Lower Colorado River Authority

FISCAL YEAR 2016 BUSINESS AND CAPITAL PLANS



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These business and capital plans present a long-term vision and summary of operational plans for LCRA and its nonprofit corporations. The business and capital plans should not be used as a basis for making a financial decision with regard to LCRA or any of its securities or other obligations. These business and capital plans are intended to satisfy the official intent requirements set forth in Section 1.150-2 of the IRS Treasury Regulations. For more complete information on LCRA and its obligations, refer to LCRA's annual financial report, the official statements relating to LCRA's bonds, and the annual and material event disclosures filed by LCRA with nationally recognized municipal securities information repositories and the State Information Depository pursuant to Rule 15c2-12 of the U.S. Securities and Exchange Commission. The information in this report and within each of the documents referred to applies only as of the report's date. The business and capital plans include forecasts based on current assumptions used for planning purposes only and are subject to change. Copies of the documents referenced in this report may be obtained from Stephen Kellicker, manager of Financial Planning, LCRA, 3700 Lake Austin Blvd., Austin, TX 78703.



LCRA's Mission

To enhance the quality of life of the Texans we serve through water stewardship, energy and community service.



Enhancing the Lives of Texans

80 years of commitment

Since opening for business more than 80 years ago, the Lower Colorado River Authority has been committed to enhancing the lives of the Texans we serve.

LCRA serves customers and communities throughout Texas by managing the lower Colorado River; generating, delivering and transmitting electric power; ensuring a clean, reliable water supply; and offering access to nature at more than 40 parks, recreation areas and river access sites along the Texas Colorado River from the Hill Country to the Gulf Coast.

LCRA's commitment to enhancing the lives of Texans has remained constant through our history, even as the challenges we face have become more complex and the markets in which we compete have become increasingly competitive. As we noted in LCRA's 2015 business plan, we remain committed to listening to our customers and working to earn their business each and every day.

Serving Texans through smart, value-driven execution

Last year, responding to customer needs, we identified \$148 million in rate relief for our Wholesale Power customers over five years – relief that already is being implemented. In this 2016 business plan, we have identified an additional \$160 million in rate relief over the next five years through debt refinancing, debt retirements, operational efficiencies and fuel management. Together, that's more than \$300 million we expect to benefit our Wholesale Power customers' pockets over five years.

Cutting costs alone will not allow LCRA to achieve our mission of enhancing the lives of the Texans we serve. To be successful in continuing to meet the needs of Texans now and in the future, LCRA cannot be satisfied with the status quo. As Texas grows, so too must LCRA to meet the needs of our current and future customers.



Enhancing the Lives of Texans

Powering the growth of Texas

This business plan identifies the foundational goals and strategies by which LCRA will increase revenues through an expansion of our customer base and a broadening of the services we provide, while minimizing costs through the smart and efficient execution of our operations. In planning for fiscal year 2016, for example, LCRA instituted zero-based budgeting for nonlabor expenses. This allowed LCRA to look at expenses with a fresh eye and build nonlabor budgets from scratch to best meet our business needs and provide exceptional service to our customers.

LCRA is working to grow our Wholesale Power customer base, both in our traditional service area and through our newly rebranded marketing nonprofit corporation WSC Energy, which can sell power anywhere outside of LCRA's traditional service area. Increasing the number of customers brings in new revenue that supports LCRA's operations, including parks, dams and other mission-driven functions. Growing our Wholesale Power business also enables LCRA to spread our fixed costs over a larger customer base, which helps keep down the rate for LCRA customers. LCRA Transmission Services Corporation also is growing its business. In the next five years, LCRA TSC is planning to invest more than \$918 million to build new transmission facilities and improve existing ones. These projects help make electric service in Texas more reliable and support the growing number of customers throughout the state.

LCRA is working diligently to increase water supplies for a growing region in the midst of a severe drought. LCRA also is exploring innovative ways to increase the services we offer at our parks and recreation areas, looking for ways to eventually make these services financially selfsufficient while enhancing the experience for visitors exploring these beautiful sites.

In these "Fiscal Year 2016 Business and Capital Plans," we have mapped out a clear path to continue our success in serving our customers and the people of Texas.



LCRA's Goals and Strategies

LCRA

<u>Goal:</u> While minimizing costs for our customers, grow our business and increase revenue.

Wholesale Power

<u>Goal:</u> Provide our wholesale electric customers with reliable, low-cost power within a sustainable Wholesale Power business.

Strategies:

- Maximize the net margin of LCRA's generating units while providing reliable power safely.
- Maintain and improve operational excellence throughout Wholesale Power.
- Minimize the fluctuations of the wholesale fuel rate component.
- Implement these strategies while complying with all applicable laws, rules and regulations.
- Grow the Wholesale Power business by helping our existing customers gain more load and acquiring new customers outside of LCRA's traditional electric service territory through WSC Energy.

Transmission

<u>Goal:</u> Provide safe, reliable, environmentally responsible and cost-effective transmission services throughout the state of Texas.

Strategies:

- Ensure the transmission system is properly planned, designed, engineered and constructed to safely and reliably serve existing and new, increasing demands for electricity statewide and improve the efficiency of Electric Reliability Council of Texas market operations.
- Achieve targeted levels of system availability, performance and efficiency.
- Grow the LCRA TSC business, including serving Texans through viable statewide transmission products and services both inside and outside LCRA's traditional electric service area.
- Manage costs to avoid the need for a transmission cost of service rate case for the foreseeable future.
- Perform financially at or better than budget for debt service coverage.



LCRA's Goals and Strategies

Water

Goal: Increase and preserve the region's water supplies.

Strategies:

- Continue expanding the region's water supplies, including constructing the Lane City Reservoir and identifying additional future water development opportunities.
- Minimize costs to customers for new sources of water supply by pursuing low-cost, innovative measures including grants and loans – to pay for new water supplies.
- Preserve the region's water supplies through the current drought as necessary by working with the Texas Commission on Environmental Quality and customer groups on measures such as:
 - Efficiently managing LCRA's available water supplies in the Highland Lakes and the Colorado River.
 - o Obtaining emergency relief or temporary authorizations as needed to protect and prolong available supplies.
 - Identifying and pursuing action against those who take water from the Highland Lakes or lower Colorado River without a valid contract or other legal authorization.
- Maintain and continue investing in LCRA's system of dams to ensure their continued safe and effective operation, which is critical for water supplies in the basin.
- Continue LCRA's focus on water conservation with programs such as:
 - \circ Teaming with municipal customers on cost-sharing grants for conservation projects.
 - \circ Providing irrigation evaluations for domestic water users.
 - o Providing technical assistance and review of customer water conservation and drought contingency plans.



LCRA Financial Summary

• Debt service coverage, a widely used measure of financial performance, is forecast to be 1.22x in FY 2016.

- The lower-than-normal coverage is temporary and reflects the loss of billing units from terminated customers.
- Debt service coverage is projected to strengthen into the mid-1.30x range in the remaining years of the plan.
- Improved debt service coverage reflects a continued focus on reducing debt and managing costs for long-term financial strength.

Note: GenTex 1 is the original 250-megawatt portion of the Lost Pines 1 Power Project from which energy is sold directly to wholesale electric customers.



Budgeted		Proposed		Fore	cast	
F	Y 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
\$	1,074.2	1,012.4	930.2	958.3	1,001.2	1,011.6
	325.6	288.9	224.2	232.1	255.6	268.9
	282.5	281.5	284.7	295.0	300.6	302.9
i.	466.1	442.0	421.3	431.1	445.1	439.8
	(2.0)	0.0	(1.3)	(2.1)	(0.3)	(0.5)
	464.0	442.0	419.9	429.0	444.8	439.3
\$	346.6	361.9	308.3	325.0	332.4	329.1
	1.34x	1.22x	1.36x	1.32x	1.34x	1.34x
\$	119.5	80.1	113.0	106.1	112.8	110.7
	F \$ \$	FY 2015 \$ 1,074.2 325.6 282.5 466.1 (2.0) 464.0 \$ 346.6 1.34x	FY 2015 FY 2016 \$ 1,074.2 1,012.4 325.6 288.9 282.5 281.5 466.1 442.0 (2.0) 0.0 464.0 442.0 \$ 346.6 361.9 1.34x 1.22x	FY 2015 FY 2016 FY 2017 \$ 1,074.2 1,012.4 930.2 325.6 288.9 224.2 282.5 281.5 284.7 466.1 442.0 421.3 (2.0) 0.0 (1.3) 464.0 442.0 419.9 \$ 346.6 361.9 308.3 1.34x 1.22x 1.36x	FY 2015 FY 2016 FY 2017 FY 2018 \$ 1,074.2 1,012.4 930.2 958.3 325.6 288.9 224.2 232.1 282.5 281.5 284.7 295.0 466.1 442.0 421.3 431.1 (2.0) 0.0 (1.3) (2.1) 464.0 442.0 419.9 429.0 \$ 346.6 361.9 308.3 325.0 1.34x 1.22x 1.36x 1.32x	FY 2015 FY 2016 FY 2017 FY 2018 FY 2019 \$ 1,074.2 1,012.4 930.2 958.3 1,001.2 325.6 288.9 224.2 232.1 255.6 282.5 281.5 284.7 295.0 300.6 466.1 442.0 421.3 431.1 445.1 (2.0) 0.0 (1.3) (2.1) (0.3) 464.0 442.0 419.9 429.0 444.8 \$ 346.6 361.9 308.3 325.0 332.4 1.34x 1.22x 1.36x 1.32x 1.34x

Revenues and expenses are net of intracompany transfers. Revenues include interest income. Expenses exclude the LCRATSC capital charge, which is a capital expense for LCRA consolidated.

² Includes adjustments related to GenTex 1 capital funding and reserve funding.

³GenTex 1 capital funding and reserve funding are available after debt service and used for that purpose.



Compensation and Benefits

Compensation and benefits are key drivers of LCRA's budget.

- Budgeted positions for FY 2016 are 1,838, an increase of 24 positions (1.3 percent) from the FY 2015 budget.
- Transmission is the driver of the increase in positions, adding 25 new positions to respond to the growth of our customers and the transmission business. Positions in LCRA – excluding Transmission – decreased by one.
- Transmission added positions to expand the existing construction line, substation and support functions. These costs will be recovered through interim capital additions and customer service revenue.
- FY 2016 labor costs reflect additional positions in Transmission and some interdepartmental personnel reassignments.



Performance awards and market adjustments:

- In FY 2016, LCRA will fund performance awards with savings achieved through operational efficiencies and new revenue generation.
- FY 2017 budgets a 4 percent increase to labor costs for performance awards and market adjustments.
- FY 2018 through FY 2019 assume a flat labor budget, with an additional 4 percent increase planned in FY 2020.



LCRA Consolidated Debt Service

LCRA recently refinanced more than \$200 million of debt, resulting in substantial savings to debt service.





Wholesale Power – Debt and Capital

LCRA will manage costs and increase revenue.

- FY 2016 includes a March 2015 debt refinancing that lowers annual debt service and debt service coverage costs.
- The business plan includes lower capital spending than budgeted in prior years, and a greater percentage of the capital spending will be funded with cash.
- LCRA will manage annual outage costs and timing to minimize rate impacts and maximize the value of LCRA's generation resources.



FY 2017

Revenue-funded

FY 2018

FY 2019

Third party/proceeds-funded



FY 2020

FY 2015

Debt-funded

FY2016

Wholesale Power – Financial Summary

The effects of recent litigation and the loss of billing units cause a temporary drop in debt service coverage; the temporary drop is not the result of any operational issue.

