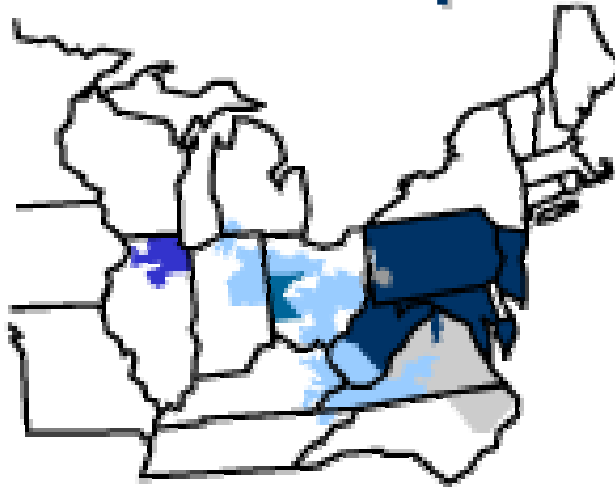


Making Electricity Markets Work Across Borders The PJM Experience



Karl V. Pfirrmann

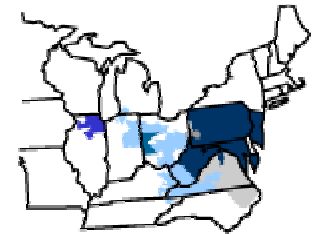
November 12, 2003

- It is access to transmission and markets in which to operate.

The PJM footprint includes several zones over multiple states.

Present:

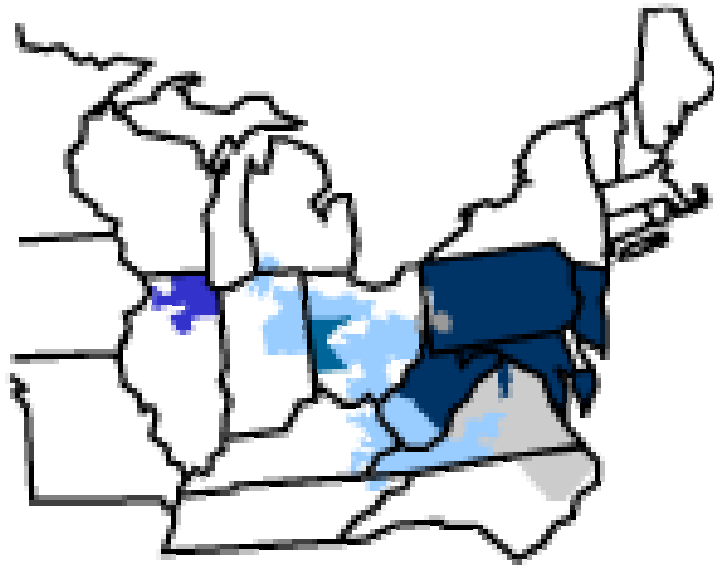
- Stretches over several states including Pennsylvania, New Jersey, Delaware, Maryland and West Virginia
- 250+ members
- 100+ Transmission Service Members



