SB 20 and Renewable Energy Development in Texas

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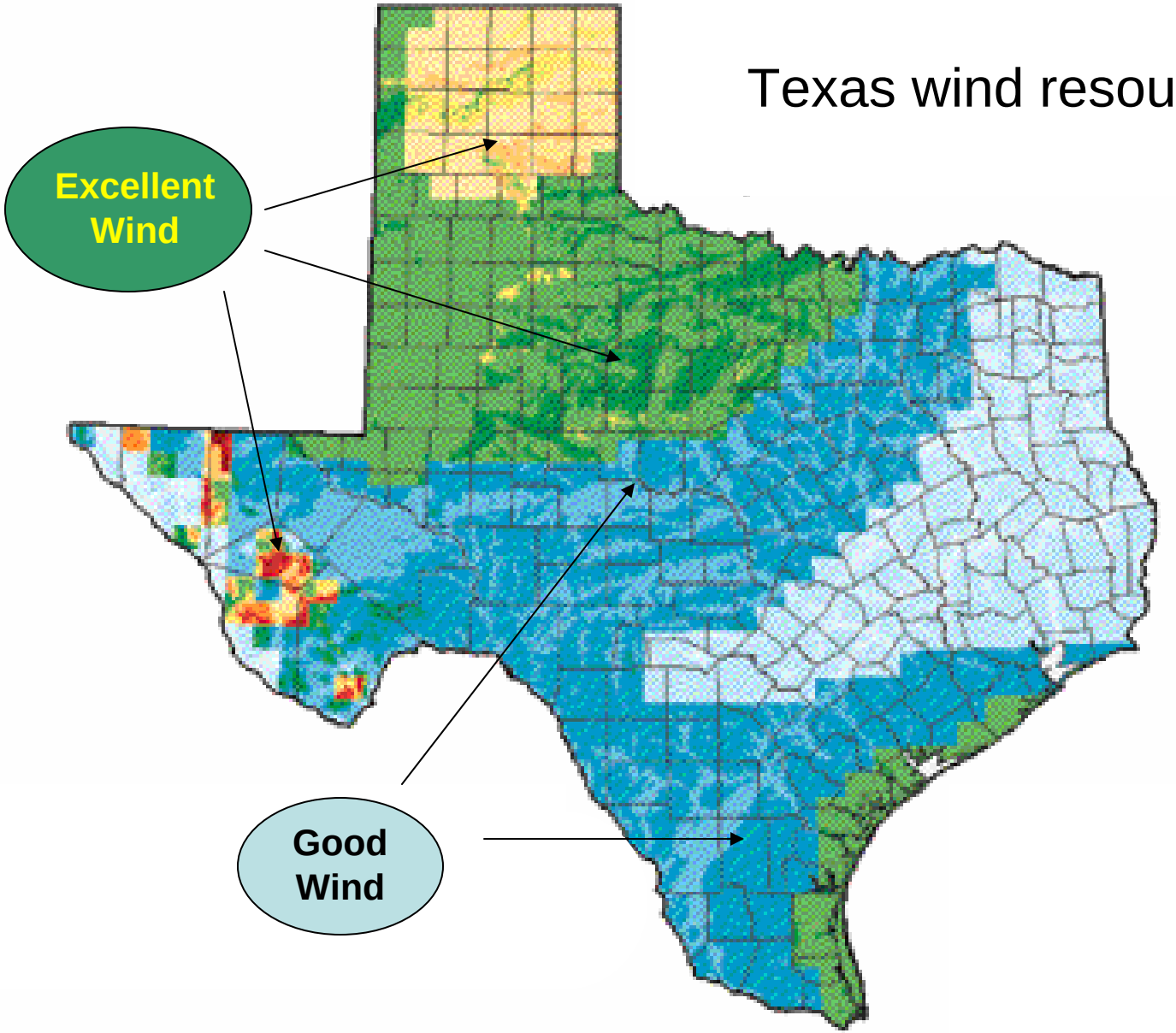
FPL Energy: world leader in wind generation

- Largest U.S. generator of wind power
- 48 wind farms in 15 states
- More than 3,600 net megawatts = approximately 28% of FPL Energy ’s total generation
- Upon completion of Horse Hollow wind farm in Texas, FPLE will become largest wind generator in the world
- FPLE’s Texas wind portfolio of more than 1,200 MW has catapulted Texas ahead of California in installed wind generation capacity
- FPLE expects to continue wind development in Texas in 2007 and beyond

Why Texas?

