



# 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





# 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 in-service (June)
- 500 MVA transformer placed into service at Rockdale (May)
- Alliant – making significant progress at the substations





# Questions?