Q. What is the Lower Colorado River Authority (LCRA)?
A. LCRA is a conservation and reclamation district created by the Texas Legislature in 1934. It has no taxing authority and operates solely on utility revenues and fees generated from supplying energy, water and community services. LCRA supplies cost-effective electricity for Central Texas, manages water supplies and floods in the lower Colorado River basin, provides public parks, and supports community development in 58 Texas counties.

Q. What is LCRA Transmission Services Corporation (LCRA TSC)?
A. Senate Bill (SB) 7, passed by the Texas Legislature in 1999, restructured the state’s electric industry and allowed LCRA to provide transmission services throughout Texas. Provisions of SB 7 required utilities to separate electric generation and transmission businesses. As a result, LCRA created LCRA Transmission Services Corporation (LCRA TSC) in 2001 to meet these requirements. As of Jan. 1, 2002, all of LCRA’s transmission assets were transferred to this nonprofit corporation. LCRA TSC owns or operates more than 4,800 miles of transmission lines, more than 350 substations and a System Operations Control Center. LCRA staff operates and maintains those facilities for LCRA TSC, which provides wholesale transmission services to eligible customers located in South, West, and Central Texas.

Q. What is the Blumenthal 138-kV Transmission Line Project?  
A. LCRA TSC is proposing to build and operate a new single-circuit 138-kilovolt (kV) transmission line as part of an overall Transmission System Improvements Plan. The new transmission line will connect Central Texas Electric Cooperative’s (CTEC) new Blumenthal Substation, to be located in the Blumenthal area, to LCRA TSC’s existing Kendall-to-Mountain Top (T-342) transmission line, which runs through northern Kendall and western Blanco counties. The new transmission line may be located in portions of Blanco, Gillespie and Kendall counties. The entire project will be about 10 to 20 miles long, depending on the final route.

Q. What is the proposed Blumenthal Substation and why is it needed?  
A. The Blumenthal Substation is a proposed load-serving substation needed to support current and forecasted electric load growth and to provide reliable electric service in CTEC’s service area. CTEC will acquire about three acres of land and construct the new Blumenthal Substation.

Q. Why are the Blumenthal Substation and 138-kV transmission line needed?  
A. CTEC has experienced a large increase in demand for electricity in its service area, especially the area from eastern Gillespie County extending to western Blanco County and northern Kendall County. The proposed new Blumenthal Substation and transmission line would transmit power from existing LCRA TSC transmission lines to CTEC and its member owners.

CTEC is a Direct-Connect Transmission Customer of LCRA TSC. LCRA TSC delivers wholesale power via its high-voltage transmission lines to CTEC who then directs that power to its end users (homes and businesses) via lower-voltage distribution lines.
The existing CTEC distribution lines coming out of the Goehmann Lane Substation serve customers located in eastern Gillespie County, parts of western Blanco County, and parts of northern Kendall County. This portion of the CTEC distribution system has experienced several recent outages. The Blumenthal Substation and 138-kV transmission line project would improve electric reliability in these areas.

Q. Who determines when and where new lines are needed?
A. The Public Utility Commission of Texas (PUC) decides if new lines are needed to supply electric service. LCRA TSC will conduct a routing study and obtain public input related to siting the new electric facilities. The PUC ultimately decides the route of new transmission lines.

Q. What is the Electric Reliability Council of Texas (ERCOT)?
A. ERCOT is the organization entrusted with keeping electric power flowing to about 20 million Texans, representing 85 percent of the state’s electric load and about 75 percent of its land area. As the independent system operator for its region, ERCOT manages the scheduling of power on an electric grid consisting of 78,000 megawatts of generation capacity and 38,000 miles of transmission lines. ERCOT is a nonprofit corporation regulated by the PUC.

Q. How does electricity get to homes?
A. To meet the electricity needs of cooperative member owners, electrical power first travels from generating plants, connected to the ERCOT system, through a network of high-voltage transmission lines and voltage transformation equipment connected at voltage levels including 138 kV and 69 kV. The voltage is then reduced or “stepped down” to a distribution-level voltage through a transformer at a substation. The voltage step down is typically to 13 kV or 25 kV. The electricity is then distributed out of the substation along these lower voltage distribution lines, ultimately supplying the electrical power to the cooperative member owners through one last level of voltage transformation near homes and businesses.

Q. How is CTEC involved with this project?
A. CTEC purchases its electricity from electric suppliers in the ERCOT region. The electricity is transmitted over the transmission systems owned and maintained by LCRA TSC and other transmission service providers to CTEC. CTEC then resells and distributes that electricity to its retail customers. As a result, CTEC customers will benefit directly from this project.

