



ERCOT Five-Year Transmission Plan Update

RPG Meeting

February 11, 2011

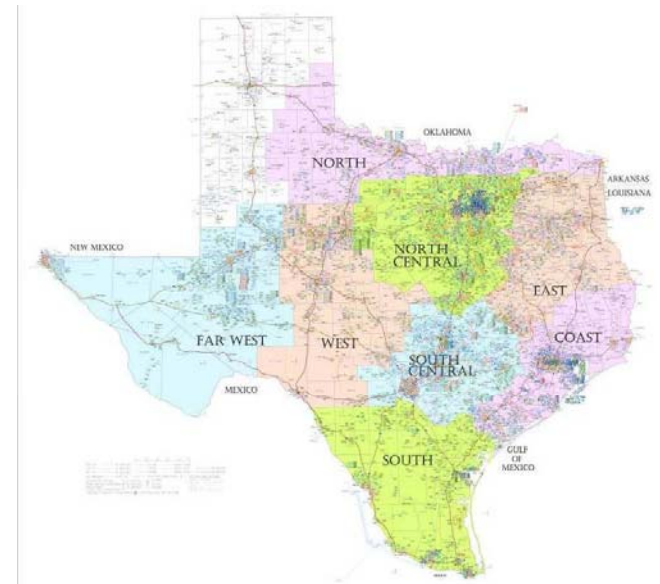
2010 5YTP Reliability & Economic Analysis Update

■ Reliability Analysis

- Reliability and voltage analysis completed for all years (2011-2015)
- 53 - Reliability driven projects were identified to relieve various thermal and voltage constraints
- List of all Reliability projects and the 2011-2015 Reliability cases are posted

■ Economic Analysis

- Economic analysis completed for all years (2011-2015)
- 7 - Economic projects were identified to relieve transmission congestion
- CREZ-level generation analysis for 2015 completed
- List of the Economic projects posted and the 2011-2015 Economic cases are posted



2010 5YTP Major Projects

Weather Zone	Project	Voltage (kV)	Transmission Owner	Project type	Needed in Year
Coast	Upgrade South Lane City - Pledger - West Columbia from 157/157/157 to 440/478/561 MVA.	138	CNP	Economic	2012
Coast	Add El Campo 138/69-kV connection and autotransformer between AEP's 138-kV bus and STEC's 69-kV bus.	139/69	AEP/STEC	Reliability	2013
South Central	Install third 600 MVA autotransformer at Cagnon (TPIT-2013).	345/138	CPS	Economic	2012
South	Upgrade Laguna - Naval Base from 79 MVA to 122 MVA.	69	LCRA TSC	Reliability	2015
South	Add second Cagnon - Howard 138-kV line circuit looping in Masterson Road.	138	CPS	Reliability	2015
West	Replace San Angelo Concho 138/69 kV autotransformer to 130/143/143 MVA.	138/69	AEP	Reliability	2011
West	Replace the Ennis Creek 138/69 kV auto to 101/116/116 MVA.	138/69	Oncor	Reliability	2012

2010 5YTP Major Projects

Weather Zone	Project	Voltage (kV)	Transmission Owner	Project type	Needed in Year
North Central	<u>Denton Area upgrades</u> Add a second 138 kV circuit to West Denton - Jim Christal - North Denton and West Denton- Fort Worth- Teasley. Upgrade two 138-kV lines: Teasley- Pockrus and Pockrus - Denton Steam from 218 MVA to 335 MVA. Upgrade West Denton - Jim Christal double circuits from 218 MVA to 326 MVA.	138	TMPA/DNTN	Reliability	2011
North Central	<u>Hicks Project:</u> Add a 345/138 kV autotransformer at Hicks 600/660/660 MVA. Tap Hicks to Eagle Mountain to Wagley Robertson Substation 138 kV line and Eagle Mountain to Blue Mound 138 kV line. Add the Hicks - Elizabeth Creek double circuit at 484 MVA.	345/138	Oncor	Reliability	2012
North Central	Add a second Lewisville 345/138 kV autotransformer . Uprate Highlands-West 138 kV line to 210 MVA. Uprate Lewisville-Jones 138 kV line to 287 MVA.	345/138	BEPC/Oncor/ TNMP	Reliability	2013
North Central	Add a second 138 kV circuit from Lewisville-Highlands (both to 326 MVA) .	138	Oncor	Reliability	2014
North Central	Add a second Collin 345/138 kV autotransformer.	345/138	Oncor	Reliability	2014
North Central	Install a 600 MVA autotransformer at Jack County substation .	345/138	BEPC	Reliability	2015

Report Update

- Draft Report Update
 - Section II - Assumption and Process (*completed*)
 - Section III - Reliability Driven Projects (*Sent for TO's review on Jan. 6 and comments/feedback period ended on Jan. 21*)
 - Section IV - Economic Analysis (*Sent for TO's review on Jan. 14 and comments/feedback period ended on Jan. 28*)
 - Section V - CREZ-Level Generation Analysis (*Sent for TO's review on Feb. 7 and comments/feedback period ends on Feb. 14*)
 - Section VI - Remaining Congestion (*Sent for TO's review on Jan. 14 and comments/feedback period ended on Jan. 28*)

- Final report will be issued in March.

Questions?