3-O3-U3-B4a-F4a-T5-I4
13	D-F-X5-Z5-A6-C6-M-N-H6-U4- 2-4 -O-D1-G1-R1-L5-U1-V1-W1-Z1- 1-2 -A2-D2- K4-T2-U2-W2-Z2-A3-D3-G3-I3-J4
14	D-F-X5-Z5-A6-C6-M-N-H6-U4- 2-4 -O-D1-G1-R1-U1a-V1a-G5-Z1- 1-2 -A2-D2- K4-T2-U2-W2a-Q5-A3a-D3a-G3-I3-J4
15	D-E-K-S4-C6-M-N-H6-U4- 2-4 -O-D1-G1-R1-L5-U1*- 1-1 -B2-K2-N3-A4-E4-G4- J4
16	D-F-X5-Z5-A6-C6-M-P-Q-Q4-V-W-T4-X-W4-I1-H1-E1- 2-2 -F1-G1-R1-L5-B2- K2-J3-M2*- 1-5 -K3-P2-R2-S2-Y2-O5-Q5-A3a-R5-F3-U3-B4-F4-T5-I4
17	D-F-Y5-I-H-C1-E1*- 2-2 -H1-K1-C5-M1-O1-S1-Y1-C2-G2-H2-N2- 1-3 -O2-P2-L3-O3-U3-A4-E4-H4-I4
18	D-F-X5-Z5-A6-C6-M-P-Q-R*-N4*- 2-6 -Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5*- 1-8 - V5-D2-K4-T2-U2-W2-Z2-P5-B3-C3-E3-G3-I3-J4
19	D-F-X5-Z5-A6-C6-M-P-Q-R*-N4*- 2-6 -Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5*- 1-8 - V5-D2-K4-T2-U2-W2A-Q5-B3-C3-E3-G3-I3-J4

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Primary Alternative Routes	Segment Combinations
20	D-F-X5-Z5-A6-S4-L4- 2-6 -N4-R-Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5*- 1-8 -V5-
	D2-K4-J2-Q2-S2-Y2-Z2-P5-B3-C3-H3-I3-J4
21	D-F-X5-Z5-A6-C6-M-P-Q-R*-N4*- 2-6 -Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5- 1-8 -
	E6-U5-U2-W2A-Q5-B3-C3-E3-G3-I3-J4
22	A-B-G-L-M-P-Q-R*-N4*- 2-6 -Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5- 1-8 -E6-U5-U2-
	W2A-Q5-B3-C3-E3-G3-I3-J4
23	D-E-J-Z5-B6-L-M-N-H6-V4-X4-Z4- 2-7 -D6-C5-D5-E5-G5-Y1-C2-G2-H2-N2- 1-
	3 -O2-R2-S2-Y2-O5-Q5-A3a-R5-F3-U3-B4a-F4a-T5-I4
24	D-E-J-Z5-B6-L-M-N-H6-V4-X4-Z4- 2-7 -D6-C5-D5-E5-G5-Y1-C2-G2-H2-N2- 1-
	3 -O2-R2-S2-Y2-Z2-A3-F3-U3-B4-F4-T5-I4
25	D-E-K-L4- 2-6 -N4-R-Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2- 1-7 -K4-T2-U2-W2-
	Z2-P5-B3-C3-E3-G3-I3-J4
26	D-E-K-L4- 2-6 -N4-R-Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2- 1-7 -K4-T2-U2-W2a-
	Q5-B3-C3-E3-G3-I3-J4
27	D-F-X5-Z5-A6-C6-M-P-Q-R*-N4*- 2-6 -Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2- 1-
	7 -K4-T2-U2-W2-Z2-P5-B3-C3-H3-I3-J4
28	D-F-X5-Z5-A6-C6-M-P-Q-R*-N4*- 2-6 -Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2- 1-
	7 -K4-T2-U2-W2a-Q5-B3-C3-H3-I3-J4
29	D-F-X5-Z5-A6-C6-M-P-Q-R*-N4*- 2-6 -Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2- 1-
	7 -K4-T2-U2-M5-V2-X2-C3-E3-G3-I3-J4
30	D-F-X5-Z5-A6-C6-M-P-Q-R*-N4*- 2-6 -Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2- 1-
	7 -K4-T2-U2-N5-V2-X2-C3-H3-I3-J4
31	D-F-X5-Z5-A6-C6-F6*- 2-8 -M-P-Q-Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2- 1-7 -
*Th	K4-J2-Q2-S2-Y2-Z2-P5-B3-C3-E3-G3-I3-J4

^{*}These segments will be used entering and exiting the substation sites.

Segment A

Segment A begins at the Leander Substation, located approximately .10 mile southwest from the intersection of US Highway (US Hwy) 183A and Hero Way. The segment proceeds southwest for approximately .05 mile, crossing an existing transmission line. It then turns southeast for approximately .25 mile while paralleling the west side of an existing transmission line, crossing Farm-to-Market (FM) 2243 and Brushy Creek. The segment then angles to the east-southeast for approximately .05 mile, crossing an existing transmission line. It then turns southeast for approximately .03 mile while paralleling the east side of an existing transmission line. The termination of Segment A is at the intersection of segments A, B, and C.

Segment B

Segment B begins at the intersection of segments A, B, and C, located southwest from the intersection of US Hwy 183A and FM 2243. The segment proceeds east for

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approximately .20 mile, crossing Mason Creek. The termination of Segment B is at the intersection of segments B, G, I, and Y5.

Segment C

Segment C begins at the intersection of segments A, B, and C, located southwest from the intersection of US Hwy 183A and FM 2243. The segment proceeds southeast for approximately .41 mile while paralleling the east side of an existing transmission line, crossing Mason Creek. The segment then turns northeast for approximately .27 mile. The termination of Segment C is at the intersection of segments C, I, and H.

Segment D

Segment D begins at the Leander Substation, located approximately .10 mile southwest from the intersection of US Hwy 183A and Hero Way. The segment proceeds northeast for approximately .02 mile. The termination of Segment D is at the intersection of segments D, E, and F.

Segment E

Segment E begins at the intersection of segments D, E, and F, located southwest from the intersection of US Hwy 183A and Hero Way. The segment proceeds northwest for approximately .11 mile, crossing Hero Way. The segment then turns northeast for approximately .31 mile while paralleling the north side of Hero Way, crossing US Hwy 183A. It then angles to the southeast for approximately .08 mile. The segment continues to the northeast for approximately .42 mile while paralleling the north side of Hero Way. The termination of Segment E is at the intersection of segments E, J, and K.

Segment F

Segment F begins at the intersection of segments D, E, and F, located southwest from the intersection of US Hwy 183A and Hero Way. The segment proceeds northeast for approximately .10 mile. It then turns southeast for approximately .19 mile while paralleling the west side of US Hwy 183A. The termination of Segment F is at the intersection of segments F, X5, and Y5.

Segment G

Segment G begins at the intersection of segment B, G, I, and Y5, located south from the intersection of US Hwy 183A and FM 2243. The segment proceeds northeast for approximately .10 mile, crossing US Hwy 183A. It then angles to the southeast for approximately .18 mile and then angles to the east for approximately .24 mile. The segment then angles to the southeast for approximately .15 mile and then turns northeast for approximately .07 mile, crossing Brushy Creek and FM 2243. The termination of Segment G is at the intersection of segments G, L, and B6.

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Segment H

Segment H begins at the intersection of segments C, H, and I, located south from the intersection of US Hwy 183Aand FM 2243. The segment proceeds northeast for approximately .09 mile, crossing US Hwy 183A. It then turns southeast for approximately .36 mile while paralleling the east side of US Hwy 183A. The segment then turns east for approximately .06 mile and then turns to the south for approximately .18 mile. The segment continues southeast for approximately .42 mile while paralleling the east side of US Hwy 183A. It then turns northeast for approximately 1.39 miles while paralleling the north side of East Crystal Falls Parkway, crossing Ronald Reagan Blvd. The termination of Segment H is at the intersection of segments H, O, C1, and D1.

Segment I

Segment I begins at the intersection of segments B, G, I, and Y5, located south from the intersection of US Hwy 183A and FM 2243. The segment proceeds southeast for approximately .40 mile while paralleling the west side of US Hwy 183A. The termination of Segment I is at the intersection of segments C, H, and I.

Segment J

Segment J begins at the intersection of segments E, J, and K, located east from the intersection of US Hwy 183A and Hero Way. The segment proceeds southeast for approximately 0.30 mile, crossing Hero Way. The termination of Segment J is at the intersection of segments J, X5, and Z5.

Segment K

Segment K begins at the intersection of segments E, J, and K, located east from the intersection of US Hwy 183A and Hero Way. The segment proceeds northeast for approximately .43 mile while paralleling the north side of Hero Way and then angles to the southeast for approximately .09 mile, crossing Hero Way. It then continues northeast for approximately .42 mile while paralleling the south side of Hero Way. The termination of Segment K is at the intersection of segments K, L4, and S4.

Segment L

Segment L begins at the intersection of segments G, L, and B6, located east from the intersection of US Hwy 183A and FM 2243. The segment proceeds in an easterly direction for approximately 1.00 mile while paralleling the north side of FM 2243. The termination of Segment L is at the intersection of segments L, M, C6, and F6.

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Segment M

Segment M begins at the intersection of Segments L, M, C6, and F6, located west from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds northeast for approximately .10 mile while paralleling the north side of FM 2243. The termination of Segment M is at the intersection of segments M, N, and P.

Segment N

Segment N begins at the intersection of segments M, N, and P, located east from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds southeast for approximately .20 mile while paralleling the east side of Ronald Reagan Blvd., crossing FM 2243. The termination of Segment N is at the intersection of segments N, G6, and H6.

Segment O

Segment O begins at the intersection of segments O, U4, and Substation Site 2-4, located south from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds southeast for approximately .60 mile while paralleling the east side of Ronald Reagan Blvd. The termination of Segment O is at the intersection of segments H, O, C1, and D1.

Segment P

Segment P begins at the intersection of segments M, N, and P, located east from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds in an easterly direction for approximately .20 mile while paralleling the north side of FM 2243. The termination of Segment P is at the intersection of segments P, Q, and Substation Site 2-5.

Segment Q

Segment Q begins at the intersection of segments P, Q, and Substation Site 2-5, located northeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds northeast for approximately .10 mile while paralleling the north side of FM 2243. The termination of Segment Q is at the intersection of segments Q, R, and Q4.

Segment R

Segment R begins at the intersection of segments Q, R, and Q4, located northeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds northeast for approximately .04 mile while paralleling the north side of FM 2243. The termination of Segment R is at the intersection of segments R, N4, and O4.

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Segment S

Segment S begins at the intersection of segments S, M4, and R4, located northeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment curves around in an easterly direction for approximately 1.18 miles while paralleling the south side of FM 2243. It then angles to the southeast for approximately .09 mile and then angles to the northeast for approximately .09 mile. The segment continues east for approximately .52 mile while paralleling the south side of FM 2243. The termination of Segment S is at the intersection of segments S, Y, and Z.

Segment T

Segment T begins at the intersection of segments T, O4, P4, and R4, located east from the intersection of FM 2243 and Sam Bass Road. The segment proceeds southeast for approximately .21 mile while paralleling the north side of Sam Bass Road. The segment continues southeast for approximately .10 mile. The termination of Segment T is at the intersection of segments T, U, and Substation Site 2-1.

Segment U

Segment U begins at the intersection of segments T, U, and Substation Site 2-1, located southeast from the intersection of FM 2243 and Sam Bass Road. The segment proceeds southeast for approximately .17 mile. It then turns southwest for approximately .16 mile, crossing Sam Bass Road. The termination of Segment U is at the intersection of segments U, V, and W.

Segment V

Segment V begins at the intersection of segments V, P4, and Q4, located southeast from the intersection of FM 2243 and Sam Bass Road. The segment proceeds in a southeasterly direction for approximately .50 mile while paralleling the south side of Sam Bass Road. The termination of Segment V is at the intersection of segments U, V, and W.

Segment W

Segment W begins at the intersection of segments U, V, and W, located southeast from the intersection of FM 2243 and Sam Bass Road. The segment proceeds southeast for approximately .30 mile while paralleling the south side of Sam Bass Road. The termination of Segment W is at the intersection of segments W, Y, and T4.

Segment X

Segment X begins at the intersection of segments X, T4, and Substation Site 2-3, located southeast from the intersection of FM 2243 and Sam Bass Road. The segment proceeds southeast for approximately .06 mile and then angles east-southeast for

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approximately .06 mile. The termination point of Segment X is at the intersection of segments X, J1, and W4.

Segment Y

Segment Y begins at the intersection of segments W, Y, and T4, located southeast from the intersection of FM 2243 and Sam Bass Road. The segment curves around to the north-northeast for approximately .50 mile. It then continues to the north-northeast for approximately 1.00 mile. At this point, the segment angles to the north-northeast for approximately .10 mile. The termination point of Segment Y is at the intersection of segments S, Y, and Z.

Segment Z

Segment Z begins at the intersection of segments S, Y, and Z, located northeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds in an easterly direction for approximately 1.10 miles while paralleling the south side of FM 2243, crossing County Road (CR) 176. The termination of Segment Z is at the intersection of segments Z, A1, and B1.

Segment A1

Segment A1 begins at the intersection of segments Z, A1, and B1, located northeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds northeast for approximately .57 mile. It then continues in an easterly direction for approximately 2.13 miles while paralleling the south side of FM 2243. The termination of Segment A1 is at the intersection of segments A1, I5, and J5.

Segment B1

Segment B1 begins at the intersection of segments Z, A1, and B1, located northeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds southeast for approximately 1.60 miles, crossing Chandler Branch. The termination point of Segment B1 is at the intersection of segments B1, U5, and E6.

Segment C1

Segment C1 begins at the intersection of segments H, O, C1, and D1, located northeast from the intersection of Ronald Reagan Blvd. and East Crystal Falls Parkway. The segment proceeds northeast for approximately .10 mile. The termination point of Segment C1 is at the intersection of segments C1, E1, and H1.

Segment D1

Segment D1 begins at the intersection of segments H, O, C1, and D1, located northeast from the intersection of Ronald Reagan Blvd. and East Crystal Falls Parkway. The segment proceeds southeast for approximately .10 mile while paralleling

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the east side of Ronald Reagan Blvd. The termination point of Segment D1 is at the intersection of segments D1, F1, and G1.

Segment E1

Segment E1 begins at the intersection of segments C1, E1, and H1, located northeast from the intersection of Ronald Reagan Blvd. and East Crystal Falls Parkway. The segment proceeds southeast for approximately .10 mile. The termination of Segment E1 is at the intersection of segments E1, F1, and Substation Site 2-2.

Segment F1

Segment F1 begins at the intersection of segments E1, F1, and Substation Site 2-2, located northeast from the intersection of Ronald Reagan Blvd. and East Crystal Falls Parkway. The segment proceeds southeast for approximately .15 mile. It then turns southwest for approximately .12 mile while paralleling the north side of CR177. The termination point of Segment F1 is at the intersection of segments D1, F1, and G1.

Segment G1

Segment G1 begins at the intersection of segments D1, F1, and G1, located south from the intersection of Ronald Reagan Blvd. and East Crystal Falls Parkway. The segment proceeds southeast for approximately .60 mile while paralleling the east side of Ronald Reagan Blvd., crossing CR 177 and Journey Parkway. The termination of Segment G1 is at the intersection of segments G1, R1, and F5.

Segment H1

Segment H1 begins at the intersection of segments C1, E1, and H1, located northeast from the intersection of Ronald Reagan Blvd. and East Crystal Falls Parkway. The segment proceeds northeast for approximately .30 mile. The termination point of Segment H1 is at the intersection of segments H1, I1, and K1.

Segment I1

Segment I1 begins at the intersection of segments I1, V4, W4, and X4, located southeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds southwest for approximately .30 mile. The termination point of Segment I1 is at the intersection of segments H1, I1, and K1.

Segment J1

Segment J1 begins at the intersection of segments X, J1, and W4, located southeast from the intersection of FM 2243 and Sam Bass Road. The segment proceeds in a southeasterly direction for approximately .35 mile while paralleling the west side of Sam Bass Road. It then angles south-southeast for approximately .11 mile. The segment then continues southeast for approximately .13 mile while paralleling the west

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side of Sam Bass Road. The termination point of Segment J1 is at the intersection of segments J1, Y4, and A5.

Segment K1

Segment K1 begins at the intersection of segments H1, I1, and K1, located northeast from the intersection of Ronald Reagan Blvd. and East Crystal Falls Parkway. The segment proceeds southeast for approximately .70 mile, crossing CR 177 and Brushy Creek twice. The termination point of Segment K1 is at the intersection of segments K1, B5, C5, and D6.

Segment L1

Segment L1 begins at the intersection of segments L1, A5, and B5, located southeast from the intersection of CR 177 and Sam Bass Road. The segment proceeds southeast for approximately .30 mile while paralleling the west side of Sam Bass Road. The termination point of Segment L1 is at the intersection of segments L1, N1, and P1.

Segment M1

Segment M1 begins at the intersection of segments M1, C5, and D5, located northeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds northeast for approximately .40 mile while paralleling the north side of Journey Parkway, crossing Brushy Creek. The termination of Segment M1 is at the intersection of segments M1, N1, and O1.

Segment N1

Segment N1 begins at the intersections of segments M1, N1, and O1, located west from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds northeast for approximately .20 mile. The termination of Segment of N1 is at the intersection of segments L1, N1, and P1.

Segment O1

Segment O1 begins at the intersection of segments M1, N1, and O1, located west from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southeast for approximately .20 mile, crossing Journey Parkway. The termination point of Segment O1 is at the intersection of segments O1, Q1, S1, and Substation Site 1-6.

Segment P1

Segment P1 begins at the intersection of segments L1, N1, and P1, located west from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southeast for approximately .20 mile while paralleling the west side of Sam Bass Road, crossing Journey Parkway. The termination point of Segment P1 is at the intersection of segments P1, Q1, and T1.

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Segment Q1

Segment Q1 begins at the intersection of segments O1, Q1, S1, and Substation Site 1-6, located southwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds northeast for approximately .30 mile. The termination point of Segment Q1 is at the intersection of segments P1, Q1, and T1.

Segment R1

Segment R1 begins at the intersection of segments G1, R1 and F5, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds southeast for approximately .60 mile while paralleling the east side of Ronald Reagan Blvd., crossing Block House Creek. The termination point of Segment R1 is at the intersection of segments R1, U1a, and L5.

Segment S1

Segment S1 begins at the intersection of segments O1, Q1, and Substation Site 1-6, located southwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southeast for approximately .23 mile and then angles to the southwest for approximately .29 mile. The segment then angles south-southwest for approximately .12 mile. The termination of Segment S1 is at the intersection of segments S1, W1, Y1, Z1, and G5.

Segment T1

Segment T1 begins at the intersection of segments P1, Q1, and T1, located south from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southeast for approximately .14 mile while paralleling the west side of Sam Bass Road. It then angles to the south-southeast for approximately .10 mile. The segment then angles southeast for approximately .05 mile. The termination of Segment T1 is at the intersection of segments T1, V5, and W5.

Segment U1

Segment U1 begins at the intersection of segments U1, B2, and L5, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds northeast for approximately .30 mile, crossing Block House Creek. The termination of Segment U1 is at the intersection of segments U1, V1, and Substation Site 1-1.

Segment U1a

Segment U1a begins at the intersection of segments R1, U1a, and L5, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds northeast for approximately .30 mile, crossing Block House Creek.

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The termination of Segment U1a is at the intersection of segments U1a, V1a, and Substation Site 1-1.

Segment V1

Segment V1 begins at the intersection of segments U1, V1, and Substation Site 1-1, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds northeast for approximately .40 mile. The termination of Segment V1 is at the intersection of segments V1, W1, X1, and H5.

Segment V1a

Segment V1a begins at the intersection of segments U1a, V1a, and Substation Site 1-1, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds northeast for approximately .40 mile. The termination of Segment V1a is at the intersection of segments V1a, E5, G5, and H5.

Segment W1

Segment W1 begins at the intersection of segments V1, W1, X1, and H5, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds northeast for approximately .10 mile, crossing Brushy Creek. The termination of Segment W1 is at the intersection of segments S1, W1, Y1, Z1, and G5.

Segment X1

Segment X1 begins at the intersection of segments V1, W1, X1, and H5, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds southeast for approximately .20 mile, crossing Brushy Creek. The termination of Segment X1 is at the intersection of segments X1, Y1, and C2.

Segment Y1

Segment Y1 begins at the intersection of segments S1, W1, Y1, Z1, and G5, located southwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southwest for approximately .20 mile. The termination of Segment Y1 is at the intersection of segments X1, Y1, and C2.

Segment Z1

Segment Z1 begins at the intersection of segments S1, W1, Y1, Z1, and G5, located southwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds northeast for approximately .30 mile. The termination of Segment Z1 is at the intersection of segments Z1, A2 and Substation Site 1-2.

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Segment A2

Segment A2 begins at the intersection of segments Z1, A2 and Substation Site 1-2, located west from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds northeast for approximately .18 mile, crossing Acacia Drive. It then turns southeast for approximately .08 mile while paralleling the east side of Acacia Drive, crossing The Outer Avenue. The segment turns northeast for approximately .21 mile while paralleling the south side of The Outer Avenue. The termination of Segment A2 is at the intersection of segments A2, D2, and V5.

Segment B2

Segment B2 begins at the intersection of segments U1, B2, and L5, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds southeast for approximately .58 mile while paralleling the east side of Ronald Reagan Blvd. It then turns northeast for approximately .05 mile. The segment turns southeast for approximately .16 mile, crossing CR 272. The termination of Segment B2 is at the intersection of segments B2, E2, and K2.

Segment C2

Segment C2 begins at the intersection of segments X1, Y1, and C2, located southwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southeast for approximately .50 mile. The termination point of Segment C2 is at the intersection of segments C2, F2, and G2.

Segment D2

Segment D2 begins at the intersection of segments A2, D2, and V5, located southwest from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds in a southeasterly direction for approximately .30 mile while paralleling the west side of Sam Bass Road. The termination of Segment D2 is at the intersection of segments D2, K4, and Substation Site 1-7.

Segment E2

Segment E2 begins at the intersection of segments B2, E2, and K2, located southeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds north-northeast for approximately .05 mile and then angles to the northeast for approximately .48 mile. The termination point of Segment E2 is at the intersection of segments E2, F2, and Substation Site 1-4.

Segment F2

Segment F2 begins at the intersection of segments E2, F2, and Substation Site 1-4, located northeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds northeast for approximately .10 mile, crossing CR 272 and Brushy

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Creek. It then angles to the north-northeast for approximately .10 mile. The termination of Segment F2 is at the intersection of segments C2, F2, and G2.

Segment G2

Segment G2 begins at the intersection of segments C2, F2, and G2, located northeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds northeast for approximately .10 mile. The termination of Segment G2 is at the intersection of segments G2, H2, and L2.

Segment H2

Segment H2 begins at the intersection of segments G2, H2, and L2, located northeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds northeast for approximately .20 mile. The termination of Segment H2 is at the intersection of segments H2, I2, and N2.

Segment I2

Segment I2 begins at the intersection of segments H2, I2, and N2, located northeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds southeast for approximately .14 mile and then angles to the northeast for approximately .50 mile. The termination of Segment I2 is at the intersection of segments I2, J2, and Q2.

Segment J2

Segment J2 begins at the intersection of segments J2, T2 and K4, located southeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds southeast for approximately .02 mile while paralleling the west side of Sam Bass Road. The termination of Segment J2 is at the intersection of segments I2, J2 and Q2.

Segment K2

Segment K2 begins at the intersection of segments B2, E2, and K2, located southeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds southeast for approximately .09 mile. It then angles to the east-southeast for approximately .67 mile while paralleling the east side of Ronald Reagan Blvd., crossing Spanish Oak Creek and FM 1431/East Whitestone Blvd. The termination of Segment K2 is at the intersection of segments K2, J3, and N3.

Segment L2

Segment L2 begins at the intersection of segments G2, H2, and L2, located northeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds southeast for approximately .50 mile. The termination of Segment L2 is at the intersection of segments L2, M2, and Substation Site 1-5.

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Segment M2

Segment M2 begins at the intersection of segments L2, M2, and Substation Site 1-5, located northeast from the intersection of Ronald Reagan Blvd. and FM 1431. The segment proceeds southeast for approximately .10 mile, crossing FM 1431/East Whitestone Blvd. The termination of Segment M2 is at the intersection of segments M2, J3, and K3.

Segment N2

Segment N2 begins at the intersection of segments H2, I2, and N2, located northeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds southeast for approximately .10 mile. The termination of Segment N2 is at the intersection of segments N2, O2, and Substation Site 1-3.

Segment O2

Segment O2 begins at the intersection of segments N2, O2, and Substation Site 1-3, located northeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds southeast for approximately .40 mile. The termination of Segment O2 is at the intersection of segments O2, P2, and R2.

Segment P2

Segment P2 begins at the intersection of segments O2, P2, and R2, located northeast from the intersection of Ronald Reagan Blvd. and FM 1431. The segment proceeds southeast for approximately .10 mile, crossing FM 1431/East Whitestone Blvd. The termination of Segment P2 is at the intersection of segments P2, K3, and L3.

Segment Q2

Segment Q2 begins at the intersection of segments I2, J2 and Q2, located southeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds southeast for approximately .09 mile while paralleling the west side of Sam Bass Road. It then angles to the south for approximately .12 mile and then angles to the east-southeast for approximately .07 mile. The segment then angles southeast for approximately .21 mile while paralleling the west side of Sam Bass Road. The termination of Segment Q2 is at the intersection of segments Q2, R2 and S2.

Segment R2

Segment R2 begins at the intersection of segments O2, P2 and R2, located northeast from the intersection of Ronald Reagan Blvd. and FM 1431. The segment proceeds northeast for approximately .60 mile while paralleling the north side of FM 1431/East Whitestone Blvd. The termination of Segment R2 is at the intersection of segments Q2, R2 and S2.

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Segment S2

Segment S2 begins at the intersection of segments Q2, R2 and S2, located northwest from the intersection of Sam Bass Road and FM 1431. The segment proceeds southeast for approximately .10 mile, crossing FM 1431/East Whitestone Blvd. The termination of Segment S2 is at the intersection of segments S2, Y2, and M3.

Segment T2

Segment T2 begins at the intersection of segments J2, T2 and K4, located southeast from the intersection of Sam Bass Road and The Outer Avenue. The segment curves around to the east-northeast for approximately .70 mile, crossing Sam Bass Road. It then angles to the northeast for approximately .14 mile, crossing Dry Fork Creek. The segment continues northeast for approximately .51 mile while paralleling the north side of Arterial H. At this point, the segment continues northeast for approximately .34 mile. The termination of Segment T2 is at the intersection of segments T2, U2 and U5.

Segment U2

Segment U2 begins at the intersection of segments T2, U2 and U5, located northeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds northeast for approximately .60 mile. The termination of Segment U2 is at the intersection of segments U2, W2, W2a, M5, and N5.

Segment V2

Segment V2 begins at the intersection of segments V2, M5 and N5, located northeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds northeast for approximately 1.10 mile, crossing Chandler Branch. The termination of Segment V2 is at the intersection of segments V2, X2, and K5.

Segment W2

Segment W2 begins at the intersection of segments U2, W2, W2a, M5, and N5, located northeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds southeast for approximately .25 mile and then turns southwest for approximately .19 mile. The segment turns southeast for approximately .68 mile. The termination of Segment W2 is at the intersection of segments W2, Y2, Z2, and O5.

Segment W2a

Segment W2a begins at the intersection of segments U2, W2, W2a, M5, and N5, located northeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds southeast for approximately .15 mile and then angles to the south-southeast for approximately.11 mile. The segment turns southwest for approximately .20 mile. It then turns southeast for approximately .60 mile. The termination of Segment W2a is at the intersection of segments W2a, O5, and Q5.

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Segment X2

Segment X2 begins at the intersection of segments V2, X2, and K5, located west from the intersection of Interstate Highway 35 (I-35) and Westinghouse Road. The segment proceeds in a southerly direction for approximately 1.30 miles by rebuilding an existing transmission line, crossing Chandler Branch, and FM 1431/East Whitestone Blvd. The termination of Segment X2 is at the intersection of segments X2, B3, and C3.