CTEC will acquire the land for the new Blumenthal Substation and construct it. Once the new substation is completed, CTEC will construct new lower voltage distribution lines out of the substation to supply the area’s electricity.

Q. There are large electric transmission lines recently constructed in the Comfort, Kerrville and Junction areas. Is this project related to that transmission line project?
A. No. That is a 345-kV electric transmission line directed by the PUC to be built as part of the state’s Competitive Renewable Energy Zones (CREZ) project. CREZ is designed to be a bulk electricity transfer project to move large quantities of power throughout the state. The Blumenthal 138-kV project is in no way related to CREZ, and is a smaller-scale electric transmission project designed to address local electricity issues and meet the area’s needs for reliable electric service.
Q. Where will the new substation and transmission line be located?
A. The exact location of these facilities has not yet been determined. LCRA TSC has contracted with an environmental and engineering firm to conduct a routing study, which will identify several alternative sites for the new Blumenthal Substation and several transmission line routes to connect the existing LCRA TSC Kendall-to-Mountain Top transmission line (T-342) to the various alternate Blumenthal Substation sites. The PUC will decide the route for any new transmission line it approves. Several alternate substation locations and alternate transmission line routes will be provided to the PUC. Only one substation site and one transmission line route connecting the substation to T-342 will be constructed.

Q. How does LCRA TSC identify and consider routes for the transmission line?
A. LCRA TSC and its routing consultant, Power Engineers, develop a study area that includes the end points of the transmission line -- the existing Kendall-to-Mountain Top transmission line (T-342) and the proposed new Blumenthal Substation alternate sites. LCRA TSC gathers data, maps, aerial photos and input from federal and state agencies and local officials. LCRA staff also conducts field reconnaissance from public access points like roads and highways. Using this information, LCRA TSC identifies environmental and land use constraints such as subdivisions, parks and known cultural resource sites within the study area. Then, staff identifies preliminary alternate sites for the new Blumenthal Substation. Several preliminary route segments connecting the end points are identified and drawn to avoid these constraints as much as possible; realizing it is impossible to avoid all constraints. These preliminary route segments and alternate substation sites are then presented to the public at an open house. Although several alternate route segments and substation sites will be shown at the open house, only one substation site and one route connecting the substation to T-342 will be constructed.

As the public input process continues, route segments and alternate substation sites may be modified, eliminated or added. Ultimately, the routes will be evaluated using factors that include public input, human/natural/cultural resource impacts, engineering, construction, operation and maintenance issues and cost. This process will identify several alternative routes connecting the project end points. These routes are then included in LCRA TSC's Certificate of Convenience and Necessity (CCN) application to the PUC. The PUC will make the final decision whether to approve the application and will select the route and substation site to build.

Q. What will the transmission line structures look like?
A. LCRA TSC is considering various structure types for this project (e.g. steel or concrete monopoles, steel or concrete H-frames, and steel lattice structures). Right of way, engineering, public input and cost constraints will be used to decide the preferred structure type. Typical transmission structures supporting 138-kV lines will be 50 to 125 feet above the ground. Typical span lengths between structures for projects like this range from 600 to 1,000 feet. The PUC ultimately will approve the structure type(s) for the project. LCRA TSC shows diagrams and photos of the typical transmission line structures at its open houses.

In some locations and along certain route segments, only H-frame structures can be used to avoid potential impacts to an existing Federal Aviation Administration communication beacon located just south of US Highway 290.
Q. What will be located at the site where the new transmission line ties into the existing transmission line?
A. During the routing phase of the project, the routing consultant and LCRA TSC will identify and evaluate a few alternate connection (also called tap point) locations along T-342 (LCRA TSC’s existing Kendall-to-Mountain Top 138-kV transmission line). After the PUC approves a route, LCRA TSC will acquire about two acres of land for the tap point location. Equipment at the tap point will include a 138-kV operating bus, three 138-kV motor-operated switches with interrupters, a remote terminal unit and a control house.

Q. How will I be affected if the route crosses my land?
A. Once the PUC selects a route, LCRA TSC will work with each property owner to purchase an easement to construct, operate and maintain the new electric transmission line. An easement gives a utility the right to use privately owned land for a specific purpose. The landowner retains ownership of the property. The easement is described in a legal document subsequently recorded in the county deed records and available for public inspection. Other than the utility facilities, no above-ground structures may be located within the easement. Normal agricultural and recreational activities including farming, ranching, hunting and hiking may take place within the easement area.