- Business-friendly environment
  - Reasonable business and property tax regimes
  - Enthusiastic host communities
- Functional energy market supporting both long-term bilateral contracts and real time energy market
  - FPLE entered Texas market with long-term PPA strategy
  - FPLE now building only merchant wind in Texas
- Easy generating siting regime and open access generation interconnection with limited participant funding
  - Utility TransCos unbundled from Utility GenCos
  - Centralized regional planning led by ERCOT ISO
- Excellent wind resource

Texas wind resource

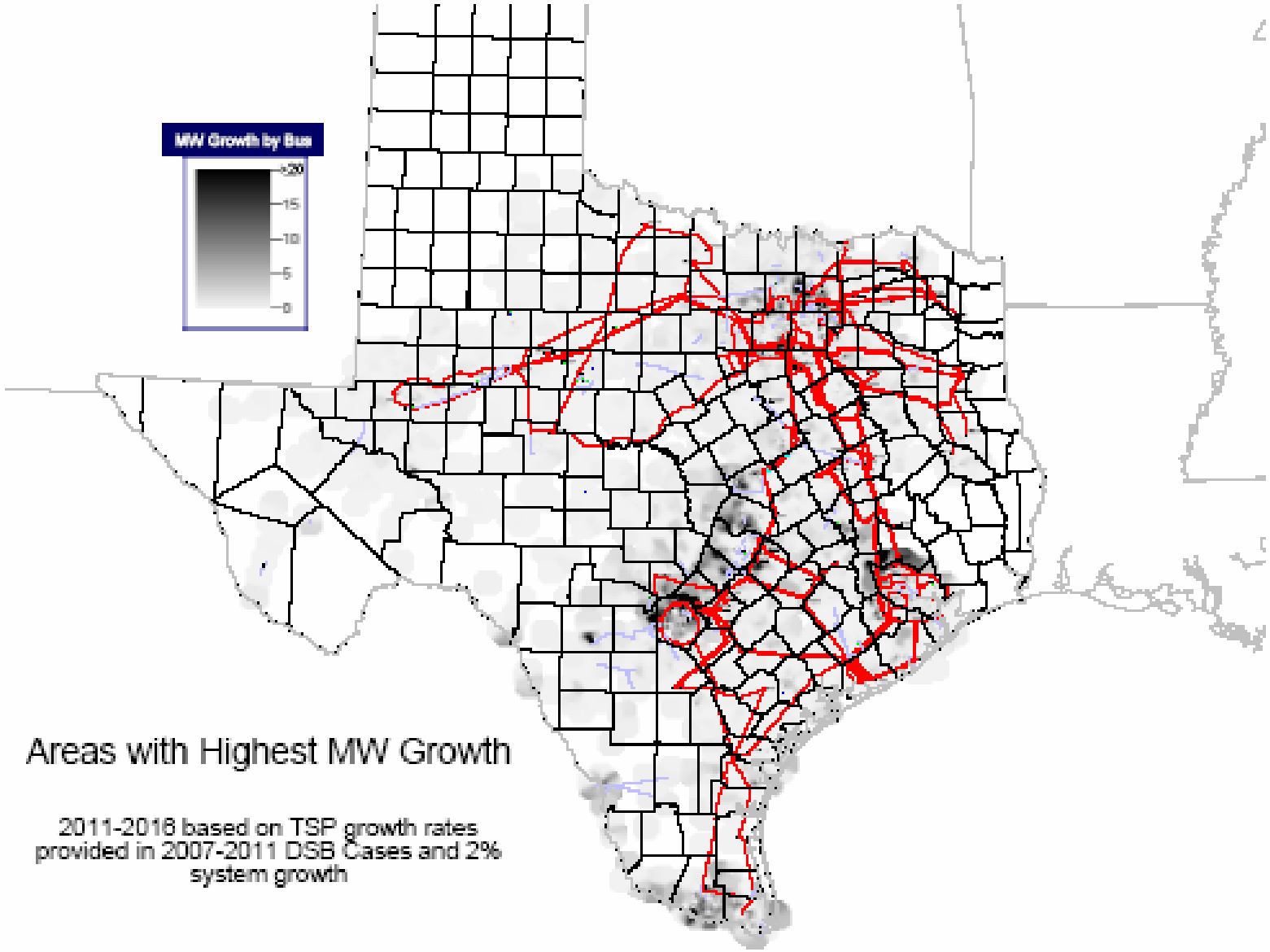


Source: NREL

It’s not all roses in Texas

It's not all roses in Texas

- Inadequate transmission plagues West Texas
  - Timeline disconnect between wind farms and transmission lines
  - Local area upgrades expensive due to great distances
  - West to North transfer limit is the ultimate obstacle
- Renewable Energy Credit market is sub-optimal
  - Early banking flooded REC market, depressed prices
  - Retail REC requirements based on actual renewable generation, historical curtailments in the formula drag down the average
- NIMBYism becoming an issue in near-suburban areas
  - Developers inching closer to load centers to avoid transmission constraints