Segment Y2

Segment Y2 begins at the intersection of segments S2, Y2, and M3, located southwest from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds northeast for approximately .95 mile while paralleling the south side of FM 1431/East Whitestone Blvd., crossing Sam Bass Road and Dry Fork Creek. It then angles to the north-northeast for approximately .05 mile, crossing FM 1431/East Whitestone Blvd. The segment continues northeast for approximately .98 mile while paralleling the north side of FM 1431/East Whitestone Blvd. The termination of Segment Y2 is at the intersection of segments W2, Y2, Z2, and O5.

Segment Z2

Segment Z2 begins at the intersection of segments W2, Y2, Z2, and O5, located northeast from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .10 mile, crossing FM 1431/East Whitestone Blvd. The termination of Segment Z2 is at the intersection of segments Z2, A3, and P5.

Segment A3

Segment A3 begins at the intersection of segments Z2, A3, and P5, located northeast from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .82 mile. It then turns northeast for approximately .70 mile. The termination of Segment A3 is at the intersection of segments A3, D3, F3, and R5.

Segment A3a

Segment A3a begins at the intersection of segments A3a, B3, P5, and Q5, located northeast from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .27 mile and then angles south for approximately .14 mile. The segment angles southeast for approximately .36 mile. It then turns northeast for approximately .68 mile. The termination of Segment A3a is at the intersection of segments A3a, D3a, and R5.

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Segment B3

Segment B3 begins at the intersection of segments A3a, B3, P5, and Q5, located northeast from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds northeast for approximately 1.66 mile while paralleling the south side of FM 1431/East Whitestone Blvd., crossing Onion Branch. It then angles to the southeast for approximately .14 mile. The termination of Segment B3 is at the intersection of segments X2, B3, and C3.

Segment C3

Segment C3 begins at the intersection of segments X2, B3, and C3, located west from the intersection of Interstate Highway 35 (I-35) and FM 1431/East Whitestone Blvd. The segment proceeds south for approximately .60 mile by rebuilding an existing transmission line. The termination of Segment C3 is at the intersection of segments C3, E3, and H3.

Segment D3

Segment D3 begins at the intersection of segments A3, D3, F3, and R5, located southwest from the intersection of I-35 and FM 1431/East Whitestone Blvd. The segment proceeds northeast for approximately .30 mile, crosses Onion Branch, and then proceeds northeast for approximately .30 mile. It then angles north-northeast for approximately .10 mile. The termination of Segment D3 is at the intersection of segments D3, D3a, E3, and G3.

Segment D3a

Segment D3a begins at the intersection of segments A3a, D3a, and R5, located southwest from the intersection of I-35 and FM 1431/East Whitestone Blvd. The segment proceeds northeast for approximately .25 mile, crosses Onion Branch, and then proceeds northeast for approximately .35 mile. It then angles east for approximately .10 mile. The termination of Segment D3a is at the intersection of segments D3, D3a, E3, and G3.

Segment E3

Segment E3 begins at the intersection of segments D3, D3a, E3, and G3, located southwest from the intersection of I-35 and FM 1431/East Whitestone Blvd. The segment proceeds east for approximately .20 mile. The termination of Segment E3 is at the intersection of segments C3, E3, and H3.

Segment F3

Segment F3 begins at the intersection of segments A3, D3, F3, and R5, located southwest from the intersection of I-35 and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .34 mile and then angles southwest for

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approximately .73 mile. The segment turns northwest for approximately .11 mile while paralleling the north side of Sam Bass Road. It then turns southwest for approximately .04 mile, crossing Sam Bass Road. The termination of Segment F3 is at the intersection of segments F3, O3, and U3.

Segment G3

Segment G3 begins at the intersection of segments D3, D3a, E3, and G3, located southwest from the intersection of I-35 and FM 1431/East Whitestone Blvd. The segment proceeds south for approximately 1.00 mile by rebuilding an existing transmission line, crossing Onion Branch. The termination of Segment G3 is at the intersection of segments G3, H3, and I3.

Segment H3

Segment H3 begins at the intersection of segments C3, E3, and H3, located southwest from the intersection of I-35 and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .05 mile, crossing an existing transmission line, a railroad, and an existing transmission line. It then turns south for approximately .86 mile while paralleling the east side of an existing transmission line. The segment turns southwest for approximately .07 mile, crossing an existing transmission line and a railroad. It then angles to the west-southwest for approximately .16 mile while paralleling the north side of FM 3406/W. Old Settlers Blvd., crossing Onion Branch and an existing transmission line. The termination of Segment H3 is at the intersection of segments G3, H3, and I3.

Segment I3

Segment I3 begins at the intersection of segments G3, H3, and I3, located west from the intersection of I-35 and FM 3406/W. Old Settlers Blvd. The segment proceeds south for approximately .80 mile by rebuilding an existing transmission line, crossing FM 3409 and Onion Branch twice. It then angles to the southeast for approximately .03 mile while paralleling the east side of an existing transmission line. The segment turns southwest for approximately .03 mile while paralleling the north side of an existing transmission line, crossing two existing transmission lines. The termination of Segment I3 is at the intersection of segments I3, G4, and J4.

Segment J3

Segment J3 begins at the intersection of segments K2, J3, and N3, located southeast from the intersection of West Parmer Lane and FM 1431/East Whitestone Blvd. The segment proceeds in a northeasterly direction for approximately .60 mile while paralleling the south side of FM 1431/East Whitestone Blvd., crossing Brushy Creek. The termination of Segment J3 is at the intersection of segments M2, J3, and K3.

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Segment K3

Segment K3 begins at the intersection of segments M2, J3, and K3, located northeast from the intersection of West Parmer Lane and FM 1431/East Whitestone Blvd. The segment proceeds in a northeasterly direction for approximately .20 mile while paralleling the south side of FM 1431/East Whitestone Blvd. The termination of Segment K3 is at the intersection of segments P2, K3, and L3.

Segment L3

Segment L3 begins at the intersection of segments P2, K3, and L3, located northeast from the intersection of West Parmer Lane and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .37 mile. It then turns northeast for approximately .28 mile. The segment continues northeast for approximately .20 mile while paralleling the south side of Thousand Oaks Drive. The termination of Segment L3 is at the intersection of segments L3, M3, and O3.

Segment M3

Segment M3 begins at the intersection of segments S2, Y2, and M3, located southwest from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .30 mile while paralleling the west side of Sam Bass Road. It then continues southeast for approximately .06 mile, crossing Thousand Oaks Drive. The termination of Segment M3 is at the intersection of segments L3, M3, and O3.

Segment N3

Segment N3 begins at the intersection of segments K2, J3, and N3, located southeast from the intersection of West Parmer Lane and FM 1431/East Whitestone Blvd. The segment proceeds in a southerly direction for approximately 1.38 miles while paralleling the east side of West Parmer Lane. It then continues south for approximately .28 mile and turns east for approximately .21 mile. The segment angles southeast for approximately .15 mile, crossing Brushy Creek Road. The segment turns east for approximately .43 mile and then angles to the northeast for approximately .28 mile, crossing Brushy Creek Road. It then angles in a northeasterly direction for approximately .66 mile while paralleling the north side of Brushy Creek Road. At this point, the segment then turns east for approximately .06 mile, crossing Brushy Creek Road and South Brushy Creek, and then angles northeast for approximately .04 mile. It then continues in a northeasterly direction for approximately .62 miles while paralleling the south side of Brushy Creek Road. The segment angles east for approximately .06 mile, crossing Great Oaks Drive. It then angles in a northeasterly direction for approximately .44 mile while paralleling the south side of Hairy Man Road, crossing Hairy Man Road. Finally, the segment continues northeast for approximately .30 mile while paralleling the north side of Hairy Man Road, crossing Brushy Creek,

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and then angles east for approximately .11 mile. The termination of Segment N3 is at the intersection of segments N3, U3, A4, B4, and B4a.

Segment O3

Segment O3 begins at the intersection of segments L3, M3, and O3, located south from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds east for approximately .15 mile. It then angles southeast for approximately .41 mile and then angles south-southeast for approximately .13 mile. The segment continues in a southeasterly direction for approximately .82 mile while paralleling the south side of Sam Bass Road. At this point, the segment then turns east for approximately .07 mile, crossing Sam Bass. It then continues in an easterly direction for approximately .29 mile while paralleling the north side of Sam Bass Road. The segment angles south-southeast for approximately .09 mile, crossing Sam Bass Road. Finally, the segment continues in a southeasterly direction for approximately .32 mile while paralleling the south side of Sam Bass Road. The termination of Segment O3 is at the intersection of segments F3, O3, and U3.

Segment U3

Segment U3 begins at the intersection of segments F3, O3, and U3, located west from the intersection of Sam Bass Road and FM 3406/W. Old Settlers Blvd. The segment proceeds southwest for approximately .12 mile, crossing Dry Fork Creek. It then angles southeast for approximately .20 mile. The termination of Segment U3 is at the intersection of segments N3, U3, A4, B4, and B4a.

Segment A4

Segment A4 begins at the intersection of segments N3, U3, A4, B4, and B4a, located southwest from the intersection of Sam Bass Road and FM 3406/W. Old Settlers Blvd. The segment proceeds southeast for approximately .12 mile, crossing Brushy Creek and Hairy Man Road. It then continues in a southeasterly direction for approximately .36 mile while paralleling the south side of Hairy Man Road. The segment continues southeast for approximately .05 mile and then angles to the northeast for approximately .08 mile, crossing Brushy Creek. The segment continues in a northeasterly direction for approximately .34 mile while paralleling the south side of Hairy Man Road. Finally, the segment turns in a southeasterly direction for approximately .14 mile while paralleling the west side of Sam Bass Road. The termination of Segment A4 is at the intersection of segments A4, D4, and E4.

Segment B4

Segment B4 begins at the intersection of segments N3, U3, A4, B4, and B4a, located southwest from the intersection of Sam Bass Road and FM 3406/W. Old Settlers Blvd. The segment proceeds southeast for approximately .53 mile, crossing Brushy Creek

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and Hairy Man Road. It then turns northeast for approximately .56 mile. The termination of Segment B4 is at the intersection of segments B4, F4, and S5.

Segment B4a

Segment B4a begins at the intersection of segments N3, U3, A4, B4, and B4a, located southwest from the intersection of Sam Bass Road and FM 3406/W. Old Settlers Blvd. The segment proceeds southeast for approximately .50 mile, crossing Brushy Creek and Hairy Man Road. It then turns northeast for approximately .48 mile and angles to the southeast for approximately .07 mile. The termination of Segment B4a is at the intersection of segments B4a, D4, F4a, and S5.

Segment D4

Segment D4 begins at the intersection of segments A4, D4, and E4, located southeast from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds southwest for approximately .14 mile. It then angles west-southwest for approximately .11 mile, crossing Brushy Creek. The termination of Segment D4 is at the intersection of segments B4a, D4, F4a, and S5.

Segment E4

Segment E4 begins at the intersection of segments A4, D4, and E4, located southeast from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds southeast for approximately .30 mile while paralleling the west side of Sam Bass Road. The termination of Segment E4 is at the intersection of segments E4, G4, and H4.

Segment F4

Segment F4 begins at the intersection of segments B4, F4, and S5, located south from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds south-southeast for approximately .10 mile and then angles southeast for approximately .14 mile. It then angles to the northeast for approximately .25 mile, crossing Brushy Creek, and then turns north for approximately .02 mile. The termination of Segment F4 is at the intersection of segments F4, F4a, and T5.

Segment F4a

Segment F4a begins at the intersection of segments B4a, D4, F4a, and S5, located south from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds south-southeast for approximately .12 mile and then angles southeast for approximately .09 mile. It then angles to the northeast for approximately .23 mile, crossing Brushy Creek. The termination of Segment F4a is at the intersection of segments F4, F4a, and T5.

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Segment G4

Segment G4 begins at the intersection of segments E4, G4, and H4, located southeast from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds northeast for approximately .10 mile crossing Sam Bass Road and paralleling the south side of Somerset Drive. It then turns southeast for approximately .03 mile. The termination of Segment G4 is at the intersection of segments I3, G4, and J4.

Segment H4

Segment H4 begins at the intersection of segments E4, G4, and H4, located southeast from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds southeast for approximately .10 mile while paralleling the west side of Sam Bass Road. The termination of Segment H4 is at the intersection of segments H4, I4, and T5.

Segment I4

Segment I4 begins at the intersection of segments H4, I4, and T5, located southeast from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds southeast for approximately .03 mile while paralleling the west side of Sam Bass Road. It then turns northeast for approximately .07 mile crossing Sam Bass Road while paralleling the south side of an existing transmission line. The termination of Segment I4 is at the Round Rock Substation, located approximately 1.00 mile west from the intersection of I-35 and Sam Bass Road.

Segment J4

Segment J4 begins at the intersection of segments I3, G4, and J4, located east from the intersection of Sam Bass Road and Somerset Drive. The segment proceeds southwest for approximately .03 mile while paralleling the north side of an existing transmission line. The termination of Segment J4 is at the Round Rock Substation, located approximately 1.00 mile west from the intersection of I-35 and Sam Bass Road.

Segment K4

Segment K4 begins at the intersection of segments D2, K4, and Substation Site 1-7, located southeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds in a southeasterly direction for approximately .30 mile while paralleling the west side of Sam Bass Road. The termination of Segment K4 is at the intersection of segments J2, T2, and K4.

Segment L4

Segment L4 begins at the intersection of segments K, L4, and S4, located southwest from the intersection of Ronald Reagan Blvd. and Hero Way. The segment proceeds

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northeast for approximately .13 mile, crossing Ronald Reagan Blvd., and then angles east-southeast for approximately .41 mile. The segment angles southeast for approximately .16 mile. The termination of Segment L4 is at the intersection of segments L4, M4, N4, and Substation Site 2-6.

Segment M4

Segment M4 begins at the intersection of segments L4, M4, N4, and Substation Site 2-6, located southeast from the intersection of Ronald Reagan Blvd. and Hero Way. The segment proceeds southeast for approximately .04 mile, crossing FM 2243. The termination of Segment M4 is at the intersection of segments S, M4, and R4.

Segment N4

Segment N4 begins at the intersection of segments L4, M4, N4, and Substation Site 2-6, located southeast from the intersection of Ronald Reagan Blvd. and Hero Way. The segment proceeds southwest for approximately .20 mile while paralleling the west side of FM 2243. The termination of Segment N4 is at the intersection of segments R, N4, and O4.

Segment O4

Segment O4 begins at the intersection of segments R, N4, and O4, located northeast from the intersection of Ronald Reagan Blvd. and FM 2243. The segment proceeds east for approximately .04 mile, crossing FM 2243. The termination of Segment O4 is at the intersection of segments T, O4, P4, and R4.

Segment P4

Segment P4 begins at the intersection of segments V, P4, and Q4, located northeast from the intersection of Ronald Reagan Blvd. and FM 2243. The segment proceeds northeast for approximately .04 mile, crossing Sam Bass Road. The termination of Segment P4 is at the intersection of segments T, O4, P4, and R4.

Segment Q4

Segment Q4 begins at the intersection of segments Q, R, and Q4, located northeast from the intersection of Ronald Reagan Blvd. and FM 2243. The segment proceeds east for approximately .04 mile, crossing FM 2243. The termination of Segment Q4 is at the intersection of segments V, P4, and Q4.

Segment R4

Segment R4 begins at the intersection of segments T, O4, P4, and R4, located northeast from the intersection of Ronald Reagan Blvd. and FM 2243. The segment proceeds northeast for approximately .20 mile while paralleling the east side of FM 2243. The termination of Segment R4 is at the intersection of segments S, M4, andR4.

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Segment S4

Segment S4 begins at the intersection of segments K, L4, and S4, located southwest from the intersection of Ronald Reagan Blvd. and Hero Way. The segment proceeds southeast for approximately .40 mile while paralleling the west side of Ronald Reagan Blvd. The termination of Segment S4 is at the intersection of segments S4, A6, and C6.

Segment T4

Segment T4 begins at the intersection of segments W, Y, and T4, located southeast from the intersection of FM 2243 and Sam Bass Road. The segment proceeds southeast for approximately .10 mile. The termination of Segment T4 is at the intersection of segments X, T4, and Substation Site 2-3.

Segment U4

Segment U4 begins at the intersection of segments U4, V4, and H6, located southeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds southeast for approximately .20 mile while paralleling the east side of Ronald Reagan Blvd, crossing Brushy Creek. The termination of Segment U4 is at the intersection of segments O, U4, and Substation Site 2-4.

Segment V4

Segment V4 begins at the intersection of segments U4, V4, and H6, located southeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds east-southeast for approximately .46 mile and then angles southeast for approximately .19 mile. The segment angles east-southeast for approximately .15 mile. The termination of Segment V4 is at the intersection of segments I1, V4, W4, and X4.

Segment W4

Segment W4 begins at the intersection of segments X, J1, and W4, located southeast from the intersection of FM 2243 and Sam Bass Road. The segment proceeds southwest for approximately .20 mile. The termination of Segment W4 is at the intersection of segments I1, V4, W4, and X4.

Segment X4

Segment X4 begins at the intersection of segments I1, V4, W4, and X4, located southeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds east-southeast for approximately .07 mile and then angles south-southeast for approximately .22 mile. The segment angles southeast for approximately .20 mile. The termination of Segment X4 is at the intersection of segments X4, Y4, and Z4.

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Segment Y4

Segment Y4 begins at the intersection of segments X4, Y4, and Z4, located west from the intersection of Sam Bass Road and CR 177. The segment proceeds northeast for approximately .20 mile while paralleling the north side of CR 177. The termination of Segment Y4 is at the intersection of segments J1, Y4, and A5.

Segment Z4

Segment Z4 begins at the intersection of segments X4, Y4, and Z4, located west from the intersection of Sam Bass Road and CR 177. The segment proceeds southeast for approximately .10 mile, crossing CR 177. The termination of Segment Z4 is at the intersection of segments Z4, D6, and Substation Site 2-7.

Segment A5

Segment A5 begins at the intersection of segments J1, Y4, and A5, located west from the intersection of Sam Bass Road and CR 177. The segment proceeds in a southeasterly direction for approximately .40 mile while paralleling the west side of Sam Bass Road, crossing CR 177. The termination point of Segment A5 is at the intersection of segments L1, A5, and B5.

Segment B5

Segment B5 begins at the intersection of segments K1, B5, C5, and D6, located northwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds northeast for approximately .40 mile, crossing Brushy Creek. The termination of Segment B5 is at the intersection of segments L1, A5, and B5.

Segment C5

Segment C5 begins at the intersection of segments K1, B5, C5, and D6, located northwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southeast for approximately .21 mile. It then angles southwest for approximately .06 mile and then angles southeast for approximately .04 mile. The termination of Segment C5 is at the intersection of segments M1, C5, and D5.

Segment D5

Segment D5 begins at the intersection of segments M1, C5, and D5, located southwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southeast for approximately .04 mile, crossing Journey Parkway. The termination of Segment D5 is at the intersection of segments D5, E5, and F5.

Segment E5

Segment E5 begins at the intersection of segments D5, E5, and F5, located southwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds

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south for approximately .07 mile and then curves around to the southeast for approximately .33 mile. It then angles south-southeast for approximately .14 mile and then angles to the southwest for approximately .10 mile. The termination of Segment E5 is at the intersection of segments V1a, E5, G5, and H5.

Segment F5

Segment F5 begins at the intersection of segments G1, R1 and F5, located south from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds northeast for approximately .80 mile while paralleling the south side of Journey Parkway. The termination point of Segment F5 is at the intersection of segments D5, E5, and F5.

Segment G5

Segment G5 begins at the intersection of segments V1a, E5, G5, and H5, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds southeast for approximately .10 mile, crossing Brushy Creek. The termination point of Segment G5 is at the intersection of segments S1, W1, Y1, Z1, and G5.

Segment H5

Segment H5 begins at the intersection of segments V1a, E5, G5, and H5, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds southeast for approximately .03 mile. The termination point of Segment H5 is at the intersection of segments V1, W1, X1, and H5.

Segment I5

Segment I5 begins at the intersection of segments A1, I5, and J5, located northwest from the intersection of I-35 and Westinghouse Road. The segment proceeds northeast for approximately .51 mile. It then turns east for approximately .09 mile and then turns southeast for approximately .49 mile. The termination of Segment I5 is at the intersection of segments I5, J5 and K5.

Segment J5

Segment J5 begins at the intersection of segments A1, I5, and J5, located northwest from the intersection of I-35 and Westinghouse Road. The segment proceeds southeast for approximately .70 mile. The termination of Segment J5 is at the intersection of segments I5, J5 and K5.

Segment K5

Segment K5 begins at the intersection of segments I5, J5, and K5, located northwest from the intersection of I-35 and Westinghouse Road. The segment proceeds southeast for approximately .18 mile. It continues in a southerly direction for

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approximately .76 mile by rebuilding an existing transmission line, crossing West Fork Smith Branch twice. The segment angles southwest for approximately .03 mile and then turns south for approximately .08 mile. It then angles southeast for approximately .05 mile. The segment continues south for approximately .96 mile by rebuilding an existing transmission line. The termination of Segment K5 is at the intersection of segments V2, X2, and K5.

Segment L5

Segment L5 begins at the intersection of segments R1, U1a, and L5, located south from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds southeast for approximately .04 mile while paralleling the east side of Ronald Reagan Blvd. The termination point of Segment L5 is at the intersection of segments U1, B2, and L5.

Segment M5

Segment M5 begins at the intersection of segments U2, W2, W2a, M5, and N5, located northeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds northeast for approximately 1.00 mile. The termination of Segment M5 is at the intersection of segments V2, M5, and N5.

Segment N5

Segment N5 begins at the intersection of segments U2, W2, W2a, M5, and N5, located northeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds north-northeast for approximately .60 mile and then angles to the northeast for approximately.30 mile. It then angles southeast for approximately .32 mile. The termination of Segment N5 is at the intersection of segments V2, M5, and N5.

Segment O5

Segment O5 begins at the intersection of segments W2, Y2, Z2, and O5, located northeast from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds northeast for approximately .04 mile while paralleling the north side of FM 1431/East Whitestone Blvd. The termination of Segment O5 is at the intersection of segments W2a, O5, and Q5.

Segment P5

Segment P5 begins at the intersection of segments Z2, A3, and P5, located northeast from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds northeast for approximately .04 mile while paralleling the south side of FM 1431/East Whitestone Blvd. The termination of Segment P5 is at the intersection of segments A3a, B3, P5, and Q5.

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Segment Q5

Segment Q5 begins at the intersection of segments W2a, O5, and Q5, located northeast from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .10 mile, crossing FM 1431/East Whitestone Blvd. The termination of Segment Q5 is at the intersection of segments A3a, B3, P5, and Q5.

Segment R5

Segment R5 begins at the intersection of segments A3a, D3a, and R5, located southwest from the intersection of I-35 and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .04 mile. The termination of Segment R5 is at the intersection of segments A3, D3, F3, and R5.

Segment S5

Segment S5 begins at the intersection of segments B4a, D4, F4a, and S5, located south from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds southwest for approximately .04 mile. The termination of Segment S5 is at the intersection of segments B4, F4, and S5.

Segment T5

Segment T5 begins at the intersection of segments F4, F4a, and T5, located southeast from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds north for approximately .04 mile while paralleling the west side of an existing transmission line. It then turns northeast for approximately .03 mile while paralleling the north side of an existing transmission line. The termination of Segment T5 is at the intersection of segments I4, H4, and T5.

Segment U5

Segment U5 begins at the intersection of segments B1, U5, and E6, located northeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds southeast for approximately .37 mile and then turns southwest for approximately .11 mile. It then turns southeast for approximately .53 mile. The termination of Segment U5 is at the intersection of segments T2, U2, and U5.

Segment V5

Segment V5 begins at the intersection of segments T1, V5, and W5, located northwest from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds southeast for approximately .08 mile. It then angles south-southeasterly for approximately .24 mile while paralleling the west side of Sam Bass Road, crossing The Outer Avenue. The termination of Segment V5 is at the intersection of segments A2, D2, and V5.

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Segment W5

Segment W5 begins at the intersection of segments T1, V5, and W5, located northwest from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds northeast for approximately .10 mile, crossing Sam Bass Road. The termination of Segment W5 is at the intersection of segments W5, E6, and Substation Site 1-8.

Segment X5

Segment X5 begins at the intersection of segments F, X5, and Y5, located northwest from the intersection of US Hwy 183A and FM 2243. The segment proceeds northeast for approximately .70 mile, crossing US Hwy 183A and CR 269. The termination of Segment X5 is at the intersection of segments J, X5, and Z5.

Segment Y5

Segment Y5 begins at the intersection of segments F, X5, and Y5, located northwest from the intersection of US Hwy 183A and FM 2243. The segment proceeds southeast for approximately .20 mile while paralleling the west side of US Hwy 183A, crossing FM 2243 and Brushy Creek. The termination of Segment Y5 is at the intersection of segments B, I, G, and Y5.

Segment Z5

Segment Z5 begins at the intersection of segments J, X5, and Z5, located northeast from the intersection of US Hwy 183A and FM 2243. The segment proceeds southeast for approximately .10 mile. The termination of Segment Z5 is at the intersection of segments Z5, A6, and B6.

Segment A6

Segment A6 begins at the intersection of segments Z5, A6, and B6, located northeast from the intersection of US Hwy 183A and FM 2243. The segment proceeds northeast for approximately .90 mile. The termination of Segment A6 is at the intersection of segments S4, A6, and C6.

Segment B6

Segment B6 begins at the intersection of segments Z5, A6, and B6, located northeast from the intersection of US Hwy 183A and FM 2243. The segment proceeds southeast for approximately .20 mile. It then turns east-southeast for approximately .02 mile while paralleling the north side of FM 2243. The termination of Segment B6 is at the intersection of segments G, L, and B6.

Segment C6

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Segment C6 begins at the intersection of segments S4, A6, and C6, located southwest from the intersection of Ronald Reagan Blvd. and Hero Way. The segment proceeds southeast for approximately .20 mile while paralleling the west side of Ronald Reagan Blvd. The termination of Segment C6 is at the intersection of segments L, M, C6, and F6.

Segment D6

Segment D6 begins at the intersection of segments Z4, D6, and Substation Site 2-7, located southwest from the intersection of Sam Bass Road and CR 177. The segment proceeds southeast for approximately .30 mile, crossing Brushy Creek. The termination of Segment D6 is at the intersection of segments K1, B5, C5, and D6.

Segment E6

Segment E6 begins at the intersection of segments W5, E6, and Substation Site 1-8, located north from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds northeast for approximately .27 mile and then turns northwest for approximately .38 mile. It then turns northeast for approximately 1.55 miles, crossing Dry Fork Creek. The termination of Segment E6 is at the intersection of segments B1, U5, and E6.

Segment F6

Segment F6 begins at the intersection of segments L, M, C6, and F6, located northeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds southeast for approximately .20 mile crossing FM 2243 while paralleling the west side of Ronald Reagan Blvd. The termination of Segment F6 is at the intersection of segments F6, G6, and Substation Site 2-8.

Segment G6

Segment G6 begins at the intersection of segments F6, G6, and Substation Site 2-8, located south from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds northeast for approximately .10 mile, crossing Ronald Reagan Blvd. The termination of Segment G6 is at the intersection of segments N, G6, and H6.

Segment H6

Segment H6 begins at the intersection of segments N, G6, and H6, located southeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds southeast for approximately .10 mile while paralleling the east side of Ronald Reagan Blvd. The termination of Segment H6 is at the intersection of segments U4, V4, and H6.

Landowners and Transmission Line Cases at the PUC

Public Utility Commission of Texas



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Effective: June 1, 2011

Purpose of This Brochure

This brochure is intended to provide landowners with information about proposed new transmission lines and the Public Utility Commission's ("PUC" or "Commission") process for evaluating these proposals. At the end of the brochure is a list of sources for additional information.

The following topics are covered in this brochure:

- How the PUC evaluates whether a new transmission line should be built,
- How you can participate in the PUC's evaluation of a line, and
- How utilities acquire the right to build a transmission line on private property.

You are receiving the enclosed formal notice because one or more of the routes for a proposed transmission line may require an easement or other property interest across your property, or the centerline of the proposed project may come within 300 feet of a house or other habitable structure on your property. This distance is expanded to 500 feet if the proposed line is greater than 230 kilovolts (kV). For this reason, your property is considered **directly affected land.** This brochure is being included as part of the formal notice process.