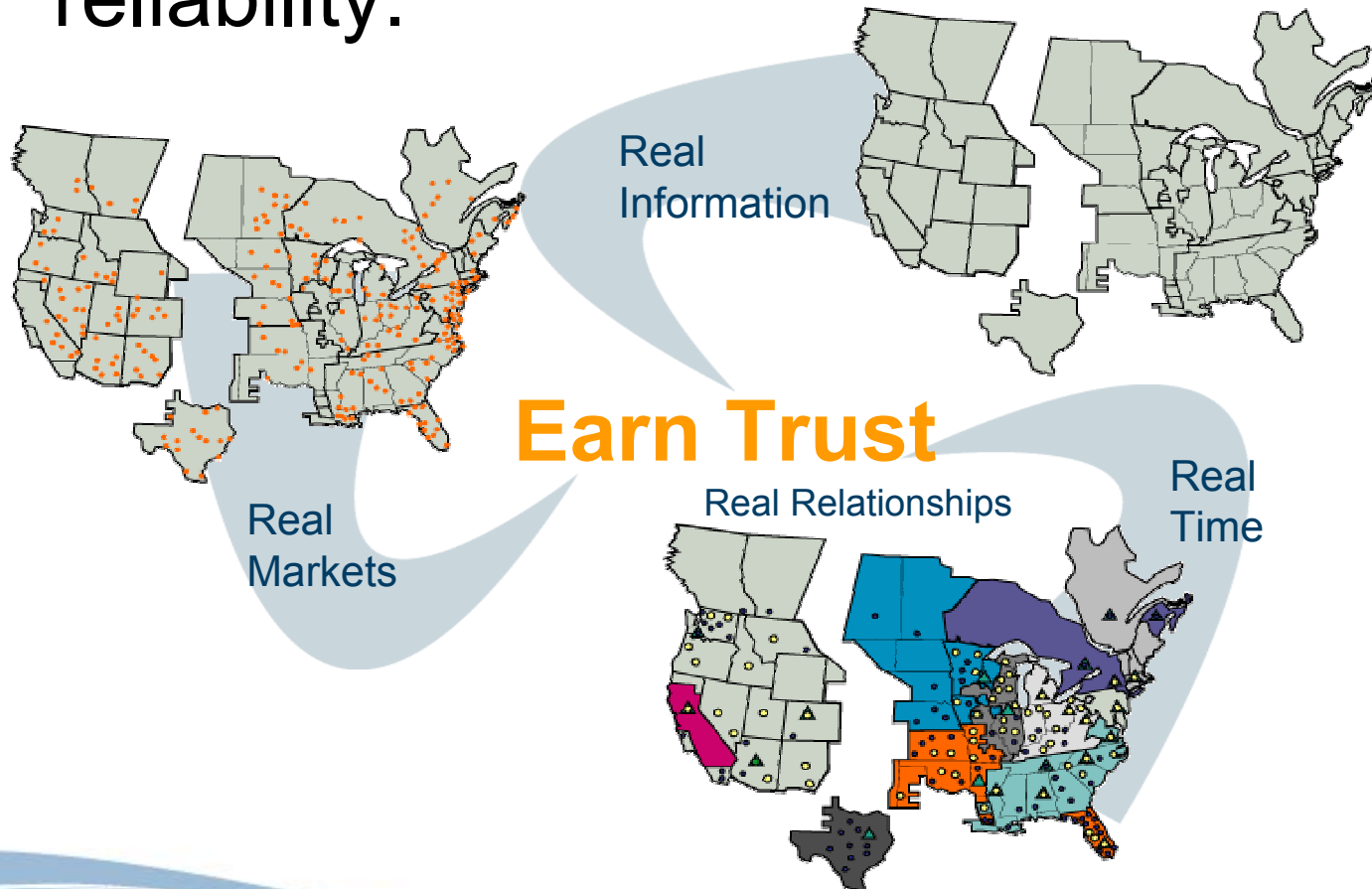
Overall Market Expansion:

- Will be extending into Kentucky, Illinois, Indiana, Michigan, Ohio, Tennessee, and Virginia
- **50+ new members**
- **30+ Transmission Service Members**

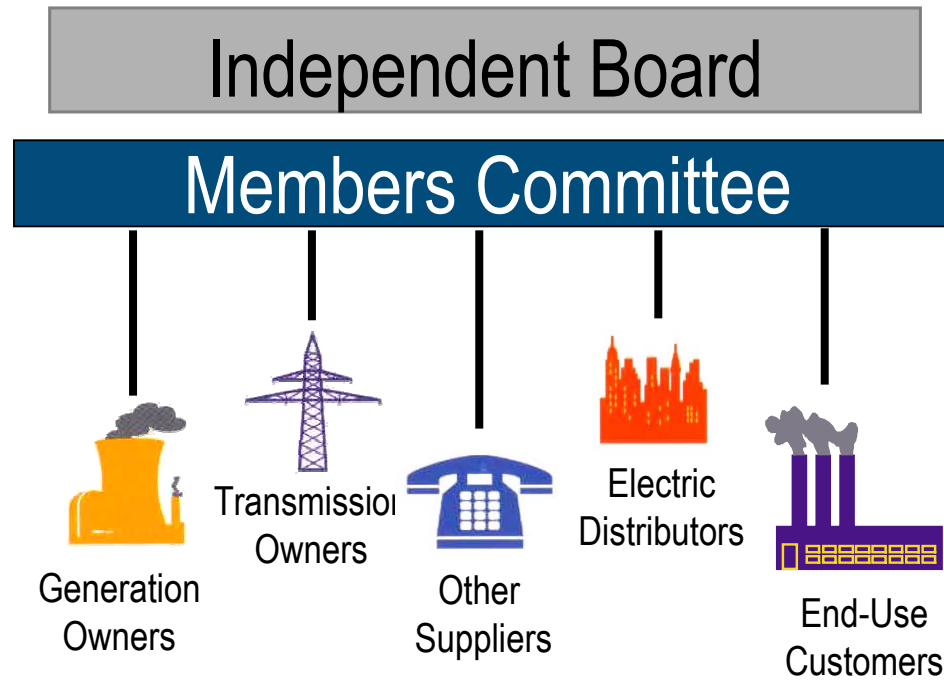
- It is unified and coordinated operations.



