

Electric System Operator

ACEG and FERC Chairs Mark the 20th Anniversary of FERC Order No. 2000

January 21, 2020

Council of Texas

Power Pool

Americans for a Clean Energy Grid

Americans for a Clean Energy Grid (ACEG) is the only non-profit broad-based public interest advocacy coalition focused on the need to expand, integrate, and modernize the North American high-voltage grid.

ACEG brings together the diverse support for an expanded and modernized grid from business, labor, consumer and environmental groups, and other transmission supporters to support policy which recognizes the benefits of a robust transmission grid.

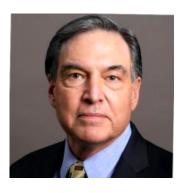
Learn more: cleanenergygrid.org



Speakers



James J. Hoecker
FERC Chairman 1997-2001
ACEG Director



Jon Wellinghoff
FERC Chairman 2009-2013



Patrick H. Wood III FERC Chairman 2001-2005



Cheryl A. LaFleur
FERC Chairman 2014-15
Acting Chairman 2013-14 and 2017



Rob Gramlich, Moderator Executive Director of ACEG



RTO Characteristics and Functions

Order 2000, December 1999

Characteristics:

- 1. Independence
- 2. Scope and regional configuration
- 3. Operational authority
- 4. Responsibility for shortterm reliability.

Functions:

- 1. Administer and design tariffs
- 2. Manage congestion
- 3. Solve the parallel path flow problem
- 4. Manage and provide ancillary services
- Maintain OASIS and post the transmission capability
- 6. Perform market monitoring
- 7. Plan and manage transmission system expansion
- 8. Handle interregional coordination.



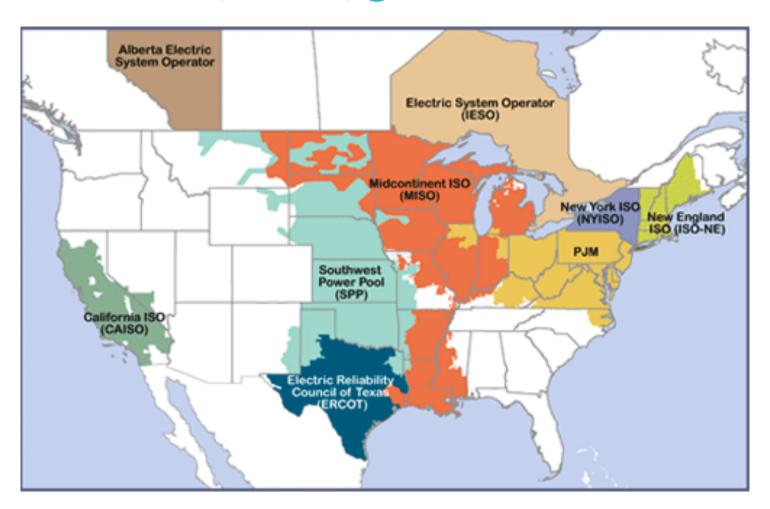
Intended Benefits of RTOs

- "Increasingly, customers are demanding the benefits of competition in the growing electricity commodity market." FERC Order 888(1996)
- RTO benefits include "increased efficiency through regional transmission pricing and the elimination of rate pancaking; improved congestion management; more accurate estimates of ATC; more effective management of parallel path flows; more efficient planning for transmission and generation investments; increased coordination among state regulatory agencies; reduced transaction costs; facilitation of the success of state retail access programs; facilitation of the development of environmentally preferred generation in states with retail access programs; improved grid reliability; and fewer opportunities for discriminatory transmission practices." FERC Order 2000 (1999) p. 90.