If you have questions about the proposed routes for a transmission line, you may contact the applicant. The applicant also has a more detailed map of the proposed routes for the transmission line and nearby habitable structures. The applicant may help you understand the routing of the project and the application approval process in a transmission line case but cannot provide legal advice or represent you. The applicant cannot predict which route may or may not be approved by the PUC. The PUC decides which route to use for the transmission line, and the applicant is not obligated to keep you informed of the PUC's proceedings. The only way to fully participate in the PUC's decision on where to locate the transmission line is to intervene, which is discussed below.

The PUC is sensitive to the impact that transmission lines have on private property. At the same time, transmission lines deliver electricity to millions of homes and businesses in Texas, and new lines are sometimes needed so that customers can obtain reliable, economical power.

The PUC's job is to decide whether a transmission line application should be approved and on which route the line should be constructed. The PUC values input from landowners and encourages you to participate in this process by intervening in the docket.

PUC Transmission Line Case

Texas law provides that most utilities must file an application with the PUC to obtain or amend a Certificate of Convenience and Necessity (CCN) in order to build a new transmission line in Texas. The law requires the PUC to consider a number of factors in deciding whether to approve a proposed new transmission line.

The PUC may approve an application to obtain or amend a CCN for a transmission line after considering the following factors:

- Adequacy of existing service;
- Need for additional service;
- The effect of approving the application on the applicant and any utility serving the proximate area;
- Whether the route utilizes existing compatible rights-of-way, including the use of vacant positions on existing multiple-circuit transmission lines;
- Whether the route parallels existing compatible rights-of-way;
- Whether the route parallels property lines or other natural or cultural features;
- Whether the route conforms with the policy of prudent avoidance (which is defined as the limiting of exposures to electric and magnetic fields that can be avoided with reasonable investments of money and effort); and
- Other factors such as community values, recreational and park areas, historical and aesthetic values, environmental integrity, and the probable improvement of service or lowering of cost to consumers in the area.

If the PUC decides an application should be approved, it will grant to the applicant a CCN or CCN amendment to allow for the construction and operation of the new transmission line.

Application to Obtain or Amend a CCN:

An application to obtain or amend a CCN describes the proposed line and includes a statement from the applicant describing the need for the line and the impact of building it. In addition to the routes proposed by the applicant in its application, the possibility exists that additional routes may be developed, during the course of a CCN case, that could affect property in a different manner than the original routes proposed by the applicant.

The PUC conducts a case to evaluate the impact of the proposed line and to decide which route should be approved. Landowners who would be affected by a new line can:

- informally file a protest, or
- formally participate in the case as an intervenor.

Filing a Protest (informal comments):

If you do not wish to intervene and participate in a hearing in a CCN case, you may file **comments.** An individual or business or a group who files only comments for or against any aspect of the transmission line application is considered a "protestor."

Protestors make a written or verbal statement in support of or in opposition to the utility's application and give information to the PUC staff that they believe supports their position.

Protestors are *not* parties to the case, however, and *do not have the right to*:

- Obtain facts about the case from other parties;
- Receive notice of a hearing, or copies of testimony and other documents that are filed in the case;
- Receive notice of the time and place for negotiations;
- File testimony and/or cross-examine witnesses;
- Submit evidence at the hearing; or
- Appeal P.U.C. decisions to the courts.

If you want to make comments, you may either send written comments stating your position, or you may make a statement on the first day of the hearing. If you have not intervened, however, you will not be able to participate as a party in the hearing. Only parties may submit evidence and *the PUC must base its decision on the evidence*.

Intervening in a Case:

To become an intervenor, you must file a statement with the PUC, no later than the date specified in the notice letter sent to you with this brochure, requesting intervenor status (also referred to as a party). This statement should describe how the proposed transmission line would affect your property. Typically, intervention is granted only to directly affected landowners. However, any landowner may request to intervene and obtain a ruling on his or her specific fact situation and concerns. A sample form for intervention and the filing address are attached to this brochure, and may be used to make your filing. A letter requesting intervention may also be used in lieu of the sample form for intervention.

If you decide to intervene and become a party in a case, you will be required to follow certain procedural rules:

- You are required to timely respond to requests for information from other parties who seek information.
- If you file testimony, you must appear at a hearing to be cross-examined.
- If you file testimony or any letters or other documents in the case, you must send copies of the documents to every party in the case and you must file multiple copies with the PUC.
- If you intend to participate at the hearing and you do not file testimony, you must at least file a statement of position, which is a document that describes your position in the case.
- Failure to comply with these procedural rules may serve as grounds for you to be dismissed as an intervenor in the
 case.
- If you wish to participate in the proceedings it is very important to attend any prehearing conferences.

Intervenors may represent themselves or have an attorney to represent them in a CCN case. If you intervene in a case, you may want an attorney to help you understand the PUC's procedures and the laws and rules that the PUC applies in deciding whether to approve a transmission line. The PUC encourages landowners to intervene and become parties.

Stages of a CCN Case:

If there are persons who intervene in the case and oppose the approval of the line, the PUC may refer the case to an administrative law judge (ALJ) at the State Office of Administrative Hearings (SOAH) to conduct a hearing, or the Commission may elect to conduct a hearing itself. The hearing is a formal proceeding, much like a trial, in which testimony is presented. In the event the case is referred to SOAH, the ALJ makes a recommendation to the PUC on whether the application should be approved and where and how the line should be routed.

There are several stages of a CCN case:

- The ALJ holds a prehearing conference (usually in Austin) to set a schedule for the case.
- Parties to the case have the opportunity to conduct discovery; that is, obtain facts about the case from other parties.
- A hearing is held (usually in Austin), and parties have an opportunity to cross-examine the witnesses.
- Parties file written testimony before the date of the hearing. Parties that do not file written testimony or statements
 of position by the deadline established by the ALJ may not be allowed to participate in the hearing on the merits.
- Parties may file written briefs concerning the evidence presented at the hearing, but are not required to do so.
- In deciding where to locate the transmission line and other issues presented by the application, the ALJ and Commission rely on factual information submitted as evidence at the hearing by the parties in the case. In order to submit factual information as evidence (other than through cross-examination of other parties' witnesses), a party must have intervened in the docket and filed written testimony on or before the deadline set by the ALJ.
- The ALJ makes a recommendation, called a **proposal for decision**, to the Commission regarding the case. Parties who disagree with the ALJ's recommendation may file exceptions.
- The Commissioners discuss the case and decide whether to approve the application. The Commission may approve the ALJ's recommendation, approve it with specified changes, send the case back to the ALJ for further consideration, or deny the application. The written decision rendered by the Commission is called a **final order**. Parties who believe that the Commission's decision is in error may file motions for rehearing, asking the Commission to reconsider the decision.
- After the Commission rule on the motion for rehearing, parties have the right to appeal the decision to district court in Travis County.

Right to Use Private Property

The Commission is responsible for deciding whether to approve a CCN application for a proposed transmission line. If a transmission line route is approved that impacts your property, the electric utility must obtain the right from you to enter your property and to build, operate, and maintain the transmission line. This right is typically called an easement.

Utilities may buy easements through a negotiated agreement, but they also have the power of eminent domain (condemnation) under Texas law. Local courts, not the PUC, decide issues concerning easements for rights-of-way. The PUC does not determine the value of property.

The PUC final order in a transmission case normally requires a utility to take certain steps to minimize the impact of the new transmission line on landowners' property and on the environment. For example, the order normally requires steps to minimize the possibility of erosion during construction and maintenance activities.

HOW TO OBTAIN MORE INFORMATION

The PUC's online filings interchange on the PUC website provides free access to documents that are filed with the Commission in Central Records. The docket number, also called a control number on the PUC website, of a case is a key piece of information used in locating documents in the case. You may access the Interchange by visiting the PUC's website home page at www.puc.state.tx.us and navigate the website as follows:

- Select "Filings."
- Select "Filings Search."
- Select "Filings Search."
- Enter 5-digit Control (Docket) Number. *No other information is necessary.*
- Select "Search." All of the filings in the docket will appear in order of date filed.
- Scroll down to select desired filing.
- Click on a blue "Item" number at left.
- Click on a "Download" icon at left.

Documents may also be purchased from and filed in Central Records. For more information on how to purchase or file documents, call Central Records at the PUC at 512-936-7180.

PUC Substantive Rule 25.101, Certification Criteria, addresses transmission line CCNs and is available on the PUC's website, or you may obtain copies of PUC rules from Central Records.

Always include the docket number on all filings with the PUC. You can find the docket number on the enclosed formal notice. Send documents to the PUC at the following address.

Public Utility Commission of Texas Central Records Attn: Filing Clerk 1701 N. Congress Avenue P.O. Box 13326 Austin, TX 78711-3326

The information contained within this brochure is not intended to provide a comprehensive guide to landowner rights and responsibilities in transmission line cases at the PUC. This brochure should neither be regarded as legal advice nor should it be a substitute for the PUC's rules. However, if you have questions about the process in transmission line cases, you may call the PUC's Legal Division at 512-936-7261. The PUC's Legal Division may help you understand the process in a transmission line case but cannot provide legal advice or represent you in a case. You may choose to hire an attorney to decide whether to intervene in a transmission line case, and an attorney may represent you if you choose to intervene.

Communicating with Decision-Makers

Do not contact the ALJ or the Commissioners by telephone or email. They are not allowed to discuss pending cases with you. They may make their recommendations and decisions only by relying on the evidence, written pleadings, and arguments that are presented in the case.

Request to Intervene in PUC Docket No. ___

The following information must be submitted by the person requesting to intervene in this proceeding. This completed form will be provided to all parties in this docket. <u>If you DO NOT want to be an intervenor, but still want to file comments</u>, please complete the "Comments" page.

	,	
Mai	I this completed form and 10 copies t	0:
Central Attraction 170 P.O.	lic Utility Commission of Texas tral Records :: Filing Clerk 1 N. Congress Ave. Box 13326 tin, TX 78711-3326	
First	Name:	Last Name:
Pho	ne Number:	Fax Number:
Add	ress, City, State:	
I an	n requesting to intervene in this pro	oceeding. As an INTERVENOR, I understand the following:
	I am a party to the case;	
	•	very requests from other parties in the case;
	If I file testimony, I may be cross-exa	•
•	·	will have to provide a copy of that document to every other party in the
	I acknowledge that I am bound by the and the State Office of Administrative	he Procedural Rules of the Public Utility Commission of Texas (PUC) te Hearings (SOAH).
Plea	se check one of the following:	
	I own property with a habitable strutransmission line.	ucture located near one or more of the utility's proposed routes for a
	One or more of the utility's proposed	routes would cross my property.
	Other. Please describe and provide co	omments. You may attach a separate page, if necessary
Sign	nature of person requesting interve	ntion:

Effective: January 1, 2003

Date: _____

Comments in Docket No. _____

	y, please complete this form. Although public comments are not PUC and its staff of the public concerns and identify issues to be action in its proceedings.
Mail this completed form and 10 copies to:	
Public Utility Commission of Texas Central Records Attn: Filing Clerk 1701 N. Congress Ave. P.O. Box 13326 Austin, TX 78711-3326	
First Name:	Last Name:
Phone Number:	Fax Number:
Address, City, State:	
 I am NOT a party to this case; My comments are not considered evide I have no further obligation to participa 	
Please check one of the following:	
☐ I own property with a habitable struct transmission line.	ture located near one or more of the utility's proposed routes for a
\Box One or more of the utility's proposed ro	outes would cross my property.
Other. Please describe and provide com	nments. You may attach a separate page, if necessary.
Signature of person submitting comment	
	Date:

Effective: January 1, 2003



LCRA TRANSMISSION SERVICES CORPORATION

April 28, 2016

«Prefix» «Contact» «FormalTitle» «Organization» «Address1» «City», «State» «Zip»

RE:

Application of LCRA Transmission Services Corporation to Amend its Certificate of Convenience and Necessity for the Proposed Leander-Round Rock 138-kV Transmission Line Project in

Williamson County, Texas

PUBLIC UTILITY COMMISSION OF TEXAS (PUC) DOCKET NO. 45866

Dear «Formal»:

As part of our efforts to keep you and the public informed about electric transmission projects, we want you to know that LCRA Transmission Services Corporation (LCRA TSC) is requesting approval from the Public Utility Commission of Texas (PUC) to amend its Certificate of Convenience and Necessity (CCN) to construct the Leander-Round Rock 138-kV Transmission Line Project in southwestern Williamson County, Texas.

All routes and route segments included in this notice are available for selection and approval by the PUC.

The proposed transmission line will connect two new substations to the existing Leander and Round Rock substations. The entire project will be about 12 to 21 miles in length, and is estimated to cost approximately \$67.8 million to \$99.6 million, depending upon the final route chosen by the PUC.

If you have questions about the transmission line, you can call Senior Regulatory Case Manager Christian Powell at 512-578-4454 or 800-776-5272, ext. 4454. The descriptions of the proposed routing alternatives and a map showing the proposed alternative routes are enclosed for your convenience.

The CCN application, including detailed routing maps illustrating the proposed transmission line project and project area, may be reviewed on the project website at www.lcra.org/LRR, and at the LCRA office located at 3505 Montopolis Drive, Building D, Austin, Texas 78744. To make an appointment to obtain or review the map at LCRA, call 512-578-4454 or 800-776-5272, ext. 4454.

As discussed in the enclosed brochure, "Landowners and Transmission Line Cases at the PUC," any one of the proposed routes or a new combination of route segments filed in this application may be selected by the PUC. Additionally, the PUC may modify the proposed routes and segments into different configurations than those proposed, so long as they affect only noticed landowners.

The brochure (available from the PUC's website at www.puc.state.tx.us) also provides basic information about how you may participate in this docket, and how you may contact the PUC. Please read this brochure carefully. The brochure includes sample forms for making comments and for making a request to intervene as a party in this docket.

The only way to fully participate in the PUC's decision on where to locate the transmission line is to intervene in the docket. It is important for an affected person to intervene because LCRA TSC is not obligated to keep affected people informed of the PUC's proceedings and cannot predict which route may or may not be approved by the PUC.

In addition to the contacts listed in the brochure, you may call the PUC's Customer Assistance Hotline at 888-782-8477. Hearing- and speech-impaired individuals with text telephones (TTY) may contact the PUC's Customer Assistance Hotline at 512-936-7136, or toll free at 800-735-2989. If you wish to participate in this proceeding by becoming an intervenor, the deadline for intervention in the proceeding is June 13, 2016, and the PUC should receive a letter from you requesting intervention by that date. Mail the request for intervention and 10 copies of the request to:

Public Utility Commission of Texas Central Records Attn: Filing Clerk 1701 N. Congress Ave. P.O. Box 13326 Austin, Texas 78711-3326

People who wish to intervene in the docket also must mail a copy of their request for intervention to all parties in the docket and all people who have pending motions to intervene at or before the time the request for intervention is mailed to the PUC. In addition to the intervention deadline, other important deadlines may already exist that affect your participation in this docket. You should review the orders and other filings already made in the docket. The enclosed brochure explains how you can access these filings.

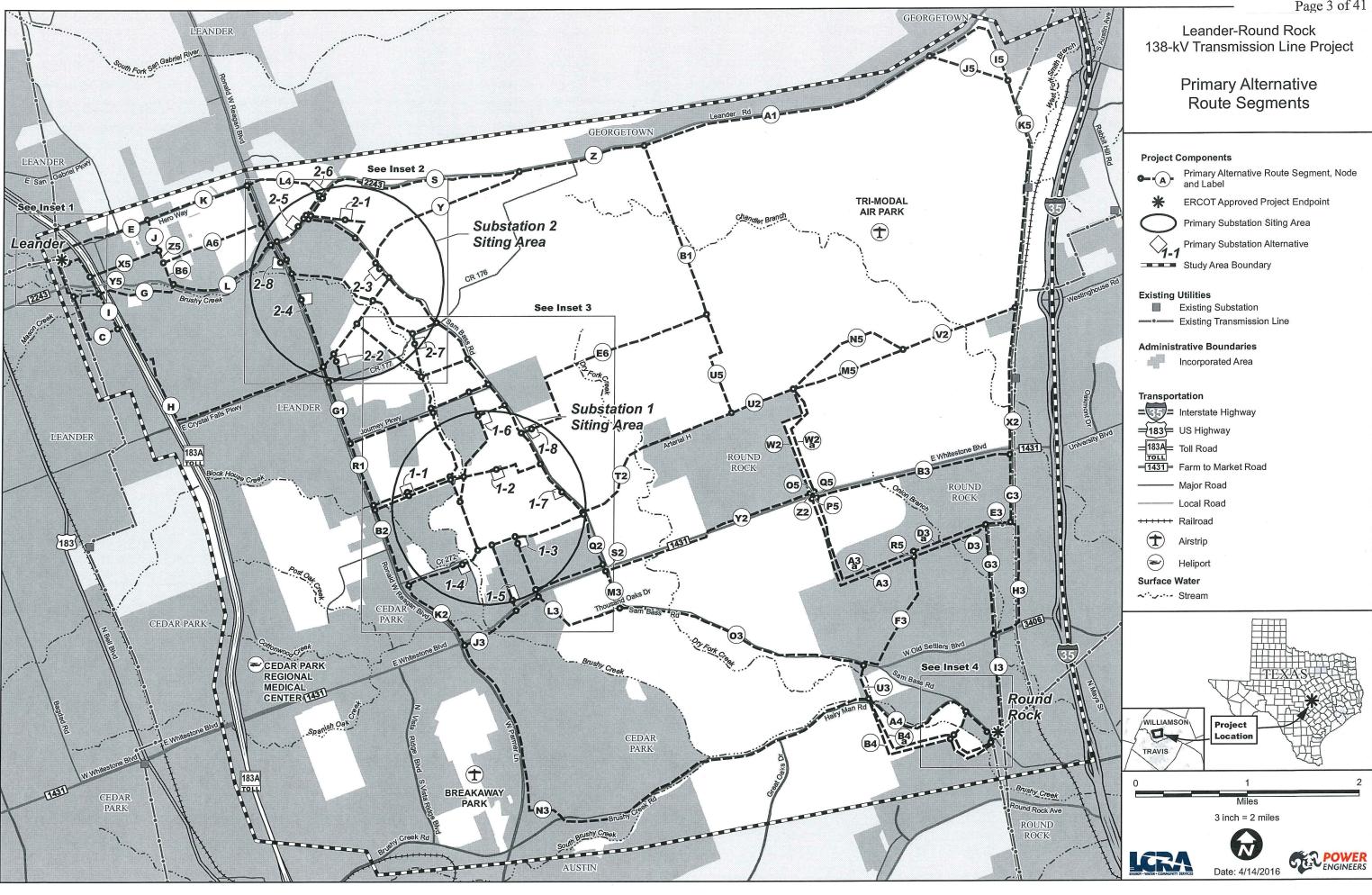
Thank you for your interest in this project.

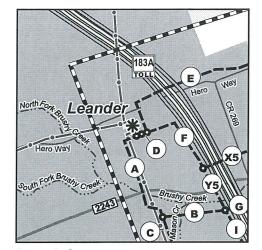
Sincerely,

C Powell

Christian Powell Senior Regulatory Case Manager Lower Colorado River Authority P.O. Box 220, MS DSC-D204 Austin, Texas 78767-0220

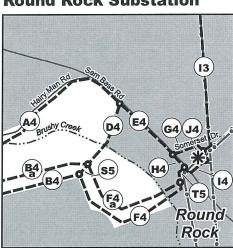
Enclosures

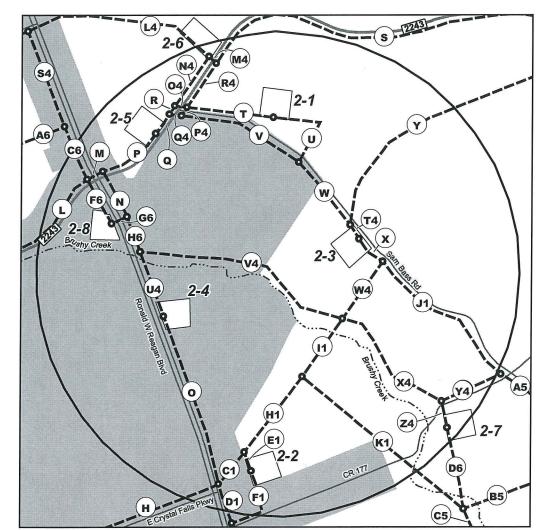




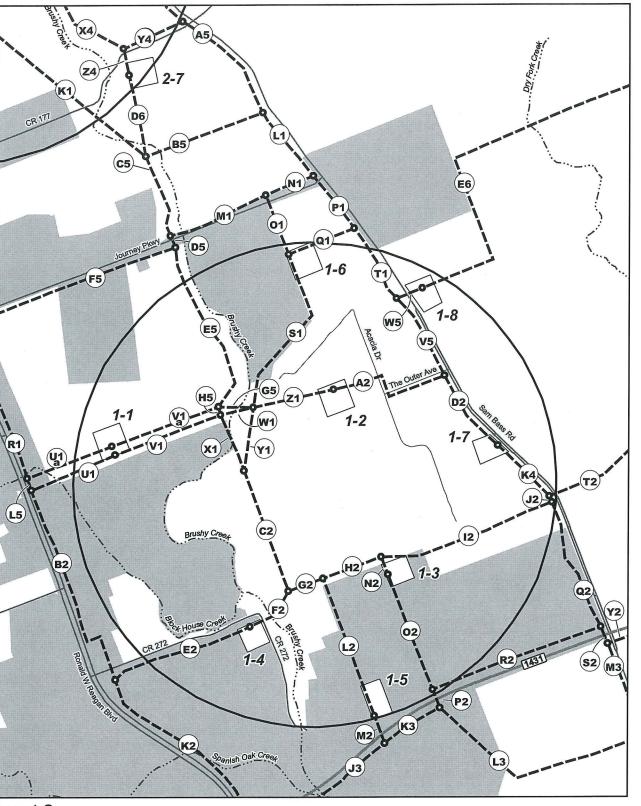
Inset 1
Leander Substation

Inset 4 Round Rock Substation





Inset 2
Substation Siting Area 2



Inset 3
Substation Siting Area 1

Leander-Round Rock
138-kV Transmission Line Project

Primary Alternative Route Segments

Project Component

G-(A)-

Primary Alternative Route Segment, Node and Label



ERCOT Approved Project Endpoint
Primary Substation Siting Area



Primary Substation Alternative



Study Area Boundary

Existing Utilities

— • Existing Transmission Line

Administrative Boundaries



Incorporated Area

Transportation

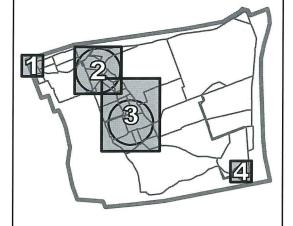
=1431 Farm to Market Road

---- Major Road

Surface Water

~·*->··- Strea

Inset Locations





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Leander –Round Rock 138-kV Transmission Line Project Segment Descriptions

Primary Alternative Routes	Segment Combinations
1	A-B-G-L-M-P-Q-Q4-V-W-T4- 2-3 -X-J1-A5-L1-P1-T1-V5-D2- 1-7 -K4-T2-U2-M5- V2-X2-C3-H3-I3-J4
2	A-B-G-L-M-P- 2-5 -Q-Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5*- 1-8 -V5-D2-K4-J2-Q2-S2-Y2-Z2-P5-B3-C3-H3-I3-J4
3	A-B-G-L-F6- 2-8 -G6-H6-U4-O-D1-G1-F5-D5-M1-O1*- 1-6 -N1-L1-A5-J1-X-T4-Y-Z-A1-J5-K5-X2-C3-H3-I3-J4
4	D-F-Y5-I-H-D1-G1-F5-D5-M1-O1*- 1-6 -N1-L1-A5-J1-X-T4-W-V-P4-R4-M4*- 2- 6 -S-Z-A1-I5-K5-X2-C3-E3-G3-I3-J4
5	A-C-H-C1-E1*- 2-2 -H1-K1-B5-L1-P1-T1-W5- 1-8 -E6-B1-A1-J5-K5-X2-C3-H3-I3- J4
6	D-F-X5-Z5-A6-C6-M-N-H6-U4- 2-4 -O-D1-G1-R1-L5-B2-E2- 1-4 -F2-G2-H2-I2- J2-T2-U5-B1-A1-J5-K5-X2-C3-H3-I3-J4
7	D-E-J-Z5-B6-L-M-P-Q-R-O4-T- 2-1 -U-W-T4-X-J1-A5-L1-P1-Q1*- 1-6 -T1-V5-D2- K4-T2-U2-N5-V2-X2-C3-E3-G3-I3-J4
8	D-E-K-L4- 2-6 -N4-R-Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2-K4-J2-I2-N2- 1-3 - O2-P2-L3-O3-U3-A4-E4-H4-I4
9	D-E-K-S4-C6-M-N-H6-V4-X4-Z4*- 2-7 -Y4-A5-L1-P1-T1-V5-D2-K4-J2-I2-H2-L2- 1-5 -M2-K3-L3-O3-U3-A4-E4-G4-J4
10	D-F-X5-Z5-A6-C6-M-N-H6-V4-X4-Z4- 2-7 -D6-C5-D5-E5-H5-X1-C2-G2-L2- 1-5 -M2-K3-L3-O3-U3-A4-D4-S5-F4-T5-I4
11	A-B-G-L-M-P- 2-5 -Q-Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5*- 1-8 -V5-D2-K4-J2-Q2-S2-M3-O3-U3-B4-F4-T5-I4
12	A-B-G-L-M-P- 2-5 -Q-Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5*- 1-8 -V5-D2-K4-J2-Q2-S2-M3-O3-U3-B4a-F4a-T5-I4
13	D-F-X5-Z5-A6-C6-M-N-H6-U4- 2-4 -O-D1-G1-R1-L5-U1-V1-W1-Z1- 1-2 -A2-D2- K4-T2-U2-W2-Z2-A3-D3-G3-I3-J4
14	D-F-X5-Z5-A6-C6-M-N-H6-U4- 2-4 -O-D1-G1-R1-U1a-V1a-G5-Z1- 1-2 -A2-D2- K4-T2-U2-W2a-Q5-A3a-D3a-G3-I3-J4
15	D-E-K-S4-C6-M-N-H6-U4- 2-4 -O-D1-G1-R1-L5-U1*- 1-1 -B2-K2-N3-A4-E4-G4- J4
16	D-F-X5-Z5-A6-C6-M-P-Q-Q4-V-W-T4-X-W4-I1-H1-E1- 2-2 -F1-G1-R1-L5-B2- K2-J3-M2*- 1-5 -K3-P2-R2-S2-Y2-O5-Q5-A3a-R5-F3-U3-B4-F4-T5-I4
17	D-F-Y5-I-H-C1-E1*- 2-2 -H1-K1-C5-M1-O1-S1-Y1-C2-G2-H2-N2- 1-3 -O2-P2-L3-O3-U3-A4-E4-H4-I4
18	D-F-X5-Z5-A6-C6-M-P-Q-R*-N4*- 2-6 -Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5*- 1-8 - V5-D2-K4-T2-U2-W2-Z2-P5-B3-C3-E3-G3-I3-J4
19	D-F-X5-Z5-A6-C6-M-P-Q-R*-N4*- 2-6 -Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5*- 1-8 -V5-D2-K4-T2-U2-W2A-Q5-B3-C3-E3-G3-I3-J4

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Primary Alternative Routes	Segment Combinations
20	D-F-X5-Z5-A6-S4-L4- 2-6 -N4-R-Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5*- 1-8 -V5-
	D2-K4-J2-Q2-S2-Y2-Z2-P5-B3-C3-H3-I3-J4
21	D-F-X5-Z5-A6-C6-M-P-Q-R*-N4*- 2-6 -Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5- 1-8 -
	E6-U5-U2-W2A-Q5-B3-C3-E3-G3-I3-J4
22	A-B-G-L-M-P-Q-R*-N4*- 2-6 -Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5- 1-8 -E6-U5-U2-
	W2A-Q5-B3-C3-E3-G3-I3-J4
23	D-E-J-Z5-B6-L-M-N-H6-V4-X4-Z4- 2-7 -D6-C5-D5-E5-G5-Y1-C2-G2-H2-N2- 1-
	3 -O2-R2-S2-Y2-O5-Q5-A3a-R5-F3-U3-B4a-F4a-T5-I4
24	D-E-J-Z5-B6-L-M-N-H6-V4-X4-Z4- 2-7 -D6-C5-D5-E5-G5-Y1-C2-G2-H2-N2- 1-
	3 -O2-R2-S2-Y2-Z2-A3-F3-U3-B4-F4-T5-I4
25	D-E-K-L4- 2-6 -N4-R-Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2- 1-7 -K4-T2-U2-W2-
	Z2-P5-B3-C3-E3-G3-I3-J4
26	D-E-K-L4- 2-6 -N4-R-Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2- 1-7 -K4-T2-U2-W2a-
	Q5-B3-C3-E3-G3-I3-J4
27	D-F-X5-Z5-A6-C6-M-P-Q-R*-N4*- 2-6 -Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2- 1-
	7 -K4-T2-U2-W2-Z2-P5-B3-C3-H3-I3-J4
28	D-F-X5-Z5-A6-C6-M-P-Q-R*-N4*- 2-6 -Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2- 1-
	7 -K4-T2-U2-W2a-Q5-B3-C3-H3-I3-J4
29	D-F-X5-Z5-A6-C6-M-P-Q-R*-N4*- 2-6 -Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2- 1-
	7 -K4-T2-U2-M5-V2-X2-C3-E3-G3-I3-J4
30	D-F-X5-Z5-A6-C6-M-P-Q-R*-N4*- 2-6 -Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2- 1-
	7 -K4-T2-U2-N5-V2-X2-C3-H3-I3-J4
31	D-F-X5-Z5-A6-C6-F6*- 2-8 -M-P-Q-Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2- 1-7 -
*T!	K4-J2-Q2-S2-Y2-Z2-P5-B3-C3-E3-G3-I3-J4

^{*}These segments will be used entering and exiting the substation sites.