Financial summary:

- Debt service coverage is temporarily below 1.25x due to the effects of terminated customers.
- Settlement funds and reserves are being used to fund cash needs (e.g., revenuefunded capital).
- Debt service coverage is forecasted to return to 1.25x by FY 2018.

(Dollars in millions)	Budgete	d Proposed		Forecast					
	FY 201	5 FY 2016	FY 2017	FY 2018	FY 2019	FY 2020			
Revenues									
Nonfuel Revenues	\$ 328	.3 285.3	253.7	260.5	264.2	252.8			
Fuel Revenues	325	6 288.9	224.2	232.1	255.6	268.9			
Total Revenue	653	.8 574.2	477.9	492.6	519.7	521.7			
Expenses									
Net F&PCR ¹ Expenses	325	6 288.9	224.2	232.1	255.6	268.9			
Total Nonfuel Operations and Maintenance	97	.1 88.3	85.7	92.3	93.3	87.4			
Total Expense	422	.7 377.2	309.9	324.4	348.9	356.3			
Net Operating Margin	231	.2 197.0	168.0	168.2	170.8	165.4			
Plus: Interest Income	0	6 0.9	2.4	4.9	6.0	6.1			
Less: Assigned Enterprise Expense	31	2 26.8	26.8	27.1	27.5	28.5			
Public Service Fund	11	.2 10.5	8.5	8.7	8.9	8.6			
Net Margin Available for Debt Service	189	.3 160.6	135.1	137.3	140.5	134.3			
Less: GenTex Funds ²	(2	.0) 0.0	(1.3)	(2.1)	(0.3)	(0.5			
Adjusted Net Margin Available for Debt Service	187	.3 160.6	133.8	135.2	140.2	133.8			
Debt Service	\$ 160	.2 158.4	108.8	108.2	112.1	107.1			
Debt Service Coverage	1.1	7x 1.01x	1.23x	1.25x	1.25x	1.25			
Plus: Settlement and Cash Reserves	13	.0 45.1	9.6	0.0	0.0	0.0			
Adjusted Debt Service Coverage	1.2	5x 1.30x	1.32x	1.25x	1.25x	1.25			

¹F&PCR = fuel and power cost recovery.

² Includes adjustments related to GenTex 1 capital funding and reserve funding.

Note: Includes GenTex Power Corporation.



Transmission – Billing Units

Transmission's billing unit is the four month coincident peak (4CP) in the ERCOT market.

Transmission billing units:

- 4CP is the average of the peak ERCOT electrical demands (measured in kilowatts) during the months of June, July, August and September of the previous calendar year.
- The Public Utility Commission of Texas (PUC) averages these four ERCOT system peaks each year to establish a 4CP for the following calendar year.
- 4CP is forecast to grow between 1 and 2 percent per year across ERCOT.



Note: One megawatt equals 1,000 kilowatts.



Transmission – Capital and Rates

Growing the transmission system to meet customer needs:

- LCRA TSC plans to spend about \$918 million over the five-year planning period on capital projects to support the needs of the ERCOT and LCRA TSC systems.
- LCRA plans to spend an additional \$34 million over the five-year plan for tools and equipment, bringing the total to about \$952 million.
- LCRA TSC plans to recover about \$759 million of capital expenses for projects that are completed and energized through interim capital addition (ICA) filings in FY 2016 and FY 2019.
- LCRA TSC plans to recover costs associated with additional projects once they are completed and energized beyond FY 2020.







Transmission – Financial Summary

Financial summary:

- The Transmission financial summary includes both the regulated transmission corporation, LCRA TSC, as well as unregulated customer services.
- Transmission plans to increase unregulated customer service work.
- To support these plans, Transmission will expand its construction line, substation and support functions, adding staff and equipment needed to increase its current capacity to construct facilities for LCRA TSC and provide customer services.
- Transmission plans to manage costs to maintain its debt service coverage ratios between 1.30x and 1.37x.

(Dollars in millions)		dgeted	Proposed	Forecast					
	F	(2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020		
LCRA Transmission Services Corporation									
Revenues	\$	370.4	387.4	395.6	400.5	411.3	417.9		
Operations and Maintenance		82.8	90.2	94.4	99.3	102.8	106.7		
Net Operating Margin		287.6	297.2	301.2	301.2	308.5	311.2		
Transmission Customer Services									
Revenues		4.5	10.4	11.3	12.3	13.3	13.5		
Operations and Maintenance		3.5	7.6	7.8	8.0	7.7	7.9		
Net Operating Margin	<u> </u>	1.0	2.8	3.5	4.3	5.6	5.6		
Total Transmission									
Revenues		374.9	397.8	406.9	412.8	424.6	431.4		
Operations and Maintenance	11	86.3	97.8	102.2	107.3	110.5	114.6		
Net Operating Margin	10	288.6	300.0	304.7	305.5	314.1	316.8		
Plus: Interest Income		0.4	0.7	2.5	5.3	6.4	6.6		
Less: Assigned Enterprise Expense		39.2	42.9	42.4	42.8	43.4	45.1		
Public Service Fund		11.3	11.9	12.2	12.4	12.7	12.9		
Resource Development Fund	16	7.4	8.0	8.1	8.3	8.5	8.6		
Net Margin Available for Debt Service		231.1	238.0	244.5	247.4	255.8	256.8		
Debt Service	\$	163.1	179.4	177.9	190.3	192.7	195.4		
Debt Service Coverage		1.42x	1.33x	1.37x	1.30x	1.33x	1.31		



Water – Billing Units and Rates

- LCRA will hold the firm water rate flat at \$175 per acre-foot through the December 2016 billing period.
- Lane City Reservoir costs are excluded from the firm water rate.

projects at the Mansfield and Buchanan

water supply dams.



Note: Water supplies managed by LCRA are divided into firm and interruptible water. Firm water is available even during a severe drought. During water shortages, interruptible water is cut back or cut off.



Water - Capital

Paying for dam rehabilitation capital projects:

- LCRA plans to spend \$41 million on dam rehabilitation projects over the next five years.
- The scope of these projects will be to inspect and rehabilitate the dams. These are critical improvements that protect the public and the existing water supply.
- As inspections continue, the costs to rehabilitate the dams could increase.
- LCRA will issue debt to pay for these projects and recover the costs in the firm water rate.

Paying for new water supply capital projects:

- LCRA plans to spend \$38 million over the next five years for new water supply projects prior to the construction phases (e.g., permitting, engineering, etc.).
- LCRA will fund these projects from firm water revenue.
 - When water is available for sale to interruptible customers, LCRA will split any excess firm revenue: 50 percent will fund new water supply projects and 50 percent will benefit firm customers (e.g., through credits or a stabilization fund).



Note: Other capital projects include capital for irrigation, Environmental Lab and minor capital needs for Water.



Water - Lane City Reservoir

- The Lane City Reservoir is currently under construction and will yield about 90,000 acre-feet per year when completed in calendar year 2017.
- This reservoir is funded independent of firm water rates.





Water – Financial Summary

Financial	summary:
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 Annual debt service includes the Texas Water Development Board (TWDB) Lane City Reservoir debt.

 Debt service coverage is below 1.0x because the funding for the reservoir is not part of Water revenues.

(Dollars in millions)	Bu	dgeted	Proposed	Forecast					
	F١	Y 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020		
Water Revenues									
Firm Water	\$	26.6	28.2	28.9	30.2	30.3	30.6		
Agricultural		8.6	4.3	4.4	4.6	4.7	4.9		
Other	1996	11.9	8.8	9.1	9.6	10.8	11.4		
Total Water Revenues		47.1	41.4	42.5	44.4	45.9	46.9		
Operations and Maintenance		21.8	18.3	20.6	21.0	21.7	22.8		
Net Operating Margin		25.3	23.1	21.9	23.4	24.2	24.1		
Plus: Interest Income		0.0	0.0	0.2	0.4	0.5	0.5		
Less: Assigned Enterprise Expense		5.7	6.1	6.0	6.1	6.2	6.4		
Public Service Fund		1.3	1.4	1.4	1.5	1.5	1.5		
Net Margin Available for Debt Service		18.3	15.7	14.7	16.3	17.0	16.7		
Debt Service	\$	18.4	18.9	17.3	21.7	22.8	22.0		
Debt Service Coverage		0.99x	0.83x	0.85x	0.75x	0.75x	0.76x		
Plus: Resource Development Fund		12.7	11.6	12.3	16.0	16.1	16.2		
Debt Service Coverage Adjusted	1	1.68x	1.44x	1.56x	1.49x	1.46x	1.49x		

Note: The Water financial summary includes water and wastewater utilities, which LCRA is phasing out due to the divestiture of the assets.



Enterprise Support

Enterprise costs consist of essential functions that support business operations across all of LCRA.

Enterprise Support includes:	(Dollars in millions)	Bu	dgeted	Proposed		Fore	cast	
 Information Technology. 		F	Y 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
 ○ Facilities. 	Gross Enterprise Costs	\$	101.9	104.9	106.1	107.1	108.5	112.5
o Legal.	Total Revenue		(5.1)	(5.8)	(6.1)	(6.1)	(6.1)	(6.1)
o Financial.	Direct-Charged		(4.6)	(9.7)	(9.4)	(9.5)	(9.6)	(10.0)
○ Regulatory.	Net Enterprise Costs		92.2	89.4	90.7	91.5	92.8	96.4
o Others.	Cost Assignment							
	Wholesale Power - Nonfuel		31.2	26.8	26.8	27.1	27.5	28.5
	Wholesale Power - Fuel		1.8	0.9	1.0	1.0	1.0	1.0
Costs are direct-charged when	Transmission		39.2	42.9	42.4	42.8	43.4	45.1
specific services are performed	Water		5.7	6.1	6.0	6.1	6.2	6.4
for a product line.	Public Service Fund Activities		3.6	3.0	3.1	3.1	3.1	3.3
	Capital/Other		10.7	9.6	11.4	11.5	11.7	12.1
	Total	\$	92.2	89.4	90.7	91.5	92.8	96.4
 Most other costs are assigned based on a three-factor formula 	Capital Expenditures Revenue-Funded	\$	9.2	10.8	21.2	12.7	9.5	12.5
of assets, labor hours and	Debt-Funded	•	-		· · · ·	-	-	-
revenue.	Third Party/Proceeds-Funded		/	0.5		· .	-	-
	Total Capital	\$	9.2	11.3	21.2	12.7	9.5	12.5



Public Service Fund

LCRA uses the Public Service Fund (PSF) to fund statutory programs that do not fully recover their costs.

- Public Service Fund activities include:
 Parks.
 - o Natural science centers.
 - Natural resource protection.
- These services provide some revenue, but require annual support to cover the costs of operations, Enterprise Support and capital.
- The PSF includes \$1 million annually for the Community Development Partnership Program (CDPP).
- Fund sources include contributions from operations:
 - 3 percent from budgeted nonfuel Wholesale Power costs.
 - o 3 percent of total budgeted GenTex 1 revenue.
 - o 3 percent of total budgeted Transmission revenue.
 - 3 percent of budgeted Water revenue and 5 percent of Environmental Lab revenue.

