Paddock to Rockdale Project Update

ATC Customer Meeting

August 20, 2009



Paddock Rockdale History

- The project is economically justified, providing strategic expansion and reliability benefits
- Provides customers with greater access to more cost effective generation and renewable resources in the upper mid-west
- Reduces potential transmission constraints
- PSCW issued CPCN June 13, 2008 with expected project in-service date of April 1, 2010



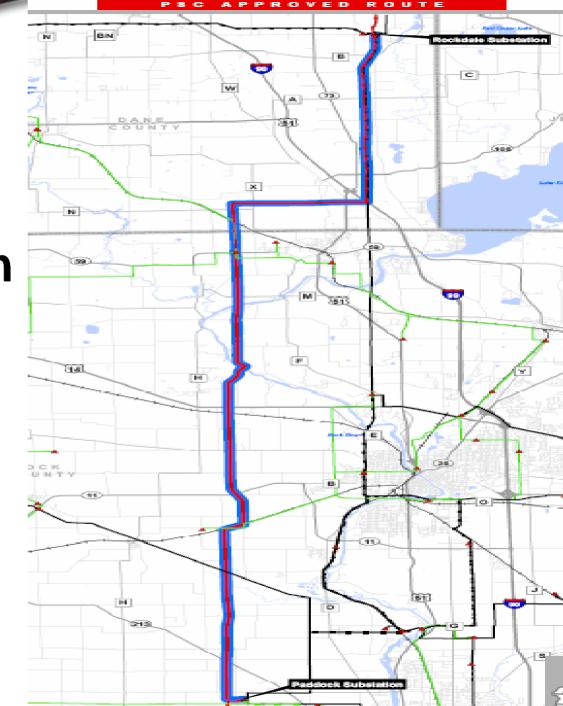
Paddock - Rockdale Scope

- Install new 345 kV circuit on existing right of way
- 35 miles new double and triple circuit monopole and reused double circuit lattice structures
- Substation work required at: Rockdale, Christiana and Paddock
- Expected in-service date is March 2010
- Within budget



Transmission Route

- Follows existing 345 kV right-ofway
- Challenges of working underneath energized lines



Paddock – Rockdale Substation Work

- Rockdale Substation
 - Major 345 kV Expansion
 - Bus expansion
 - Replace 336 MVA transformer with 500 MVA
 - 5 breaker replacements
 - Substation footprint expansion
 - Ground grid and grade work



Rockdale Expansion



Paddock – Rockdale Substation Work (cont'd)

- Christiana Substation
 - 5 breaker replacements
 - Ground grid upgrade
- Paddock Substation
 - Disturbance fault recorder replacement
 - Ground grid upgrade
 - Battery replacement and upgrade
 - Relaying changes



Paddock – Rockdale Transmission Line Work

- Using existing right-of-way
- Work sequenced to minimize outage
 - Working under and next to energized line
 - Foundations
 - Structures
 - Conductor
- Reusing lattice steel structures
- Moved 1.5 miles of 69 kV to new structure



Stringing Conductor on Lattice Towers



Stringing T2 Blue Jay



Foundation Work



Constructability Constraints



Alliance Partners

- Engineering
 - Sargent & Lundy
- Substation
 - Alliant Energy
 - Eillertson
- Transmission Line
 - Kenny Construction
 - PAR Electric
 - Aldridge Engineering



Progress / Plans

- PAR setting bases and framing Sequenced approach allows for reduced outage window
- Work on 69 kV line completed and inservice (June)
- 500 MVA transformer placed into service at Rockdale (May)
- Alliant making significant progress at the substations



Questions?

