Transmission Planning in ERCOT

In general, transmission is needed to move power from generation to load. When generation on the system changes or when load grows, transmission improvement projects are often needed. ERCOT and Transmission Service Providers (TSPs) use objective criteria to determine the need for transmission improvement projects. The criteria is outlined in the ERCOT Protocols and Planning Guide and in the North American Electric Reliability Corporation Reliability Standards.

ERCOT transmission projects are designated one of four tier levels based on the scope and cost of the project.

Tier 1
- $ >$100M
- With or without CCN*

Requires:
- Regional Planning Group review
- ERCOT independent review
- ERCOT Board endorsement

Tier 2
- <$100M

Requires:
- Regional Planning Group review
- ERCOT independent review

Tier 3
- $ >$25M and < $100M
- With CCN

Requires:
- Regional Planning Group review

Tier 4
- Neutral projects with minimal impact to the grid
- Does not require ERCOT’s involvement

* A Certificate of Convenience and Necessity, or CCN, is a certificate issued by the Public Utility Commission of Texas (PUC) that allows the transmission owner to establish a new right-of-way for the proposed project.

Most transmission projects in ERCOT take 2 to 6 years to complete. The timeline depends on the scope of the project and whether a CCN is required.