Segment A

Segment A begins at the Leander Substation, located approximately .10 mile southwest from the intersection of US Highway (US Hwy) 183A and Hero Way. The segment proceeds southwest for approximately .05 mile, crossing an existing transmission line. It then turns southeast for approximately .25 mile while paralleling the west side of an existing transmission line, crossing Farm-to-Market (FM) 2243 and Brushy Creek. The segment then angles to the east-southeast for approximately .05 mile, crossing an existing transmission line. It then turns southeast for approximately .03 mile while paralleling the east side of an existing transmission line. The termination of Segment A is at the intersection of segments A, B, and C.

Segment B

Segment B begins at the intersection of segments A, B, and C, located southwest from the intersection of US Hwy 183A and FM 2243. The segment proceeds east for

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approximately .20 mile, crossing Mason Creek. The termination of Segment B is at the intersection of segments B, G, I, and Y5.

Segment C

Segment C begins at the intersection of segments A, B, and C, located southwest from the intersection of US Hwy 183A and FM 2243. The segment proceeds southeast for approximately .41 mile while paralleling the east side of an existing transmission line, crossing Mason Creek. The segment then turns northeast for approximately .27 mile. The termination of Segment C is at the intersection of segments C, I, and H.

Segment D

Segment D begins at the Leander Substation, located approximately .10 mile southwest from the intersection of US Hwy 183A and Hero Way. The segment proceeds northeast for approximately .02 mile. The termination of Segment D is at the intersection of segments D, E, and F.

Segment E

Segment E begins at the intersection of segments D, E, and F, located southwest from the intersection of US Hwy 183A and Hero Way. The segment proceeds northwest for approximately .11 mile, crossing Hero Way. The segment then turns northeast for approximately .31 mile while paralleling the north side of Hero Way, crossing US Hwy 183A. It then angles to the southeast for approximately .08 mile. The segment continues to the northeast for approximately .42 mile while paralleling the north side of Hero Way. The termination of Segment E is at the intersection of segments E, J, and K.

Segment F

Segment F begins at the intersection of segments D, E, and F, located southwest from the intersection of US Hwy 183A and Hero Way. The segment proceeds northeast for approximately .10 mile. It then turns southeast for approximately .19 mile while paralleling the west side of US Hwy 183A. The termination of Segment F is at the intersection of segments F, X5, and Y5.

Segment G

Segment G begins at the intersection of segment B, G, I, and Y5, located south from the intersection of US Hwy 183A and FM 2243. The segment proceeds northeast for approximately .10 mile, crossing US Hwy 183A. It then angles to the southeast for approximately .18 mile and then angles to the east for approximately .24 mile. The segment then angles to the southeast for approximately .15 mile and then turns northeast for approximately .07 mile, crossing Brushy Creek and FM 2243. The termination of Segment G is at the intersection of segments G, L, and B6.

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Segment H

Segment H begins at the intersection of segments C, H, and I, located south from the intersection of US Hwy 183Aand FM 2243. The segment proceeds northeast for approximately .09 mile, crossing US Hwy 183A. It then turns southeast for approximately .36 mile while paralleling the east side of US Hwy 183A. The segment then turns east for approximately .06 mile and then turns to the south for approximately .18 mile. The segment continues southeast for approximately .42 mile while paralleling the east side of US Hwy 183A. It then turns northeast for approximately 1.39 miles while paralleling the north side of East Crystal Falls Parkway, crossing Ronald Reagan Blvd. The termination of Segment H is at the intersection of segments H, O, C1, and D1.

Segment I

Segment I begins at the intersection of segments B, G, I, and Y5, located south from the intersection of US Hwy 183A and FM 2243. The segment proceeds southeast for approximately .40 mile while paralleling the west side of US Hwy 183A. The termination of Segment I is at the intersection of segments C, H, and I.

Segment J

Segment J begins at the intersection of segments E, J, and K, located east from the intersection of US Hwy 183A and Hero Way. The segment proceeds southeast for approximately 0.30 mile, crossing Hero Way. The termination of Segment J is at the intersection of segments J, X5, and Z5.

Segment K

Segment K begins at the intersection of segments E, J, and K, located east from the intersection of US Hwy 183A and Hero Way. The segment proceeds northeast for approximately .43 mile while paralleling the north side of Hero Way and then angles to the southeast for approximately .09 mile, crossing Hero Way. It then continues northeast for approximately .42 mile while paralleling the south side of Hero Way. The termination of Segment K is at the intersection of segments K, L4, and S4.

Segment L

Segment L begins at the intersection of segments G, L, and B6, located east from the intersection of US Hwy 183A and FM 2243. The segment proceeds in an easterly direction for approximately 1.00 mile while paralleling the north side of FM 2243. The termination of Segment L is at the intersection of segments L, M, C6, and F6.

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Segment M

Segment M begins at the intersection of Segments L, M, C6, and F6, located west from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds northeast for approximately .10 mile while paralleling the north side of FM 2243. The termination of Segment M is at the intersection of segments M, N, and P.

Segment N

Segment N begins at the intersection of segments M, N, and P, located east from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds southeast for approximately .20 mile while paralleling the east side of Ronald Reagan Blvd., crossing FM 2243. The termination of Segment N is at the intersection of segments N, G6, and H6.

Segment O

Segment O begins at the intersection of segments O, U4, and Substation Site 2-4, located south from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds southeast for approximately .60 mile while paralleling the east side of Ronald Reagan Blvd. The termination of Segment O is at the intersection of segments H, O, C1, and D1.

Segment P

Segment P begins at the intersection of segments M, N, and P, located east from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds in an easterly direction for approximately .20 mile while paralleling the north side of FM 2243. The termination of Segment P is at the intersection of segments P, Q, and Substation Site 2-5.

Segment Q

Segment Q begins at the intersection of segments P, Q, and Substation Site 2-5, located northeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds northeast for approximately .10 mile while paralleling the north side of FM 2243. The termination of Segment Q is at the intersection of segments Q, R, and Q4.

Segment R

Segment R begins at the intersection of segments Q, R, and Q4, located northeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds northeast for approximately .04 mile while paralleling the north side of FM 2243. The termination of Segment R is at the intersection of segments R, N4, and O4.

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Segment S

Segment S begins at the intersection of segments S, M4, and R4, located northeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment curves around in an easterly direction for approximately 1.18 miles while paralleling the south side of FM 2243. It then angles to the southeast for approximately .09 mile and then angles to the northeast for approximately .09 mile. The segment continues east for approximately .52 mile while paralleling the south side of FM 2243. The termination of Segment S is at the intersection of segments S, Y, and Z.

Segment T

Segment T begins at the intersection of segments T, O4, P4, and R4, located east from the intersection of FM 2243 and Sam Bass Road. The segment proceeds southeast for approximately .21 mile while paralleling the north side of Sam Bass Road. The segment continues southeast for approximately .10 mile. The termination of Segment T is at the intersection of segments T, U, and Substation Site 2-1.

Segment U

Segment U begins at the intersection of segments T, U, and Substation Site 2-1, located southeast from the intersection of FM 2243 and Sam Bass Road. The segment proceeds southeast for approximately .17 mile. It then turns southwest for approximately .16 mile, crossing Sam Bass Road. The termination of Segment U is at the intersection of segments U, V, and W.

Segment V

Segment V begins at the intersection of segments V, P4, and Q4, located southeast from the intersection of FM 2243 and Sam Bass Road. The segment proceeds in a southeasterly direction for approximately .50 mile while paralleling the south side of Sam Bass Road. The termination of Segment V is at the intersection of segments U, V, and W.

Segment W

Segment W begins at the intersection of segments U, V, and W, located southeast from the intersection of FM 2243 and Sam Bass Road. The segment proceeds southeast for approximately .30 mile while paralleling the south side of Sam Bass Road. The termination of Segment W is at the intersection of segments W, Y, and T4.

Segment X

Segment X begins at the intersection of segments X, T4, and Substation Site 2-3, located southeast from the intersection of FM 2243 and Sam Bass Road. The segment proceeds southeast for approximately .06 mile and then angles east-southeast for

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approximately .06 mile. The termination point of Segment X is at the intersection of segments X, J1, and W4.

Segment Y

Segment Y begins at the intersection of segments W, Y, and T4, located southeast from the intersection of FM 2243 and Sam Bass Road. The segment curves around to the north-northeast for approximately .50 mile. It then continues to the north-northeast for approximately 1.00 mile. At this point, the segment angles to the north-northeast for approximately .10 mile. The termination point of Segment Y is at the intersection of segments S, Y, and Z.

Segment Z

Segment Z begins at the intersection of segments S, Y, and Z, located northeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds in an easterly direction for approximately 1.10 miles while paralleling the south side of FM 2243, crossing County Road (CR) 176. The termination of Segment Z is at the intersection of segments Z, A1, and B1.

Segment A1

Segment A1 begins at the intersection of segments Z, A1, and B1, located northeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds northeast for approximately .57 mile. It then continues in an easterly direction for approximately 2.13 miles while paralleling the south side of FM 2243. The termination of Segment A1 is at the intersection of segments A1, I5, and J5.

Segment B1

Segment B1 begins at the intersection of segments Z, A1, and B1, located northeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds southeast for approximately 1.60 miles, crossing Chandler Branch. The termination point of Segment B1 is at the intersection of segments B1, U5, and E6.

Segment C1

Segment C1 begins at the intersection of segments H, O, C1, and D1, located northeast from the intersection of Ronald Reagan Blvd. and East Crystal Falls Parkway. The segment proceeds northeast for approximately .10 mile. The termination point of Segment C1 is at the intersection of segments C1, E1, and H1.

Segment D1

Segment D1 begins at the intersection of segments H, O, C1, and D1, located northeast from the intersection of Ronald Reagan Blvd. and East Crystal Falls Parkway. The segment proceeds southeast for approximately .10 mile while paralleling

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the east side of Ronald Reagan Blvd. The termination point of Segment D1 is at the intersection of segments D1, F1, and G1.

Segment E1

Segment E1 begins at the intersection of segments C1, E1, and H1, located northeast from the intersection of Ronald Reagan Blvd. and East Crystal Falls Parkway. The segment proceeds southeast for approximately .10 mile. The termination of Segment E1 is at the intersection of segments E1, F1, and Substation Site 2-2.

Segment F1

Segment F1 begins at the intersection of segments E1, F1, and Substation Site 2-2, located northeast from the intersection of Ronald Reagan Blvd. and East Crystal Falls Parkway. The segment proceeds southeast for approximately .15 mile. It then turns southwest for approximately .12 mile while paralleling the north side of CR177. The termination point of Segment F1 is at the intersection of segments D1, F1, and G1.

Segment G1

Segment G1 begins at the intersection of segments D1, F1, and G1, located south from the intersection of Ronald Reagan Blvd. and East Crystal Falls Parkway. The segment proceeds southeast for approximately .60 mile while paralleling the east side of Ronald Reagan Blvd., crossing CR 177 and Journey Parkway. The termination of Segment G1 is at the intersection of segments G1, R1, and F5.

Segment H1

Segment H1 begins at the intersection of segments C1, E1, and H1, located northeast from the intersection of Ronald Reagan Blvd. and East Crystal Falls Parkway. The segment proceeds northeast for approximately .30 mile. The termination point of Segment H1 is at the intersection of segments H1, I1, and K1.

Segment I1

Segment I1 begins at the intersection of segments I1, V4, W4, and X4, located southeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds southwest for approximately .30 mile. The termination point of Segment I1 is at the intersection of segments H1, I1, and K1.

Segment J1

Segment J1 begins at the intersection of segments X, J1, and W4, located southeast from the intersection of FM 2243 and Sam Bass Road. The segment proceeds in a southeasterly direction for approximately .35 mile while paralleling the west side of Sam Bass Road. It then angles south-southeast for approximately .11 mile. The segment then continues southeast for approximately .13 mile while paralleling the west

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side of Sam Bass Road. The termination point of Segment J1 is at the intersection of segments J1, Y4, and A5.

Segment K1

Segment K1 begins at the intersection of segments H1, I1, and K1, located northeast from the intersection of Ronald Reagan Blvd. and East Crystal Falls Parkway. The segment proceeds southeast for approximately .70 mile, crossing CR 177 and Brushy Creek twice. The termination point of Segment K1 is at the intersection of segments K1, B5, C5, and D6.

Segment L1

Segment L1 begins at the intersection of segments L1, A5, and B5, located southeast from the intersection of CR 177 and Sam Bass Road. The segment proceeds southeast for approximately .30 mile while paralleling the west side of Sam Bass Road. The termination point of Segment L1 is at the intersection of segments L1, N1, and P1.

Segment M1

Segment M1 begins at the intersection of segments M1, C5, and D5, located northeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds northeast for approximately .40 mile while paralleling the north side of Journey Parkway, crossing Brushy Creek. The termination of Segment M1 is at the intersection of segments M1, N1, and O1.

Segment N1

Segment N1 begins at the intersections of segments M1, N1, and O1, located west from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds northeast for approximately .20 mile. The termination of Segment of N1 is at the intersection of segments L1, N1, and P1.

Segment O1

Segment O1 begins at the intersection of segments M1, N1, and O1, located west from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southeast for approximately .20 mile, crossing Journey Parkway. The termination point of Segment O1 is at the intersection of segments O1, Q1, S1, and Substation Site 1-6.

Segment P1

Segment P1 begins at the intersection of segments L1, N1, and P1, located west from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southeast for approximately .20 mile while paralleling the west side of Sam Bass Road, crossing Journey Parkway. The termination point of Segment P1 is at the intersection of segments P1, Q1, and T1.

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Segment Q1

Segment Q1 begins at the intersection of segments O1, Q1, S1, and Substation Site 1-6, located southwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds northeast for approximately .30 mile. The termination point of Segment Q1 is at the intersection of segments P1, Q1, and T1.

Segment R1

Segment R1 begins at the intersection of segments G1, R1 and F5, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds southeast for approximately .60 mile while paralleling the east side of Ronald Reagan Blvd., crossing Block House Creek. The termination point of Segment R1 is at the intersection of segments R1, U1a, and L5.

Segment S1

Segment S1 begins at the intersection of segments O1, Q1, and Substation Site 1-6, located southwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southeast for approximately .23 mile and then angles to the southwest for approximately .29 mile. The segment then angles south-southwest for approximately .12 mile. The termination of Segment S1 is at the intersection of segments S1, W1, Y1, Z1, and G5.

Segment T1

Segment T1 begins at the intersection of segments P1, Q1, and T1, located south from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southeast for approximately .14 mile while paralleling the west side of Sam Bass Road. It then angles to the south-southeast for approximately .10 mile. The segment then angles southeast for approximately .05 mile. The termination of Segment T1 is at the intersection of segments T1, V5, and W5.

Segment U1

Segment U1 begins at the intersection of segments U1, B2, and L5, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds northeast for approximately .30 mile, crossing Block House Creek. The termination of Segment U1 is at the intersection of segments U1, V1, and Substation Site 1-1.

Segment U1a

Segment U1a begins at the intersection of segments R1, U1a, and L5, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds northeast for approximately .30 mile, crossing Block House Creek.

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The termination of Segment U1a is at the intersection of segments U1a, V1a, and Substation Site 1-1.

Segment V1

Segment V1 begins at the intersection of segments U1, V1, and Substation Site 1-1, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds northeast for approximately .40 mile. The termination of Segment V1 is at the intersection of segments V1, W1, X1, and H5.

Segment V1a

Segment V1a begins at the intersection of segments U1a, V1a, and Substation Site 1-1, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds northeast for approximately .40 mile. The termination of Segment V1a is at the intersection of segments V1a, E5, G5, and H5.

Segment W1

Segment W1 begins at the intersection of segments V1, W1, X1, and H5, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds northeast for approximately .10 mile, crossing Brushy Creek. The termination of Segment W1 is at the intersection of segments S1, W1, Y1, Z1, and G5.

Segment X1

Segment X1 begins at the intersection of segments V1, W1, X1, and H5, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds southeast for approximately .20 mile, crossing Brushy Creek. The termination of Segment X1 is at the intersection of segments X1, Y1, and C2.

Segment Y1

Segment Y1 begins at the intersection of segments S1, W1, Y1, Z1, and G5, located southwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southwest for approximately .20 mile. The termination of Segment Y1 is at the intersection of segments X1, Y1, and C2.

Segment Z1

Segment Z1 begins at the intersection of segments S1, W1, Y1, Z1, and G5, located southwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds northeast for approximately .30 mile. The termination of Segment Z1 is at the intersection of segments Z1, A2 and Substation Site 1-2.

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Segment A2

Segment A2 begins at the intersection of segments Z1, A2 and Substation Site 1-2, located west from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds northeast for approximately .18 mile, crossing Acacia Drive. It then turns southeast for approximately .08 mile while paralleling the east side of Acacia Drive, crossing The Outer Avenue. The segment turns northeast for approximately .21 mile while paralleling the south side of The Outer Avenue. The termination of Segment A2 is at the intersection of segments A2, D2, and V5.

Segment B2

Segment B2 begins at the intersection of segments U1, B2, and L5, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds southeast for approximately .58 mile while paralleling the east side of Ronald Reagan Blvd. It then turns northeast for approximately .05 mile. The segment turns southeast for approximately .16 mile, crossing CR 272. The termination of Segment B2 is at the intersection of segments B2, E2, and K2.

Segment C2

Segment C2 begins at the intersection of segments X1, Y1, and C2, located southwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southeast for approximately .50 mile. The termination point of Segment C2 is at the intersection of segments C2, F2, and G2.

Segment D2

Segment D2 begins at the intersection of segments A2, D2, and V5, located southwest from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds in a southeasterly direction for approximately .30 mile while paralleling the west side of Sam Bass Road. The termination of Segment D2 is at the intersection of segments D2, K4, and Substation Site 1-7.

Segment E2

Segment E2 begins at the intersection of segments B2, E2, and K2, located southeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds north-northeast for approximately .05 mile and then angles to the northeast for approximately .48 mile. The termination point of Segment E2 is at the intersection of segments E2, F2, and Substation Site 1-4.

Segment F2

Segment F2 begins at the intersection of segments E2, F2, and Substation Site 1-4, located northeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds northeast for approximately .10 mile, crossing CR 272 and Brushy

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Creek. It then angles to the north-northeast for approximately .10 mile. The termination of Segment F2 is at the intersection of segments C2, F2, and G2.

Segment G2

Segment G2 begins at the intersection of segments C2, F2, and G2, located northeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds northeast for approximately .10 mile. The termination of Segment G2 is at the intersection of segments G2, H2, and L2.

Segment H2

Segment H2 begins at the intersection of segments G2, H2, and L2, located northeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds northeast for approximately .20 mile. The termination of Segment H2 is at the intersection of segments H2, I2, and N2.

Segment I2

Segment I2 begins at the intersection of segments H2, I2, and N2, located northeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds southeast for approximately .14 mile and then angles to the northeast for approximately .50 mile. The termination of Segment I2 is at the intersection of segments I2, J2, and Q2.

Segment J2

Segment J2 begins at the intersection of segments J2, T2 and K4, located southeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds southeast for approximately .02 mile while paralleling the west side of Sam Bass Road. The termination of Segment J2 is at the intersection of segments I2, J2 and Q2.

Segment K2

Segment K2 begins at the intersection of segments B2, E2, and K2, located southeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds southeast for approximately .09 mile. It then angles to the east-southeast for approximately .67 mile while paralleling the east side of Ronald Reagan Blvd., crossing Spanish Oak Creek and FM 1431/East Whitestone Blvd. The termination of Segment K2 is at the intersection of segments K2, J3, and N3.

Segment L2

Segment L2 begins at the intersection of segments G2, H2, and L2, located northeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds southeast for approximately .50 mile. The termination of Segment L2 is at the intersection of segments L2, M2, and Substation Site 1-5.

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Segment M2

Segment M2 begins at the intersection of segments L2, M2, and Substation Site 1-5, located northeast from the intersection of Ronald Reagan Blvd. and FM 1431. The segment proceeds southeast for approximately .10 mile, crossing FM 1431/East Whitestone Blvd. The termination of Segment M2 is at the intersection of segments M2, J3, and K3.

Segment N2

Segment N2 begins at the intersection of segments H2, I2, and N2, located northeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds southeast for approximately .10 mile. The termination of Segment N2 is at the intersection of segments N2, O2, and Substation Site 1-3.

Segment O2

Segment O2 begins at the intersection of segments N2, O2, and Substation Site 1-3, located northeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds southeast for approximately .40 mile. The termination of Segment O2 is at the intersection of segments O2, P2, and R2.

Segment P2

Segment P2 begins at the intersection of segments O2, P2, and R2, located northeast from the intersection of Ronald Reagan Blvd. and FM 1431. The segment proceeds southeast for approximately .10 mile, crossing FM 1431/East Whitestone Blvd. The termination of Segment P2 is at the intersection of segments P2, K3, and L3.

Segment Q2

Segment Q2 begins at the intersection of segments I2, J2 and Q2, located southeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds southeast for approximately .09 mile while paralleling the west side of Sam Bass Road. It then angles to the south for approximately .12 mile and then angles to the east-southeast for approximately .07 mile. The segment then angles southeast for approximately .21 mile while paralleling the west side of Sam Bass Road. The termination of Segment Q2 is at the intersection of segments Q2, R2 and S2.

Segment R2

Segment R2 begins at the intersection of segments O2, P2 and R2, located northeast from the intersection of Ronald Reagan Blvd. and FM 1431. The segment proceeds northeast for approximately .60 mile while paralleling the north side of FM 1431/East Whitestone Blvd. The termination of Segment R2 is at the intersection of segments Q2, R2 and S2.

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Segment S2

Segment S2 begins at the intersection of segments Q2, R2 and S2, located northwest from the intersection of Sam Bass Road and FM 1431. The segment proceeds southeast for approximately .10 mile, crossing FM 1431/East Whitestone Blvd. The termination of Segment S2 is at the intersection of segments S2, Y2, and M3.

Segment T2

Segment T2 begins at the intersection of segments J2, T2 and K4, located southeast from the intersection of Sam Bass Road and The Outer Avenue. The segment curves around to the east-northeast for approximately .70 mile, crossing Sam Bass Road. It then angles to the northeast for approximately .14 mile, crossing Dry Fork Creek. The segment continues northeast for approximately .51 mile while paralleling the north side of Arterial H. At this point, the segment continues northeast for approximately .34 mile. The termination of Segment T2 is at the intersection of segments T2, U2 and U5.

Segment U2

Segment U2 begins at the intersection of segments T2, U2 and U5, located northeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds northeast for approximately .60 mile. The termination of Segment U2 is at the intersection of segments U2, W2, W2a, M5, and N5.

Segment V2

Segment V2 begins at the intersection of segments V2, M5 and N5, located northeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds northeast for approximately 1.10 mile, crossing Chandler Branch. The termination of Segment V2 is at the intersection of segments V2, X2, and K5.

Segment W2

Segment W2 begins at the intersection of segments U2, W2, W2a, M5, and N5, located northeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds southeast for approximately .25 mile and then turns southwest for approximately .19 mile. The segment turns southeast for approximately .68 mile. The termination of Segment W2 is at the intersection of segments W2, Y2, Z2, and O5.

Segment W2a

Segment W2a begins at the intersection of segments U2, W2, W2a, M5, and N5, located northeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds southeast for approximately .15 mile and then angles to the south-southeast for approximately.11 mile. The segment turns southwest for approximately .20 mile. It then turns southeast for approximately .60 mile. The termination of Segment W2a is at the intersection of segments W2a, O5, and Q5.

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Segment X2

Segment X2 begins at the intersection of segments V2, X2, and K5, located west from the intersection of Interstate Highway 35 (I-35) and Westinghouse Road. The segment proceeds in a southerly direction for approximately 1.30 miles by rebuilding an existing transmission line, crossing Chandler Branch, and FM 1431/East Whitestone Blvd. The termination of Segment X2 is at the intersection of segments X2, B3, and C3.

Segment Y2

Segment Y2 begins at the intersection of segments S2, Y2, and M3, located southwest from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds northeast for approximately .95 mile while paralleling the south side of FM 1431/East Whitestone Blvd., crossing Sam Bass Road and Dry Fork Creek. It then angles to the north-northeast for approximately .05 mile, crossing FM 1431/East Whitestone Blvd. The segment continues northeast for approximately .98 mile while paralleling the north side of FM 1431/East Whitestone Blvd. The termination of Segment Y2 is at the intersection of segments W2, Y2, Z2, and O5.

Segment Z2

Segment Z2 begins at the intersection of segments W2, Y2, Z2, and O5, located northeast from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .10 mile, crossing FM 1431/East Whitestone Blvd. The termination of Segment Z2 is at the intersection of segments Z2, A3, and P5.

Segment A3

Segment A3 begins at the intersection of segments Z2, A3, and P5, located northeast from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .82 mile. It then turns northeast for approximately .70 mile. The termination of Segment A3 is at the intersection of segments A3, D3, F3, and R5.

Segment A3a

Segment A3a begins at the intersection of segments A3a, B3, P5, and Q5, located northeast from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .27 mile and then angles south for approximately .14 mile. The segment angles southeast for approximately .36 mile. It then turns northeast for approximately .68 mile. The termination of Segment A3a is at the intersection of segments A3a, D3a, and R5.

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Segment B3

Segment B3 begins at the intersection of segments A3a, B3, P5, and Q5, located northeast from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds northeast for approximately 1.66 mile while paralleling the south side of FM 1431/East Whitestone Blvd., crossing Onion Branch. It then angles to the southeast for approximately .14 mile. The termination of Segment B3 is at the intersection of segments X2, B3, and C3.

Segment C3

Segment C3 begins at the intersection of segments X2, B3, and C3, located west from the intersection of Interstate Highway 35 (I-35) and FM 1431/East Whitestone Blvd. The segment proceeds south for approximately .60 mile by rebuilding an existing transmission line. The termination of Segment C3 is at the intersection of segments C3, E3, and H3.

Segment D3

Segment D3 begins at the intersection of segments A3, D3, F3, and R5, located southwest from the intersection of I-35 and FM 1431/East Whitestone Blvd. The segment proceeds northeast for approximately .30 mile, crosses Onion Branch, and then proceeds northeast for approximately .30 mile. It then angles north-northeast for approximately .10 mile. The termination of Segment D3 is at the intersection of segments D3, D3a, E3, and G3.

Segment D3a

Segment D3a begins at the intersection of segments A3a, D3a, and R5, located southwest from the intersection of I-35 and FM 1431/East Whitestone Blvd. The segment proceeds northeast for approximately .25 mile, crosses Onion Branch, and then proceeds northeast for approximately .35 mile. It then angles east for approximately .10 mile. The termination of Segment D3a is at the intersection of segments D3, D3a, E3, and G3.

Segment E3

Segment E3 begins at the intersection of segments D3, D3a, E3, and G3, located southwest from the intersection of I-35 and FM 1431/East Whitestone Blvd. The segment proceeds east for approximately .20 mile. The termination of Segment E3 is at the intersection of segments C3, E3, and H3.

