



ERCOT: A Recipe for Transmission Expansion Success

Mike Greene
Chairman and CEO
TXU Power

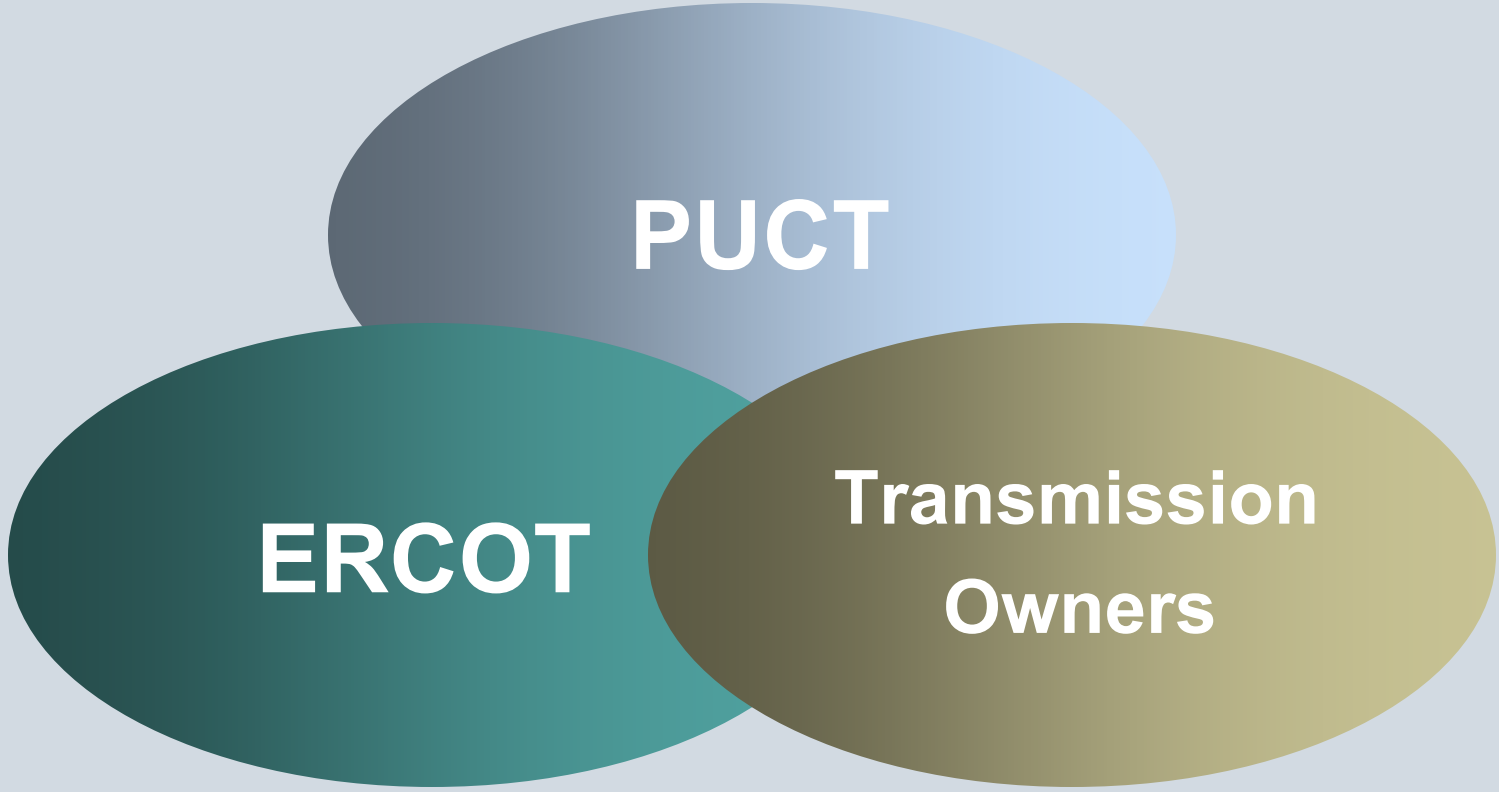
*Harvard Electricity Policy Group
John F. Kennedy School of Government
Atlanta, Georgia meeting
December 9, 2005*