Q. What is the process for defining or describing an easement?
A. LCRA TSC will contact owners of the property to be crossed by the transmission line after the PUC approves the route for the transmission line. The landowners are notified of the need to conduct surveys on the property. Crews conduct a land survey to establish boundaries of the easement. At the same time, environmental and cultural resources surveys are conducted. The easement area is defined and described by a registered professional land surveyor. This survey, referred to as a “metes and bounds” survey, is a description of the exact measurements of the land needed for the facilities.

Q. How much does LCRA TSC pay for an easement?
A. LCRA TSC pays fair market value for transmission line easements and supplemental easements. A copy of the fair market value report is provided to a property owner at the time an offer is made to purchase the easement.

Q. What is eminent domain?
A. Eminent domain is the right granted to certain entities such as utilities and governmental bodies to acquire property for public use, as long as the property owner is paid just compensation. The power of eminent domain may be used for such things as schools, parks, roads, highways, fire and police stations, public buildings and utilities. As public utilities, LCRA TSC and CTEC have the right to exercise eminent domain. However, LCRA TSC and CTEC are obligated to negotiate in good faith with property owners for the purchase of the property or easement rights they need before invoking the authority of eminent domain.

Q. How wide is the easement for the transmission line?
A. Easements for this proposed 138-kV transmission line typically range between 80 and 130 feet wide. The exact width of the easement will depend on the type of structure selected, engineering constraints and other factors.
Q. Will LCRA TSC clear the entire easement area?
A. LCRA TSC will clear the work zone along the easement typically 60 to 90 feet wide. Additional clearing less than or equal to the 80- to 130-foot easement width also will be required to allow for conductor (also called wire) sag and swing due to anticipated wind conditions. In environmentally sensitive areas, minimal clearing is typically required.

Q. Do LCRA TSC and CTEC pay property taxes on transmission and substation facilities?
A. Yes. LCRA TSC pays local property taxes on the transmission facilities, land and land rights that it owns. LCRA TSC has paid more than $2 million in property taxes to school districts and other local jurisdictions in Gillespie County since its creation in 2002. LCRA TSC also pays state and local sales and use taxes for goods and services defined as taxable by state law.

CTEC also pays property taxes on its facilities and land located within its service area. In 2012, CTEC paid property taxes in its service area totaling about $473,500.

Q. What about electric and magnetic fields?
A. Electric and magnetic fields (EMF) are found everywhere, especially where electricity is used, including household appliances (such as hair dryers, computers and televisions), electrical equipment, communications equipment and power lines. Some concerns have been raised in the past about potential health effects of EMF. Extensive scientific research has established no direct link between exposure to power lines and adverse health effects. Neither the state nor federal government has established any health standards relating to EMF. For more information, visit the Electric and Magnetic Field section of the LCRA website at http://lcra.org/energy/energy-education-and-safety/safety/Pages/electric-and-magnetic-fields.aspx

Q. What are the next steps for this project?
A. After the open house, LCRA TSC and its routing consultant will evaluate all public comments and conduct additional engineering and environmental analysis of the options. Some of the preliminary route segments and substation locations may be eliminated or modified. Others may be added based on public input and additional analysis. A set of primary alternative routes made up of the various segments and alternate substation locations will be identified and evaluated in detail. The consultant will prepare a project Environmental Assessment and Alternative Route Analysis report (sometimes called an EA or routing study) for LCRA TSC to review. LCRA TSC will then prepare the Certificate of Convenience and Necessity (CCN) application and submit it to the PUC. Upon submitting the CCN application (currently scheduled for late 2014), LCRA TSC will mail letters to potentially affected landowners about how they can participate in the proceeding. Public notifications regarding the CCN application filing also will be published in area newspapers. If the PUC approves the project, final notices will be sent to landowners advising them of the approved route. The PUC should reach a decision on the CCN application within a year after the application is filed.

Q. What happens once the PUC approves the project?
A. Once the PUC approves the project, LCRA TSC will conduct land, environmental and cultural resources surveys to prepare the necessary plans and specifications to construct the transmission line. CTEC will do the same for the substation portion of the project. Then LCRA TSC will prepare the right of way for construction. After the right of way is prepared, construction equipment and workers will enter the right of way to install new structures and conductors. CTEC will begin clearing, grading
and constructing the new Blumenthal Substation after it purchases the required land from the landowner.

**Q. When will this 138-kV transmission line and new substation be in operation?**  
**A.** If approved by the PUC, the new transmission line and substation are scheduled to be operational by 2018.

Anyone with questions about the Blumenthal 138-kV Project can send a letter, email or call Lance Wenmohs or visit www.lcra.org/energy:

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