Segment F3

Segment F3 begins at the intersection of segments A3, D3, F3, and R5, located southwest from the intersection of I-35 and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .34 mile and then angles southwest for

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approximately .73 mile. The segment turns northwest for approximately .11 mile while paralleling the north side of Sam Bass Road. It then turns southwest for approximately .04 mile, crossing Sam Bass Road. The termination of Segment F3 is at the intersection of segments F3, O3, and U3.

Segment G3

Segment G3 begins at the intersection of segments D3, D3a, E3, and G3, located southwest from the intersection of I-35 and FM 1431/East Whitestone Blvd. The segment proceeds south for approximately 1.00 mile by rebuilding an existing transmission line, crossing Onion Branch. The termination of Segment G3 is at the intersection of segments G3, H3, and I3.

Segment H3

Segment H3 begins at the intersection of segments C3, E3, and H3, located southwest from the intersection of I-35 and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .05 mile, crossing an existing transmission line, a railroad, and an existing transmission line. It then turns south for approximately .86 mile while paralleling the east side of an existing transmission line. The segment turns southwest for approximately .07 mile, crossing an existing transmission line and a railroad. It then angles to the west-southwest for approximately .16 mile while paralleling the north side of FM 3406/W. Old Settlers Blvd., crossing Onion Branch and an existing transmission line. The termination of Segment H3 is at the intersection of segments G3, H3, and I3.

Segment I3

Segment I3 begins at the intersection of segments G3, H3, and I3, located west from the intersection of I-35 and FM 3406/W. Old Settlers Blvd. The segment proceeds south for approximately .80 mile by rebuilding an existing transmission line, crossing FM 3409 and Onion Branch twice. It then angles to the southeast for approximately .03 mile while paralleling the east side of an existing transmission line. The segment turns southwest for approximately .03 mile while paralleling the north side of an existing transmission line, crossing two existing transmission lines. The termination of Segment I3 is at the intersection of segments I3, G4, and J4.

Segment J3

Segment J3 begins at the intersection of segments K2, J3, and N3, located southeast from the intersection of West Parmer Lane and FM 1431/East Whitestone Blvd. The segment proceeds in a northeasterly direction for approximately .60 mile while paralleling the south side of FM 1431/East Whitestone Blvd., crossing Brushy Creek. The termination of Segment J3 is at the intersection of segments M2, J3, and K3.

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Segment K3

Segment K3 begins at the intersection of segments M2, J3, and K3, located northeast from the intersection of West Parmer Lane and FM 1431/East Whitestone Blvd. The segment proceeds in a northeasterly direction for approximately .20 mile while paralleling the south side of FM 1431/East Whitestone Blvd. The termination of Segment K3 is at the intersection of segments P2, K3, and L3.

Segment L3

Segment L3 begins at the intersection of segments P2, K3, and L3, located northeast from the intersection of West Parmer Lane and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .37 mile. It then turns northeast for approximately .28 mile. The segment continues northeast for approximately .20 mile while paralleling the south side of Thousand Oaks Drive. The termination of Segment L3 is at the intersection of segments L3, M3, and O3.

Segment M3

Segment M3 begins at the intersection of segments S2, Y2, and M3, located southwest from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .30 mile while paralleling the west side of Sam Bass Road. It then continues southeast for approximately .06 mile, crossing Thousand Oaks Drive. The termination of Segment M3 is at the intersection of segments L3, M3, and O3.

Segment N3

Segment N3 begins at the intersection of segments K2, J3, and N3, located southeast from the intersection of West Parmer Lane and FM 1431/East Whitestone Blvd. The segment proceeds in a southerly direction for approximately 1.38 miles while paralleling the east side of West Parmer Lane. It then continues south for approximately .28 mile and turns east for approximately .21 mile. The segment angles southeast for approximately .15 mile, crossing Brushy Creek Road. The segment turns east for approximately .43 mile and then angles to the northeast for approximately .28 mile, crossing Brushy Creek Road. It then angles in a northeasterly direction for approximately .66 mile while paralleling the north side of Brushy Creek Road. At this point, the segment then turns east for approximately .06 mile, crossing Brushy Creek Road and South Brushy Creek, and then angles northeast for approximately .04 mile. It then continues in a northeasterly direction for approximately .62 miles while paralleling the south side of Brushy Creek Road. The segment angles east for approximately .06 mile, crossing Great Oaks Drive. It then angles in a northeasterly direction for approximately .44 mile while paralleling the south side of Hairy Man Road, crossing Hairy Man Road. Finally, the segment continues northeast for approximately .30 mile while paralleling the north side of Hairy Man Road, crossing Brushy Creek,

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and then angles east for approximately .11 mile. The termination of Segment N3 is at the intersection of segments N3, U3, A4, B4, and B4a.

Segment O3

Segment O3 begins at the intersection of segments L3, M3, and O3, located south from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds east for approximately .15 mile. It then angles southeast for approximately .41 mile and then angles south-southeast for approximately .13 mile. The segment continues in a southeasterly direction for approximately .82 mile while paralleling the south side of Sam Bass Road. At this point, the segment then turns east for approximately .07 mile, crossing Sam Bass. It then continues in an easterly direction for approximately .29 mile while paralleling the north side of Sam Bass Road. The segment angles south-southeast for approximately .09 mile, crossing Sam Bass Road. Finally, the segment continues in a southeasterly direction for approximately .32 mile while paralleling the south side of Sam Bass Road. The termination of Segment O3 is at the intersection of segments F3, O3, and U3.

Segment U3

Segment U3 begins at the intersection of segments F3, O3, and U3, located west from the intersection of Sam Bass Road and FM 3406/W. Old Settlers Blvd. The segment proceeds southwest for approximately .12 mile, crossing Dry Fork Creek. It then angles southeast for approximately .20 mile. The termination of Segment U3 is at the intersection of segments N3, U3, A4, B4, and B4a.

Segment A4

Segment A4 begins at the intersection of segments N3, U3, A4, B4, and B4a, located southwest from the intersection of Sam Bass Road and FM 3406/W. Old Settlers Blvd. The segment proceeds southeast for approximately .12 mile, crossing Brushy Creek and Hairy Man Road. It then continues in a southeasterly direction for approximately .36 mile while paralleling the south side of Hairy Man Road. The segment continues southeast for approximately .05 mile and then angles to the northeast for approximately .08 mile, crossing Brushy Creek. The segment continues in a northeasterly direction for approximately .34 mile while paralleling the south side of Hairy Man Road. Finally, the segment turns in a southeasterly direction for approximately .14 mile while paralleling the west side of Sam Bass Road. The termination of Segment A4 is at the intersection of segments A4, D4, and E4.

Segment B4

Segment B4 begins at the intersection of segments N3, U3, A4, B4, and B4a, located southwest from the intersection of Sam Bass Road and FM 3406/W. Old Settlers Blvd. The segment proceeds southeast for approximately .53 mile, crossing Brushy Creek

and Hairy Man Road. It then turns northeast for approximately .56 mile. The termination of Segment B4 is at the intersection of segments B4, F4, and S5.

Segment B4a

Segment B4a begins at the intersection of segments N3, U3, A4, B4, and B4a, located southwest from the intersection of Sam Bass Road and FM 3406/W. Old Settlers Blvd. The segment proceeds southeast for approximately .50 mile, crossing Brushy Creek and Hairy Man Road. It then turns northeast for approximately .48 mile and angles to the southeast for approximately .07 mile. The termination of Segment B4a is at the intersection of segments B4a, D4, F4a, and S5.

Segment D4

Segment D4 begins at the intersection of segments A4, D4, and E4, located southeast from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds southwest for approximately .14 mile. It then angles west-southwest for approximately .11 mile, crossing Brushy Creek. The termination of Segment D4 is at the intersection of segments B4a, D4, F4a, and S5.

Segment E4

Segment E4 begins at the intersection of segments A4, D4, and E4, located southeast from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds southeast for approximately .30 mile while paralleling the west side of Sam Bass Road. The termination of Segment E4 is at the intersection of segments E4, G4, and H4.

Segment F4

Segment F4 begins at the intersection of segments B4, F4, and S5, located south from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds south-southeast for approximately .10 mile and then angles southeast for approximately .14 mile. It then angles to the northeast for approximately .25 mile, crossing Brushy Creek, and then turns north for approximately .02 mile. The termination of Segment F4 is at the intersection of segments F4, F4a, and T5.

Segment F4a

Segment F4a begins at the intersection of segments B4a, D4, F4a, and S5, located south from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds south-southeast for approximately .12 mile and then angles southeast for approximately .09 mile. It then angles to the northeast for approximately .23 mile, crossing Brushy Creek. The termination of Segment F4a is at the intersection of segments F4, F4a, and T5.

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Segment G4

Segment G4 begins at the intersection of segments E4, G4, and H4, located southeast from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds northeast for approximately .10 mile crossing Sam Bass Road and paralleling the south side of Somerset Drive. It then turns southeast for approximately .03 mile. The termination of Segment G4 is at the intersection of segments I3, G4, and J4.

Segment H4

Segment H4 begins at the intersection of segments E4, G4, and H4, located southeast from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds southeast for approximately .10 mile while paralleling the west side of Sam Bass Road. The termination of Segment H4 is at the intersection of segments H4, I4, and T5.

Segment I4

Segment I4 begins at the intersection of segments H4, I4, and T5, located southeast from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds southeast for approximately .03 mile while paralleling the west side of Sam Bass Road. It then turns northeast for approximately .07 mile crossing Sam Bass Road while paralleling the south side of an existing transmission line. The termination of Segment I4 is at the Round Rock Substation, located approximately 1.00 mile west from the intersection of I-35 and Sam Bass Road.

Segment J4

Segment J4 begins at the intersection of segments I3, G4, and J4, located east from the intersection of Sam Bass Road and Somerset Drive. The segment proceeds southwest for approximately .03 mile while paralleling the north side of an existing transmission line. The termination of Segment J4 is at the Round Rock Substation, located approximately 1.00 mile west from the intersection of I-35 and Sam Bass Road.

Segment K4

Segment K4 begins at the intersection of segments D2, K4, and Substation Site 1-7, located southeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds in a southeasterly direction for approximately .30 mile while paralleling the west side of Sam Bass Road. The termination of Segment K4 is at the intersection of segments J2, T2, and K4.

Segment L4

Segment L4 begins at the intersection of segments K, L4, and S4, located southwest from the intersection of Ronald Reagan Blvd. and Hero Way. The segment proceeds

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northeast for approximately .13 mile, crossing Ronald Reagan Blvd., and then angles east-southeast for approximately .41 mile. The segment angles southeast for approximately .16 mile. The termination of Segment L4 is at the intersection of segments L4, M4, N4, and Substation Site 2-6.

Segment M4

Segment M4 begins at the intersection of segments L4, M4, N4, and Substation Site 2-6, located southeast from the intersection of Ronald Reagan Blvd. and Hero Way. The segment proceeds southeast for approximately .04 mile, crossing FM 2243. The termination of Segment M4 is at the intersection of segments S, M4, and R4.

Segment N4

Segment N4 begins at the intersection of segments L4, M4, N4, and Substation Site 2-6, located southeast from the intersection of Ronald Reagan Blvd. and Hero Way. The segment proceeds southwest for approximately .20 mile while paralleling the west side of FM 2243. The termination of Segment N4 is at the intersection of segments R, N4, and O4.

Segment O4

Segment O4 begins at the intersection of segments R, N4, and O4, located northeast from the intersection of Ronald Reagan Blvd. and FM 2243. The segment proceeds east for approximately .04 mile, crossing FM 2243. The termination of Segment O4 is at the intersection of segments T, O4, P4, and R4.

Segment P4

Segment P4 begins at the intersection of segments V, P4, and Q4, located northeast from the intersection of Ronald Reagan Blvd. and FM 2243. The segment proceeds northeast for approximately .04 mile, crossing Sam Bass Road. The termination of Segment P4 is at the intersection of segments T, O4, P4, and R4.

Segment Q4

Segment Q4 begins at the intersection of segments Q, R, and Q4, located northeast from the intersection of Ronald Reagan Blvd. and FM 2243. The segment proceeds east for approximately .04 mile, crossing FM 2243. The termination of Segment Q4 is at the intersection of segments V, P4, and Q4.

Segment R4

Segment R4 begins at the intersection of segments T, O4, P4, and R4, located northeast from the intersection of Ronald Reagan Blvd. and FM 2243. The segment proceeds northeast for approximately .20 mile while paralleling the east side of FM 2243. The termination of Segment R4 is at the intersection of segments S, M4, andR4.

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Segment S4

Segment S4 begins at the intersection of segments K, L4, and S4, located southwest from the intersection of Ronald Reagan Blvd. and Hero Way. The segment proceeds southeast for approximately .40 mile while paralleling the west side of Ronald Reagan Blvd. The termination of Segment S4 is at the intersection of segments S4, A6, and C6.

Segment T4

Segment T4 begins at the intersection of segments W, Y, and T4, located southeast from the intersection of FM 2243 and Sam Bass Road. The segment proceeds southeast for approximately .10 mile. The termination of Segment T4 is at the intersection of segments X, T4, and Substation Site 2-3.

Segment U4

Segment U4 begins at the intersection of segments U4, V4, and H6, located southeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds southeast for approximately .20 mile while paralleling the east side of Ronald Reagan Blvd, crossing Brushy Creek. The termination of Segment U4 is at the intersection of segments O, U4, and Substation Site 2-4.

Segment V4

Segment V4 begins at the intersection of segments U4, V4, and H6, located southeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds east-southeast for approximately .46 mile and then angles southeast for approximately .19 mile. The segment angles east-southeast for approximately .15 mile. The termination of Segment V4 is at the intersection of segments I1, V4, W4, and X4.

Segment W4

Segment W4 begins at the intersection of segments X, J1, and W4, located southeast from the intersection of FM 2243 and Sam Bass Road. The segment proceeds southwest for approximately .20 mile. The termination of Segment W4 is at the intersection of segments I1, V4, W4, and X4.

Segment X4

Segment X4 begins at the intersection of segments I1, V4, W4, and X4, located southeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds east-southeast for approximately .07 mile and then angles south-southeast for approximately .22 mile. The segment angles southeast for approximately .20 mile. The termination of Segment X4 is at the intersection of segments X4, Y4, and Z4.

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Segment Y4

Segment Y4 begins at the intersection of segments X4, Y4, and Z4, located west from the intersection of Sam Bass Road and CR 177. The segment proceeds northeast for approximately .20 mile while paralleling the north side of CR 177. The termination of Segment Y4 is at the intersection of segments J1, Y4, and A5.

Segment Z4

Segment Z4 begins at the intersection of segments X4, Y4, and Z4, located west from the intersection of Sam Bass Road and CR 177. The segment proceeds southeast for approximately .10 mile, crossing CR 177. The termination of Segment Z4 is at the intersection of segments Z4, D6, and Substation Site 2-7.

Segment A5

Segment A5 begins at the intersection of segments J1, Y4, and A5, located west from the intersection of Sam Bass Road and CR 177. The segment proceeds in a southeasterly direction for approximately .40 mile while paralleling the west side of Sam Bass Road, crossing CR 177. The termination point of Segment A5 is at the intersection of segments L1, A5, and B5.

Segment B5

Segment B5 begins at the intersection of segments K1, B5, C5, and D6, located northwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds northeast for approximately .40 mile, crossing Brushy Creek. The termination of Segment B5 is at the intersection of segments L1, A5, and B5.

Segment C5

Segment C5 begins at the intersection of segments K1, B5, C5, and D6, located northwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southeast for approximately .21 mile. It then angles southwest for approximately .06 mile and then angles southeast for approximately .04 mile. The termination of Segment C5 is at the intersection of segments M1, C5, and D5.

Segment D5

Segment D5 begins at the intersection of segments M1, C5, and D5, located southwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southeast for approximately .04 mile, crossing Journey Parkway. The termination of Segment D5 is at the intersection of segments D5, E5, and F5.

Segment E5

Segment E5 begins at the intersection of segments D5, E5, and F5, located southwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds

south for approximately .07 mile and then curves around to the southeast for approximately .33 mile. It then angles south-southeast for approximately .14 mile and then angles to the southwest for approximately .10 mile. The termination of Segment E5 is at the intersection of segments V1a, E5, G5, and H5.

Segment F5

Segment F5 begins at the intersection of segments G1, R1 and F5, located south from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds northeast for approximately .80 mile while paralleling the south side of Journey Parkway. The termination point of Segment F5 is at the intersection of segments D5, E5, and F5.

Segment G5

Segment G5 begins at the intersection of segments V1a, E5, G5, and H5, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds southeast for approximately .10 mile, crossing Brushy Creek. The termination point of Segment G5 is at the intersection of segments S1, W1, Y1, Z1, and G5.

Segment H5

Segment H5 begins at the intersection of segments V1a, E5, G5, and H5, located southeast from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds southeast for approximately .03 mile. The termination point of Segment H5 is at the intersection of segments V1, W1, X1, and H5.

Segment I5

Segment I5 begins at the intersection of segments A1, I5, and J5, located northwest from the intersection of I-35 and Westinghouse Road. The segment proceeds northeast for approximately .51 mile. It then turns east for approximately .09 mile and then turns southeast for approximately .49 mile. The termination of Segment I5 is at the intersection of segments I5, J5 and K5.

Segment J5

Segment J5 begins at the intersection of segments A1, I5, and J5, located northwest from the intersection of I-35 and Westinghouse Road. The segment proceeds southeast for approximately .70 mile. The termination of Segment J5 is at the intersection of segments I5, J5 and K5.

Segment K5

Segment K5 begins at the intersection of segments I5, J5, and K5, located northwest from the intersection of I-35 and Westinghouse Road. The segment proceeds southeast for approximately .18 mile. It continues in a southerly direction for

approximately .76 mile by rebuilding an existing transmission line, crossing West Fork Smith Branch twice. The segment angles southwest for approximately .03 mile and then turns south for approximately .08 mile. It then angles southeast for approximately .05 mile. The segment continues south for approximately .96 mile by rebuilding an existing transmission line. The termination of Segment K5 is at the intersection of segments V2, X2, and K5.

Segment L5

Segment L5 begins at the intersection of segments R1, U1a, and L5, located south from the intersection of Ronald Reagan Blvd. and Journey Parkway. The segment proceeds southeast for approximately .04 mile while paralleling the east side of Ronald Reagan Blvd. The termination point of Segment L5 is at the intersection of segments U1, B2, and L5.

Segment M5

Segment M5 begins at the intersection of segments U2, W2, W2a, M5, and N5, located northeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds northeast for approximately 1.00 mile. The termination of Segment M5 is at the intersection of segments V2, M5, and N5.

Segment N5

Segment N5 begins at the intersection of segments U2, W2, W2a, M5, and N5, located northeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds north-northeast for approximately .60 mile and then angles to the northeast for approximately.30 mile. It then angles southeast for approximately .32 mile. The termination of Segment N5 is at the intersection of segments V2, M5, and N5.

Segment O5

Segment O5 begins at the intersection of segments W2, Y2, Z2, and O5, located northeast from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds northeast for approximately .04 mile while paralleling the north side of FM 1431/East Whitestone Blvd. The termination of Segment O5 is at the intersection of segments W2a, O5, and Q5.

Segment P5

Segment P5 begins at the intersection of segments Z2, A3, and P5, located northeast from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds northeast for approximately .04 mile while paralleling the south side of FM 1431/East Whitestone Blvd. The termination of Segment P5 is at the intersection of segments A3a, B3, P5, and Q5.

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Segment Q5

Segment Q5 begins at the intersection of segments W2a, O5, and Q5, located northeast from the intersection of Sam Bass Road and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .10 mile, crossing FM 1431/East Whitestone Blvd. The termination of Segment Q5 is at the intersection of segments A3a, B3, P5, and Q5.

Segment R5

Segment R5 begins at the intersection of segments A3a, D3a, and R5, located southwest from the intersection of I-35 and FM 1431/East Whitestone Blvd. The segment proceeds southeast for approximately .04 mile. The termination of Segment R5 is at the intersection of segments A3, D3, F3, and R5.

Segment S5

Segment S5 begins at the intersection of segments B4a, D4, F4a, and S5, located south from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds southwest for approximately .04 mile. The termination of Segment S5 is at the intersection of segments B4, F4, and S5.

Segment T5

Segment T5 begins at the intersection of segments F4, F4a, and T5, located southeast from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds north for approximately .04 mile while paralleling the west side of an existing transmission line. It then turns northeast for approximately .03 mile while paralleling the north side of an existing transmission line. The termination of Segment T5 is at the intersection of segments I4, H4, and T5.

Segment U5

Segment U5 begins at the intersection of segments B1, U5, and E6, located northeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds southeast for approximately .37 mile and then turns southwest for approximately .11 mile. It then turns southeast for approximately .53 mile. The termination of Segment U5 is at the intersection of segments T2, U2, and U5.

Segment V5

Segment V5 begins at the intersection of segments T1, V5, and W5, located northwest from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds southeast for approximately .08 mile. It then angles south-southeasterly for approximately .24 mile while paralleling the west side of Sam Bass Road, crossing The Outer Avenue. The termination of Segment V5 is at the intersection of segments A2, D2, and V5.

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Segment W5

Segment W5 begins at the intersection of segments T1, V5, and W5, located northwest from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds northeast for approximately .10 mile, crossing Sam Bass Road. The termination of Segment W5 is at the intersection of segments W5, E6, and Substation Site 1-8.

Segment X5

Segment X5 begins at the intersection of segments F, X5, and Y5, located northwest from the intersection of US Hwy 183A and FM 2243. The segment proceeds northeast for approximately .70 mile, crossing US Hwy 183A and CR 269. The termination of Segment X5 is at the intersection of segments J, X5, and Z5.

Segment Y5

Segment Y5 begins at the intersection of segments F, X5, and Y5, located northwest from the intersection of US Hwy 183A and FM 2243. The segment proceeds southeast for approximately .20 mile while paralleling the west side of US Hwy 183A, crossing FM 2243 and Brushy Creek. The termination of Segment Y5 is at the intersection of segments B, I, G, and Y5.

Segment Z5

Segment Z5 begins at the intersection of segments J, X5, and Z5, located northeast from the intersection of US Hwy 183A and FM 2243. The segment proceeds southeast for approximately .10 mile. The termination of Segment Z5 is at the intersection of segments Z5, A6, and B6.

Segment A6

Segment A6 begins at the intersection of segments Z5, A6, and B6, located northeast from the intersection of US Hwy 183A and FM 2243. The segment proceeds northeast for approximately .90 mile. The termination of Segment A6 is at the intersection of segments S4, A6, and C6.

Segment B6

Segment B6 begins at the intersection of segments Z5, A6, and B6, located northeast from the intersection of US Hwy 183A and FM 2243. The segment proceeds southeast for approximately .20 mile. It then turns east-southeast for approximately .02 mile while paralleling the north side of FM 2243. The termination of Segment B6 is at the intersection of segments G, L, and B6.

Segment C6

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Segment C6 begins at the intersection of segments S4, A6, and C6, located southwest from the intersection of Ronald Reagan Blvd. and Hero Way. The segment proceeds southeast for approximately .20 mile while paralleling the west side of Ronald Reagan Blvd. The termination of Segment C6 is at the intersection of segments L, M, C6, and F6.

Segment D6

Segment D6 begins at the intersection of segments Z4, D6, and Substation Site 2-7, located southwest from the intersection of Sam Bass Road and CR 177. The segment proceeds southeast for approximately .30 mile, crossing Brushy Creek. The termination of Segment D6 is at the intersection of segments K1, B5, C5, and D6.

Segment E6

Segment E6 begins at the intersection of segments W5, E6, and Substation Site 1-8, located north from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds northeast for approximately .27 mile and then turns northwest for approximately .38 mile. It then turns northeast for approximately 1.55 miles, crossing Dry Fork Creek. The termination of Segment E6 is at the intersection of segments B1, U5, and E6.

Segment F6

Segment F6 begins at the intersection of segments L, M, C6, and F6, located northeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds southeast for approximately .20 mile crossing FM 2243 while paralleling the west side of Ronald Reagan Blvd. The termination of Segment F6 is at the intersection of segments F6, G6, and Substation Site 2-8.

Segment G6

Segment G6 begins at the intersection of segments F6, G6, and Substation Site 2-8, located south from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds northeast for approximately .10 mile, crossing Ronald Reagan Blvd. The termination of Segment G6 is at the intersection of segments N, G6, and H6.

Segment H6

Segment H6 begins at the intersection of segments N, G6, and H6, located southeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds southeast for approximately .10 mile while paralleling the east side of Ronald Reagan Blvd. The termination of Segment H6 is at the intersection of segments U4, V4, and H6.

Landowners and Transmission Line Cases at the PUC

Public Utility Commission of Texas



1701 N. Congress Avenue P.O. Box 13326 Austin, Texas 78711-3326 (512) 936-7261 www.puc.state.tx.us

Effective: June 1, 2011

Purpose of This Brochure

This brochure is intended to provide landowners with information about proposed new transmission lines and the Public Utility Commission's ("PUC" or "Commission") process for evaluating these proposals. At the end of the brochure is a list of sources for additional information.

The following topics are covered in this brochure:

- How the PUC evaluates whether a new transmission line should be built,
- How you can participate in the PUC's evaluation of a line, and
- How utilities acquire the right to build a transmission line on private property.

You are receiving the enclosed formal notice because one or more of the routes for a proposed transmission line may require an easement or other property interest across your property, or the centerline of the proposed project may come within 300 feet of a house or other habitable structure on your property. This distance is expanded to 500 feet if the proposed line is greater than 230 kilovolts (kV). For this reason, your property is considered **directly affected land.** This brochure is being included as part of the formal notice process.

If you have questions about the proposed routes for a transmission line, you may contact the applicant. The applicant also has a more detailed map of the proposed routes for the transmission line and nearby habitable structures. The applicant may help you understand the routing of the project and the application approval process in a transmission line case but cannot provide legal advice or represent you. The applicant cannot predict which route may or may not be approved by the PUC. The PUC decides which route to use for the transmission line, and the applicant is not obligated to keep you informed of the PUC's proceedings. The only way to fully participate in the PUC's decision on where to locate the transmission line is to intervene, which is discussed below.

The PUC is sensitive to the impact that transmission lines have on private property. At the same time, transmission lines deliver electricity to millions of homes and businesses in Texas, and new lines are sometimes needed so that customers can obtain reliable, economical power.

The PUC's job is to decide whether a transmission line application should be approved and on which route the line should be constructed. The PUC values input from landowners and encourages you to participate in this process by intervening in the docket.

PUC Transmission Line Case

Texas law provides that most utilities must file an application with the PUC to obtain or amend a Certificate of Convenience and Necessity (CCN) in order to build a new transmission line in Texas. The law requires the PUC to consider a number of factors in deciding whether to approve a proposed new transmission line.

The PUC may approve an application to obtain or amend a CCN for a transmission line after considering the following factors:

- Adequacy of existing service;
- Need for additional service;
- The effect of approving the application on the applicant and any utility serving the proximate area;
- Whether the route utilizes existing compatible rights-of-way, including the use of vacant positions on existing multiple-circuit transmission lines;
- Whether the route parallels existing compatible rights-of-way;
- Whether the route parallels property lines or other natural or cultural features;
- Whether the route conforms with the policy of prudent avoidance (which is defined as the limiting of exposures to electric and magnetic fields that can be avoided with reasonable investments of money and effort); and
- Other factors such as community values, recreational and park areas, historical and aesthetic values, environmental integrity, and the probable improvement of service or lowering of cost to consumers in the area.

If the PUC decides an application should be approved, it will grant to the applicant a CCN or CCN amendment to allow for the construction and operation of the new transmission line.

Application to Obtain or Amend a CCN:

An application to obtain or amend a CCN describes the proposed line and includes a statement from the applicant describing the need for the line and the impact of building it. In addition to the routes proposed by the applicant in its application, the possibility exists that additional routes may be developed, during the course of a CCN case, that could affect property in a different manner than the original routes proposed by the applicant.

The PUC conducts a case to evaluate the impact of the proposed line and to decide which route should be approved. Landowners who would be affected by a new line can:

- informally file a protest, or
- formally participate in the case as an intervenor.

Filing a Protest (informal comments):

If you do not wish to intervene and participate in a hearing in a CCN case, you may file **comments.** An individual or business or a group who files only comments for or against any aspect of the transmission line application is considered a "protestor."

Protestors make a written or verbal statement in support of or in opposition to the utility's application and give information to the PUC staff that they believe supports their position.