Electric Reliability Council of Texas (ERCOT)



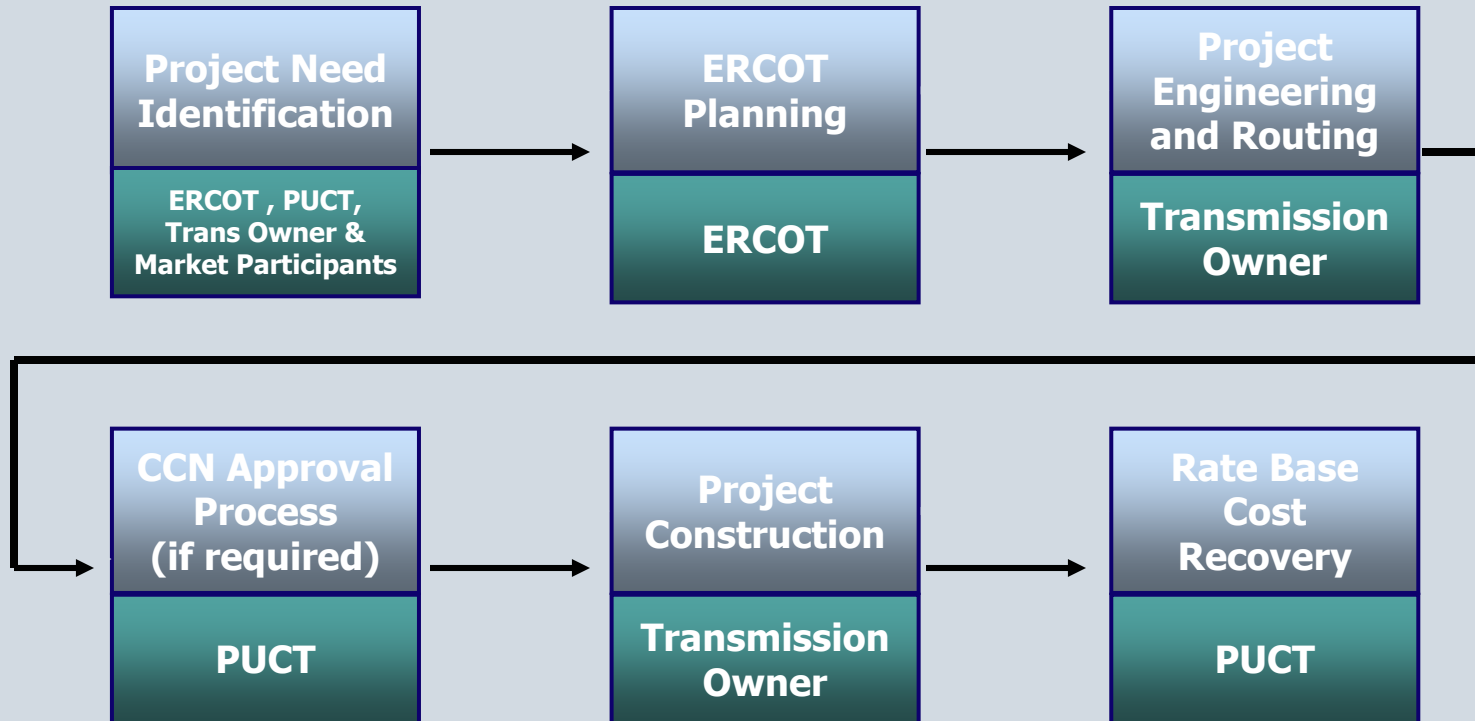
- organized in 1941
- Intrastate electricity network
 - One of three U.S. interconnections
 - Connected only by DC ties
- One of 10 NERC regional reliability councils
- Independent system operator since 1996
- Single control area operator since 2001
- Administrator of both retail and wholesale markets