(Dollars in millions)		Budgeted	Proposed		Fore	cast	
		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Revenue	\$	3.3	3.2	3.4	3.4	3.4	3.4
Total Operating Expense		16.0	16.1	16.4	16.5	16.6	17.1
Operating Funding Requirement	_	12.7	12.9	13.0	13.1	13.3	13.8
Capital Spending		2.2	2.2	2.5	2.2	2.3	2.1
Assigned Enterprise Capital		0.8	0.3	0.6	0.4	0.4	0.4
Reserves		0.0	0.0	0.1	0.0	0.0	0.1
CDPP		1.0	1.0	1.0	1.0	1.0	1.0
Total Funding Requirement	\$	16.7	16.4	17.2	16.7	16.9	17.4

(Dollars in millions)	Budgeted	Proposed		Foreca	ast	
Sources	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Public Service Funds	14 J V	14				
Generation	\$ 9.2	9.4	7.4	7.5	7.7	7.4
Less: Due from defaulting customers	(1.5)	4	-	-	-	-
GenTex Power Corporation	2.0	1.1	1.1	1.2	1.2	1.2
Transmission	11.3	11.9	12.2	12.4	12.7	12.9
Water	1.4	1.4	1.4	1.5	1.5	1.5
Subtotal	 22.5	23.8	22.1	22.6	23.1	23.1
Jses						
Public Service Activities	16.7	16.4	17.2	16.7	16.9	17.4
Water and Wastewater Utility Support	0.3	0.0	0.0	0.0	0.0	0.0
Environmental Lab Capital	0.0	0.8	0.0	0.0	0.0	0.0
Resource Development Fund	5.4	6.5	4.9	5.8	6.2	5.6
Subtotal	 22.5	23.8	22.1	22.6	23.1	23.1
Remaining PSF Funds	\$ 0.0	0.0	0.0	0.0	0.0	0.0



LCRA Capital Plan – by Status

- Approval of this capital plan authorizes the initiation of all recommended projects at their individually stated lifetime budgets as shown in the plan.
- Board approval of this plan also authorizes the proposed \$265 million budget for fiscal year 2016 capital spending, which includes \$111 million for recommended projects and \$154 million for projects the Board approved previously.

FY 2016-FY 2020 Capital Spending for Recommended, Approved and Future Projects LCRA Total (Including Austin Energy's Share and the City of San Marcos' Share) (Dollars in millions)

Status		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Five-Year Total	Lifetime
Recommended Projects	\$		111.2	141.2	63.0	57.4	1	372.7	372.7
Approved Projects	Ψ		153.7	129.4	100.7	23.5	8.0	415.2	1,038.2
Subtotal Recommended and Approved			264.8	270.6	163.7	80.9	8.0	788.0	1,410.9
Future Projects			-	114.1	151.4	149.9	203.8	619.2	735.5
Total FY 2016 Capital Plan			264.9	384.7	315.1	230.8	211.8	1,407.2	2,146.4
Less: Partners' Shares			1.0	2.5	0.8	1.5	0.7	6.4	17.9
LCRA's Share		-	263.9	382.2	314.3	229.3	211.0	1,400.7	2,128.5
Comparison to Previous Plan									
Total FY 2015 Capital Plan (with partners)) _	309.9	298.9	269.7	149.7	136.7		1,165.0	2,338.1
Difference*	\$	n/a	(34.0)	115.0	165.4	94.1	n/a	242.2	(191.7)

*Difference for five-year total is based on a rolling five-year comparison, i.e., FY 2016-2020 spending from the current plan compared to FY 2015-2019 from last year's plan.



LCRA Capital Plan – by Business

(Dollars in millions)

LCRA's share of the total FY 2016 capital budget for recommended and approved projects is \$264 million. LCRA estimates it will fund about 23 percent of that amount with revenue.

LCRA's share of the fiveyear total capital budget, including recommended, approved and future projects, is \$1.4 billion. LCRA estimates it will fund about 28 percent of that amount with revenue. FY 2016-FY 2020 Capital Spending for Recommended, Approved and Future Projects LCRA Total (Excluding Austin Energy's Share and the City of San Marcos' Share)

(Dollars in millions)							
		Budgeted	Proposed		Fore	cast	
		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
LCRA Capital Expenditures							
Revenue-Funded							
Wholesale Power and Nonprofit Corps.	\$	1.5	6.2	15.9	12.6	15.3	19.7
Transmission ¹		48.5	38.2	47.0	37.4	50.1	47.2
Water		0.8	2.6	2.8	4.6	4.2	4.1
Enterprise Support		9.2	10.8	21.2	12.7	9.5	12.5
Public Services		2.2	2.2	2.5	2.2	2.3	2.1
		62.3	60.0	89.5	69.6	81.4	85.6
Debt-Funded							
Wholesale Power and Nonprofit Corps.		25.1	- ·	. / ²	· ·	-	-
Transmission		119.9	132.7	171.0	162.9	142.5	122.8
Water		92.7	70.1	118.9	81.5	5.4	2.6
	1	237.7	202.8	289.9	244.4	147.9	125.4
Third Party/Proceeds-Funded							
Wholesale Power and Nonprofit Corps.		1.9	0.1	-	-	-	-
Transmission		1.3	- 10 -			-	
Water		3.8	0.5	2.8	0.4	-	-
Enterprise Support		-	0.5	-	-	-	-
		7.1	1.0	2.8	0.4	-	-
Total LCRA Capital	\$	307.1	263.9	382.2	314.3	229.3	211.0
	-						

¹ The Transmission consolidated capital table includes LCRA TSC capital spending and spending for transmission minor capital, which is used by LCRA TSC and transmission customer services.



LCRA Capital Plan – Approach

Capital Planning Approach

LCRA includes projects in the capital plan with the goal of ensuring LCRA can continue to offer its customers energy, water and public services in a reliable, competitively priced, environmentally responsible and safe manner. Each project undergoes a thorough review by LCRA's Asset Management work group and other staff members who separate the projects into three categories: recommended (projects that management has reviewed and recommended for Board approval); approved (projects the Board approved previously); and future (projects staff may recommend implementing within the next five years).

Staff does not submit future projects for Board approval at this time and includes them in this document only for strategic planning purposes. The cost and timing of future projects presented in this document could change. For this reason, LCRA repeats the capital planning process annually and updates the plan as necessary. LCRA will bring future projects back to the Board for approval.

Determining Need and Financial Analysis

Capital plan projects must support the goals of the business plan within financial parameters established by LCRA's Board and chief financial officer.

LCRA includes projects based on multiple factors, such as current and anticipated demand for LCRA's services and the need to maintain or build facilities or infrastructure to meet those demands. Other factors include compliance with applicable state or federal regulations, safety and security needs, potential for increased revenues, and better management and protection of natural resources.

Staff has rigorously reviewed and analyzed the recommended projects. The project criteria may vary but all will involve either a "payback period" test, net present value analysis or other analyses to ensure the project is the most cost-effective approach. Executive management reviews each project to ensure the project warrants funding and inclusion in the capital plan. When appropriate, affected customers and stakeholders have the opportunity to review and comment on the proposed project scope and budget.



Developing Project Estimates

LCRA staff develops project cost estimates using one of three estimating levels: preliminary, budgetary or final.

An estimate's accuracy is based on identifying the work and resources necessary to complete the project objectives. Cost estimates are revised and become more accurate as more information regarding the scope and deliverables is available.

The capital planning cycle involves these steps:

- Developing and refining a list of business needs based on planning criteria and asset owner input.
- · Defining the scope and approach necessary to address those needs.
- Performing business analyses and cost estimates to establish a proposed project budget and to evaluate affordability, economic viability and portfolio prioritization.
- Seeking approval of the capital plan to validate strategic direction, establish lifetime and fiscal year budgets, and allow business planning for the future.

LCRA generally recommends projects to the Board for approval using a budgetary estimate. LCRA may recommend some projects using preliminary estimates because of the timing in determining the specific technology that would be implemented. Projects recommended in this plan at a preliminary estimate are noted in the project description.

Regardless of the estimating level or the method used to generate the cost estimate, LCRA Board Policy 304 – Financial Planning and LCRA TSC Board Policy T304 – Financial Planning require LCRA and LCRA TSC to bring previously authorized projects to the Board for additional review and approval if staff expects the projects to exceed the Board-approved lifetime budget by 10 percent and \$300,000.

Project Prioritization

LCRA reviews and prioritizes its projects based on criteria that include safety, cost, reliability, competitiveness, environmental considerations and other factors. The appropriate executive reviews staff recommendations.



Project Prioritization (Continued)

Projects that are essential to ensure the continued reliable and cost-effective delivery of LCRA services, concern public safety (including loss of life or property), or limit interruption of services receive the highest priority. The highest priority projects could have substantial financial, health or safety impacts to customers or stakeholders. LCRA also assigns higher priority to projects with regulatory issues that may result in substantial financial impacts for noncompliance, projects already in progress that have a substantial cost to stop, and projects with contractual requirements that could have substantial financial financial impacts to LCRA.

Medium priority projects include those in progress that have a moderate financial impact associated with stopping them, or those that have contractual, regulatory or reliability issues that would have a moderate to minimal financial or health and safety impact to LCRA, customers and stakeholders.

A lower priority project is not unimportant to LCRA or to stakeholders. Staff may assign lower priority rankings to projects that have a more moderate monetary or stakeholder impact and would have minimal impacts to safety, the environment, contractual obligations or revenue if they were stopped or delayed.

Project Approval and Monitoring

LCRA brings each capital project recommended to begin in the next fiscal year to the LCRA Board for approval with this plan. Board approval authorizes projects and delegates the authority to LCRA's executives to release funds to execute the identified projects. Executives may authorize funding in stages or all at once for the entire project.

Project management staff provides to LCRA's executives quarterly capital project status reports on approved projects. Reports include cost variances, estimated completion dates, comparisons of work completed to budget spent, fiscal year spending forecasts and project estimates at completion compared to the current capital plan. The reports also highlight any significant changes to the capital program, including project cancellations, delays and budget-to-actual expenditures. From time to time, conditions change rapidly and may create a need for immediate action. In these cases, LCRA identifies new projects, adjusts the plan and presents the new projects to the Board for approval.



Contingency

Contingency refers to a dollar amount added to a project's spending estimate to address items that are unknown when the estimate is prepared. This dollar amount is often based on a percentage of total construction or project costs, and the percentage is often based on the amount of planning and scope definition available at the time of the estimate. LCRA staff estimates and manages many different types of projects, including major wholesale power facilities, new electric transmission lines, dam and hydroelectric upgrades, water delivery and utilities, telecommunication facilities, software system installations, park development projects and facility improvements. Despite this diversity of project types, LCRA has arrived at certain standards for estimating, reporting and managing contingency for all of LCRA's capital projects.

LCRA discloses contingency amounts incorporated into project estimates in the capital plan. Staff also discloses contingency for each recommended, approved and future project to the chief financial officer during the annual planning process. LCRA submits the capital plan, including the contingency amount in each recommended project lifetime budget, for Board review and approval. Project tables in the following pages show the contingency amount included in each recommended project.

Individual project managers manage contingency amounts included in the lifetime budgets in accordance with LCRA standards as part of the overall budgets for the projects. LCRA staff monitors the status of contingencies on all projects and provides reports at least quarterly to executive management.

Capital Plan Approval and Reporting

LCRA Board approval of this capital plan authorizes the initiation of all recommended projects at their individually stated lifetime budgets. These recommended projects include annual budgets for general additions and minor capital. General additions are small capital additions or replacement projects not to exceed \$300,000. Minor capital budgets are used to fund purchases of equipment that is ready to place in service upon delivery, such as fleet assets or Information Technology hardware.



Capital Plan Approval and Reporting (Continued)

Board approval of this plan also authorizes the proposed \$265 million budget for FY 2016 capital spending for recommended and approved projects.

LCRA incorporates spending projections in the capital plan into the financial performance and rate impacts shown in the business plan. Upon approval and throughout FY 2016, LCRA will provide to the Board regular reports on project progress and compliance with the project budgets and fiscal year spending constraints established in the plan.

The following pages include specific project details and proposed lifetime budgets for recommended projects, as well as annual spending projections for approved and future projects. At this time, LCRA is not seeking Board approval for future projects. LCRA will bring any future project determined to require initiation in FY 2016 to the Board for approval individually.