Areas with Highest MW Growth

2011-2016 based on TSP growth rates provided in 2007-2011 DSB Cases and 2% system growth

Competitive Renewable Energy Zones

- Created by Senate Bill 20 (2005, First Called Session)
- Concept designed to move system planning ahead of renewable energy development
- Public Utility Commision of Texas currently engaged in implementation rulemaking
  - Project No. 31852
  - Staff proposed rule issued Aug. 16, 2006
- Proposed rule utilizes combination of collaborative processes and contested cases
  - Preserve developer confidentiality early in process
  - Relies on ERCOT for independent analysis
  - Designed to balance statutory RPS and open access requirements with prudent system costs

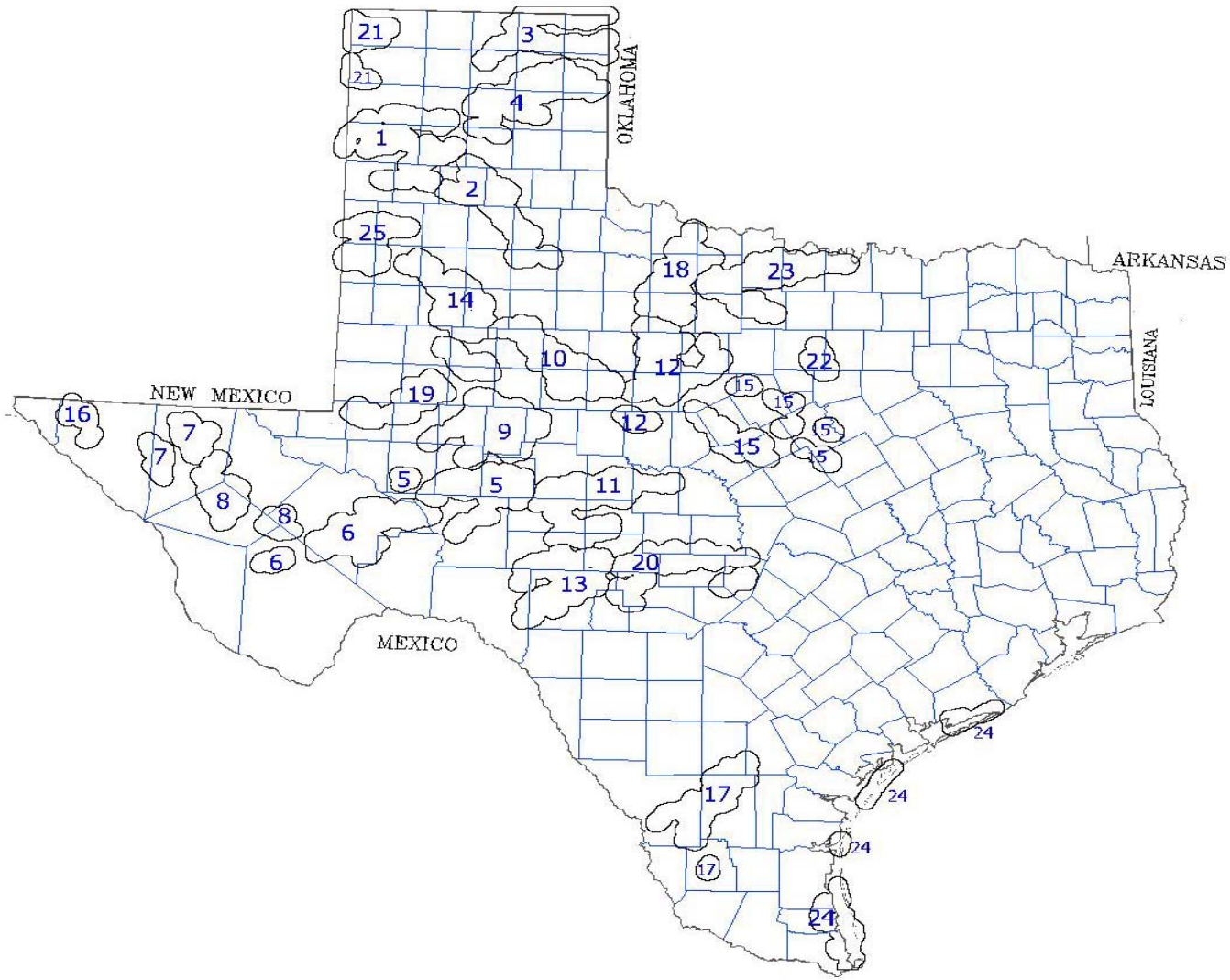
CREZs (cont.)