Planning, building new transmission requires TEAMWORK



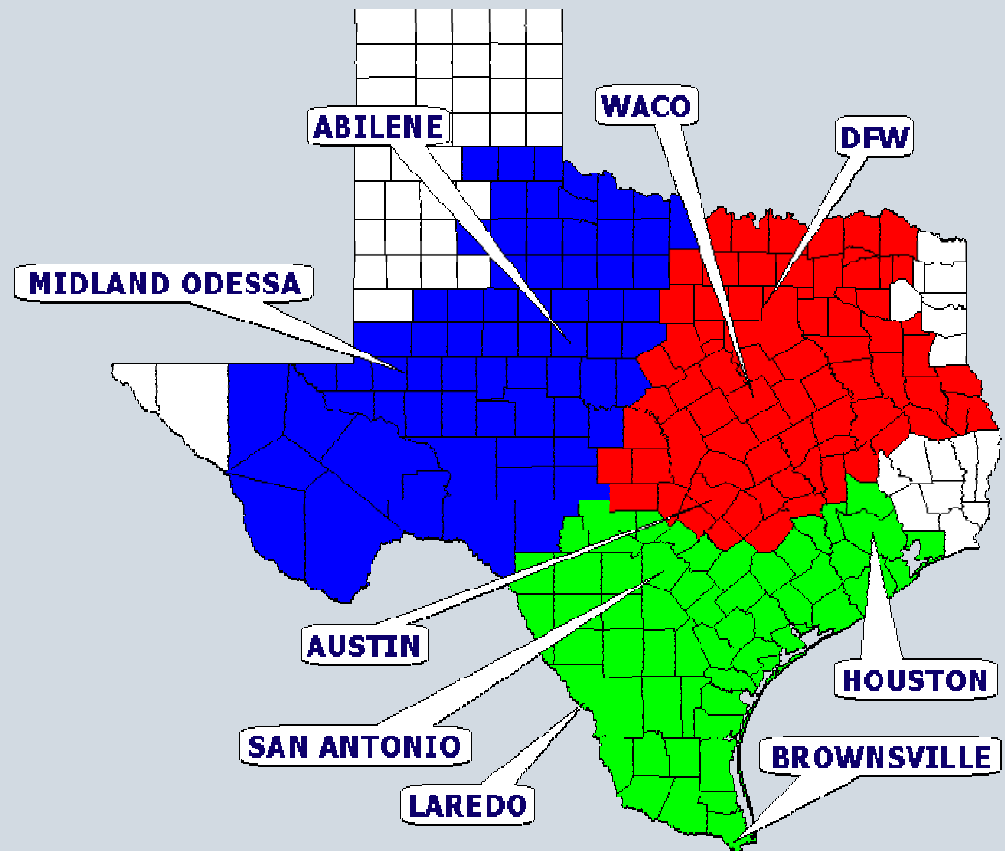
Implementation of New Transmission Projects

Each team member has a defined role in a transparent process



ERCOT operates open, non-discriminatory planning process

- ERCOT staff leads and facilitates three Regional Planning Groups (North, South and West)
- Information about planned transmission projects is distributed to all stakeholders in these groups
- These groups provide the means for stakeholders to participate, express concerns, share alternatives, and provide input to the ERCOT staff independent recommendation



Established & transparent process encourages investment by Transmission Owners

- ERCOT provides independent determination of need for new transmission with input from all stakeholders**
 - Planning benefits from tight integration with operations**
 - Addresses both project reliability & economic issues**

