WELCOME

LCRA Transmission Services Corporation

OPEN HOUSE
ABOUT LCRA TSC

LCRA Transmission Services Corporation (LCRA TSC) is a nonprofit utility that provides safe, reliable and environmentally responsible electric transmission services in Texas. LCRA TSC’s transmission lines and substations play a vital role in the transmission of electricity between power generation plants and local electric service providers.

- LCRA TSC facilities include approximately 5,200 miles of transmission lines and nearly 400 substations.
- LCRA TSC facilities connect to electric generators and other transmission providers to transmit electricity to municipal utilities, electric cooperatives and other electric distribution service providers within Texas.
- The electricity LCRA TSC transmits is delivered by local distribution service providers to homes and businesses to meet the energy needs of Texas’ growing population.
- LCRA TSC is regulated by the Public Utility Commission of Texas and pays sales and property taxes on facilities it owns.

LCRA Transmission Services Corporation

LCRA TSC IS A NONPROFIT CORPORATION OWNED AND OPERATED BY THE LOWER COLORADO RIVER AUTHORITY.
Electricity travels from generation sources through voltage transformation equipment and a network of transmission lines.

Voltage is reduced to a lower distribution level through a transformer at a substation.

Electricity then flows through local distribution lines to homes and businesses.
LCRA TSC is proposing to construct and operate:

- A new load-serving substation near Mountain Home.
- 20 miles of new 138-kV transmission line connecting the existing Hunt and Harper substations to the new Mountain Home Substation.

Why is this project needed?

- Population growth and development in the Texas Hill Country have increased demand for electricity. This project will add transmission infrastructure crucial for electric reliability to serve the long-term needs of residences and businesses in Gillespie, Kerr and Kimble counties.
- System studies show without this project, the current electric system will be unable to reliably meet the area’s forecasted demand for power by 2021.
- Customers of Central Texas Electric Cooperative, the City of Fredericksburg and the Kerrville Public Utility Board will benefit from more reliable electricity with this new transmission infrastructure.

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**PUBLIC UTILITY COMMISSION CERTIFICATION PROCESS**

<table>
<thead>
<tr>
<th>LCRA TSC Defines Project</th>
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<tbody>
<tr>
<td>• Conduct research and review studies to determine need.</td>
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<td>• Identify needed facilities and end points of the project.</td>
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<tr>
<th>LCRA TSC Conducts Environmental Assessment and Routing Analysis</th>
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<tr>
<td>• Establish study area based on project definition.</td>
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<td>• Gather data about study area and map environmental and land use constraints in study area.</td>
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<td>• Determine preliminary transmission line segments.</td>
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<td><strong>Hold open house to gather public input.</strong></td>
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<td>• Analyze data and feedback from the public to develop primary transmission line routes, including multiple alternatives.</td>
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<td>• Prepare an Environmental Assessment Report.</td>
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<tr>
<th>LCRA TSC Applies for CCN Amendment</th>
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<td>• Submit application to the Public Utility Commission of Texas (PUC) to amend LCRA TSC’s Certificate of Convenience and Necessity (CCN).</td>
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<td>• Send notices to landowners whose properties may be crossed or who own a habitable structure within 300 feet of route alternatives at the time CCN application is filed.</td>
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<tr>
<td>• Send notices to municipalities and electric utilities within five miles of the project and to local government entities where the project will potentially be located.</td>
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<th>Public Participation</th>
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<td>• After the CCN application is filed, people who are potentially impacted by the project have an opportunity to participate in the application proceeding at the PUC by filing a request to participate (intervene) within 45 days.</td>
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<td>• If no parties intervene in the proceeding, the PUC staff conducts a review and issues a recommendation to the PUC.</td>
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<tr>
<td>• If parties have intervened in the proceeding, testimony may be filed, an administrative hearing may be held and an administrative law judge will prepare a recommendation to the PUC regarding the application.</td>
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<th>PUC Decision</th>
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<td>• Within 12 months of the CCN application filing, the PUC will approve or deny the application, or approve it with modifications.</td>
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<td>• PUC approval directs LCRA TSC to build the new transmission line and substation along the route selected by the PUC.</td>
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Public Utility Commission of Texas Issues Final Order

LCRA TSC contacts landowners to arrange property access to conduct one or more of the following:

- Property survey
- Environmental/cultural resources survey
- Engineering site visits
- Geotechnical testing and soil boring

Property value is determined through an independent appraisal or available market data.

LCRA TSC provides landowner with an offer letter, survey, appraisal/compensation summary and copy of the State’s Landowner’s Bill of Rights.

LCRA TSC works with landowners to reach an agreement for acquisition of the necessary easement.

- **Agreement reached:** LCRA TSC pays landowner and enters into easement agreement.
- **Agreement not reached:** LCRA TSC initiates eminent domain process as described in the Landowner’s Bill of Rights.
LCRA TSC purchases easements and maintains these rights of way for safety and the long-term reliability of the transmission line.

Compatible Vegetation and Structures for Transmission Rights of Way

Tree canopies and structures should **NOT** extend under the transmission lines.

LCRA TSC follows appropriate clearing requirements and guidelines.
ELECTRIC AND MAGNETIC FIELDS

Electric and magnetic fields (EMF) surround all electrical appliances and devices. When electricity is generated, transmitted or consumed, EMF are produced.

Harper to Mountain Home to Hunt EMF Levels

- Common sources of EMF are home and workplace electrical appliances and power lines.
- The EMF levels from transmission lines and substations decrease rapidly with distance from the transmission line or substation.