Wholesale Power Projects

Information about Wholesale Power capital projects included in the capital plan is considered confidential and has been removed from this version of the document.



Transmission Projects

Transmission

The LCRA capital plan includes all capital projects approved separately in the LCRA TSC capital plan by the LCRA TSC Board of Directors. LCRA's plan also includes transmission minor capital purchases. The transmission projects address transmission electric system reliability requirements, respond to ERCOT systems needs, meet projected area load growth, respond to existing customer needs and connect new generators to the LCRA TSC electric system.

Recommended and approved transmission projects total \$171 million in FY 2016 and \$495 million over the next five years through FY 2020. Future projects total \$457 million through FY 2020.

LCRA TSC FY 2016 Recommended Projects

Altair-Glidden Transmission Line Overhaul – The project's scope is to inspect and replace deteriorated wooden poles, structures, cross arms and braces on the 12.2-mile Altair-to-Glidden 69-kilovolt (kV) transmission line in Colorado County to maintain safe and reliable operation of the transmission network. The replacement structures will be 138-kV with 795 aluminum conductor steel reinforced (ACSR) conductor and optical ground wire. The new structures will meet Public Utility Commission of Texas (PUC) storm hardening requirements. The recommended project completion date is May 30, 2017.

Autotransformer Monitoring Additions Phase 2 – The upgrade will increase monitoring capabilities of the autotransformers at the Bellville South, Glidden and Mason substations. The substations are located in Austin, Colorado and Mason counties. The recommended project completion date is June 30, 2016.

Battery Replacements Phase 2 – The upgrade will increase reliability of substation equipment at the Austrop, Brenham, Cedar Hill, Giddings, Smithville, Winchester and Yoakum Gartner Road substations. The substations are located in Bastrop, DeWitt, Fayette, Lee, Travis and Washington counties. The recommended project completion date is June 30, 2017.

Burnet Autotransformer Upgrade – The upgrade will increase reliability of substation equipment at the Burnet Substation in Burnet County by replacing the autotransformer and associated equipment. The recommended project completion date is May 30, 2016.



LCRA TSC FY 2016 Recommended Projects (Continued)

Chappell Hill Double-Circuit Break-Off Structure-Waller Transmission Line Overhaul – The overhaul's scope is to inspect and replace deteriorated wooden poles, structures, cross arms and braces on 20.8 miles of the Brenham North-Waller 69-kV transmission line between the Chappell Hill double-circuit break-off structure and the Waller Substation in Colorado County to maintain safe and reliable operation of the transmission network. The replacement structures will be 138-kV with 795 ACSR conductor and optical ground wire. The structures will meet PUC storm hardening requirements. The recommended project completion date is May 30, 2016.

Circuit Breaker Operator Upgrades Phase 3 – The upgrade will increase reliability of substation equipment at the Hays Energy Substation in Hays County by replacing three circuit breaker operators. The recommended project completion date is June 30, 2016.

Circuit Breaker Replacements Phase 4 – The upgrade will increase reliability of substation equipment at the Fayette Power Project's 345-kV Yard 1, Lampasas and Salem substations in Fayette, Lampasas and Washington counties by replacing four circuit breakers and associated equipment. The recommended project completion date is June 30, 2016.

Circuit Switcher Replacements Phase 9 – The upgrade will increase reliability of substation equipment at the Brenham North, Mendoza and Strahan substations in Caldwell, Hays and Washington counties by replacing three circuit switchers and associated equipment. The recommended project completion date is June 30, 2016.

Clear Springs Substation Upgrade – The project's scope is to upgrade protective relay equipment at the Clear Springs Substation in Guadalupe County. The recommended project completion date is Dec. 1, 2015.

Copperas Cove-Lampasas Transmission Line Overhaul – The overhaul's scope is to inspect and replace deteriorated wooden poles, structures, cross arms and braces on the 13.6-mile Copperas Cove-Lampasas 138-kV transmission line in Lampasas County to maintain safe and reliable operation of the transmission network. The replacement structures will be 138-kV with 795 ACSR conductor and optical ground wire. The structures will meet PUC storm hardening requirements. The recommended project completion date is May 30, 2016.



LCRA TSC FY 2016 Recommended Projects (Continued)

Copperas Cove-Oncor Tie Transmission Line Overhaul – The overhaul's scope is to inspect and replace deteriorated wooden poles, structures, cross arms and braces on the 1.1-mile Copperas Cove-Oncor Tie 138-kV transmission line in Lampasas County to maintain safe and reliable operation of the transmission network. The replacement structures will be 138-kV with 795 ACSR conductor and optical ground wire. The recommended project completion date is May 30, 2016.

Cost Substation Addition – Guadalupe Valley Electric Cooperative will purchase property and construct a new 69-kV/138-kV substation on the Nixon-to-Gonzales 69-kV transmission line in Gonzales County. LCRA TSC will install a meter panel, a remote terminal unit and telecommunications equipment to support the project. The recommended project completion date is Sept. 30, 2018.

Elgin Switch-Gilleland Creek Transmission Line Overhaul – The overhaul's scope is to inspect and replace deteriorated wooden poles, structures, cross arms and braces on the 12.9-mile Elgin Switch-Gilleland Creek 138-kV transmission line in Bastrop, Travis and Williamson counties to maintain safe and reliable operation of the transmission network. The replacement structures will be 138-kV with 795 ACSR conductor and optical ground wire. The recommended project completion date is May 30, 2017.

Elgin Switch-Sim Gideon Transmission Line Overhaul – The overhaul's scope is to inspect and replace deteriorated wooden poles, structures, cross arms and braces on the 31.2-mile Elgin Switch-Sim Gideon 138-kV transmission line in Bastrop and Williamson counties to maintain safe and reliable operation of the transmission network. The replacement structures will be 138-kV with 795 ACSR conductor and optical ground wire. The structures will meet PUC storm hardening requirements. The recommended project completion date is May 30, 2017.

Ferguson-Sandy Creek Transmission Line Overhaul – The overhaul's scope is to inspect and replace deteriorated wooden poles, structures, cross arms and braces on the nine-mile Ferguson-Sandy Creek 138-kV transmission line in Llano County to maintain safe and reliable operation of the transmission network. The replacement structures will be 138-kV with 795 ACSR conductor and optical ground wire. The structures will meet PUC storm hardening requirements. The recommended project completion date is May 30, 2017.

Flatonia-Plum Transmission Line Upgrade – The upgrade will increase reliability and capacity of the Flatonia-to-Plum 19.6-mile 138-kV transmission line in Fayette County by replacing structures and conductor on the first 0.5 mile of the transmission line from the Flatonia Substation. The recommended project completion date is May 30, 2016.



LCRA TSC FY 2016 Recommended Projects (Continued)

Flatrock Substation Upgrade – Pedernales Electric Cooperative will upgrade a power transformer at the Flatrock Substation in Burnet County. LCRA TSC will install a meter panel and telecommunications equipment to support the project. The recommended project completion date is June 30, 2016.

FM 725 Substation Addition – Guadalupe Valley Electric Cooperative (GVEC) will purchase property and construct a new 138-kV substation on GVEC's McQueeney-to-Schumansville 138-kV transmission line in Guadalupe County. LCRA TSC will install a meter panel, a remote terminal unit and telecommunications equipment to support the project. The recommended project completion date is Nov. 1, 2016.

FM 758 Substation Addition – New Braunfels Utilities will purchase property and construct a new 138-kV substation on the Freiheit Road-Clear Springs 138-kV transmission line in Guadalupe County. LCRA TSC will own and construct the high side of the substation and install a meter panel, a remote terminal unit and telecommunications equipment to support the project. The recommended project completion date is June 30, 2017.

Fredericksburg-Kendall Transmission Line Overhaul – The overhaul's scope is to inspect and replace deteriorated wooden poles, structures, cross arms and braces on the 21.1-mile Fredericksburg-Kendall 138-kV transmission line in Gillespie and Kendall counties to maintain safe and reliable operation of the transmission network. The replacement structures will be 138-kV with 795 ACSR conductor and optical ground wire. The recommended project completion date is May 30, 2016.

Freiheit Road Substation Upgrade – The upgrade will increase the reliability of substation equipment at the Freiheit Road Substation in Comal County by reconfiguring the Freiheit Road Substation to a 138-kV, ring-bus arrangement. The recommended project completion date is June 30, 2018.

Garfield Substation Upgrade – The project's scope is to upgrade the protective relay equipment at the Garfield Substation in Bastrop County for an existing generator tie line. The recommended project completion date is March 1, 2016.



LCRA TSC FY 2016 Recommended Projects (Continued)

General Additions – The general additions will maintain funding for required, but unplanned, system improvements to accommodate load increases, failed equipment, substation reliability enhancement or changing system conditions as they occur through June 30, 2016.

Georgetown East Circuit Breaker Addition – The addition will increase reliability of substation equipment at the Georgetown East Substation in Williamson County by reconfiguring the Georgetown East Substation to a 138-kV, ring-bus arrangement. The recommended project completion date is May 30, 2016.

Georgetown South Substation Upgrade – The upgrade will increase reliability of substation equipment at the Georgetown South Substation in Williamson County by adding motor operator switches, a control house, a remote terminal unit and telecommunications equipment to support the project. The recommended project completion date is June 30, 2016.

Gilleland Creek Asset Monitoring Substation Upgrade – The upgrade will increase the reliability of substation equipment at the Gilleland Creek Substation in Travis County with an upgraded transformer, a battery, circuit breaker monitoring equipment and a substation asset monitoring system. The recommended project completion date is June 30, 2016.

Gilleland Creek Autotransformer Addition – The addition will increase the autotransformer capacity at the Gilleland Creek Substation in Travis County by installing a second 672-megavolt ampere autotransformer and its associated equipment. The autotransformer will be able to step up 138-kV to 345-kV and step down 345-kV to 138-kV. The recommended project completion date is Oct. 31, 2017.

Goldthwaite-to-Lampasas Transmission Line Upgrade – The upgrade will increase capacity and improve reliability of the 18.2-mile Goldthwaite-San Saba 69-kV transmission line, the 33.3-mile San Saba-Lometa 69-kV transmission line and five substations. This project is located in Lampasas, Mills and San Saba counties. The recommended project completion date is Dec. 31, 2017.

Helena Circuit Breaker Addition – The project's scope is to add 138-kV circuit breakers and associated equipment to the Helena Substation in Karnes County to improve reliability of transmission service to loads that exceed 20 megawatts during peak loading conditions. The recommended project completion date is June 30, 2017.


LCRA TSC FY 2016 Recommended Projects (Continued)

Henne-Comal Transmission Line Upgrade – The upgrade will increase reliability and capacity of the Henne-Comal 7.6-mile 138-kV transmission line in Comal County by replacing structures, a conductor and associated substation equipment. The recommended project completion date is May 31, 2018.

Henne-McCarty Lane Transmission Line Upgrade – The upgrade will increase reliability and capacity of the Henne-McCarty Lane 6.6-mile 138-kV transmission line in Comal County by replacing structures, a conductor and associated substation equipment. The recommended project completion date is May 31, 2018.

Hidden Valley Substation Upgrade – The upgrade will provide a transmission point of interconnection at the Austin Energy Hidden Valley Substation in Travis County. The recommended project completion date is May 30, 2016.

Kerrville Stadium-Harper Road Transmission Line Upgrade – The upgrade will increase reliability and capacity of the Kerrville Stadium-to-Harper Road 1.6-mile 138-kV transmission line in Kerr County by replacing structures, conductor and associated substation equipment. The recommended project completion date is May 30, 2019.

