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 enabled 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 5,100 miles of transmission lines, more than 380 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 Zorn-to-Marion 345-kV Transmission Line Project?
A. LCRA TSC is proposing to build and operate a new 345-kilovolt (kV) transmission line as part of an overall Transmission System Improvements Plan. The new transmission line will connect the Zorn and Marion substations in Guadalupe County. Some portion of the line will use existing structures between the Zorn and Marion substations and the remainder of the line will require new construction on new right of way. The section of newly constructed transmission line will be approximately 10 to 12 miles long, depending on the final route and will be double circuit capable.

Q. Why is the 345-kV transmission line needed?
A. This 345-kV transmission line is needed to reliably serve the demand for electricity in Bexar County and the Interstate 35 corridor between San Antonio and Austin. The demand in this area has been growing, and that growth is expected to continue.

The electric power supply to Bexar County is dependent upon existing 138-kV and 345-kV transmission lines located in Bexar County and along the I-35 corridor between San Antonio and Austin. CPS Energy’s plan to decommission an 850 megawatt (MW) power plant located in the southern portion of Bexar County in 2018 increases reliance on these transmission lines.

Electric system planning assessments indicate existing transmission lines are not adequate to meet the demand for electricity when coupled with retirement of the 850 MW power plant, so the additional 345-kV infrastructure is required to serve future demand for Bexar, Comal, Guadalupe and Kendall counties in a safe and reliable manner. After reviewing these planning assessments, the Electric Reliability Council of Texas (ERCOT) Board of Directors endorsed this project and deemed the Zorn-to-Marion 345-kV transmission line critical to the reliability of the ERCOT system.

Q. What is the Electric Reliability Council of Texas (ERCOT)?
A. ERCOT is the organization entrusted with keeping electric power flowing to about 24 million Texans, representing 90 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 more than 43,000 miles of transmission lines and 550 generation units. ERCOT is a nonprofit corporation regulated by the Public Utility Commission of Texas (PUC).
Q. Who determines when and where new transmission lines need to be constructed?
A. The PUC decides if new transmission lines are needed to supply electric service. LCRA TSC will conduct a routing study and obtain public input related to siting the portion of the new electric facilities between the Clear Springs and Zorn substations. The PUC ultimately determines the route for new transmission lines.

Q. How does electricity get to homes?
A. To meet the electricity needs of consumers, 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 345 kV, 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 end use consumers through one last level of voltage transformation near homes and businesses.

Q. Where will the new transmission line be located?
A. The exact location of the transmission line has not yet been determined. LCRA TSC has contracted with an environmental and engineering firm, Power Engineers, to conduct a routing study to identify several potential transmission line routes between the existing LCRA TSC Zorn and Marion substations. For a portion of the project, the new 345-kV circuit will be installed on existing structures. The PUC will select the route for any new transmission line it approves. Several alternate transmission line routes will be provided to the PUC. Only one transmission line route connecting the two substations will be constructed.

Q. How does LCRA TSC identify and consider routes for the transmission line?
A. LCRA TSC and its routing consultant develop a study area for the project. LCRA TSC gathers data, maps, aerial photos and input from federal and state agencies as well as local officials. LCRA staff also conducts field reconnaissance from public access points like roads and highways. This information helps LCRA TSC identify environmental and land use constraints such as subdivisions, parks and known cultural resource sites within the study area. Then, staff identifies preliminary route segments connecting the end points, which are identified and drawn to avoid these constraints as much as possible, though it is impossible to avoid all constraints. These preliminary route segments are then presented to the public at an open house. Although several alternate route segments will be shown at the open house, only one route between the Zorn and Marion substations will be constructed.

As the public input process continues, route segments 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 to build.

Q. What will the transmission line structures look like?
A. LCRA TSC is considering various structure types for this project (primarily steel or concrete monopoles 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 345-kV lines will be 130 to 180 feet above the ground. Typical span lengths between structures for projects like this range from 900 to 1,500 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.

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 affected 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 that will be recorded in the county deed records and is available for public inspection. 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. After the PUC approves the transmission line route, LCRA TSC will contact owners of the property to be crossed by 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 resource 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 a public utility, LCRA TSC has the right to exercise eminent domain. However, LCRA TSC is 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 345-kV transmission line typically range between 120 and 160 feet wide. The exact width of the easement will depend on the types of structures 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 80 to 100 feet wide. Additional clearing less than or equal to the 120- to 160-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. Does LCRA TSC 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 $12.5 million in property taxes to school districts and other local jurisdictions in Guadalupe 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.

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 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 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 winter 2016), 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 six months 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. 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.

Q. When will this 345-kV transmission line be in operation?
A. If approved by the PUC, the new transmission line is scheduled to be operational in 2019.

For more information, visit www.lcra.org/zornmarion or contact:

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