For more information on EMF, see the National Institute of Environmental Health Sciences’ website.

Based on anticipated loading at system peak load conditions and minimum ground clearance.
TYPICAL 138-kV SINGLE-CIRCUIT POLE DESIGN

Typical Height
80 to 120 feet

Typical Easement Width
80 to 100 feet

Structure Material
Weathering steel or concrete

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TYPICAL 138-kV DOUBLE-CIRCUIT POLE DESIGN

Typical Height
80 to 130 feet

Typical Easement Width
80 to 100 feet

Structure Material
Weathering steel or concrete

Pertains to segments G, F and B.

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LCRA TSC is proposing to build a new 138-kV load-serving substation near Mountain Home.

- LCRA TSC designs, constructs and operates open-air substations that adhere to industry safety and technical guidelines and requirements.
- The footprint of the proposed Mountain Home Substation is eight to 10 acres.
- The tallest structures within the substation will be about 60 feet tall.
- LCRA TSC has identified six alternative substation sites based on load-serving capability, land requirements, environmental/land use considerations, local area benefits, cost effectiveness and accessibility.
- The Mountain Home Substation will be built on one site.
ENVIRONMENTAL AND LAND USE CONSIDERATIONS

Land use

- Length of alternative route(s)
- Number of habitable structures within 300 feet of the transmission line right of way (ROW) center line
- Length of route using and paralleling existing transmission line ROW
- Length of ROW parallel and adjacent to apparent property lines
- Length of ROW across parks and recreational areas
- Number of additional parks and recreational areas within 1,000 feet of the center line of the proposed transmission line
- Length of ROW across crop, pasture and range lands
- Length of ROW across land irrigated by traveling systems
- Length of ROW parallel and adjacent to natural gas pipelines
- Number of pipeline crossings
- Number of transmission line crossings
- Number of highway (interstate, U.S. and state) and farm-to-market road crossings
- Number of cemeteries within 1,000 feet of the center line of the proposed transmission line
- Number of airports registered with the Federal Aviation Administration (FAA) with at least one runway more than 3,200 feet in length located within 20,000 feet of the center line of the proposed transmission line
- Number of FAA registered airports with no runway more than 3,200 feet in length located within 10,000 feet of the center line
- Number of private airstrips within 10,000 feet of the center line
- Number of heliports within 5,000 feet of the center line
- Number of commercial AM radio transmitters within 10,000 feet of the center line
- Number of FM radio transmitters, microwave towers and other electronic installations within 2,000 feet of the center line
ENVIRONMENTAL AND LAND USE CONSIDERATIONS

Aesthetics
• Estimated length of ROW within sight of interstates, U.S. and state highways and FM roads
• Estimated length of ROW within sight of parks and recreational areas

Ecology
• Length of ROW across upland woodlands/brushlands
• Length of ROW across bottomland/riparian woodlands
• Length of ROW across wetlands mapped by the National Wetlands Inventory
• Length of ROW across known habitats of federally listed endangered or threatened species
• Area of ROW crossing modeled Golden-cheeked Warbler habitat(s)
• Length of ROW across open water, such as lakes and ponds
• Length of ROW within 100 feet of streams or rivers
• Length of ROW across 100-year floodplains
• Number of stream and river crossings

Archeological
• Number of historic and prehistoric sites crossed by the ROW and within 1,000 feet of the center line
• Number of sites listed in the National Register of Historic Places or determined eligible that are crossed by the ROW or within 1,000 feet of the center line
• Length of ROW across areas of high archeological and historic site potential

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## OUTREACH AND COORDINATION

**LCRA TSC seeks input from the following:**

### Local Agencies/Governments/Organizations

#### Counties (Kerr, Gillespie and Kimble)
- County judges
- County commissioners
- Chambers of commerce
- Alamo Area Council of Governments
- Concho Valley Council of Governments
- Gillespie County Historical Society
- Kerr County Historical Commission
- Kimble County Historical Commission

#### Ingram
- Mayor
- City administrator
- City council members

#### Hunt, Harper, Divide
- School districts

#### Utilities
- Central Texas Electric Cooperative
- City of Fredericksburg Utilities
- Kerrville Public Utility Board
- Pedernales Electric Cooperative
- Bandera Electric Cooperative

### State and Regional Agencies/Government

- Railroad Commission of Texas
- Texas Commission on Environmental Quality
- Texas Department of Transportation, Aviation Division
- Texas Department of Transportation, Austin District
- Texas Department of Transportation, San Antonio District
- Texas Department of Transportation, Environmental Affairs
- Texas Department of Transportation, Planning and Programming
- Texas General Land Office
- Texas Historical Commission
- Texas Parks and Wildlife Department
- Texas Water Development Board
- Texas House of Representatives, Rep. Andrew Murr
- Texas House of Representatives, Rep. Kyle Biedermann
- Texas Senate, Sen. Dawn Buckingham
- Texas Senate, Sen. Charles Perry

### Federal Agencies/Government

- U.S. House of Representatives, Rep. Lamar Smith
- U.S. Senate, Sen. John Cornyn
- U.S. Senate, Sen. Ted Cruz
- Federal Aviation Administration, Southwest Region
- Federal Emergency Management Agency, Region 6
- Natural Resources Conservation Service
- U.S. Army Corps of Engineers, Fort Worth District
- U.S. Department of Defense, Siting
- U.S. Environmental Protection Agency, Region 6
- U.S. Fish and Wildlife Service
- National Park Service