Luling-Nixon Transmission Line Overhaul – The overhaul's scope is to inspect and replace deteriorated wooden poles, structures, cross arms and braces on the 34.4-mile Luling-Nixon 69-kV transmission line in Caldwell, Guadalupe and Gonzales counties to maintain safe and reliable operation of the transmission network. The replacement structures will be 138-kV with 795 ACSR conductor and optical ground wire. The recommended project completion date is May 30, 2017.

Magnolia Mercer Substation Upgrade – The upgrade will increase transformer capacity at the Magnolia Mercer Substation in Caldwell County and upgrade associated substation equipment. The recommended project completion date is Dec. 1, 2015.

Meter Upgrades – The project will upgrade metering equipment in 33 substations where the existing meter sets exceeded the manufacturer's estimated useful life and the manufacturer no longer supports the equipment. The recommended project completion date is June 30, 2017.



LCRA TSC FY 2016 Recommended Projects (Continued)

Minor Capital – The scope of minor capital projects is to purchase equipment that is ready to place in service upon delivery for projects related to transmission lines, substations or related equipment.

Mobile 10919 Substation Upgrade – The upgrade will increase reliability of substation equipment for the Unit No. 10919 mobile substation. The equipment will be used in counties where LCRA TSC owns or operates power transformers. The recommended project completion date is June 30, 2016.

Mobile Transformer Hookup Switches Phase 2 – The upgrade's scope is to install high-side mobile disconnect switches and low-side hook switches at nine substations in Caldwell, DeWitt, Gonzales, Guadalupe, Hays, Kendall and Mason counties to increase reliability of the LCRA TSC transmission system. The recommended project completion date is June 30, 2018.

Moulton South Substation Addition – Guadalupe Valley Electric Cooperative will purchase property and construct a new 138-kV substation on the Flatonia-to-Yoakum Gartner 138-kV transmission line in Lavaca County. LCRA TSC will own and construct the high side of the substation and install a meter panel, a remote terminal unit and telecommunications equipment to support the project. The recommended project completion date is May 30, 2016.

Pitsburg-Sandy Creek Transmission Line Overhaul – The overhaul's scope is to inspect and replace deteriorated wooden poles, structures, cross arms and braces on the 18.8-mile Pitsburg-Sandy Creek 138-kV transmission line in Llano County to maintain safe and reliable operation of the transmission network. The replacement structures will be 138-kV with 795 ACSR conductor and optical ground wire. The recommended project completion date is May 30, 2017.

Raymond F. Barker Substation Upgrade – The upgrade will add 138-kV circuit breakers and associated equipment to the Raymond F. Barker Substation in Kerr County for a new transmission point of delivery for Kerrville Public Utility Board's new power transformer. The recommended project completion date is June 30, 2016.



LCRA TSC FY 2016 Recommended Projects (Continued)

Rincon-Rockport Lane Transmission Line Relocation – The upgrade will relocate a portion of the Rincon-to-Rockport 138-kV transmission line in Aransas County to accommodate an AEP Texas upgrade at the AEP Rockport Substation. The recommended project completion date is June 30, 2016.

Rock Island Substation Upgrade – The upgrade will improve reliability of the transmission system by adding real-time monitoring, control and communication facilities at the Rock Island Substation in Colorado County. The recommended project completion date is Sept. 1, 2015.

Rosita Creek Circuit Breaker Addition – The project will add 138-kV circuit breakers to the Rosita Creek Substation in Maverick County to improve reliability of transmission service to loads that exceed 20 megawatts during peak loading conditions. The recommended project completion date is May 30, 2016.

SubWAN Upgrades – The upgrades will improve reliability of the transmission system by adding and upgrading real-time monitoring facilities at the Bellville South, Boerne Cico, Brenham, Comfort, Coronado, Goforth, Highway 36, Ingram, Marshall Ford, McNeil, Odlaw, Paleface, Redwood, Rivery, Sim Gideon, Skywest, Verde Creek, Weiderstein, Winchester and Zorn substations. The substations are located in Austin, Bastrop, Fayette, Guadalupe, Hays, Kendall, Kerr, Kinney, Llano, Midland, Real, Travis, Washington and Williamson counties. The recommended project completion date is June 30, 2016.

Switch Replacements Phase 3 – The project will upgrade switching equipment at Lampasas and Zorn substations in Guadalupe and Lampasas counties to maintain safe and reliable operation of the transmission network. The recommended project completion date is May 30, 2016.

Upton Circuit Breaker Addition – The project will add 138-kV circuit breakers to the Upton Substation in Upton County to improve reliability of transmission service to loads that exceed 20 megawatts during peak loading conditions. The recommended project completion date is May 30, 2017.



LCRA TSC FY 2016 Recommended Projects (Continued)

Zorn-Marion Transmission Line Addition – The scope of the project will be to construct a new 345-kV transmission line between the Zorn and Marion substations that are located in Guadalupe County. The project is required to address regional load growth, ERCOT north to south bulk power transfers through the LCRA TSC 345-kV system and planned generation retirements in San Antonio. The recommended project completion date is May 30, 2019.

Unregulated Transmission FY 2016 Recommended Project

Minor Capital – The scope of minor capital projects is to purchase equipment that is ready to place in service upon delivery to provide regulated transmission services to LCRA Transmission and unregulated customers.



LCRA Transmission Services Corporation FY 2016 Capital Plan Recommended Projects (Dollars in thousands)

Project Name	Contingency	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Five-Year Total	Lifetime
ommended								
Altair-Glidden Transmission Line Overhaul	2%	3,075	8,802	-	-		11,877	11,877
Autotransformer Monitoring Additions - Phase 2	10%	401	-	-	-	/ -	401	401
Battery Replacements - Phase 2	2%	205	530	-	-		735	735
Burnet Autotransformer Upgrade	2%	762	-	-	-	-	762	762
Chappel Hill Double-Circuit Break-off Structure-Waller								
Transmission Line Overhaul	10%	6,441	-	-	- / -		6,441	6,441
Circuit Breaker Operator Upgrades - Phase 3	2%	424	X. / -	-	- 10	-	424	424
Circuit Breaker Replacements - Phase 4	10%	1,077	-		/ ~ -	-	1,077	1,077
Circuit Switcher Replacements - Phase 9	2%	1,052	- 10	-		-	1,052	1,052
Clear Springs Substation Upgrade	2%	304	11 -	-	-	· -	304	304
Copperas Cove-Lampasas Transmission Line Overhaul	2%	6,340	- / /	- 1	-	-	6,340	6,340
Copperas Cove-Oncor Tie Transmission Line Overhaul	10%	697	/	- // -	-	-	697	697
Cost Substation Addition	2%	10	5	51	188	1	254	254
Elgin Switch-Gilleland Creek Transmission Line Overhaul	2%	510	4,650	-	-	-	5,160	5,160
Elgin Switch-Sim Gideon Transmission Line Overhaul	2%	5,125	12,099	11	- ·	-	17,224	17,224
Ferguson-Sandy Creek Transmission Line Overhaul	6%	374	3,956		-	-	4,330	4,330
Flatonia-Plum Transmission Line Upgrade	10%	1,067	- //-	· · ·	-	-	1,067	1,067
Flatrock Substation Upgrade	2%	212	/ -	-		-	212	212
FM 725 Substation Addition	10%	21	288	-	-		309	309
FM 758 Substation Addition	10%	308	1,573	- \	-	-	1,881	1,881
Fredericksburg-Kendall Transmission Line Overhaul	2%	9,026	_		-	-	9,026	9,026
Freiheit Road Substation Upgrade	2%	256	1,025	2,222	- T	14	3,503	3,503
Garfield Substation Upgrade	10%	223	-	_			223	223



LCRA Transmission Services Corporation FY 2016 Capital Plan Recommended Projects

(Dollars in thousands)

Project Name	Contingency	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Five-Year Total	Lifetime
Recommended (Continued)								
General Additions	0%	4,000	-	-		<u></u>	4,000	4,000
Georgetown East Circuit Breaker Addition	10%	2,666	-	-		- /	2,666	2,666
Georgetown South Substation Upgrade	10%	814	-	-	-	/ -	814	814
Gilleland Creek Asset Monitoring Substation Upgrade	2%	316	-	-	-	-	316	316
Gilleland Creek Autotransformer Addition	2%	1,896	5,786	985		-	8,667	8,667
Goldthwaite-Lampasas Transmission Line Upgrade	6%	3,075	46,125	23,885	× / -		73,085	73,085
Helena Circuit Breaker Addition	10%	308	1,031	-	100 -	-	1,339	1,339
Henne-Comal Transmission Line Upgrade	3%	513	4,100	7,970		-	12,583	12,583
Henne-McCarty Lane Transmission Line Upgrade	2%	513	2,563	10,920	-	-	13,996	13,996
Hidden Valley Substation Upgrade	2%	3,190	115-	-	-		3,190	3,190
Kerrville Stadium-Harper Road Transmission Line Upgrade	2%	231	513	2,024	2,363	-	5,131	5,131
Luling-Nixon Transmission Line Overhaul	2%	3,075	15,004	- V/-	-	-	18,079	18,079
Magnolia Mercer Substation Upgrade	2%	683	-	- 7/	-	-	683	683
Meter Upgrades	7%	205	360	- // -	_	-	565	565
Minor Capital	0%	190	-	- 1		-	190	190
Mobile 10919 Substation Upgrade	2%	357	-	-	-	-	357	357
Mobile Transformer Hookup Switches - Phase 2	2%	1,099	313	310	-	-	1,722	1,722
Moulton South Substation Addition	2%	1,955	- /	-		-	1,955	1,955
Pitsburg-Sandy Creek Transmission Line Overhaul	2%	3,075	6,627	-	-		9,702	9,702
Raymond F. Barker Substation Upgrade	10%	679	-	-	-	-	679	679
Rincon-Rockport Transmission Line Relocation	5%	1,376	-	-	-	-	1,376	1,376
Rock Island Substation Upgrade	8%	172	-	-	-	-	172	172
Rosita Creek Circuit Breaker Addition	10%	1,305		-	<u> </u>	<u> </u>	1,305	1,305



LCRA Transmission Services Corporation

FY 2016 Capital Plan Recommended and Approved Projects

(Dollars in thousands)

							Five-Year	
Project Name	Contingency	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total	Lifetime
Recommended (Continued)								
SubWAN Upgrades	2%	839	-	-	-	- 1º -	839	839
Switch Replacements - Phase 3	2%	679	-	-	-		679	679
Upton Circuit Breaker Addition	4%	170	4,216	-	-	/ -	4,386	4,386
Zorn-Marion Transmission Line Addition	9%	6,312	7,845	14,372	54,817	-	83,346	83,346
Recommended Subtotal	1	77,603	127,411	62,739	57,368	-	325,121	325,121
Approved								
Altair-Eagle Lake Transmission Line Overhaul		658	- 1 <i>.</i>	-	· · ·	-	658	6,922
Bergheim Capacitor Bank Addition		587	-	-			587	751
Big Hill-Kendall Transmission Line Addition		641	- // -	-	-	-	641	345,150
Blewett Substation Addition		4,816	///	-	-	· · ·	4,816	5,086
Blumenthal Substation Addition		2,371	4,470	4,860	1,398	-	13,099	15,054
Cuero Hydro-Hochheim Transmission Line Overhaul		148	-	// -	-	-	148	6,582
DVM Microwave Telecommunications Upgrade		1,381	451	166	137	· ·	2,135	2,888
E. C. Mornhinweg Substation Addition		488	-	- 1/		-	488	12,781
Fayetteville-Glidden Transmission Line Overhaul		2,128	-		-	-	2,128	3,459
Ferguson-Sandy Creek-Pitsburg Transmission Line Upgrade		120	-	· · · ·	-	-	120	3,854
Georgetown-Rivery Transmission Line Upgrade		949	-	-		-	949	1,642
Kendall Substation Upgrade		796	-	-	-		796	12,638
Kenedy Switch-Guadalupe Transmission Line Upgrade		123	-	-	-	-	123	34,200
Kenedy Switch-Nixon-Seguin Transmission Line Upgrade		6,661	-	-	-		6,661	37,507
Leander-Round Rock 138-kV Tranmission Line Addition		934	535	23,595	15,056	3,170	43,290	43,867
Lockhart-Luling Transmission Line Upgrade	~	4,530	7,491	-	-	/-	12,021	12,664