Protestors are *not* parties to the case, however, and *do not have the right to*:

- Obtain facts about the case from other parties;
- Receive notice of a hearing, or copies of testimony and other documents that are filed in the case;
- Receive notice of the time and place for negotiations;
- File testimony and/or cross-examine witnesses;
- Submit evidence at the hearing; or
- Appeal P.U.C. decisions to the courts.

If you want to make comments, you may either send written comments stating your position, or you may make a statement on the first day of the hearing. If you have not intervened, however, you will not be able to participate as a party in the hearing. Only parties may submit evidence and *the PUC must base its decision on the evidence*.

Intervening in a Case:

To become an intervenor, you must file a statement with the PUC, no later than the date specified in the notice letter sent to you with this brochure, requesting intervenor status (also referred to as a party). This statement should describe how the proposed transmission line would affect your property. Typically, intervention is granted only to directly affected landowners. However, any landowner may request to intervene and obtain a ruling on his or her specific fact situation and concerns. A sample form for intervention and the filing address are attached to this brochure, and may be used to make your filing. A letter requesting intervention may also be used in lieu of the sample form for intervention.

If you decide to intervene and become a party in a case, you will be required to follow certain procedural rules:

- You are required to timely respond to requests for information from other parties who seek information.
- If you file testimony, you must appear at a hearing to be cross-examined.
- If you file testimony or any letters or other documents in the case, you must send copies of the documents to every party in the case and you must file multiple copies with the PUC.
- If you intend to participate at the hearing and you do not file testimony, you must at least file a statement of position, which is a document that describes your position in the case.
- Failure to comply with these procedural rules may serve as grounds for you to be dismissed as an intervenor in the
 case.
- If you wish to participate in the proceedings it is very important to attend any prehearing conferences.

Intervenors may represent themselves or have an attorney to represent them in a CCN case. If you intervene in a case, you may want an attorney to help you understand the PUC's procedures and the laws and rules that the PUC applies in deciding whether to approve a transmission line. The PUC encourages landowners to intervene and become parties.

Stages of a CCN Case:

If there are persons who intervene in the case and oppose the approval of the line, the PUC may refer the case to an administrative law judge (ALJ) at the State Office of Administrative Hearings (SOAH) to conduct a hearing, or the Commission may elect to conduct a hearing itself. The hearing is a formal proceeding, much like a trial, in which testimony is presented. In the event the case is referred to SOAH, the ALJ makes a recommendation to the PUC on whether the application should be approved and where and how the line should be routed.

There are several stages of a CCN case:

- The ALJ holds a prehearing conference (usually in Austin) to set a schedule for the case.
- Parties to the case have the opportunity to conduct discovery; that is, obtain facts about the case from other parties.
- A hearing is held (usually in Austin), and parties have an opportunity to cross-examine the witnesses.
- Parties file written testimony before the date of the hearing. Parties that do not file written testimony or statements
 of position by the deadline established by the ALJ may not be allowed to participate in the hearing on the merits.
- Parties may file written briefs concerning the evidence presented at the hearing, but are not required to do so.
- In deciding where to locate the transmission line and other issues presented by the application, the ALJ and Commission rely on factual information submitted as evidence at the hearing by the parties in the case. In order to submit factual information as evidence (other than through cross-examination of other parties' witnesses), a party must have intervened in the docket and filed written testimony on or before the deadline set by the ALJ.
- The ALJ makes a recommendation, called a **proposal for decision**, to the Commission regarding the case. Parties who disagree with the ALJ's recommendation may file exceptions.
- The Commissioners discuss the case and decide whether to approve the application. The Commission may approve the ALJ's recommendation, approve it with specified changes, send the case back to the ALJ for further consideration, or deny the application. The written decision rendered by the Commission is called a **final order**. Parties who believe that the Commission's decision is in error may file motions for rehearing, asking the Commission to reconsider the decision.
- After the Commission rule on the motion for rehearing, parties have the right to appeal the decision to district court in Travis County.

Right to Use Private Property

The Commission is responsible for deciding whether to approve a CCN application for a proposed transmission line. If a transmission line route is approved that impacts your property, the electric utility must obtain the right from you to enter your property and to build, operate, and maintain the transmission line. This right is typically called an easement.

Utilities may buy easements through a negotiated agreement, but they also have the power of eminent domain (condemnation) under Texas law. Local courts, not the PUC, decide issues concerning easements for rights-of-way. The PUC does not determine the value of property.

The PUC final order in a transmission case normally requires a utility to take certain steps to minimize the impact of the new transmission line on landowners' property and on the environment. For example, the order normally requires steps to minimize the possibility of erosion during construction and maintenance activities.

HOW TO OBTAIN MORE INFORMATION

The PUC's online filings interchange on the PUC website provides free access to documents that are filed with the Commission in Central Records. The docket number, also called a control number on the PUC website, of a case is a key piece of information used in locating documents in the case. You may access the Interchange by visiting the PUC's website home page at www.puc.state.tx.us and navigate the website as follows:

- Select "Filings."
- Select "Filings Search."
- Select "Filings Search."
- Enter 5-digit Control (Docket) Number. *No other information is necessary*.
- Select "Search." All of the filings in the docket will appear in order of date filed.
- Scroll down to select desired filing.
- Click on a blue "Item" number at left.
- Click on a "Download" icon at left.

Documents may also be purchased from and filed in Central Records. For more information on how to purchase or file documents, call Central Records at the PUC at 512-936-7180.

PUC Substantive Rule 25.101, Certification Criteria, addresses transmission line CCNs and is available on the PUC's website, or you may obtain copies of PUC rules from Central Records.

Always include the docket number on all filings with the PUC. You can find the docket number on the enclosed formal notice. Send documents to the PUC at the following address.

Public Utility Commission of Texas Central Records Attn: Filing Clerk 1701 N. Congress Avenue P.O. Box 13326 Austin, TX 78711-3326

The information contained within this brochure is not intended to provide a comprehensive guide to landowner rights and responsibilities in transmission line cases at the PUC. This brochure should neither be regarded as legal advice nor should it be a substitute for the PUC's rules. However, if you have questions about the process in transmission line cases, you may call the PUC's Legal Division at 512-936-7261. The PUC's Legal Division may help you understand the process in a transmission line case but cannot provide legal advice or represent you in a case. You may choose to hire an attorney to decide whether to intervene in a transmission line case, and an attorney may represent you if you choose to intervene.

Communicating with Decision-Makers

Do not contact the ALJ or the Commissioners by telephone or email. They are not allowed to discuss pending cases with you. They may make their recommendations and decisions only by relying on the evidence, written pleadings, and arguments that are presented in the case.

Request to Intervene in PUC Docket No. ___

The following information must be submitted by the person requesting to intervene in this proceeding. This completed form will be provided to all parties in this docket. <u>If you DO NOT want to be an intervenor, but</u> still want to file comments, please complete the "Comments" page.

Mail this completed form and 10 copies to:	
Public Utility Commission of Texas Central Records Attn: Filing Clerk 1701 N. Congress Ave. P.O. Box 13326 Austin, TX 78711-3326	
First Name: Last Name:	
Phone Number: Fax Number:	
Address, City, State:	
I am requesting to intervene in this proceeding. As an INTERVENOR, I understand the following	ng:
I am a party to the case;	
 I am required to respond to all discovery requests from other parties in the case; 	
If I file testimony, I may be cross-examined in the hearing;	
If I file any documents in the case, I will have to provide a copy of that document to every other p case; and	earty in the
I acknowledge that I am bound by the Procedural Rules of the Public Utility Commission of Te and the State Office of Administrative Hearings (SOAH).	xas (PUC)
Please check one of the following:	
☐ I own property with a habitable structure located near one or more of the utility's proposed retransmission line.	outes for a
\Box One or more of the utility's proposed routes would cross my property.	
Other. Please describe and provide comments. You may attach a separate page, if necessary	
Signature of person requesting intervention:	

Effective: January 1, 2003

Date: _____

Comments in Docket No. _____

	y, please complete this form. Although public comments are not PUC and its staff of the public concerns and identify issues to be pation in its proceedings.
Mail this completed form and 10 copies to:	
Public Utility Commission of Texas Central Records Attn: Filing Clerk 1701 N. Congress Ave. P.O. Box 13326 Austin, TX 78711-3326	
First Name:	Last Name:
Phone Number:	Fax Number:
Address, City, State:	
 I am NOT a party to this case; My comments are not considered evide I have no further obligation to participate 	
Please check one of the following:	
☐ I own property with a habitable struc transmission line.	ture located near one or more of the utility's proposed routes for a
\Box One or more of the utility's proposed re	outes would cross my property.
Other. Please describe and provide con	nments. You may attach a separate page, if necessary.
Signature of person submitting commen	ts:
	Date:

Effective: January 1, 2003

Organization	Prefix	Contact	Formal	FormalTitle	Address1	Citv	State 7	Zip
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Oncor Electric	Mr.	Bob Shapard	Mr. Shapard	Chief Executive Officer	1616 Woodall Rodgers Fwy.	Dallas	X	75202
Oncor Electric	Mr.	Jim Greer	Mr. Greer	Chief Operating Officer	1616 Woodall Rodgers Fwy.	Dallas	XL	75202
Georgetown Utility Systems	Mr.	Jim Briggs	Mr. Briggs	General Manager	113 E. 8th St	Georgetown	X	78626
Georgetown Utility Systems	Mr.	Jimmy Sikes	Mr. Sikes	T & D Service Manager	113 E. 8th St	Georgetown	XL	78626
Austin Energy	Mr.	Mark Dombroski	Mr. Dombroski	Interim General Manager	721 Barton Springs Rd.	Austin	X	78704
Pedernales Electric Cooperative	Mr.	John Hewa	Mr. Hewa	Chief Executive Officer	P.O. Box 1	Johnson City	XL	78636
Pedernales Electric Cooperative	Mr.	Brad Hicks	Mr. Hicks	VP, Engineering and Energy Innovations	P.O. Box 1	Johnson City	ΧL	78636
Atmos Energy	Mr.	Randy Hartford	Mr. Hartford	Mgr, Public Affairs	3110 N. IH 35	Round Rock	XL	78681
Atmos Energy	Mr.	Kim Cocklin	Mr. Cocklin	President & CEO	P.O. Box 650205	Dallas	X	75265
Oncor Electric	Mr.	Robert Holt	Mr. Holt	Regulatory Manager	1616 Woodall Rodgers Fwy.	Dallas	XX	75202
Georgetown Utility Systems	Mr.	Paul Elkins	Mr. Elkins	Electric Engineering Manager	113 E. 8th St	Georgetown	X	78626
Atmos Energy	Mr.	Randy Erskine	Mr. Erskine	President, Atmos Pipeline-Texas	P.O. Box 650205	Dallas	XT	75265
Texas Dept. of Transportation	Mr.	Mark Olsen	Mr. Olsen	Georgetown Area Engineering Office	2727 S. Austin Ave.	Georgetown	X	78626
Texas Dept. of Transportation	Ms.	Michelle Cooper	Ms. Cooper	Georgetown Area Engineering Office	2727 S. Austin Ave.	Georgetown	XT	78626
Texas Dept. of Transportation	Mr.	Greg Malatek	Mr. Malatek	District Engineer	P.O. Drawer 15426	Austin	X	78761
Office of Public Utility Counsel	Ms.	Michelle Gregg	Ms. Gregg	Director of External Relations	1701 N. Congress Ave. Ste. 9-180	Austin	X	78711
Public Utility Commission of Texas	Mr.	Tom Sweatman	Mr. Sweatman	Engineering Dept.	P.O. Box 13326	Austin	X	78711
Pedernales Electric Cooperative	Mr.	Paul Lochte	Mr. Lochte	Director, Electrical Engineering	P.O. Box 1	Johnson City	X	78636

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City of Leander	City Manager	Mr.	Kent Cagle	Mr. Cagle	P.O. Box 319	Leander	XT	78646
City of Leander	Mayor Pro Tem	The Honorable	Andrea Navarrette	Mayor Pro Tem Navarrette	P.O. Box 319	Leander	TX 7	78646
City of Leander	Council Member	The Honorable	Michelle Stephenson	Council Member Stephenson	P.O. Box 319	Leander	XT X	78646
City of Leander	Council Member	The Honorable	Shanan Shepherd	Council Member Shepherd	P.O. Box 319	Leander	TX 7	78646
City of Leander	Council Member	The Honorable	Ron Abruzzese	Council Member Abruzzese	P.O. Box 319	Leander	TX 7	78646
City of Leander	Council Member	The Honorable	Jeff Seiler	Council Member Seiler	P.O. Box 319	Leander	TX 7	78646
City of Leander	Council Member	The Honorable	Troy Hill	Council Member Hill	P.O. Box 319	Leander	TX 7	78646
City of Leander	Mayor	The Honorable	Christopher Fielder	Mayor Fielder	P.O. Box 319	Leander	TX 7	78646
City of Leander	Economic Development Manager	Mr.	Eric Zeno	Mr. Zeno	P.O. Box 319	Leander	XT X	78646
Greater Leander Chamber of Commerce	President & CEO	Ms.	Bridget Brandt	Ms. Brandt	P.O. Box 556	Leander	TX 7	78646
City of Leander	Public Works Director	Mr.	Pat Womack	Mr. Womack	P.O. Box 319	Leander	XT X	78646
City of Leander	Asst. City Manager	Mr.	Tom Yantis	Mr. Yantis	P.O. Box 319	Leander	XT X	78646
City of Cedar Park	City Manager	Ms.	Brenda Eivens	Ms. Eivens	450 Cypress Creek Rd.	Cedar Park	TX 7	78613
City of Cedar Park	Mayor	The Honorable	Matt Powell	Mayor Powell	450 Cypress Creek Rd.	Cedar Park	TX 7	78613
City of Cedar Park	Council Member	The Honorable	Stephen Thomas	Council Member Thomas	450 Cypress Creek Rd.	Cedar Park	TX 7	78613
City of Cedar Park	Mayor Pro Tem	The Honorable	Corbin Van Arsdale	Mayor Pro Tem Van Arsdale	450 Cypress Creek Rd.	Cedar Park	TX 7	78613
City of Cedar Park	Council Member	The Honorable	Lyle Grimes	Council Member Grimes	450 Cypress Creek Rd.	Cedar Park	TX 7	78613
City of Cedar Park	Council Member	The Honorable	Lowell Moore	Council Member Moore	450 Cypress Creek Rd.	Cedar Park	TX 7	78613
City of Cedar Park	Council Member	The Honorable	Jon Lux	Council Member Lux	450 Cypress Creek Rd.	Cedar Park	TX 7	78613
City of Cedar Park	Council Member	The Honorable	Kristyne Bollier	Council Member Bollier	450 Cypress Creek Rd.	Cedar Park	XT	78613
City of Cedar Park	Asst. City Manager	Mr.	Sam Roberts	Mr. Roberts	450 Cypress Creek Rd.	Cedar Park	TX 7	78613
City of Cedar Park	Director of Business Services	Mr.	Daron Butler	Mr. Butler	450 Cypress Creek Rd.	Cedar Park	TX 7	78613
Cedar Park Chamber of Commerce	President & CEO	Mr.	Tony Moline	Mr. Moline	1460 E. Whitestone Blvd., Suite 180	Cedar Park	TX 7	78613
City of Cedar Park	Director of Economic Development	Mr.	Phil Brewer	Mr. Brewer	450 Cypress Creek Rd.	Cedar Park	TX 7	78613
Williamson County	Commissioner	The Honorable	Lisa Birkman	Commissioner Birkman	1801 East Old Settlers Blvd., Ste. 110	110 Round Rock	TX 7	78664
Williamson County	Commissioner	The Honorable	Cynthia Long	Commissioner Long	350 Discovery Blvd., Ste. 201	Cedar Park	XT	78613
Williamson County	Commissioner	The Honorable	Valerie Covey	Commissioner Covey	3010 Williams Dr., Ste. 153	Georgetown	TX 7	78628
Williamson County	Commissioner	The Honorable	Ron Morrison	Commissioner Morrison	350 Exchange Blvd., Ste. 100	Hutto	XT	78634
Williamson County	County Judge	The Honorable	Dan Gattis	Judge Gattis	710 S. Main St., Ste. 101	Georgetown	TX 7	78626
Williamson County	Director of Infrastructure	Mr.	Robert Daigh	Mr. Daigh	3151 SE Inner Loop	Georgetown	TX 7	78626
City of Austin	District 6 Council Member	The Honorable	Don Zimmerman	Council Member Zimmerman P.O. Box 1088		Austin	TX 7	78767
City of Austin	Mayor	The Honorable	Steve Adler	Mayor Adler	P.O. Box 1088	Austin	TX 7	78767
City of Austin	Asst. City Manager	Mr.	Robert Goode	Mr. Goode	P.O. Box 1088	Austin	TX 7	78767
City of Austin	City Manager	Mr.	Marc Ott	Mr. Ott	P.O. Box 1088	Austin	TX 7	78767
City of Austin Economic Development	Director	Mr.	Kevin Johns	Mr. Johns	P.O. Box 1088	Austin	TX 7	78767

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Organization	FormalTitle	Prefix	Contact	Formal	Address1	City	State	Zip
Austin Chamber of Commerce	President	Mr.	Michael Rollins	Mr. Rollins	535 East 5th Street	Austin	×	78701
City of Round Rock	City Manager	Ms.	Laurie Hadley	Ms. Hadley	221 E. Main Street	Round Rock	×	78664
City of Round Rock	Mayor	The Honorable	Alan McGraw	Mayor McGraw	221 E. Main Street	Round Rock	×	78664
City of Round Rock	Council Member	The Honorable	Craig Morgan	Council Member Morgan	221 E. Main Street	Round Rock	×	78664
City of Round Rock	Council Member	The Honorable	Kris Whitfield	Council Member Whitfield	221 E. Main Street	Round Rock	×	78664
City of Round Rock	Council Member	The Honorable	George White	Council Member White	221 E. Main Street	Round Rock	×	78664
City of Round Rock	Council Member	The Honorable	Frank Leffingwell	Council Member Leffingwell	221 E. Main Street	Round Rock	×	78664
City of Round Rock	Council Member	The Honorable	Will Peckham	Council Member Peckham	221 E. Main Street	Round Rock	×	78664
City of Round Rock	Council Member	The Honorable	Writ Baese	Council Member Baese	221 E. Main Street	Round Rock	×	78664
City of Round Rock	Director of Utility & Environmental Services Mr.	Mr.	Michael Thane	Mr. Thane	2008 Enterprise Drive	Round Rock	×	78664
City of Round Rock	Director of Planning and Development	Mr.	Brad Wiseman	Mr. Wiseman	301 W. Bagdad Avenue, Suite 210	Round Rock	×	78664
Round Rock Chamber of Commerce	President & CEO	Mr.	Mike Odom	Mr. Odom	212 E. Main Street	Round Rock	×	78664
Round Rock Economic Development Partnership	Vice President, Economic Development	Mr.	Ben White	Mr. White	212 E. Main Street	Round Rock	×	78664
City of Georgetown	City Manager	Mr.	David Morgan	Mr. Morgan	113 E. 8th St.	Georgetown	×	78626
City of Georgetown	District 1 Council Member	The Honorable	Anna Eby	Council Member Eby	113 E. 8th St.	Georgetown	×	78626
City of Georgetown	District 2 Council Member	The Honorable	Keith Brainard	Council Member Brainard	113 E. 8th St.	Georgetown	×	78626
City of Georgetown	Mayor	The Honorable	Dale Ross	Mayor Ross	113 E. 8th St.	Georgetown	×	78626
Georgetown Department of Economic Development	Director of Economic Development	Mr.	Mark Thomas	Mr. Thomas	816 S. Main	Georgetown	×	78627
Georgetown Chamber of Commerce	President	Ms.	Karen Sheldon	Ms. Sheldon	P.O. Box 346	Georgetown	×	78627
City of Georgetown	Asst. City Manager	Ms.	Laurie Brewer	Ms. Brewer	113 E. 8th St.	Georgetown	×	78626
Upper Brushy Creek Water Control & Improvement District	General Manager	Ms.	Ruth Haberman	Ms. Haberman	1850 Round Rock Avenue, Ste. 100	Round Rock	×	78681

Organization	Prefix	Contact	Formal	FormalTitle	Address1	City	State	Zip
Leander ISD	Dr.	Bret Champion	Dr. Champion	Superintendent	P.O. Box 218	Leander	ΤX	78646
eander ISD	Ms.	Trish Bode	Ms. Bode	Trustee	P.O. Box 218	Leander	ΤX	78646
eander ISD	Mr.	Don Hisle	Mr. Hisle	Trustee	P.O. Box 218	Leander	ΤX	78646
eander ISD	Ms.	Pamela Waggoner	Ms. Waggoner	Trustee	P.O. Box 218	Leander	ΤX	78646
eander ISD	Ms.	Grace S. Barber-Jordan	Ms. Barber-Jordan	Trustee	P.O. Box 218	Leander	ΤX	78646
Leander ISD	Mr.	Russell Bundy	Mr. Bundy	Trustee	P.O. Box 218	Leander	ΤX	78646
Leander ISD	Mr.	Aaron Johnson	Mr. Johnson	Trustee	P.O. Box 218	Leander	ΤX	78646
eander ISD	Mr.	Will Streit	Mr. Streit	Trustee	P.O. Box 218	Leander	ΤX	78646
Georgetown ISD	Dr.	Fred Brent	Dr. Brent	Superintendent	603 Lakeway Drive	Georgetown	ΤX	78628
Georgetown ISD	Mr.	Scott Stribling	Mr. Stribling	Trustee	603 Lakeway Drive	Georgetown	ΤX	78628
Georgetown ISD	Mr.	Scott Alarcon	Mr. Alarcon	Trustee	603 Lakeway Drive	Georgetown	ΤX	78628
Georgetown ISD	Mr.	Andy Webb	Mr. Webb	Trustee	603 Lakeway Drive	Georgetown	ΤX	78628
Georgetown ISD	Mr.	Fred Barhydt	Mr. Barhydt	Trustee	603 Lakeway Drive	Georgetown	ΤX	78628
Georgetown ISD	Ms.	Melanie Dunham	Ms. Dunham	Trustee	603 Lakeway Drive	Georgetown	TX	78628
Georgetown ISD	Mr.	Greg Eady	Mr. Eady	Trustee	603 Lakeway Drive	Georgetown	ΤX	78628
Georgetown ISD	Ms.	Ronna Johnson	Ms. Johnson	Trustee	603 Lakeway Drive	Georgetown	ΤX	78628
Round Rock ISD	Dr.	Steve Flores	Dr. Flores	Superintendent	1311 Round Rock Ave.	Round Rock	ΤX	78681
Round Rock ISD	Ms.	Nikki Gonzales	Ms. Gonzales	Trustee	1311 Round Rock Ave.	Round Rock	TX	78681
Round Rock ISD	Mr.	Charles Chadwell	Mr. Chadwell	Trustee	1311 Round Rock Ave.	Round Rock	TX	78681
Round Rock ISD	Ms.	Diane M. Cox	Ms. Cox	Trustee	1311 Round Rock Ave.	Round Rock	ΤX	78681
Round Rock ISD	Ms.	Terri Romere	Ms. Romere	Trustee	1311 Round Rock Ave.	Round Rock	X	78681
Round Rock ISD	Ms.	Suzi David	Ms. David	Trustee	1311 Round Rock Ave.	Round Rock	ΤX	78681
Round Rock ISD	Mr.	Paul Tisch	Mr. Tisch	Trustee	1311 Round Rock Ave.	Round Rock	X	78681
Round Rock ISD	Ms.	Pauline Law	Ms. Law	Trustee	1311 Round Rock Ave.	Round Rock	TX	78681

Organization	Prefix	Contact	Formal	FormalTitle	Address1	City	State Z	Zip
Texas House of Representatives	The Honorable	Tony Dale	Representative Dale	State Representative	P.O. Box 2910	Austin	×	78768
Texas House of Representatives	The Honorable	Larry Gonzales	Representative Gonzales	State Representative	P.O. Box 2910	Austin	ΧL	78768
Texas House of Representatives	The Honorable	Larry Gonzales	Representative Gonzales	State Representative	P.O. Box 2501	Round Rock	ΧL	78680
Texas House of Representatives	The Honorable	Marsha Farney	Representative Farney	State Representative	P.O. Box 2910	Austin	ΧL	78768
Texas House of Representatives	The Honorable	Marsha Farney	Representative Farney	State Representative	1633 Williams Dr., Ste. 201	Georgetown	XT	78628
Texas Senate	The Honorable	The Honorable Charles Schwertner	Senator Schwertner	State Senator	P.O. Box 12068	Austin	XT	78711
Texas Senate	The Honorable	Charles Schwertner	Senator Schwertner	State Senator	501 S. Austin Ave., Ste. 1250	Georgetown	XT	78626
United States House of Representatives	The Honorable	John Carter	Representative Carter	United States Representative	2110 Rayburn H.O.B.	Washington	DC	20515
United States House of Representatives	The Honorable	John Carter	Representative Carter	United States Representative	1717 N. IH 35, Ste. 303	Round Rock	X	78664
United States Senate	The Honorable	John Cornyn	Senator Cornyn	United States Senator	517 Hart Senate Office Building	Washington	DC	20510
United States Senate	The Honorable	John Cornyn	Senator Cornyn	United States Senator	221 West Sixth Street, Suite 1530	Austin	X	78701
United States Senate	The Honorable	Ted Cruz	Senator Cruz	United States Senator	404 Russell	Washington	DC	20510
United States Senate	The Honorable	Ted Cruz	Senator Cruz	United States Senator	300 East 8th Street, Suite 961	Austin	X	78701

Application of LCRA Transmission Services Corporation to Amend its Certificate of Convenience and Necessity for the Proposed Leander-Round Rock 138-kV Transmission Line Project in Williamson County, Texas

PUBLIC UTILITY COMMISSION OF TEXAS (PUC) DOCKET NO. 45866

Distance Services Corporation (LCRA TSC) provides this notice of Intent to amend its Certificate of Convenience and Necessity (CCN) to construct the proposed Leander-Round Rock 138-kV Transmission Line Project in Williamson County, Texas.

The proposed transmission line will connect two new substations to the existing Leander and Round Rock substations. The entire project will be about 12 to 21 miles in length, and is estimated to cost approximately \$67.8 million to \$99.6 million, depending upon the final route chosen by the PUC.

People with questions about the transmission line can call LCRA at 800-776-5272, ext. 7051.

The CCN application, including detailed routing maps illustrating the proposed transmission line project and project area, may be reviewed on the project website at www.lcra.org/LRR, and at the LCRA office located at 3505 Montopolis Drive, Building D, Austin, Texas 78744. To make an appointment to obtain or review the map at LCRA, call 800-776-5272, ext. 7051.

People affected by the proposed transmission line who wish to intervene in the docket or comment on LCRA TSC's application should mail their original request to intervene and 10 copies, or mail their original comments and 10 copies, to

Public Utility Commission of Texas Central Records Attn: Filing Clerk 1701 N. Congress Ave. PO Box 13326 Austin, Texas 78711-3326

People who wish to intervene in the docket must also mail a copy of their request for intervention to all parties in the docket and all people who have pending motions to intervene at or before the time the request for intervention is mailed to the PUC. The only way to fully participate in the PUC's decision on where to locate the transmission line is to intervene in the docket. It is important for an affected person to intervene because the utility is not obligated to keep affected people informed of the PUC's proceedings and cannot predict which route may or may not be approved by the PUC's. may not be approved by the PUC

The deadline for intervention in the docket is June 13, 2016, and letters from anyon requesting to intervene should be received by the PUC by that date.

Copies of the PUC's brochure "Landowners and Transmission Line Cases at the PUC" are available from LCRA at 800-776-5272, ext. 7051, or may be downloaded from the PUC's website at www.puc.state.ts.us. For more information about this docket, contact the PUC's Customer Assistance Hotline at \$12-936-7120 or 888-782-847. Hearing- and speech-impaired people with text telephones (TTV) may call the PUC's Customer Assistance Hotline at \$12-936-7136 or 800-735-2989.

In addition to the intervention deadline, other important deadlines may alread exist that affect your participation in this docket. You should review the orders and other filings already made in the docket.