- Biannual contested case proceedings to designate CREZs
- ERCOT submits recommendations based on renewable production potential, interconnection requests, other developer input (confidential, aggregated)
- PUCT selects CREZs
  - Must have suitable renewable resources, land areas
  - Cost-effective transmission solution, value of renewable energy
  - Sufficient developer financial commitment
    - Existing generation
    - Signed IAs, completed interconnection studies, executed land leases
    - Escrow $ for Congestion Revenue Rights
      - 2-yr CRRs for CREZs purchased with escrow $ convert to 6-yr CRRs

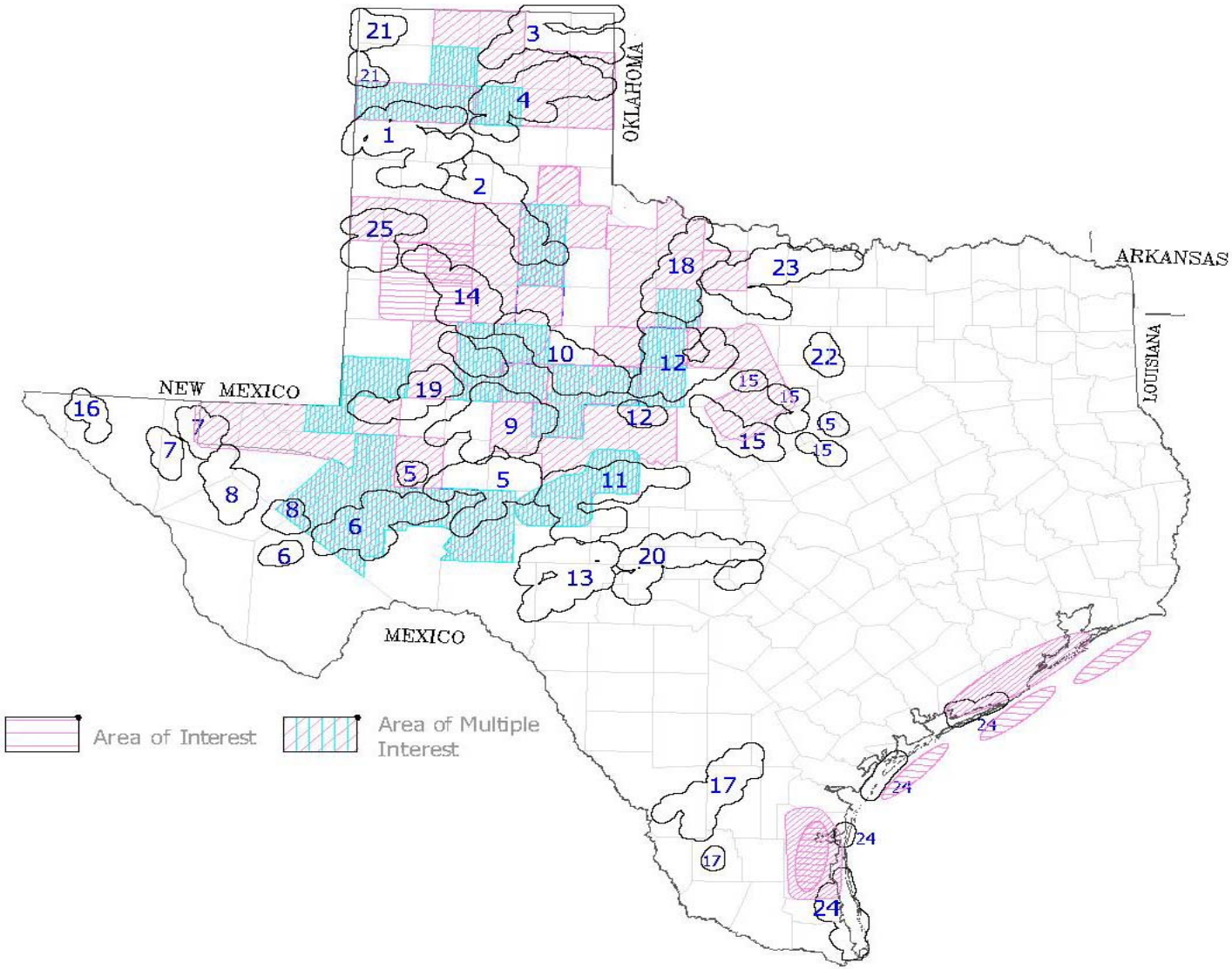
CREZs (cont.)