LCRA Transmission Services Corporation

FY 2016 Capital Plan Approved and Future Projects

(Dollars in thousands)

						Five-Year	
Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total	Lifetime
Approved (Continued)							
Long Loop (Mesa View) Circuit Breaker Addition	3,089	-	-	-	- PL	3,089	4,575
Marion Substation Upgrade	4,455	235				4,690	5,012
Mobile Transformer Addition	875	-		-	1.	875	2,153
Naval Base Transmission Line Relocation	1,292	-		-		1,292	1,643
Nopal Substation Addition	2,341	-	-	-	-	2,341	2,426
Paige Circuit Breaker Addition	2,277	1	-	× /-		2,277	2,735
Physical Security Substation Upgrade	12,515		-	10	-	12,515	18,961
Pleasant Farms Circuit Breaker Addition	2,184	-		1/2	-	2,184	2,471
Protection System Upgrades – Substation Upgrade	1,094	1,329	872	1,286	· ·	4,581	6,125
Seawillow Substation Addition	17	2,891	1,515	-	- \	4,423	5,001
Sherwood Shores Circuit Breaker Addition	51	644	2,505	-	-	3,200	3,897
Taylor County Load Interconnection	1,498	1	-	-	-	1,498	1,773
Transmission Line T485 Modification	641	-	- \	-	-	641	1,041
Tunas Creek Substation Addition	2,898	-	· / -	-	-	2,898	4,198
Twin Buttes Autotransformer Addition	6,684	1,907			-	8,591	12,983
Warda-Giddings Transmission Line Upgrade	50	2,122		-	-	2,172	2,501
Zorn-Seguin Transmission Line Upgrade	12,031	-	-	-	-	12,031	13,680
Approved Subtotal	81,323	22,075	33,513	17,877	3,170	157,958	636,220

Future

Andice T1/T2 Substation Upgrade	-	-	90	-	-	90	90	
Austrop-Sandow Transmission Line Upgrade	-	500	10,000	34,500	42,073	87,073	87,073	
Bakersfield-Big Hill Cut-in (Autotransformer)	-	-	-	-	25,000	25,000	25,000	



LCRA Transmission Services Corporation FY 2016 Capital Plan Future Projects (Dollars in thousands)

						Five-Year	
Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total	Lifetime
Future (Continued)							
Balcones T4 Substation Upgrade	-	-	-	-	90	90	90
Bergheim T2 Power Transformer Addition	1	-	2,000	-	./ -	2,000	2,000
Blockhouse T3 Power Transformer Addition	-		-	90	-	90	90
Brenham North - Double-Circuit Break-off Structure Transmission							
Line Overhaul	-	4,977	9,000	- V-	-	13,977	13,977
Caddo Substation Addition	-	-	-	- / -	500	500	3,900
Camp Wood-Leakey Transmission Line Overhaul	-	- 1	10,000	17,882	-	27,882	27,882
Chappel Hill Double-Circuit Break-off Structure-Highway 36	-	3,691	8,611	/ <u>`</u>	-	12,302	12,302
Chappell Hill Circuit Breaker Addition	-	950	-	-	-	950	950
Circuit Switcher Replacement Program Substation Upgrade -							
Phase 10	1	1,183	1.4	-	-	1,183	1,183
Cuero Hydro-Luling Transmission Line Overhaul	/ -	3,580	7,000	-	-	10,580	10,580
Darst Creek Circuit Breaker Addition		-	950	-	-	950	950
Esperanza Substation Addition	K (*	- 1	90	-	-	90	90
Fayette County Autotransformer Addition		-	1 -	-	4,500	4,500	10,600
Flatonia Substation Upgrade	- 1	1,659	-	-	-	1,659	1,659
Frelsburg Circuit Breaker Addition	- / -	- / -	950	-	-	950	950
Friendship Substation Upgrade			-	90	-	90	90
Garfield Cut-in (Austin Energy Requested Interconnection)							
Substation Addition	12.	-	500	3,100	-	3,600	3,600
General Additions		4,000	4,000	4,000	4,000	16,000	16,000
Georgetown South Circuit Breaker Addition	-	-		-	950	950	950
Giddings-Warda Transmission Line Upgrade	-	5,125	13,592	-		18,717	18,717



LCRA Transmission Services Corporation FY 2016 Capital Plan Future Projects (Dollars in thousands)

						Five-Year	
Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total	Lifetime
Future (Continued)							
Giddings Distribution Upgrade		1,137	-	-	<u></u>	1,137	1,137
Glidden Area Autotransformer Addition	, All		500	4,000	12,000	16,500	34,222
Hallettsville-Hallettsville City Transmission Line Addition	· · ·	-		-	5,355	5,355	5,355
Harris Branch T1 Substation Upgrade	1	-	· .	-	2,000	2,000	2,000
Hays Energy Substation Upgrade		-	4,579	4	-	4,579	4,579
Hunter Substation T2 Power Transformer Addition	-	S. 14		90		90	90
Lakeway Substation T2 Power Transformer Addition	-	<u> </u>	-	90		90	90
LCRA TSC Fiber Upgrades-FY 2017	-	4,077			-	4,077	4,077
LCRA TSC Fiber Upgrades-FY 2018	-	- 10	4,077	-	· .	4,077	4,077
LCRA TSC Fiber Upgrades-FY 2019	-	10-	-	4,077		4,077	4,077
LCRA TSC Fiber Upgrades-FY 2020		/ \-	-	-	4,077	4,077	4,077
Lockhart-Seguin Split Transmission Line Upgrade (CCN)	1.	-	1,000	3,000	25,000	29,000	69,300
Marion Substation Upgrade	/ -	231	- 17	-	-	231	231
Meadow Lake Substation Addition	1	-	90	-		90	90
Megastar Microwave	1 14	523	523	523	524	2,093	2,093
Merrelltown Substation Addition	. / -	-	-	-	2,831	2,831	2,831
Minor Capital	· / -	350	350	350	350	1,400	1,400
Pflugerville South Substation Addition	χ	-	-	3,234	-	3,234	3,234
Power Lane Transmission Line Addition (CCN)	N 1/	500	1,000	4,000	14,535	20,035	37,035
Ranch Road 12 Substation Circuit Breaker Addition	N / / -	-	-	950		950	950
Remote Terminal Unit Upgrades Substation Upgrades		1,248	-	-		1,248	1,248
Santa Clara Substation Addition	- · ·	-		-	281	281	281
Southeast Leander Substation Addition	-	-	-	-	3,900	3,900	3,900



LCRA Transmission Services Corporation FY 2016 Capital Plan Future Projects (Dollars in thousands)

						Five-Year	
Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total	Lifetime
Future (Continued)							
Sherwood Shores Substation Upgrade	/ \ / -	-	90	-		90	90
Smiley Substation T2 Substation Upgrade	· / .	-	-	-	90	90	90
Transmission Line Overhauls - FY 2017	, All	21,870	-		- /	21,870	21,870
Transmission Line Overhauls - FY 2018		-	17,979	-	-	17,979	17,979
Transmission Line Overhauls - FY 2019	- <i>1</i> /-	-		34,134	-	34,134	34,134
Transmission Line Overhauls - FY 2020	16 N	-		-	15,231	15,231	15,231
Triple R Ranch Substation Addition	(_	-	500	500	3,900
Weimar Substation Circuit Breaker Addition	-	950	-	- 10		950	950
XS Ranch Substation Addition	-	500	3,400		-	3,900	3,900
Future Subtotal	-	57,051	100,371	114,110	163,787	435,319	523,241
Total LCRA Transmission Services Corporation	158,926	206,537	196,623	189,355	166,957	918,398	1,484,582

Unregulated Transmission and Total Transmission FY 2016 Capital Plan Recommended, Approved and Future Projects

							Five-Year	
Project Name	Contingency	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total	Lifetime
Recommended								
Minor Capital	0%	12,023	- / -	-	-	-	12,023	12,023
Recommended Subtotal		12,023				· ·	12,023	12,023
Future		10					-	
Minor Capital		- // -	11,451	3,728	3,301	3,091	21,571	21,571
Future Subtotal		/ -	11,451	3,728	3,301	3,091	21,571	21,571
Total Unregulated Transmission		12,023	11,451	3,728	3,301	3,091	33,594	33,594
Total Transmission		170,949	217,988	200,351	192,656	170,048	951,992	1,518,176



Water Projects

Water

Water projects in the capital plan include capital improvements for managing and delivering raw water and for water utilities. This plan focuses resources on managing the river and planning to meet the basin's future water needs. The plan also assumes the current status of the sale agreements for LCRA's remaining water and wastewater utilities. Therefore, it only includes water utility capital expenditures that support the continued reliable operation of, or fulfill regulatory requirements for, the remaining systems and the systems being purchased by Corix Utilities (Texas), pending completion of the sale, transfer and merger process.

Water recommended and approved projects total \$73 million in FY 2016 and \$256 million over the next five years through FY 2020. Future projects total \$45 million through FY 2020.

FY 2016 Recommended Projects

Integrated Water Projects Phase 1 – This group of projects will provide new water supplies primarily in the high-growth areas of LCRA's water service area. The projects include new off-channel storage, wastewater return flow indirect reuse and groundwater development to create firm water supply and offset the use of stored Highland Lakes water. Phase 1 includes preliminary engineering, preliminary environmental studies for permitting, cost estimating, and preliminary land acquisition efforts for three of the projects. Phase 2, a future project, will deliver shovel-ready project documents and permits.

General Additions – General addition projects will maintain infrastructure and improve reliability and efficiency for the following: irrigation systems, raw water, and water and wastewater.

Minor Capital – The scope of minor capital projects is to purchase equipment that is ready to place in service upon delivery for the following: Environmental Lab and Hydromet.

FY 2016 Requested Project Budget Increase

Lane City Reservoir – LCRA requests approval to increase the Lane City Reservoir project previously approved total lifetime budget by \$35.1 million from \$214.9 million to \$250 million, consistent with business plan assumptions discussed with the Board and borrowing limits previously authorized by the Board.