Leander-Round Rock 138-kV Transmission Line

Primary Alternative Routes	Segment Combinations
1	A-B-G-L-M-P-Q-Q4-V-W-T4-2-3-X-J1-A5-L1-P1-T1-V5-D2-1-7-K4-T2-U2-M5- V2-X2-G3-H3-13-J4
2	A.B.G.L.M.P.2-5-Q-Q4-V.W.T4-X-J1-A5-L1-P1-T1-W5*-1-8-V5-D2-K4-J2-Q2- \$2-Y2-Z2-P5-B3-C3-H3-I3-J4
3	A-B-G-L-F6-2-8-G6-H6-U4-O-D1-G1-F5-D5-M1-O1*-1-6-N1-L1-A5-H-X-T4-Y-Z-A1-J5-K5-X2-C3-H3-I3-J4
4	D.F.YS.I-H.DI-GLES-DS-MI-OP-1-6-NI-LL-A5-J1-X-T4-W-V-P4-R4-M4*-2-6-S-Z-A1-I5-K5-X2-G3-B3-G3-B-J4
5	A-C-H-Ct-Et*-2-2-H1-K1-B5-Ct-P1-T1-W5-1-8-E6-B1-A1-J5-K5-X2-C3-H3-I3-J4
6	D.F.XS-ZS-A6-C6-M-N-H6-U4-2-4-O-D1-G1-R1-L5-B2-E2-1-4-F2-G2-H2-12-J2- T2-U5-B1-A1-J5-K5-X2-C3-H3-I3-J4
7	D.E.JZS-B6-L-M-F-Q-R-O4-T-2-1-U-W-T4-X-J1-A5-LI-P1-Q1*-1-6-T1-V5-D2- K4-T2-U2-N5-V2-X2-C3-E3-G3-I3-I4
8	D.E.K.LI-2-5-N4-R-Q4-V-W-T4-X-[1-A5-L1-P1-T1-V5-D2-K4-[2-I2-N2-1-3-O2- P2-L3-O3-U3-A4-E4-H4-I4
9	D.E.K.S4-C6-M.N-H6-V4-X4-Z4°-2-7-Y4-A5-LL-P1-T1-V5-D2-K4-J2-I2-H2-L2- 1-5-M2-K3-L3-O3-U3-A4-E4-G4-I4
10	D.F.X5-Z5-A6-C6-M-N-H6-V4-X4-Z4-2-7-D6-C5-D5-E5-H5-X1-C2-G2-L2-1-5- M2-K3-L3-O3-U3-A4-D4-S5-F4-T5-I4
11	A-B-G-L-M-P-2-5-Q-Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5*-1-8-V5-D2-K4-J2-Q2- S2-M3-O3-U3-84-F4-T3-I4
12	A.B.G.L.M.P.2-5-Q.Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5*-1-B-V5-D2-K4-J2-Q2- 52-M3-Q3-U3-B44-F44-T5-M
13	D.F.X5-Z5-A6-C6-M-N-H6-U4-2-4-O-DL-GL-R1-L5-U1-V1-W1-Z1-1-2-A2-D2- K4-72-U2-W2-Z2-A3-D3-G3-D-H
14	D-F-X5-Z5-A6-C6-M-N-H6-U4-2-4-O-D1-G1-R1-U1a-V1a-G6-Z1-1-2-A2-D2- K4-T2-U2-W2a-Q5-A3a-D3a-G3-U3-H
15	D-E-K-S4-C6-M-N-H6-U4-2-4-O-D1-G1-R1-L5-U1*-1-1-B2-K2-N3-A4-E4-G4-I4
16	D-F-X5-Z5-A6-C6-M-F-Q-Q4-V-W-T4-X-W4-H-H1-E1-2-2-F1-G1-R1-L5-B2-K2- J3-M2*-1-5-K3-P2-R3-52-Y2-O5-Q5-A34-R5-F3-U3-B4-F4-T5-I4
17	D.F.YS-I-H. CI-EI*-2-2-HI-KI-CS-MI-OI-SI-YI-C2-G2-H2-N2-I-3-O2-P2-L3- O3-U3-A4-E4-H4-I4
18	D-F-X5-Z5-A5-C6-M-P-Q-R*-N4*-2-6-Q4-V-W-T4-X-J1-A5-L1-PL-T1-W5*-1-8- V5-D2-K4-T2-U2-W2-Z2-P5-B3-C3-E3-G3-L3-J4
19	D-F-X3-Z5-A6-C6-M-P-Q-R*-N4*-2-6-Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5*-1-8- V5-D2-K4-T2-D2-W2A-Q5-B3-C3-E3-G3-I3-J4
20	D.F.X5-Z5-A6-S4-L4-2-6-N4-R-Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5*-1-8-V5-D2- K4-I2-Q2-\$2-Y2-Z2-P5-B3-C3-H3-I3-J4
21	D-F-X5-Z5-A6-C6-M-P-Q-R ⁻ -N4 ⁻ -2-6-Q4-V-W-T4-X-J1-A5-L1-P1-T1-W5-1-8- E6-U5-U2-W2A-Q5-83-C3-83-G3-13-J4
22	A. B. G. L. M. P. Q. R.* NY 2. 6-Q4-V-W-T4-X-J1-AS-L1-P1-T1-W5-1-8-E6-U5-U2- W2A-Q5-B3-C3-E3-G3-E3-J4
23	D-8-J-25-86-L-M-N-H6-V4-X4-Z4-2-7-D6-C3-D5-E5-G5-Y1-C2-G2-H2-N2-L-J- O2-R2-S2-Y2-O5-Q5-A3a-R5-F3-U3-B4a-F4a-T3-I4
24	D.E.J. Z5.B5-L-M-N-H6-V4-X4-Z4-2-7-D6-C5-D5-E5-G5-Y1-C2-G2-H2-N2-1-3- 02-R2-S2-Y2-Z2-A3-F3-U3-B4-F4-T3-14
25	D.E.K.L4.2-6:N4-R-Q4-V-W-T4-X-I1-A5-L1-P1-T1-V5-D2-1-7-K4-T2-U2-W2-Z2- P5-B3-C3-E3-G3-B3-J4
26	D.E.K.L4.2-6-N6-R-Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2-1-7-K4-T2-U2-W2a- Q5-B3-C1-E3-G3-I3-J4
27	D-E-X5-25-A6-C6-M-P-Q-R*-N4*-2-6-Q4-V-W-T4-X-H-A5-L1-P1-T1-V5-D2-1-7- K4-T2-U2-W2-22-P5-B3-C3-H3-D-H
28	D.F.XS-ZS-A6-C6-M-P-Q-R*-N4*-2-6-Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2-1-7- E4-T2-U2-W2a-Q3-83-C3-H3-I3-I4
29	D-F-XS-ZS-A6-C6-M-P-Q-R*-N4*-2-6-Q4-V-W-T4-X-H-A5-EL-PI-T1-VS-D2-1-7- K4-T2-U2-M5-V2-X2-C3-E3-G3-I3-I4
30	D.F.X5-Z5-A6-C6-M-P-Q-R*-Net-2-6-Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2-1-7- K6-T2-U2-N5-V2-X2-C3-H3-D-I4
31	D-F-X5-Z5-A6-C6-F6*-2-8-M-P-Q-Q4-V-W-T4-X-J1-A5-L1-P1-T1-V5-D2-1-7-K4- J2-Q2-52-Y2-Z2-F5-B3-C3-E3-G3-J3-J4

*These segments will be used entering and exiting the substantantian -to-



Segment A — Segment A begins at the Leander Substation, located approximately 10 mile southwest from the intersection of US Highway (US Broy) 125A and Hero Way. The agenced recorded southwest for approximately 35 mile, consign are assiring transmission. In all limit to proceeds southwest for approximately 35 mile, consign are assiring transmission. In all limit to the limit of the second southwest of the proximately 35 mile, covering a resisting transmission has place to the east-southeast for approximately 35 mile, covering a existing transmission limit. The termination of Segment A is at the interestion of segments A, 5, and C.

Segment B — Segment B beginner at the intersection of segments A, B, and C, located southwest from the intersection of US Hwy 183A and FM 2243. The segment proceeds east for approximately 20 mile, crossing Mason Ceek. The termination of Segment B is at the intersection of segments B, G, I, and YS. Segment C — Segment Chegins at the intersection of segments A, B, and C, located southwest from the intersection of US Hay 180A and FM 224A. The segment proceeds southests for approximately A! mile while prefilling the cast side of an existing transmission line, crossing Mason Creek. The segment then turns northeast for approximately .27 mile. The termination of Segment C is at the intersection of segments C1. and M.

Segment D — Segment D begins at the Leander Substation, located approximately .10 mile southwest from the intersection of US Hwy 183A and Hero Way. The segment proceeds northeast for approximately .02 mile. The termination of Segment D is at the intersection of segments D, E, and F.

Segment 1. Segment 1. Segment with the instruction of regress 0. E. A. and F. Jose of southern from Segment 1.

Segment F — Segment F begins as the intersection of segments D. E. and F. located southwest from the intersection of US Hwy 183A and Hero Way. The segment proceeds northeast for approximately. Journal, it then turns southeast for approximately 190 mile. It then turns southeast for approximately 190 mile while paralleling the west side of US Hwy 183A. The termination of Segment F is at the intersection of segments F, XS, and YS.

1990. In termination of segment 2 is time interaction of registration, A.S., bina 13. Segment 6 G. Segment

and J M 2243. The termination of Segment 1: is at the interestation of segments (1, 1, 2nd to 80. Segment H – Segment I Segment is the interestation of segments (1, H, and 1, located south from the interestion of US Hay 183.Am of PM 2243. The segment proceeds northeast for approximately 60 mills creating US 1949; 126A. It has trues southeast for generatinally 3.6 mills with the south for approximately 40 mills which parallel the south for approximately 1.8 mills. The segment continues southeast for approximately 4.2 mills while paralleling the sort side of US Hay 193.A. I then turns northeast for approximately 1.29 mills while paralleling the north side of Bata Crystal Talls Parksvay, crossing Renald Reagan Blvd. The termination of Segment II is at the interaction of segments 16, O. C., and D.1.

Segment I – Segment I begins at the intersection of segments B, G, I, and YS, located south from the intersection of US Hwy 181A and FM 2243. The segment proceeds southeast for appreximately 400 mile while paralleling the west side of US Hwy 183A. The termination of Segment I is at the intersection of segments C, H, and C.

intersection or segments ..., 7, and ...

Segment J — Segment J begins at the intersection of segments E, J, and K, located east from the intersection of US Hvy 183A and Hero Way. The segment proceeds southeast for approximately 0.30 mile, crossing Hero Way. The termination of Segment J is at the intersection of segments J, XS, and ZS. Segment K — Segment K begins at the intersection of segments E, J, and K, located east from the intersection of US Hey 18XA and Hero Way. The segment proceeds northeast for appreximately 43 male while paralleling the north alsed Girler Way and then suggine to the southeast for appreximately and male, crossing Fero Way. It then continues mertheast for appreximately 42 mile while paralleling the south also of flews Wy. The termitation of Segment K is at the intersection of segments (X, A, and SX.).

Segment 1.— Segment 1. begins at the intersection of segments G. I. and 36, located east from the intersection of US Hoy 183A and FM 224S. The segment proceeds in an easterly direction for approximately 1.00 mile white paralleling the earth side of FM 2243. The termination of Segment L is at the intersection of segments In M. O.S. and 76.

Segment M — Segment M begins at the intersection of Segments I., M., C6, and F6, located west from the Intersection of FM 2243 and Ronald Reagan Bhd. The segment proceeds northeast for approximately I mile white paralling the north-side of FM 2243. The termination of Segment M is at the intersection of segments M, N, and P.

sequences of the sequence of the process of the sequence of th

Segment O – Segment O begins at the intersection of segments O, U4, and Substation Site 2-4, located couth from the intersection of FM 2243 and Ronald Reigan Blvd. The segment proceeds southesst for approximately .60 mile while paralleling the east side of Ronald Reagan Blvd. The termination of Segment O is at the intersection of segments H, O, Cl., and D1. Segment P — Segment P begins at the intersection of segments M, N, and P, located east from the intersection of EM 2243 and Ronald Reagan Blot. The segment proceeds in an easterly direction for approximately. 20 mile while paralleling the north side of FM 2243. The termination of Segment P is at the intersection of segments 70, and Substation Size 2.5.

Segment R — Segment R begins at the interaction of segments Q, R, and Q4, located northeast from the intersection of FM 2243 and Ronald Reagan Bbd. The segment proceeds northeast for approximately-04-mile while paralleling the north-side of FM 2243. The termination of Segment R is at the intersection of segments R, N4, and O4.

The contraction of the contracti

Segment T — Segment T begins at the intersection of segments T_i, O4, P4, and R4, located east from the intersection of FM 2243 and Sam Bass Road. The segment proceeds southeast for approximately 2.1 mile while paralleling the north side of Sam Bass Road. The segment continues southeast for approximately 1.0 mile. The termination of Segment T is at the intersection of segments T_i, U, and Substation Rise 2.

Segment U – Segment U begins at the intersection of segments T, U, and Substation Site 2-1, located southeast from the intersection of FM 2243 and Sam Bass Road. The segment proceeds southeast for approximately J or mile I; the interns southwest for approximately J. of mile, crossing Sam Bass Road. The iermination of Segment U is at the intersection of segments U, V, and W.

Segment V — Segment V begins at the intersection of segments V, P4, and Q4, located southeast from the intersection of FM 2243 and Sam Bass Read. The segment proceeds in a southeasterly direction for approximately 50 mile whitle paralleling the south hade of Sam Bass Road. The termination of Segment V is at the intersection of segment U, V, and W,

Segment V is at the intersection of segments U, V, and W.

Segment W — Segment W begins at the intersection of segments U, V, and W, located southeast from
the intersection of YM 2243 and Sam Bass Boald. The segment proceeds southeast for approximately
3.0 mile while peralleling the south side of Sam Bass Road. The termination of Segment W is at the
intersection of segment W, Y, and TS. Journal of wait paralleling like Ves and Ta.

Segment X — Segment X begins and his increased in of segments, Ta, and Substation Sile 2.3, located southeast from the acceptance of PAZ 2433 and Sam Blass Road. The segment proceeds southeast for the learning located southeast for the proceeds southeast for a processingly 36 mile and then angles east-southeast for a prevaintantly 36 mile. The termination point of Segment X, in at the intersection of segments X, 11, and W4.

Segment Y — Segment Y begins at the intersection of regions W, Y, and T4, located southeast from the intersection of FK 2243 and Sim Bass Road. The segment curves around to the north-northeast for opportunitiety 50 mile. It then continues to the north-northeast for approximately 50 mile. 2 then continues to the sortheast for approximately 1.00 mile. This point, the segment sugles to the north-northeast for approximately .10 mile. The termination point of Segment T3 at the intersection of Segment S5, and 2.

ot Segment Y as all he interaction of segments S, 1, and Z.
Segment Z—Segment Z—Segment A Engling at the interaction of segments S, Y, and Z, located northeast from
the interaction of FM 2243 and Ronald Reagan Blvd. The segment proceeds in an exaterly direction
for approximately 1.10 miles while paralleling the routh side of FM 2245, crossing County Road (CR)
176. The termination of Segment Z, the interaction of Segment Z, Al, and Bl.

Segment A 1—Spars a few interactions of segments Z, Al, and Bl., located northeast from the interaction of segments Z, Al, and Bl., located northeast from the interaction of FM 2343 and Ronald Reapar Blvd. The segment proceeds northeast for approximately 27 mile. It then continues in an easterly direction for approximately 2.33 miles with partial continues in a neather of segments Al, is at the intersection of segments Al, is at the intersecti

segments M. L. D., and J. D.

Segment BI — Segment BI begins at the intersection of segments Z. Al. and Bl. located northeast from the intersection of FM 2243 and Ronald Reagan Blvd. The segment proceeds southeast for approximately 1-06 units; consisting Chandler Branch. The termination point of Segment Bl is at the intersection of segments Bl, UX, and E6.

Segment C1 – Segment C1 begins at the interaction of segments H, O, C1, and D1, located northeast from the interaction of Ronald Reagan Blvd. and East Crystal Falls Parkway. The segment proceeds northeast for approximately. 10 mile. The termination point of Segment C1 is at the interaction of segment C1 is at the interaction of segment C1. B, and B1.

segment O. – Segment D. Degins at the intersection of segments H, O, Cl., and DI, located northeast from the intersection of Ronald Reagan 3hd. and East Crystal Falls Parkvny: The segment proceeds southeast for approximately. J But white paralleling he east side of Stonald Reagan 3hd. The termination point of Segment DI is at the intersection of segment DI, FI, and GI. Segment E1 — Segment E1 begins at the intersection of segments C1, E1, and H1, located northeast from the intersection of Ronald Reagan Rivd. and East Crystal Fails Parkway. The segment proceeds southeast for approximately. Joinile. The termination of Segment E1 Is at the intersection of segments

Segment IT—Segment SI begins at the intersection of segments E1, F1, and Substation Site 2-7, located northeast from the intersection of Snoald Reagan Blvd. and East Crystel Flalle Packway. The segment proceeds southeast for approximately 1.5 mile, it fine turns southwest for approximately 1.2 mile while paralleling the north side of CR177. The termination point of Segment F1 is at the interaction of segment D1. F1, and G1.

Segment G1 — Signest G1 begins at the intersection of segments D1, F1, and G1, located south from the intersection of Small Rogan Rick and East Cryata Falls Parkway The segment proceeds southeast for approximately 0 mile white parallilaging the cast side of Romal Reages milet, crising CR 177 and Journey Parkway. The termination of Segment G1 is at the intersection of segments G1, R1, and F5.

Segment H1 — Segment H1 begins at the intersection of segments C1, E1, and H1, located corrheast from the intersection of from the intersection of from the intersection of Segments G1, E1, and H1, located corrheast from the intersection of Nondal Reages in Rick, and E2 is Cryatal Falls Parkway. The segment proceeds northeast for approximately 30 mile. The termination point of Segment H1 is at the intersection of segments H1, it and K1.

Segment II — Segment It begins at the intersection of segments II, V4, W4, and X4, located aoutheast from the intersection of FM 2263 and Ronald Reagon 20vd. The segment proceeds southwest for approximately, 30 mile. The termination point of Segment II is at the intersection of segments III, II, and XI.

Segment 11— Segment 13 begins at the interaction of segments K. H. and Wu, because tombest from the introduction of 30° 133 and 50° mas Ren Rend 15° the segment proceed in a confidentially direction for approximately 3.5° mile while paralleling the west side of Sim Bass Road. It then angles south-southhand for approximately 1.1° mile. The segment these continues southers for approximately 1.3° mile while paralleling the west side of Sim Bass Road. The termination point of Segment 13° is at the interaction of segments 13° V. An and AS.

Segment IX — Segment IX begins at the intersection of segments III, II, and IX, located northeast from the intersection of Rounds Responsible and Basic Crystal Palls Parkway. The segment proceeds sometheast for approximately 70 mile, crossing GR 177 and Basicy Creek vice. The termination point of Segment IX is at the intersection of segments IX, Bs, CS, and D6.

Segment U — Segment L1 begins at the intersection of segments L1, A5, and B5, located southeast from the intersection of CR 177 and Sam Bass Road. The segment proceeds southeast for approximately 30 mile while paralleling the west died of Sam Bass Road. The termination point of Segment L1 is at the intersection of segments L1, N1, and P1.

Segment M1—Segment M1. Egins at the interaction of Segment M1, CS, and DS, located northeast from the interaction of Romal Reagan Bird, and loomey Parkway. The segment proceeds northeast from the interaction of Romal Reagan Bird, and loomey Parkway. The segment proceeds northeast from approximately On mile while pertuling the north diet of Punnery Parkway, constituting the Creek. The termination of Segment M1 is at the interaction of segments M1, N1, and O1.

Segment NI — Segment NI begins at the intersections of segments M1, N1, and O1, located west from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds northeast for approximately .20 mile. The termination of Segment of N1 is at the intersection of segments L1, N1, and P1.

2.0 mine. The fermination of squared in N is at the interaction of segments M1, Ni, and O1, located west from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southeast for approximately 2, D mile, corosing Journey Parkway. The termination point of Segment O1 is at the interaction of Segments O1, O3, Si, and Solbstation Siets.

Segment P1 - Segment 19 begins at the intersection of segments L1, N1, and P1, located west from the intersection of Segment 19 begins at the intersection of Seam Bass Road and portray Parkiway. The segment proceeds southwast for appreciatedly 20 mile while peralleling the west side of Sam Bass Road, crossing Journey Parkway. The termination point of Segment P1 is at the intersection of segments P2, Q1, and T1.

Segment Q1 — Segment Q1 begins at the intersection of segments (), Q1, 830 11.

1-6, located southwest from the intersection of segments (), Q2, S3, and Substation Site 1-6, located southwest from the intersection of Sam Bass Road and fourney Packway. The segment proceeds northeast for approximately 30 mile. The termination point of Segment Q1 is at the intersection of Segment P2, Q1, and T1.

intersection of regiments r₁, v₁, and 1.1. Segment R1 = Segment R1 begins at the intersection of segments G1, R1 and F5, located southeast from the intersection of Ronald Reagan B1vd, and Journey Parkway. The segment proceeds southeast for approximately 60 mile while paralleling like east side of Ronald Reagan B1vd, crowsing Block Dougs Creek. The termination point of Segment R1 is at the intersection of segments R1, UL, and L3.

Segment 51 — Segment 51 begins at his interestion of segments Ri, Ult, and L5.

Segment 51 — Segment 51 begins the interestion of segments (I), Qi, and Sbattation Site
1-6, Boated southwest from the interestion of Sum Bass Road and Journey Farkway. The segment
peaced nontheast for appreximately 2 mile and then suggest to the neuthworth or appreximately
22 mile. The segment then angles south-routhwest for appreximately 22 mile. The termination of
Segment 50 is at the interestion of Segment 50 i Sogment T1 — Segment T1 begins at the intersection of segments P1, Q1, and T1, located south from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southeast for approximately, I amile while paralleling the west side of Sam Bass Road. It then angles to the south-

approximately .14 mile while paralleling the west side of Sam Bass Road. It then ang southeast for approximately .10 mile. The segment then angles southeast for approximately .10 mile. The segment then angles southeast for approximate the termination of Segment T1 is at the intersection of segments T1, V5, and W5.

Segment U1 — Segment U1 begins at the interaction of segments U1, B2, and L5, located southeast from the interaction of Ronald Reagan Blvd, and Journey Ferkway. The segment proceeds northeast for approximately 30 mile, crossing Block House Crock. The termination of Segment U1 is at the intersection of segments U1, V1, and Substation Site 1-1.

intersection of segments Oil, vi. and solvation seeds.

Segment UID = Se Segment V1 — Segment V1 begins as the interaction of segments U1, V1, and Substition Site 1-1, located southeast from the interaction of Stondal Reagon Blvd, and Journey Parkway. The segment proceeds northeast for approximately 40 mile. The termination of Segment V1 is at the intersection of Segment V1, W1, X1, and H5.

Segment VIa — Segment VIa begins at the intersection of segments UIa, VIa, and Substation Site 1-1, located combeast from the intersection of Ronald Reagan Bird, and Journey Parkway. The segment proceeds mortheast for systemistely 40 mile. The termination of Segment VIa is at the intersection of segment VIa, 25, GS, and MS.

Sagman WI — Sogment W begins at the interaction of segments V1, W1, X1, and H5, located southeat from the interaction of Reach Regen H04, and pummy Parkway. The segment proceeds northeat from proximately 40 mile, excessing Parksby Creek. The termination of Segment W1 is at the interaction of segments S1, W1, Y1, Z1, and G5.

Segment XI.—Segment XI. began as the interaction of segments VI, VI, XI, and MS, located southeast from the interaction of Renalth Regard Relating Packway The segment proceed southeast from the interaction of Renalth Regard Relating Passby Cred. The termination of Segment XI is at the interaction of segment XI, VI, and CI.

Segment Y1 — Segment Y1 begins at the intersection of segments Si, Wi, Yi, Zi, and GS, located southwarf from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southwarf for the intersection of Sam Bass Road and Journey Parkway. The segment proceeds are appreciately 2.00 mile. The termination of Segment Y1 is at the intersection of segments X1, Y1, and CA.

Segment Z1 — Segment Z1 begins at the intersection of segments S1, W1, Y1, Z1, and G5, located southwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds

segment 22, A2 and Substation Site 1-2.

Segment A2 — Enginent A2 begins at the intersection of segment 21, A2 and Substation Site 1-2, located west from the intersection of Sam Base Boad and The Outer Avenue. The segment proceeds northeart for approximately 18 mile, rooms packed between the the turns sorbeats for approximately 48 mile while paralleling the east side of Acacta Drive, crossing The Outer Avenue. The segment usus anotheast of approximately 21 mile while paralleling the sort side of The Outer Avenue. The termination of Segment 31 as it the intersection of segments A2, D2, and V3.

Segment 32 begins at the third termination of segments A3, D3, and U5, located southeast from the intersection of Stonath Reagan Blvd, and journey Parksay; The segment proceeds southeast from the intersection of Stonath Reagan Blvd, and journey Parksay; The segment proceeds southeast for approximately 35 mile while paralleling the cast side of Ronald Reagan Blvd, and journey Parksay; The segment BDV, if then turns of the segment and

Segment C2 — Segment C2 begins at the intersection of segments X1, Y1, and C2, located southwest from the intersection of Sem Bass Road and Journey Parkway. The segment proceeds southwest for approximately 50 mile. The termination point of Segment C2 is at the intersection of segments C2, F2, and C2. Segment D. 2. Segment D. 2 signs at the intersection of segments C.1, P.2, and G.3. Segment D. 2 signs at the intersection of segments A.1, P.3, and V.3, located sentitives from the intersection of Sam Bass Road and The Outer Aware. The segment proceeds in a southeasterly direction for approximately. 30 mile while peralleling the west does of Sam Bass Road. The termination of Segment D.2 is at the intersection of segments D.2, Ks, and Substation Site 1.7.

Segment E2 — Segment E2 begins at the intersection of segments E2, E2, and Montal on the intersection of Rounds Reagan Blot, and CR 272. The segment proceeds north northeast for appreximately So Bille and then analges to the northeast for spreadings of Son Blea and then analges to the northeast for spreadings of smile. The termination point of Segment E2 18 at the intersection of segment E2, F2, and Substitution Sile 1-4.

Segment F2 — Segment F2 begins at the intersection of segments E2. F2, and Substation Site 1-4, located northeast from the intersection of Ronald Reagan Rivd. and G2. 727. The segment proceeds northeast for approximately 1, 000 inter, coroning G2. 722 and Taushy Greek. It then angels to the north-northeast for approximately 1,000 intersection of Segment C2. F2. and G2.

.10 mile. The termination to segment A2 begins at the intersection of segment A2. Hz, and A2, hz, as the market for the intersection of Ronald Reagan Blvd, and CR 727. The segment proceeds northeast for approximately .20 mile. The termination of Segment H2 is at the intersection of segment P2, IZ, and N2.

Segment 12—Segment 12 begins at the intersection of segments H2, 12, and N2, located northeast from the intersection of Ronald Reagon Bivd, and CR 272. The segment proceeds southeast for approximately. It will end then angles to the northeast for approximately. 50 mile. The termination of Segment 12 is at the intersection of segment 12, 12, and Q2. Segment I2.— Segment I2 begins at the interaction of segment I2, T2 and K4, located southeast from the interaction of Sam Bass Road and The Outer Avenue. The segment proceeds southeast for the interaction of Sam Bass Road and The Outer Avenue. The segment proceeds southeast for approximately On Julie while pracelling the vest side of Sam Bass Road. The termination of Segment 12 is at the interacction of segments 12, 17 and Q2.

Segman KZ — Segman KZ begins at the intersection of segments 12, E2, and K2, located southeast from the intersection of Ronald Reagan Blvd, and CR 272. The segment proceeds combnast for approximately 50 mile 1, then angle to the east-conductant for approximately 67 mile while paralleling the east ade of Ronald Reagan Blvd, crossing Spanish Cok Creek and 1431/East Whitstoom Elfo, the termination of Segmant K2 in at the intersection of agamma K2, 73, and 783.

Segment 12 — Segment L2 begins at the intersection of segments G2, H2, and L2, located northeast from the intersection of Ronald Reagan Blvd. and CR 272. The segment proceeds southeast for approximately .50 mile. The termination of Segment L2 is at the intersection of segments L2, M2, and Substation Six 1-5.

Segment M2 — Segment M2 begins at the intersection of segments L2, M2, and Substation Site 1-5, located northeast from the intersection of Ronald Reagan Blvd, and FM 1431. The segment proceeds sources not neast from the intersection of Ronald Reagan Blvd, and FM 1431. The segment proceeds southeast for approximately 10 mile, crossing FM 1831/East Whitestone Blvd. The termination of Segment M2 is at the intersection of segments M2, I3, and K3.