Spread of RTOs 2001-2005

+SPP, MISO, growth of PJM





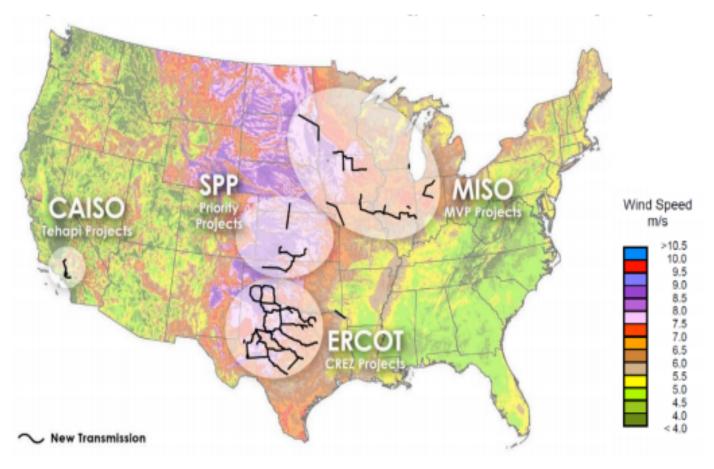
The RTO NOPR Order SMD NOPR "Successful Market Design" Contains a Consistent Framework Bilateral Schedules at Difference in Nodal Prices Charges Market-Driven Investment Coordinated Spot Market Plate Access Bid-Based, Security-Constrained, Economic Dispatch with Nodal Prices 07/05 Financial Transmission Rights 07/02 (TCCs, FTRs, FCRs, CRRs, ...) 12/99 5/99

Regional Transmission Expansion

Thanks to RTOs

Policy formula:

- Pro-active multi-benefit planning by RTO
- Broad, beneficiary pays cost allocation in RTO tar





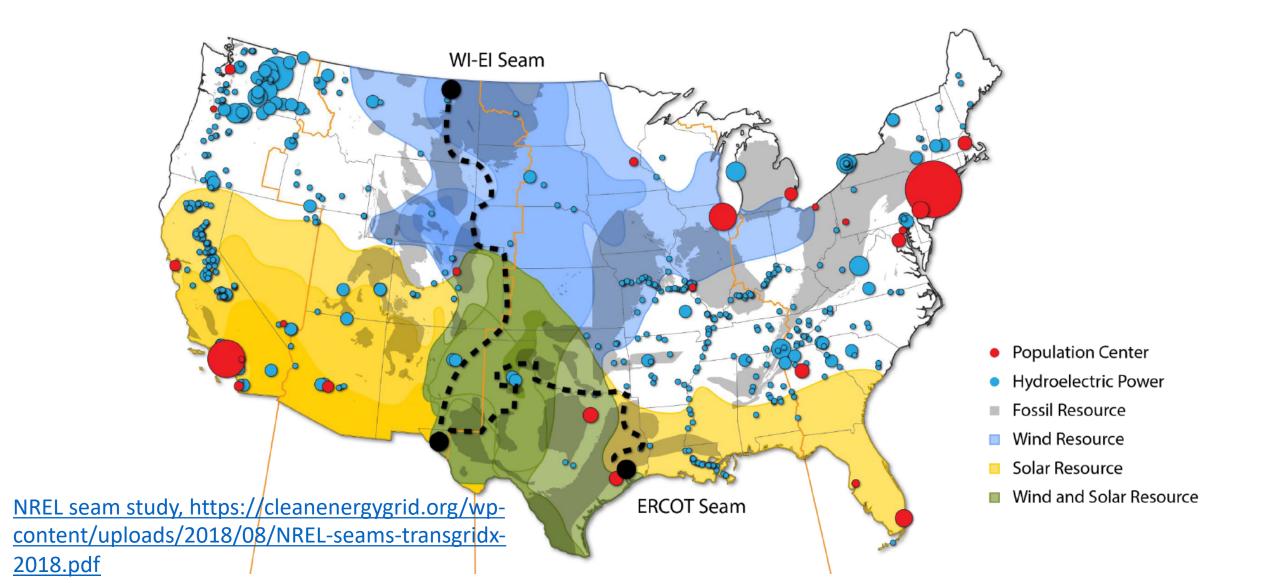
Transmission Enabled ½ of US Wind Capacity

100 GW installed in US

Transmission plan	Wind Capacity Enabled (GW)
Tehachapi CA	4.5
Texas CREZ	14.5
MISO MVP	14
SPP Priority Projects, Balanced Portfolio	6
CO+ME+NV+PAC+BPA	10
Total	49

Connecting supply to demand

Interconnection queues and transmission planning



Questions?

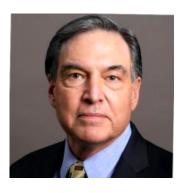
Please submit any questions through the GoToWebinar panel on the right side of your screen, and we will answer as many as possible during Q&A.



Moderated Discussion and Q&A



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Thank you

To learn more about ACEG, visit <u>cleanenergygrid.org</u>

Additional questions? Email: info@cleanenergygrid.org