Water Projects (Continued)

Water

FY 2016 Capital Plan Recommended and Approved Projects (Dollars in thousands)

							Five-Year	
Project Name	Contingency	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total	Lifetime
commended								
Raw Water								
General Additions - Irrigation Systems - FY 2016	0%	265	-	-	- /	-	265	26
General Additions - Raw Water - FY 2016	0%	177	-	-	-	-	177	17
Integrated Water Projects - Phase 1	0%	2,751	3,428	-	-		6,179	6,17
Minor Capital Environmental Lab - FY16	0%	335		-		-	335	33
Minor Capital - Hydromet - FY 2016	0%	66		-		-	66	6
Water Utility								
General Additions - FY 2016	0%	12	- 2	-		-	12	1
Recommended Subtotal		3,606	3,428)	-	-	7,034	7,03
		1	10					
proved								
Raw Water								
Buchanan Dam Spalling Concrete Rehabilitation Phase 3		3,467	2,771	2,771	2,771	2,771	14,551	36,00
Buchanan Floodgate Rehabilitation Phase 2		7,822	7,502	1,975	485	-	17,784	50,07
Lane City Reservoir		57,300	94,500	59,873	27	-	211,700	250,00
Mansfield Dam Paradox Gate Rehabilitation Phase 2		841	943	910	857	875	4,426	10,41
Wintermann Farms Land Purchase		37	-	-	-	-	37	3,27
Water Utility								
Bonanza Beach Water Supply System		92	<u> </u>	-	-	-	92	35
Approved Subtotal	1 1	69,559	105,716	65,529	4,140	3,646	248,590	350,11



Water Projects (Continued)

Water

FY 2016 Capital Plan Future Projects

(Dollars in thousands)

						Five-Year	
Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total	Lifetime
Future							
Raw Water							
Buchanan 7 Gate Deck and Hoist Recoating			500	_	1	500	500
General Additions - Irrigation Systems		595	465	455	455	1,970	1,970
General Additions - Raw Water		140	208	200	300	848	848
Gulf Coast Plant No. 1 - Pumps 1 and 2		140	200	-	700	700	700
Gulf Coast South Texas Project and Oyster Lake Gates	-	N. 14	- 370	100	-	370	370
Gulf Coast Wadsworth Gates	-	- 365	570		-	365	365
Integrated Water Projects - Phase 2	-	10,365	- 17,607		-		31,563
Irrigation Supervisory Control and Data Acquisition	-	10,305	235	3,591	· ·	31,563 492	492
Lakeside Automated Gates	-	15		257	-		
		201 ° V	- //	-	370	370	1,850
Lakeside Canal Easement Acquisition	-7/-	-	-	300	300	600	900
Lakeside Lake Plant Variable Frequency Drive and Switch Gear Building	1	500		-	-	500	500
Mansfield Dam Bridge and Structures		2,230	-	-	-	2,230	2,230
Mansfield Dam Dehumidification System	< - y	500	-		-	500	500
Mansfield Dam Floodgate Hydraulic Piping	- ///	-	785		-	785	785
Minor Capital - Hydromet	-	167	167	167	167	668	668
Minor Capital - Irrigation		249	230	221	375	1,075	1,075
Minor Capital Environmental Lab	-	274	315	265	330	1,184	1,184
Water Utility							
General Additions	1 - 2	12	12	12	12	48	48
Future Subtotal	1.14	15,397	20,894	5,468	3,009	44,768	46,548
Total Water	73,165	124,541	86,423	9,608	6,655	300,392	403,692



Public Services Projects

Public Services

LCRA acts under its legislative authority and Board direction to develop and manage parks, recreation facilities and natural science centers in its statutory district, providing public recreation and water access along the Colorado River and its tributaries and LCRA's power plant reservoirs. LCRA's public park system includes more than 40 parks, recreation areas and river access sites on about 14,000 acres. The parks and natural science centers enhance the public's use and enjoyment of LCRA lands and provide diverse outdoor recreation and education opportunities.

LCRA's public service funding aims to keep pace with the growing Central Texas population and expected increases in park visitation; protect natural resources and water quality along the Colorado River; and develop facilities that help achieve LCRA's cost-recovery goals for parks.

Public Services recommended and approved projects total \$2 million in FY 2016 and \$3 million over the next five years through FY 2020. Future projects total \$8 million through FY 2020.

FY 2016 Recommended Projects

McKinney Roughs Equestrian Camping – The equestrian trails at McKinney Roughs Nature Park are well-known by equestrians all over the state for their 12 miles of looped trails passing through four distinct ecosystems. The park does not have overnight facilities for equestrian customers. The scope of this project is to design and construct a restroom, camping loop, utilities, park host site, pay station, roads and a parking lot to provide overnight camping for equestrian trail users. A partnership with a private recreation provider will share these common facilities to accommodate two new business opportunities.

General Additions - General addition projects will maintain infrastructure and improve safety for Parks.

Minor Capital – The scope of minor capital projects is to purchase equipment that is ready to place in service upon delivery for the following:

- Parks.
- Other Public Services.



Public Services Projects (Continued)

Public Services

FY 2016 Capital Plan Recommended, Approved and Future Projects

(Dollars in thousands)

							Five-Year	
Project Name	Contingency	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total	Lifetime
Recommended								
Parks								
General Additions - FY 2016	0%	1,645	_		-	1	1,645	1,645
McKinney Roughs Equestrian Camping	10%	125	905	250	_	<u> </u>	1,280	1,280
Minor Capital - FY 2016	0%	100	-			-	100	100
Other Public Services								
Minor Capital - FY 2016	0%	89	- L	-	- 18	_	89	89
Recommended Subtotal		1,959	905	250		-	3,114	3,114
Approved					1. 8		1	
Parks								
Pedernales River Nature Park Facilities		193	111-	-	-	-	193	270
Approved Subtotal		193		-	-	-	193	270
Future		12	- A - N	1 - V.				
Parks								
Camp Creek Recreation Area Facilities		-	60	250	-	-	310	310
Canyon of the Eagles Nature Park Water System		-	-	17 -	40	220	260	260
General Additions			1,005	1,260	1,960	1,745	5,970	5,970
Minor Capital		- 1	267	167	159	78	671	671
Plum Park Erosion Control		-	- \	-	-	35	35	285
Shaffer Bend Recreation Area Facilities		-	30	240	-	-	270	270
Other Public Services								
Minor Capital	1	1.1-	217	40	116	40	413	413
Future Subtotal		-	1,579	1,957	2,275	2,118	7,929	8,179
Total Public Services		2,152	2,484	2,207	2,275	2,118	11,236	11,563



Enterprise Support Projects

Enterprise Support

Enterprise Support capital projects provide the facility, telecommunications and information technology infrastructure that support the business operations of the organization. LCRA's power, transmission and water rates fund the projects, making predicting costs to include in LCRA's rates especially important. Unless an emergency arises, LCRA adjusts Enterprise Support priorities throughout the year to stay within the approved capital plan budget for each fiscal year instead of seeking additional funding authority from the Board.

Enterprise Support recommended and approved projects total \$11 million in FY 2016 and \$16 million over the next five years through FY 2020. Future projects total \$52 million through FY 2020.

FY 2016 Recommended Projects

Dalchau Service Center (DSC) Environmental Lab Chiller – The current heating ventilation and air conditioning chiller for LCRA's Environmental Lab is experiencing multiple failures, resulting in high maintenance and operational costs. The chiller's warranty expires in June 2015. This project's scope is to design and install a new chiller system, including piping and controls.

Enterprise Resource Planning System – Enterprise Resource Planning (ERP) is business management software that typically is a suite of integrated applications. ERP systems generally collect, store and manage business data necessary for business operations. PeopleSoft is LCRA's primary ERP application; however, LCRA currently uses more than 25 other applications to perform the ERP function. The ERP functions at LCRA have three primary categories: finance, human resources and supply management. The database supporting PeopleSoft will reach its end of life by 2018. In addition, the current version of PeopleSoft LCRA owns does not support several business process improvement requirements, nor does it provide base functionality that now is standard with most ERP applications. This project's scope is to purchase and install an ERP system for LCRA's finance, human resources and supply management functions.

Market Operation Solutions – This is a commercial market management software package LCRA uses to participate in the Electric Reliability Council of Texas (ERCOT) market. The application allows LCRA to transfer the appropriate trade information to ERCOT. ERCOT requires LCRA to use an application that performs this function to conduct power trades in the ERCOT market. Components of this system were licensed gradually in preparation for the nodal market. The result of the licensing is annual costs of this system exceeding the combined licensing costs of all other software used by Wholesale Power. This project's scope is to procure and implement a new application to perform the same function at a lower maintenance cost, providing substantial cost savings to LCRA.



Enterprise Support FY 2016 Recommended Projects (Continued)

Physical Access Control System Phase 1 – Physical access control means restricting access to a location or resource based on a set of criteria. Physical access control systems assist in managing this process and log an automated transaction of events. LCRA has two physical access control systems. The current system configuration is complicated and near the end of its expected life. This project is the initial phase of migrating all LCRA locations that are not North American Electric Reliability Corporation (NERC) locations into a single access control system.

Tower Upgrades Phase 1 – The upgrades will increase the capacity and reliability of telecommunications tower equipment at the Creedmoor, Moulton and Welcome telecommunications facilities, as well as the Lockhart and Luling substations. The recommended project completion date is June 30, 2016.

General Additions - General addition projects will maintain infrastructure and improve reliability for the following:

- · Facilities.
- Information Technology (includes various projects to comply with NERC regulations, maintain infrastructure, and improve reliability for LCRA technology systems and applications).
- Telecommunications (includes projects for required, but unplanned, system improvements to accommodate failed equipment, telecommunications system reliability enhancements or changing system conditions as they occur).

Minor Capital – The scope of minor capital projects is to purchase equipment that is ready to place in service upon delivery for the following:

- Facilities.
- Information Technology.
- Public Safety.
- Telecommunications.



Enterprise Support

FY 2016 Capital Plan Recommended and Approved Projects

(Dollars in thousands)

							Five-Year	
Project Name	Contingency	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total	Lifetime
ecommended								
Facilities								
Dalchau Service Center (DSC) Environmental Lab Chiller	9%	500		-	-	· · ·	500	50
General Additions - FY 2016	0%	233		-	-	-	233	23
Minor Capital - FY 2016	0%	274		-	- //	-	274	27
Information Technology								
Enterprise Resource Planning System	10%	3,444	3,444	-		-	6,888	6,88
General Additions - FY 2016	0%	1,600	-	-	100-	-	1,600	1,60
Market Operating Solutions	10%	900	900	-	-	-	1,800	1,80
Minor Capital - FY 2016	0%	1,200	-		1 20	-	1.200	1,20
Public Safety		,					,	
Minor Capital - FY 2016	0%	204	118 -	-	-	-	204	20-
Physical Access Control System - Phase 1	10%	280	S/ \-		-	· · ·	280	28
Telecommunications								-
General Additions - FY 2016	0%	1,000		. /	-	- 1	1,000	1,00
Minor Capital - FY 2016	0%	171	_	<i>.</i>	-		171	17
Tower Upgrades - Phase 1	10%	408	-	-	-		408	40
Recommended Subtotal	X. X	10,214	4,344	1	-	-	14,558	14,55
Approved				<u></u>				
Information Technology								
Electronic Document Management System		718	- /	1	-	-	718	1,80
LCRA Enterprise Historian		356	39	-	-	-	395	86
Approved Subtotal	- 11 - X - 1	1,074	39	- \	-		1,113	2,666



Enterprise Support FY 2016 Capital Plan Future Projects (Dollars in thousands)

						Five-Year	
Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total	Lifetime
ure							
 Facilities							
All Sites Unified Server for Building Controls System		473		-	<i>.</i> .	473	47
DSC Parking Lot and Road Surface	· ·	500	-	- /	-	500	50
General Additions	-	500	500	500	500	2,000	2,00
General Office Complex (GOC) and DSC Building Automation							
Controls Management Integrations	- \	500	-	- X -		500	50
GOC Campus Lighting	-	· · · ·	-	250	-	250	25
GOC Parking Lot and Road Surface	-	320	-	· · ·	-	320	32
GOC Xeriscaping	-	240	60		-	300	30
Minor Capital	-	232	173	89	129	623	62
Information Technology							
Asset and Work Management (Maximo)	-	800	500	-	-	1,300	1,30
Asset and Work Management (Maximo) - FY 2020		· .	· · · ·	-	1,000	1,000	1,00
Billing System Consolidation	16 - J	1,500	1,500	-	-	3,000	3,00
Document Management - FY 2020		-	- 1		1,000	1,000	1,00
eDiscovery - FY 2020	. / · · ·	- 1	3 · · · ·	1	500	500	50
General Additions	/- /-	1,200	1,200	1,200	1,200	4,800	4,80
Generation Management System			-	600	-	600	60
LCRA Enterprise Historian - FY 2020		-		-	800	800	80
Minor Capital		1,350	650	650	1,440	4,090	4,09
SharePoint/Project Management Information System	-/	-	800	-	-	800	80
Trade Management Consolidation (Allegro/Aline)	1 /-	1,000	- X	-	-	1,000	1,00
Wireless Replacement	V 7. / -	500	1	-		500	50