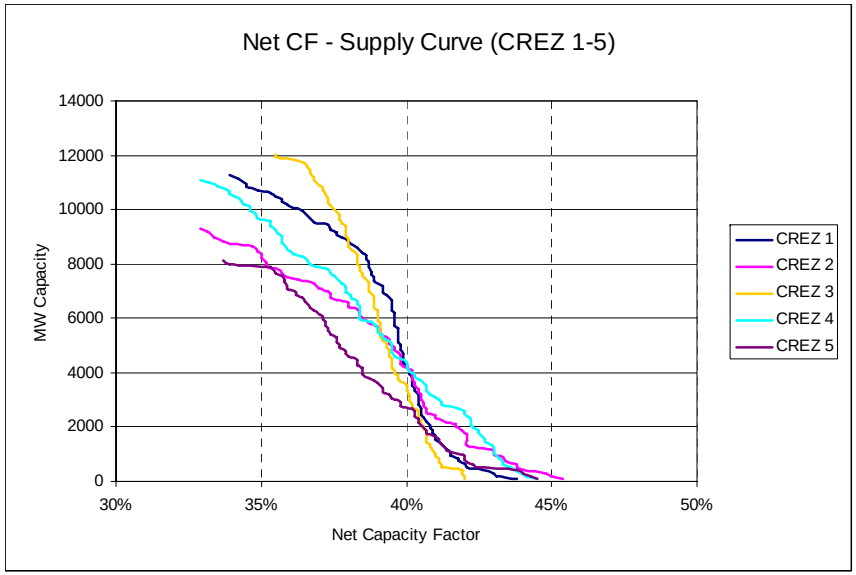
- Proposed CREZ rule addresses “piling on”
  - Non-renewable generation can interconnect with CREZ transmission facilities, but utility interconnection studies must assume CREZ transmission capacity consumed by renewables
  - PUCT can disallow interconnection for late-comers
- Utility cost recovery and speedy process are key ingredients to success
  - Transmission built to meet RPS is deemed “used and useful”
  - CCN process shortened to 180 days
  - Developer financial commitment sufficient to designate CREZ supplants traditional requirement for signed IAs