Segment N2 — Segment N2 begins in the intersection of segment H2, 12, and N2, located unriheast from the intersection of Ronald Reagan Blvd, and CR 272. The segment proceeds southeast for approximately. 10 mile. The termination of Segment N2 is at the intersection of segments N2, O2, and Sobstation Site 1-3.

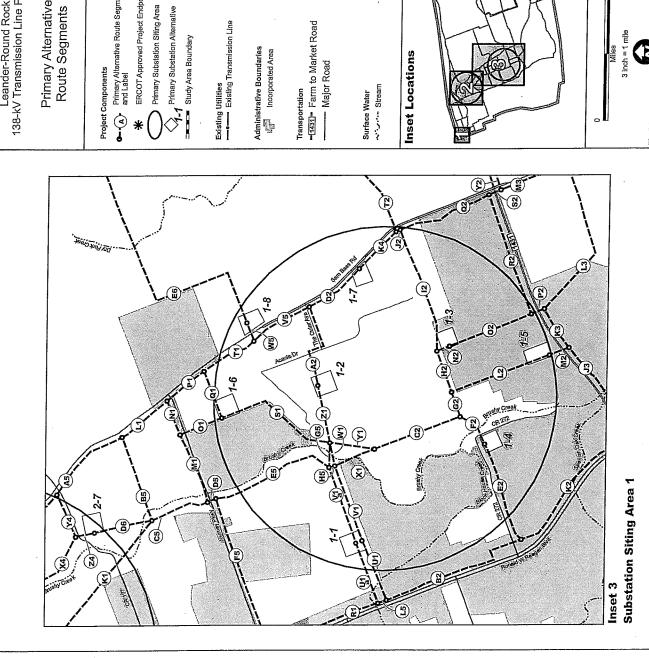
Segment O2 — Segment O2 begins at the intersection of segments N2, O2, and Substation Site 1-3, located northeast from the intersection of Renald Reagan Net. and CR 272. The segment proceeds outbeast for approximately .40 mile. The termination of Segment O2 is at the intersection of segments O2, P2, and R2.

Segments V2, F2, and Rx. Segment P2 - Segment P2 begins at the intersection of segments O2, P2, and R2, located northeast from the intersection of Romald Reagan Rivd. and FM 1433. The segment proceeds southeast for approximately 30 mile, crossing FM 1431/East Whitestone Rived. The termination of Segment P2 is at the intersection of Segment P2, R5, and L3.

Segment 02 — Segment 02 heaps as the interaction of opposits 11, 2 and 02, beared southerst.

Segment 02 — Segment 02 heaps as the interaction of opposits 12, 2 and 02, beared southerst for approximately 60 mile while paralleling the over side of Sum Bass Road, it then angles to the south for approximately 4.2 mile and then angles to the seaso-broadest for approximately 4.2 mile and then angles to the seaso-broadest for approximately 4.2 mile while paralleling the vest side of Sam Bass Road. The terms are side of Sam Bass Road. The terms are side of Sam Bass Road. The terms after of Segment 02, 10 as it to interactions of of opposits 10 and 5.2 miles of Sam Bass Road. The terms after of Segment 02, 10 and 5.2 miles of Sam Bass Road. Segment R2 — Segment R2 begins at the intersection of segments O2, P2 and R2, located northeast from the intersection of Ronald Reagan Bivd, and FM 1831. The segment proceeds northeast for approximately .60 mile while paralleling the north side of FM 1831/East Whitestone Bivd. The termination of Segment R2 is at the intersection of segments O2, R2 and S2.

ATTACHMENT 13 Page 1 of 3



Inset Locations

Surface Water

Leander-Round Rock 138-kV Transmission Line Project

Primary Alternative Route Segments

Primary Substation Siting Area

Administrative Boundaries

Existing Utilities

Segment S2 — Segment S2 begins at the intersection of segments Q2, R2 and S2, located northwest from the intersection of segments Road and FM 1431. The segment process is outless for operoximately. In mile, crossing FM 1431. The segment process is outless for operoximately 10 mile, crossing FM 1431. Whitestone Bivd. The termination of Segment S2 is at the intersection of segment S2, X2, and M3.

Segment T2 — Segment T2 begins at the intersection of segments R2 for and K4, located southeast from the intersection of Segment R2 and T6 or approximately 70 mile, crossing Sam Bass Road, it then angles to the northeast for approximately 14 mile, crossing Dry Fork Creek, The segment continues northeast for approximately 14 mile, crossing Dry Fork Creek, The segment continues northeast for approximately 14 mile, crossing Dry Fork Creek, The segment continues northeast for approximately 14 mile crossing Dry Fork Creek. The segment continues northeast for approximately 34 mile. At this point, the segment T2 is at the Segment U2 — Segment T2 begins at the Intersection of Segments T2, U2 and U3, and U3, located northeast from the intersection of segments T2, U2 and T10 error Arenice. The segment proceeds northeast for approximately 50 mile. The termination of Segment U2 is at the intersection of segments U2, WZa, MS, and N5.

Segment V2 — Segment V2 begins at the intersection of segments V2, MS and N5, located northeast from the intersection of Sam Bass Road and The Outer Annue. The segment proceededs northeast for approximately 1.10 mile, crossing Chandler Branch. The termination of Segment V2 is at the intersection of segments V2, X2, and K5.

intersection of segments V2, X2, and K5.
Segment W2 — Segment W2, X2, and K5.
Segment W2 — Segment W2 begins at the intersection of segments U2, V2, W2a, M5, and N5, located orcheast from the intersection of Sam Bass Road and The Outer Arenue. The segment proceeds southeast for approximately J2 mile and then turns southwest for approximately J3 mile and then turns southwest from principal with the segment W2 — Segment

ment A3a — Segment A3a begins at the intersection of segments A3a, P5; and Q5, located northeast from the intersection of Sam Bass Road PM A34, Izast Whitestone Blod. The segment proceeds southeast for coximately .27 mile and then angles south for approximately .44 mile. segment angles southeast for approximately .44 mile. the theory approximately .68 mile. It then turns theast for approximately .68 mile. The termination of Segment A3a is at intersection of segment A3a, D3a, and R3.

mile, crosses Onion Branch, and then proceeds northeast for approximately .35 mile. It then angles east for approximately .10 mile. The termination of Segment D3a is at the intersection of segments D3, D3a, E3, and G3.

Segment E3 — Segment E3 begins at the intersection fearurable and 32.

E3 and G3, located southwest from the intersection fearurable D3.2a,
E3, and G3, located southwest from the intersection fearurable D3.2a,
E4 and G3, located southwest from the intersection of segments P3. D4.
E4 bit segment P3 is at the intersection of segments A3. D3.
E3 and B4, located southwest from the intersection of segments A3, D3,
E3, and E4, located southwest from the intersection of segments A3, D3,
E3, and B4, located southwest from the intersection of segments A3, D3,
E3, and B4 whitestone B104. The segment proceeds southeast for approximately
34 mile and then angles southwest for approximately 23 mile. The north side of Sam Bass Road. It then turns southwest for approximately
64 mile, crossing Sam Bass Road. The termination of Segment F3 is at the intersection of segments E3, O3, and U3.

Segment G3 — Segment (3) begins at the intersection of segments D3, D3a, B3, and G3, located southwest from the intersection of 153 and 184 M31/ B31 and G3, located southwest from the intersection of 153 and 184 M31/ B31 was dG3, located southwest from the intersection of 153 and 184 M31/ B31 was dG3, located southwest from the intersection of segments G3 and B4 M31/ B31 was based by the control of the contr

Segment 13 — Segment 19 P2, K3, and 13, Segment 13 — Segment 15 — Segment 15 — Segment 15 — Segment 15 — Segment 15 — Segment 15 — Segment 15 — Segment 15 — Segment 15 — Segment 15 — Segment 15 — Segment 15 — Segment 15 — Segment 15 — Segment 15 — Segment 15 — Segment 15 — Segment 50 — Segment 50 — Segment 50 — Segment 60 — Segm

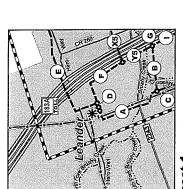
Segment G3 — Segment G3 begins at the intersection of segments L3, M3, and G3, located south from the intersection of Sam Basis Road and RM, 1431/East Whitestone Bird. The segment proceeds east for approximately, L5 mile, It then angles coutteast for approximately 4.1 mile and then angles south-southeast for approximately 13 mile. The segment confitnes in a southeasterly direction

Date: 4/14/2016 B

Aft his point, the segment that the transit of supportantially of an interventionally of an ille while paralleling the south side of Sam Bass Road, Than illy where the paralleling the north side of Sam Bass Road, Than segment angles on the southern to the segment angles of the segment of the point the segment on the segment of the segment angles of the segment of the segment angles of the segment of the segment of the segment angles of the segment of segments by the segment of the segment of segments by the seg

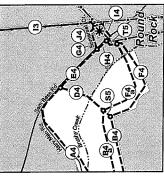
Segment 14 — Segment 14 begins at the intersection of segments 13, G4, and 14, located east from the intersection of Sam Bass Road and Somersel Dyfre. The segment proceeds southward for approximately 03 mile while paralleling the north side of an existing transmission line. The termination of Segment 14 is at the Round Rock Substation, located approximately 1.00 mile west from the intersection of 1.35 and Sam Bass Road.

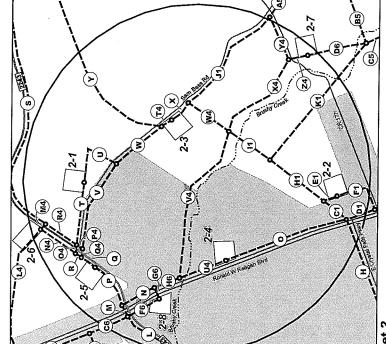
egment K4 — Segment K4 begins at the intersection of segments D2, K4, and bubstation Site 1-7, located southeast from the intersection of Sam Bass Road and The Outer Avenue. The segment proceeds in a southeasterly direction for proxomately, 30 mile while paralleling the west side of Sam Bass Road. The ermination of Segment K4 is at the intersection of segments [2, T2, and C4, and C4].



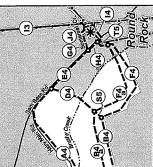
nset 1

Leander Substation





Inset 4 Round Rock Substation



Inset 2 Substation Siting Area 2

Segment D5 — Segment D5 begins at the intersection of segments M1, C5, and D5, located southwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds southeast for approximately. Os mile, crossing Journey Parkway. The termination of Segment D5 is at the intersection of segments D5, E5, and F5. Segment M4 — Segment M4 begins at the intersection of segments L4, M4, N4, and Substation Site 2-6, located southeast from the intersection of Ronald Reagon BM4, and Ferro Way, The segment proceeds southeast for approximately of mile, crossing FM 2243. The termination of Segment M4 is at the intersection of Segments M4, and R4.

Intersection or segments D. L. L., et al. V. L. L. Segment E. Segment E. D. Segment E. D. Segment E. D. Segment E. D. Segment E. D. Segment E. D. S. and E. J. Located southwest from the intersection of Sam Bass Road and Journey Parkway. The segment proceeds south for approximately O' mile and then curves around to the southest for approximately J. S. Mile. It then angles to the southwest for approximately. In mile and then angles to the southwest for approximately. In mile. The seathwest for approximately to mile. The termination of Segment ES is at the intersection of segments Via, 185, 65, and 181.

Segment F. D. Segment FS begins at the intersection of Segment BC is and Journey Parkway. The segment proceeds northeast for approximately, 30 mile while partileling the south side of Journey Parkway. The termination point of Segment FS is at the intersection of segments D. S. and FS. Segment N4 — Segment N4 begins at the intersection of segments L4, M4, N4, and Substation Site 2-6, located southeast from the intersection of Ronald Reagan Bivd, and Hero Way. The segment proceeds southwest for approximately 20, 20 mile while paralleling the west side of Pix 2243. The termination of Segment N4 is at the paralleling the west side of Pix 2243. The Segment O4 — Segment O6 begins at the cinetasction of segments N, N4, and O4, located northeast from the intersection of segments R, N4, and O4, located northeast from the intersection of Ronald Reagan Bivd, and Pix 2243. The segment proceeds east for approximately .04 mile, crossing Fix 2243. The termination of Segment O4 is at the intersection of segments T, O4, P4, and R4.

Segment Pd.—Segment Pd begins at the intersection of segments V, Pd, and Qd, located northeast from the intersection of Ronald Reagan Blvd, and FM 2243. The segment proceeds northeast for approximately, O4 mile, crossing Sam Bass Road. The termination of Segment Pd is at the intersection of segments T, O4, Pz, and R4.

Segments T, O4, Pz, and R4.

Segments TQA—Segment Q4 begins at the intersection of segments O, R, and Q4, located northeast from the intersection of Roads. The segment proceeds east for approximately O4 mile, crossing FM 2243. The segment proceeds east for approximately O4 mile, crossing V, Pt, and Q4.

Segment G5 — Segment G5 begins at the intersection of sequents V1, L5, G5, and H5, located southeast from the intersection of Sequents V1, E5, G5, and H5, located southeast from the intersection of Ronald Reagan Bivd, and Journey Parkway. The segment proceeds southeast for approximately 10 mile, crossing Brushy Creek. The termination point of Segment G5 is at the intersection of segment H5 — Segment H5 begins at the intersection of segments V1a, E5, G5 and H5, located southeast from the intersection of Ronald Reagan Bivd. and Journey Parkway. The segment proceeds southeast for approximately .03 mile. The termination point of Segment H5 is at the intersection of segments V1, W1, X1, and H5.

t the intersection of segments S, M4, and R4.

jment S4 — Segment S4 begins at the intersection of segments K, L5,
184, located southwest from the intersection of Ronald Reagan Blvd,
184no Way, The segment proceeds southeast for approximately 40 mile
lie paralleling the west side of Ronald Reagan Blvd. The termination of
ment S4 is at the intersection of segments S4, A6, and C6.

ment R4 — Segment R4 begins at the intersection of segments T₁ O4, and R4, Cated northeast from the intersection of Ronald Reagan Blvd. FM 2244. The segment proceeds northeast for approximately .20 mile to paralleling the east side of FM 2243. The termination of Segment R4, the intersection of segments S, M4, and R4.

Phe termination of Segment IS is at the intersection of segments 15, jS and XS.

Segment 15 — Segment 15 begins at the intersection of segments A1, 15, and A1.

In and P15 located northwest from the intersection of segment A1, 15, and A1.

Road. The segment proceeds southeast for approximately. 70 mile. The termination of Segment JS is at the intersection of segments 15, JS, and XS.

Segment KS — Segment XS begins at the intersection of segments 15, JS, and XS. Incated northwest from the intersection of segments 15, JS, and XS. Incated northwest from the intersection of segments 15, JS, and XS. Incated northwest from the intersection of segments 15, JS, and XS. Incated northwest from the intersection of segments 15, JS, and XS. Incated northwest in a southerly direction for approximately. 3B mile. It continues in a southerly direction for approximately 3D mile. It then angles southeast for approximately 3D mile. It then angles southeast for approximately 3D mile. It the angles southeast for approximately 3D mile. It the angles southeast for approximately 3D mile. The segment 15 is and 15.

Segment 15 — Segment 15 begins at the intersection of Segment XS is at the intersection of Segment XS is at the intersection of Segment XS and 15.

Segment MS is at the intersection of Segments U1, B2, and 15.

Segment MS and NS, located northwest from the intersection of Segment U2, W2, W2, M3, and M5.

Segment MS and NS, located northwest from the intersection of Segments V2, M2, and M3.

N2, M5, and N3.

the intersection of segments W, Y, arsection of PM 2243 and Sam Bass it for approximately .10 mile. The tresection of segments X, T4, and

agment T4 — Segment T4 begins at the in nd T4, located southeast from the intersecti and. The segment proceeds southeast for runination of Segment T4 is at the intersec ibstation Site 2-3,

Segment U4 — Segment U4 begins at the intersection of segments U4, V4, and H6, located southeast from the intersection of FM 2243 and Ronald Reagan Bivd. The segment proceeds southeast for approximately .20 mile while pratelling the east side of Ronald Reagan Bivd, crossing Brushy Creek. The termination of Segment U4 is at the intersection of segments O, U4, and Substation Site 2-4.

Segment NG — Segment NS begins at the intersection of segments U2, W2, W2a, M5, and N5, located northeast from the intersection of Snn Bass Road and The Outer Avenue, The segment proceeds north-northeast for approximately, 60 mile and then angles to the northeast for approximately, 50 mile. It then angles southeast for approximately, 32 mile. The termination of Segment NS is at the intersection of segments V2, M5, and M3.

Y2, Z2, and O5, located northeast from the intersection of segments W2, Y2, Z3, and O5, located northeast from the intersection of Snn Bass Road and RM 431/East Whittstone BNd. The segment proceeds northeast for approximately, 04 mile while paralleling the north side of FM 1431/East Whitestone Blwd. The segment O5 is at the intersection of segments W2a, O5, and Q5.

Segment P5 — Segment P5 begins at the intersection of segments Z2, A43, and P5, located northeast from the intersection of Sam Basas Road and FM 1431/East Whitestone Bivd. The segment proceeds northeast for approximately, O4 mile while paralleling the south side of FM 1431/East Whitestone Bivd. The termination of Segment P5 is at the intersection of segments A3a, B3, P5, and Q5. Segment W — Segment V4 begins at the intersection of segments U4, V4, and H6 located southeast from the intersection of FM 2243 and Ronald Reagan BWd. The segment proceeds eart-southeast for approximately 46 mile and then angles southeast from the intersection of FM 2243 and Ronald Reagan BWd. The segment proceeds eart-southeast for approximately .19 mile. The segment angles east-southeast for approximately .15 mile. The segment angles east-southeast for approximately .15 mile. The termination of Segment W4 - Segment W4 begins at the intersection of Segment X1, and W4, located southeast from the intersection of FM 2243 and Sam Bass Road of Segment W4 is at the intersection of segments I1, V4, W4, and X4.

Segment X4 - Segment X4 begins at the intersection of segments I1, V4, W4, and X4.

Segment X4 - Segment X4 begins at the intersection of segments I1, V4, W4, and X4.

Segment X4 - Segment Y4 begins at the intersection of segments I1, V4, V4, and X4.

Segment X4 - Segment Y4 begins at the intersection of segments X4.

Segment Y4 - Segment Y4 begins at the intersection of segments X4.

Segment Y4 - Segment Y4 begins at the intersection of segments X4.

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Segment Y4 - Segment X4 begins at the intersection of segments X4.

Segment Y4 - Segment X4 begins at the intersection of segments X4.

Segment Y4 - Segment X4 begins at the intersection of segments X4.

Segment Y4 - Segment X4 begins at the intersection of segments X4.

Segment X4 located southeast for approximately .20 mile while puralleling the north side of CR 117. The termination of Segment X4, and A5.

Segment proceeds southeast for approximately .10 mile will be puralleling the north side of CR 117. The termination of Segment X4, and A5.

Segment X4 located west from the intersection of Segments X4, X4, and A5.

Segment x4 located west from the intersectio

Segment GG – Segment QS begins at the intersection of segments W2a, OS, and QS, located northeast from the intersection of Sam Bass Read and FM 1431/East Whitestone BNd. The segment proceeds southeast for approximately 10 mle, crossing M4.131/East Whitestone BNd. The termination of Segment Q5 is at the intersection of segments A3a, BS, and QS.

Segment R5 — Segment R5 begins at the intersection of segments A3a, B3a, and BS, located southwest from the intersection of 1-35 and FM 1431/East Whitestone BNd. The segment Proceeds southeast for approximately 04 mile. The termination of Segment R5 is at the intersection of segments A3, DS, R3, and RS.

Segment B5 — Segment B5 begins at the inter C5, and D6, located northwest from the inter and Journey Parkway. The segment proceeds in 40 mile, crossing Brushy Creek. The terminal intersection of segments L1, A5, and B5.

Segment 55 — Segment S5 begins at the intersection of segments B4a, D4, F4a, and S5, located south from the intersection of Sam Bass Road and Hairy Man Road. The segment proceeds southwest for approximately J04 mille. The termination of Segment S5 is at the intersection of segment B4, R4, and S5. Segment C5 — Segment C5 begins at the intersection of segments K1, B5, C5, and D6, located northwest from the intersection of Sam Bass Road and Interpretation of Sam Bass Road and milet are awayer. The segment proceeds southeast for approximately, 21 milet. It then awayer southwest for approximately 06 mile and then angles southeast for approximately 04 mile. The termination of Segment C5 is at the intersection of segments M1, C5, and D5.

Segment W5 is at the intersection of segments AA, D2, and V5, V5, and W5, located northwat from the intersection of segments T1, V5, and W5, located northwat from the intersection of Sam Bass Road and Interlocated northwat from the intersection of Sam Bass Road and Interlocated so to the available of Segment W5 is and substation of Segment W5 is at the intersection of segment W5, E6, and Substation Site 1.4.

Segment X5 — Segment X5, E6, and Substation Site 1.4.

Segment X5 — Segment X5 begins at the intersection of segments E, X5, and X5, located orthwest from the intersection of Segments E, X5, and X4. The segment proceeds northeast for approximately 70 mile, crossing US Hwy 183A and CR 269. The termination of Segment X5 is at the intersection of Segment X5 is and X5.

Segment Y6 — Segment Y6 organis at the intersection of segments E, X5, and X5, located onothwest from the intersection of segments Z, Coetal The segment proceeds southeast for approximately 20 mile while paralleling the west side of US Hwy 183A, crossing PM 2243 and Brishy Creek. The termination of Segment Y5 is at the Intersection of segments B, I, G, and Y5.

Segment Z5 – Segment Z5 begins at the intersection of segments J, X5, and Z54. Iocated northeast from the intersection of US Hwy 183A and FM Z543. The segment proceeds southeast for approximately 10 mile. The termination of Segment Z5 is at the intersection of segments Z5. A6, and B6. Segment A6 begins at the intersection of segments Z5. A6, and B6. Segment A6 begins at the intersection of segments Z5. A6, and B6. Locate northeast from the intersection of US Hwy 183A and termination of Segment A6 is at the intersection of segments 25, A6, and 26. Locate northeast from the intersection of segments Z5, A6, and C6. Segment B6 begins at the intersection of tegments Z5, A6, and B6. Locate northeast from the intersection of US Hwy 183A and FM Z434. The segment proceeds southeast for approximately 20 mile. It the furne asset-outheast for approximately 20 mile. It the furne asset-outheast for approximately 20 mile in the mersection of segments G, I, and B6.

Segment G.—Segment Cobegins at the intersection of segments 34, A6, and C6, located southwest from the intersection of Ronald Reagan Bivd. and Hard Way. The segment proceeds southeast for approximately 20 mile while paralleling the west side of Ronald Reagan Bivd. The termination of Segment C6 is at the intersection of segments L, M, C6, and F6.

Segment C6 is at the intersection of segments L, M, C6, and F6.

Segment D6—Segment D6 begins at the intersection of segments Z4, D6, and C8 LT7. The segment proceeds southeast from the intersection of Sam Bass Road and CR 177. The segment proceeds southeast for approximately 30 mile, crossing Brushy Creek. The termination of Segment D6 is at the intersection of segments K1, B5, C5, and D6.

Segment E6 — Segment E6 begins at the intersection of segments V E6, and Substation Sife 1-8, located north from the intersection of S Bass Road and The Outer Avenue. The segment proceeds northeast pproximately ...27 mile and then turns northwest for approximals 38 mile. It then turns northeast for approximately 1.55 miles, cross Dyr Pork Creek. The termination of Segment E6 is at the intersection segments B1, U5, and E6.

gment F6 — Segment F6 begins at the intersection of segments I., M, and F6, located northead morthead from the intersection of FM 2243 and Ronald agan Blvd. The segment sproceeds southeast for approximately. 20 mile swing FM 2243 with spranleling the were side of Ronald Reagan Blvd. et ermination of Segment F6 is at the intersection of segments F6, G6, dishistation Site 2.8.

Segment G6 — Segment G6 begins at the intersection of segments F6, G6, and Substation Site 2-8, located south from the intersection of FM 224's and Konald Reagan Blvd. The segment proceeds northeast for approximately, 10 mile, crossing Ronald Reagan Blvd. The termination of Segment G6 is at the intersection of segments N, G6, and H6.

Leander-Round Rock 138-kV Transmission Line Project

Primary Alternative Route Segments

Project Components

Primary Alternative Route Segment and Label

RECOT Approved Project Endpoint

Primary Substation Siling Area

Primary Substation Alternative

Study Area Boundary

Existing Utilities

Transportation 1431 Farm to Market Ro. Major Road

Inset Locations

POWER ENGINEERS **B**

Segment 15 — Segment T'S begins at the intersection of sam Bass Road and TS, located southeast from the intersection of Sam Bass Road and Histy Man Road. The segment proceeds north for approximately of mile while paralleling the west side of an existing transmission line. It then turns northeast for approximately 30 mile while paralleling the north side of an existing transmission line. It then turns contrast to a secting transmission line. It then the existing transmission line. The intersection of Segment TS is at the intersection of Segment TS is at the

ment V5 — Segment V5 begins of W5, located northwest from the let Avenue. The segment proceeds

intersection of segments N, G6, and HS.

Segment M. — Segment HG begins at the intersection of segments N, G6, and HS, located southeast from the intersection of FM 2243 and Roand Reagan Blvd. The segment proceeds southeast for approximately 1.0 mild reagan Blvd. The segment proceeds southeast for approximately 1.0 mild reagan Blvd. The segment proceeds southeast for approximately 1.10 mild Segment H6 is at the intersection of segments U4, 44, and HG.



Kirk D. Rasmussen Direct: (512) 615-1203 krasmussen@enochkever.com

April 28, 2016

Via Hand Delivery

Ms. Julie Wicker Wildlife Habitat Assessment Program Wildlife Division Texas Parks and Wildlife Department 4200 Smith School Road Austin, TX 78744-3291

Re:

PUC Docket No. 45866 – Application of LCRA Transmission Services Corporation to Amend Its Certificate of Convenience and Necessity for the Proposed Round Rock – Leander 138-kV Transmission Line Project in Williamson County, Texas

Dear Ms. Wicker:

On Thursday, April 28, 2016, LCRA Transmission Services Corporation ("LCRA TSC") filed with the Public Utility Commission of Texas ("Commission") the above-referenced application to amend its Certificate of Convenience and Necessity ("CCN") to construct a new 138-kV transmission line in Williamson County, Texas. As you are aware, the Commission's CCN application requires that we provide for review and comment a copy of the project environmental assessment ("EA") to Texas Parks and Wildlife Department ("TPWD") within seven days after the application is filed. Accordingly, enclosed with this letter is a copy of the EA prepared for the referenced project as well as a complete copy of LCRA TSC's CCN application filed at the Commission. The CCN application also requires that a copy of this transmittal letter be included with the project application. You will find a copy of this letter included as Attachment 14 to the filed application.

Under the traditional CCN process, TPWD typically provides the Commission Staff with comments about the application. On behalf of LCRA TSC, and as we have requested in past CCN cases, I would also appreciate receiving a copy of any comments TPWD may choose to provide to Commission Staff. You may send those comments to me at the address shown below. Of course, LCRA TSC reserves the right to inquire into the basis of any comments or recommendations TPWD may choose to submit in this contested case, but I am certain the appropriate arrangements can be made for that inquiry if the necessity arises.

Ms. Julie Wicker April 28, 2016 Page 2 of 2

Finally, it has been LCRA TSC's practice to provide TPWD staff with a briefing of the CCN application and the accompanying EA. To that end, Mr. Christian Powell and I would appreciate the opportunity to visit with you and your staff at your earliest convenience. If you have any questions about the EA please feel free to contact me at (512) 615-1203.

Sincerely yours,

Kirk Rasmussen Enoch Kever PLLC

Enc: CCN Application including EA for the Leander-Round Rock Project

cc: Mr. Todd George, Texas Parks and Wildlife Department w/o enc.

Mr. A.J. Smullen, Public Utility Commission of Texas w/o enc. Ms. Karen Hubbard, Public Utility Commission of Texas w/o enc.

Mr. John Poole, Public Utility Commission of Texas w/o enc.

Mr. Rob Reid, POWER Engineers, Inc. w/o enc.

Mr. Christian Powell, LCRA TSC w/o enc.