Enterprise Support FY 2016 Capital Plan Future Projects (Dollars in thousands)

						Five-Year	
Project Name	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total	Lifetime
Future (Continued)							
Public Safety							
Minor Capital		385	275	213	50	923	923
Physical Access Control System - Phase 2	· · · ·	995		-	1 -	995	995
Physical Access Control System - Phase 3		- 1	760	-	-	760	760
Physical Access Control System - Phase 4		-	-	420	-	420	420
Physical Access Control System - Phase 5	-// · · ·	-	-		330	330	330
Telecommunications							
Backbone Fiber Upgrades	-	4,077	4,077	4,077	4,077	16,308	16,308
Fayette Power Project Diverse Fiber Entrance	-	750	750	- N	-	1,500	1,500
General Additions	-	1,000	1,000	1,000	1,000	4,000	4,000
Minor Capital	-	120	92	114	98	424	424
Tower Upgrades - Phase 2		400	400	400	400	1,600	1,600
Future Subtotal	-	16,842	12,737	9,513	12,524	51,616	51,616
Total Enterprise Support	11,288	21,225	12,737	9,513	12,524	67,287	68,840



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Appendix – Financial Tables



LCRA Consolidated (Including Nonprofit Corporations)

(Dollars in millions)		Budgeted		EV 0047		cast	E)(0000
- 1		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
<u>Revenues¹</u>							
Wholesale Power	\$	654.4	575.1	480.3	497.5	525.7	527.8
Transmission		375.3	398.5	409.5	418.1	431.0	438.1
Water		47.1	41.4	42.7	44.8	46.4	47.4
Other		3.3	3.2	3.4	3.4	3.4	3.4
Less Intracompany Eliminations		(6.0)	(5.8)	(5.6)	(5.5)	(5.2)	(5.1)
Total Net Revenue		1,074.2	1,012.4	930.2	958.3	1,001.2	1,011.6
Expenses ¹							
Fuel and Power Cost Recovery (F&PCR)		325.6	288.9	224.2	232.1	255.6	268.9
Operations and Maintenance		282.5	281.5	284.7	295.0	300.6	302.9
Total Net Expense		608.1	570.4	509.0	527.1	556.1	571.8
Net Margin for Debt Service		466.1	442.0	421.3	431.1	445.1	439.8
Less: GenTex 1 Capital ²		(2.0)	0.0	(1.3)	(2.1)	(0.3)	(0.5)
Adjusted Net Margin Available		464.0	442.0	419.9	429.0	444.8	439.3
Debt Service	\$	346.6	361.9	308.3	325.0	332.4	329.1
Debt Service Coverage, Adjusted		1.34x	1.22x	1.36x	1.32x	1.34x	1.34x
Net Margin After Debt Service ³	\$	119.5	80.1	113.0	106.1	112.8	110.7
Plus:		40.0	10.0				
Use of Additional Cash Funds Less:		13.0	16.2	9.6	0.0	0.0	0.0
Operating Reserves		49.4	11.9	8.4	18.1	11.5	8.6
Revenue-Funded Capital		62.3	60.0	89.5	69.6	81.4	85.6
Noncash Revenue		3.2	1.9	1.9	1.9	1.9	1.9
Resource Development Fund		8.8	10.8	7.2	2.1	5.9	4.8
Restricted for Capital/Debt Retirement		7.8	10.8	14.7	13.4	11.1	8.9
CDPP Grants	_	1.0	1.0	1.0	1.0	1.0	1.0
Net Cash Flow	\$	0.0	0.0	0.0	0.0	0.0	-0.1

¹ Total net revenues and total net expenses are net of intracompany transfers. Total revenues include interest income. Operations and maintenance expense excludes the LCRA TSC capital charge, which is a capital expense for LCRA consolidated.

² Includes adjustments related to GenTex 1 capital funding and reserve funding.

³ GenTex 1 capital funding and reserve funding are available after debt service and used for that purpose.



Wholesale Power (Including Nonprofit Corporations)

(Dollars in millions)		Budgeted	Proposed		Forec		
	_	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Revenues ¹							
Nonfuel Revenues	\$	328.3	285.3	253.7	260.5	264.2	252.8
Fuel Revenues		325.6	288.9	224.2	232.1	255.6	268.9
Total Revenue		653.8	574.2	477.9	492.6	519.7	521.7
Expenses ¹							
Net F&PCR Expenses		325.6	288.9	224.2	232.1	255.6	268.9
Total Nonfuel Operations and Maintenance		97.1	88.3	85.7	92.3	93.3	87.4
Total Expense		422.7	377.2	309.9	324.4	348.9	356.3
Net Operating Margin		231.2	197.0	168.0	168.2	170.8	165.4
Plus: Interest Income		0.6	0.9	2.4	4.9	6.0	6.1
Less: Assigned Enterprise Expense		31.2	26.8	26.8	27.1	27.5	28.5
Public Service Fund	1	11.2	10.5	8.5	8.7	8.9	8.6
Net Margin Available for Debt Service		189.3	160.6	135.1	137.3	140.5	134.3
Less: GenTex 1 Funds	/	(2.0)	0.0	(1.3)	(2.1)	(0.3)	(0.5)
Adjusted Net Margin Available		187.3	160.6	133.8	135.2	140.2	133.8
Total Debt Service	\$	160.2	158.4	108.8	108.2	112.1	107.1
Debt Service Coverage	<u> </u>	1.17x	1.01x	1.23x	1.25x	1.25x	1.25x
Net Margin After Debt Service	\$	29.1	2.2	26.3	29.1	28.4	27.3
Plus:							
Settlement Funds		13.0	6.3	9.6	0.0	0.0	0.0
Additional Cash Funds		0.0	9.9	0.0	0.0	0.0	0.0
Less: Operating Reserves		37.7	0.0	0.0	3.7	6.2	2.1
Assigned Enterprise Capital		2.9	4.5	9.0	4.6	2.4	3.3
Revenue-Funded Capital		1.5	6.2	15.9	12.6	15.3	19.7
Restricted for Debt Retirement		0.0	7.7	11.0	8.2	4.5	2.2
Net Cash Flow	\$	0.0	0.0	0.0	0.0	0.0	0.0
¹ Includes GenTex Pow er Corporation.							J.



Transmission

(Dollars in millions)		Budgeted	Proposed		Fore	cast	
		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
LCRA Transmission Services Corporation							
Revenues	\$	370.4	387.4	395.6	400.5	411.3	417.9
Operations and Maintenance		82.8	90.2	94.4	99.3	102.8	106.7
Net Operating Margin		287.6	297.2	301.2	301.2	308.5	311.2
Transmission Customer Services							
Revenues		4.5	10.4	11.3	12.3	13.3	13.5
Operations and Maintenance		3.5	7.6	7.8	8.0	7.7	7.9
Net Operating Margin		1.0	2.8	3.5	4.3	5.6	5.6
Total Transmission							
Revenues		374.9	397.8	406.9	412.8	424.6	431.4
Operations and Maintenance		86.3	97.8	102.2	107.3	110.5	114.6
Net Operating Margin	_	288.6	300.0	304.7	305.5	314.1	316.8
Plus: Interest Income		0.4	0.7	2.5	5.3	6.4	6.6
Less: Assigned Enterprise Expense		39.2	42.9	42.4	42.8	43.4	45.1
Public Service Fund		11.3	11.9	12.2	12.4	12.7	12.9
Resource Development Fund		7.4	8.0	8.1	8.3	8.5	8.6
Net Margin Available for Debt Service		231.1	238.0	244.5	247.4	255.8	256.8
Debt Service	\$	163.1	179.4	177.9	190.3	192.7	195.4
Debt Service Coverage		1.42x	1.33x	1.37x	1.30x	1.33x	1.31x
Net Margin After Debt Service	\$	68.0	58.6	66.6	57.1	63.2	61.4
Less:							
Operating Reserves		11.1	11.8	7.7	14.3	5.0	6.1
Assigned Enterprise Capital		4.7	5.3	10.4	7.1	6.2	7.9
Revenue-Funded Capital		48.5	38.2	47.0	37.4	50.1	47.2
Transfer to LCRA Resource Development Fund	1	7.1	7.1	6.5	4.1	7.3	6.7
Restricted for Debt Retirement		0.0	0.0	0.5	1.8	3.0	2.9
Plus:		0.0	0.0	0.5	1.0	3.0	2.9
Amortization of Enterprise/Minor Capital ²		3.5	3.8	5.4	7.5	8.5	9.4
Net Cash Flow	\$	0.0	0.0	0.0	0.0	0.0	9.4

¹ A transfer of \$7.1 million from LCRA TSC to LCRA was authorized by the LCRA and LCRA TSC boards of directors in April 2014. Under the initial contractual commitment entered into by LCRA and LCRA TSC, the Board must make an annual determination to authorize each year's transfer. Such annual transfers are payable only if all other financial commitments have been met as required by LCRA TSC's financial policies.

² In FY 2012, LCRA TSC began funding minor capital and its share of enterprise capital with current year revenues. It will include an amortization of the amount in each year to recover in rates.



Water

(Dollars in millions)	E	Budgeted	Proposed		Fore	cast		
		FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	
Revenues								
Firm water	\$	26.6	28.2	28.9	30.2	30.3	30.6	
Agricultural		8.6	4.3	4.4	4.6	4.7	4.9	
Other		11.9	8.8	9.1	9.6	10.8	11.4	
Total Revenues		47.1	41.4	42.5	44.4	45.9	46.9	
Operations and Maintenance		21.8	18.3	20.6	21.0	21.7	22.8	
Net Operating Margin		25.3	23.1	21.9	23.4	24.2	24.1	
Plus: Interest Income		0.0	0.0	0.2	0.4	0.5	0.	
Less: Assigned Enterprise Expense		5.7	6.1	6.0	6.1	6.2	6.	
Public Service Fund		1.3	1.4	1.4	1.5	1.5	1.	
Net Margin Available for Debt Service		18.3	15.7	14.7	16.3	17.0	16.	
Debt Service	\$	18.4	18.9	17.3	21.7	22.8	22.	
Debt Service Coverage		0.99x	0.83x	0.85x	0.75x	0.75x	0.76	
Plus: Resource Development Funding		12.7	11.6	12.3	16.0	16.1	16.2	
Adjusted Debt Service Coverage	_	1.68x	1.44x	1.56x	1.49x	1.46x	1.49	
Net Margin After Debt Service	\$	12.6	8.4	9.7	10.7	10.4	10.9	
Less:								
Operating Reserves		0.2	0.1	0.6	0.1	0.2	0.	
Assigned Enterprise Capital		0.8	0.7	1.2	0.7	0.6	0.	
Revenue-Funded Capital		0.8	2.6	2.8	4.6	4.2	4.	
Restricted for Capital/Debt Retirement		7.8	3.1	3.2	3.4	3.5	3.	
Noncash Revenues		3.2	1.9	1.9	1.9	1.9	1.	
Plus:								
Water and Wastewater Support		0.3	0.0	0.0	0.0	0.0	0.	
	\$	0.0	0.0	0.0	0.0	0.0	0.0	

Note: The Water financial summary includes water and wastewater utilities, which LCRA is phasing out due to the divestiture of the assets.



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