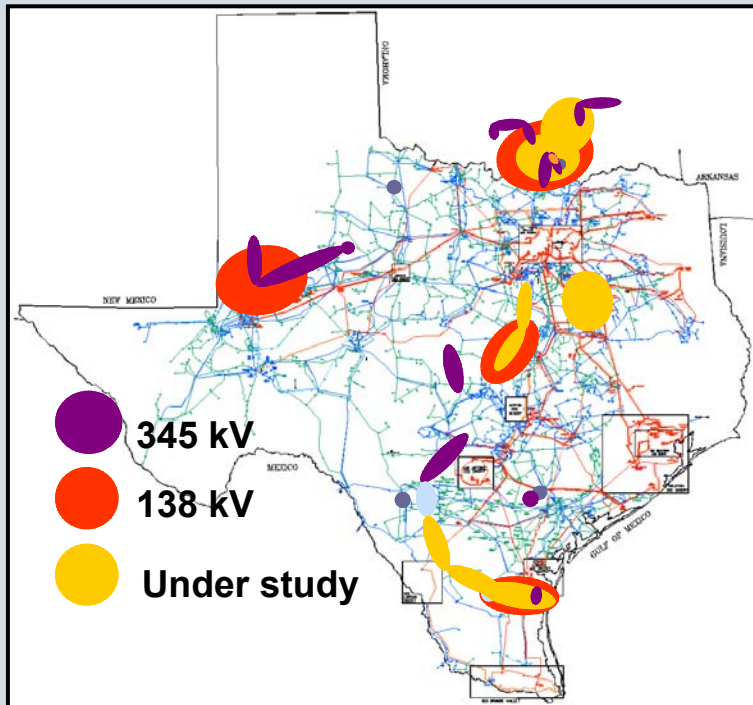
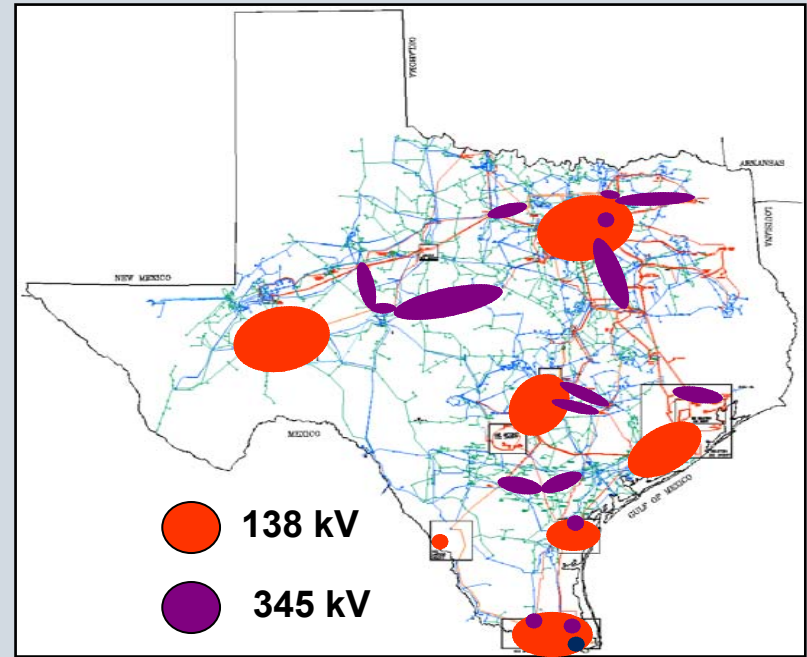
- PUC reviews/approves new line (CCN)**
 - Transmission owner proposes possible routes**
 - Transmission owner builds upon PUC approval**

- PUC authorizes timely cost recovery**
 - Postage stamp pricing streamlines process**
 - Rate base updated periodically through investment tracker mechanism**

ERCOT Results Speak for Themselves

Since 1999... →

- Over 4,400 circuit miles of new/rebuilt lines
- 24,600 MVA autotransformer capacity
- Over \$2.2 billion investment in upgrades



Projected additions through 2011...

- 3,750 miles of new/rebuilt lines
- 23,600 MVA autotransformer capacity
- Over \$2.8 billion investment in upgrades

Key Factors in ERCOT's Success – are they transferable to multi-state jurisdictions?

1. Independent, transparent planning process that includes all stakeholders
 - YES: RTO/ISO can lead process
2. Fair & balanced state regulatory process that results in consistent project certification
 - YES/NO: Will vary by region; federal back-stop may change this dynamic for some regions
3. Stable pricing mechanism that results in timely recovery of investments
 - ???????: federal/state interaction difficult