

# The Importance Of Transmission: Bringing Texans More Affordable, Reliable Power

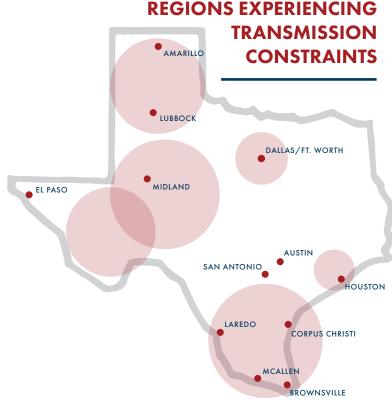
Texas is a trailblazer in renewable energy and has long secured its national lead with early investments in one key area: transmission. Transmission lines are the lifeblood of the Texas energy grid, carrying power from rural regions that are generating energy to the population hubs across the state, like Dallas, Houston, and San Antonio. New policies are needed to upgrade our grid in the near-term and put Texas back on the path to continued economic growth.

### **Transmission Connects Texans to Affordable Energy Solutions**

- The ability to get electricity from where it's generated to where it keeps the lights on is essential to nearly everything Texans do.
- America's economy, national security, and even the health and safety of our citizens depend on the reliable delivery of electricity.
- Transmission provides dozens of quantifiable economic and reliability benefits for Texas families and businesses.
- All electricity customers, especially large power users, and the communities that will host new wind, solar, and energy storage facilities, will benefit from an upgraded power grid and a reformed planning process. For <u>example</u>, transmission:
  - Helps consumers access lower-cost electricity;
  - Reduces the need to build additional electricity generation to hold in reserve;
  - Facilitates robust electricity markets;
  - Provides economic development and jobs;
  - And helps generators and utilities comply with public policy requirements.

### Without Expanded Transmission, Congestion Could Cost Texas Billions

- The <u>ERCOT electricity grid</u> is experiencing levels of transmission constraints and congestion that are only predicted to increase.
- There is a cost of transmission congestion and it is growing. "The congestion costs in ERCOT's day-ahead and real-time markets in 2019 totaled \$1.1 and \$1.26 billion, respectively."
- In addition to driving up costs on power consumers, growing congestion problems frustrate new power generation development. Billions of dollars in new capital for Texas power plants could be sidelined without transmission system improvements.
- If those projects are delayed or canceled, so too are billions of dollars of new local tax revenue and landowner income, mostly to rural Texas.
- Increasing transmission problems will slow business and industrial activities throughout the state (or make those activities more expensive). And, congestion problems put the Texas power grid on a path to substantive reliability problems, especially with the wider deployment of Generic Transmission Constraints (GTCs).



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### Transmission is the Backbone of Texas' Strong Economy

- Previous expansion of the grid in Texas has proven a huge success, driven down wholesale electricity market costs, and today Texans pay some of the lowest electricity rates in the country.
- In 2005, The Texas State Legislature introduced the concept of Competitive Renewable Energy Zones (CREZ) as a
  means of connecting areas with abundant wind resources to more highly populated parts of the state. Completed in
  2013, the CREZ transmission project transmits more than 18.5 MW of electricity across Texas. CREZ is recognized as a
  "tremendous infrastructure success story."
- "[W]e have invested \$7 billion in 3,600 miles of transmission lines to bring renewable energy from West Texas to population centers in the eastern part of the state." <u>Governor Greg Abbott</u>
- "One thing in favor of strengthening transmission ... is that it's pro market. It allows a larger set of generators to compete in a more robust marketplace. You don't always want to throw money at transmission, but at the same time, you have to recognize it's transmission that's enabling the market." <a href="ERCOT Board Member Peter Cramton">ERCOT Board Member Peter Cramton</a>

### **Transmission Investment Does Not Impact Customers' Bills**

- Due in part to the CREZ investment, ERCOT wholesale power prices have declined each year. Relative to the 2008 average production costs, they were \$12 billion lower in 2019 and are expected to be \$20 billion lower in 2020.
- Transmission plays a critical role in lowering production costs. With additional investment, electricity production costs (power plants + fuel costs) are a lower portion of electric bills.
- The average residential electric rate in 2019 was about 12 cents / kWh. On average, 1 cent / kWh, or ~12% of customer bill (average of all customer classes) is for transmission.
- That means in 2019, CREZ wires charges were about 3% of the average customer's bill.

Expansion of Texas' transmission has proven a huge success, driving down wholesale electricity market costs - Today, Texans pay some of the lowest electricity rates in the country.