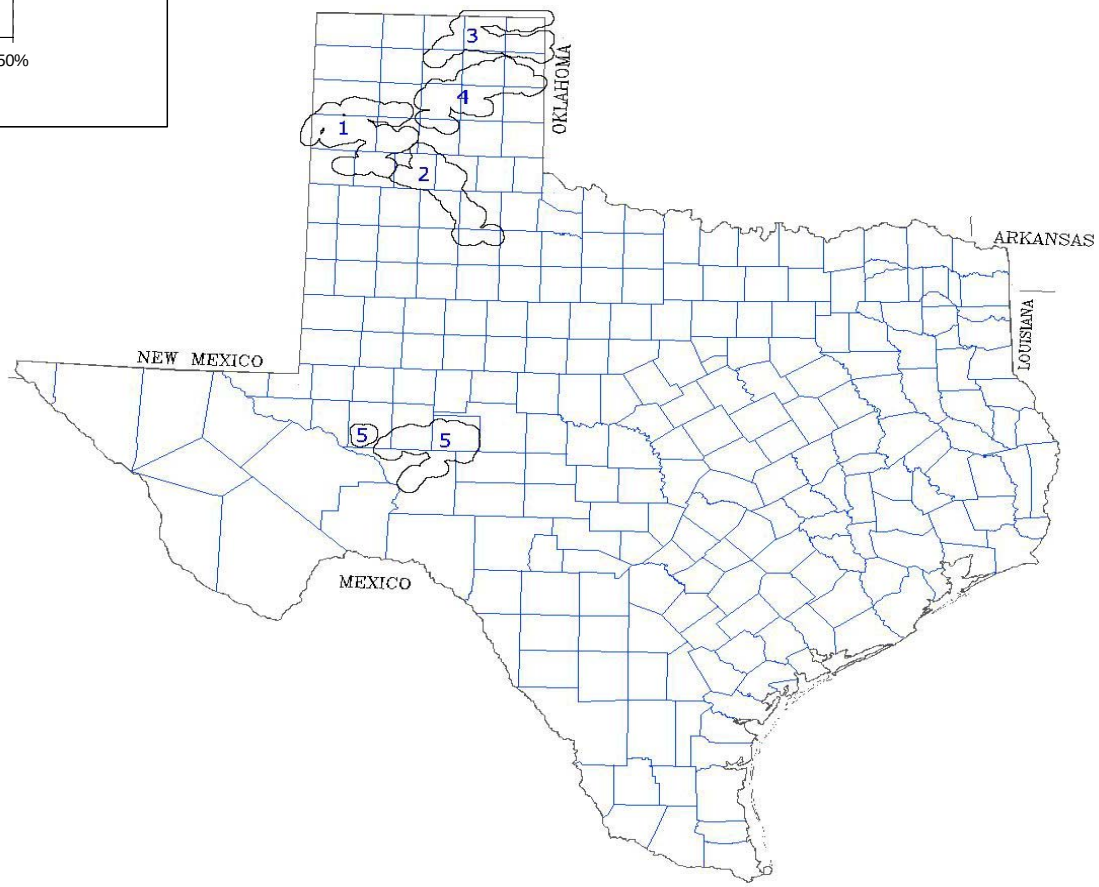
25 areas of preliminary interest based on ERCOT's 2006 Texas wind resource study

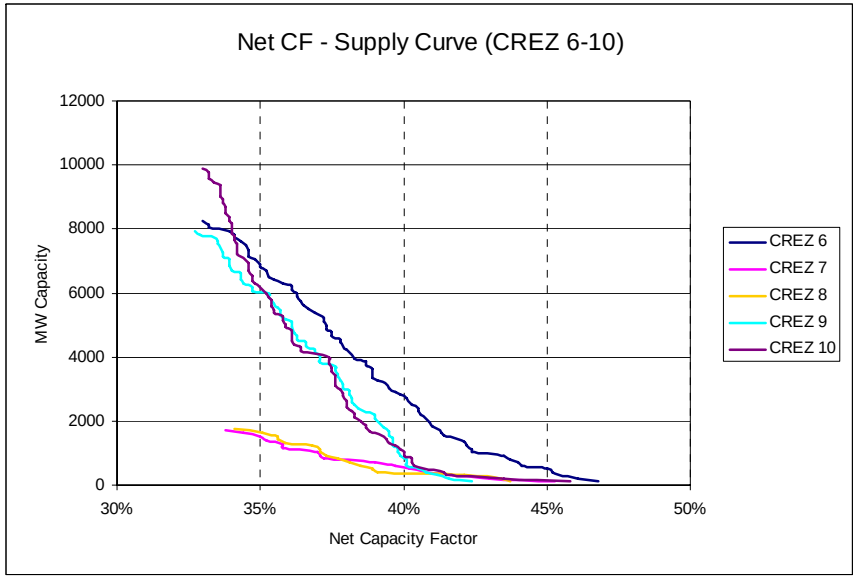


Areas of stakeholder interest (Spring 2006)




Net CF - Supply Curve (CREZ 1-5)
14000
12000
10000
8000
6000
4000
2000
0
MW Capacity
30%
35%
40%
45%
50%
Net Capacity Factor
CREZ 1
CREZ 2
CREZ 3
CREZ 4
CREZ 5


3
4
1
2
5
5
OKLAHOMA
ARKANSAS
LOUISIANA
NEW MEXICO
MEXICO


Net CF - Supply Curve (CREZ 6-10)
12000
10000
8000
6000
4000
2000
0
MW Capacity
30%
35%
40%
45%
50%
Net Capacity Factor
CREZ 6
CREZ 7
CREZ 8
CREZ 9
CREZ 10

OKLAHOMA
ARKANSAS
LOUISIANA
NEW MEXICO
MEXICO
10
9
7
7
8
8
6
6