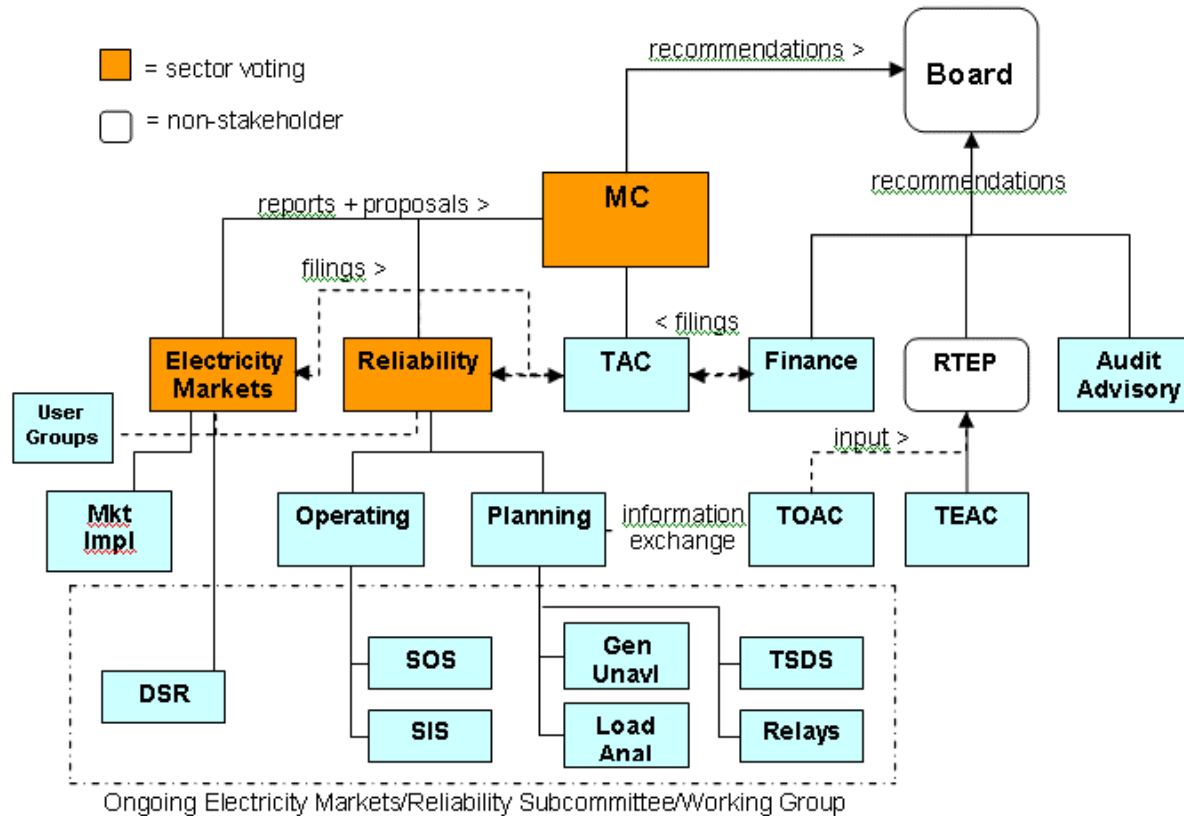
- It is authority to act in the interest of reliability.



- It is independence.



- It is a broad and open stakeholder process.



- It is being responsive to our members and our regulatory and legislative entities.

- **What's New?**

- **Evolution of**

- Market Rules
- Operating Practices
- Planning Process

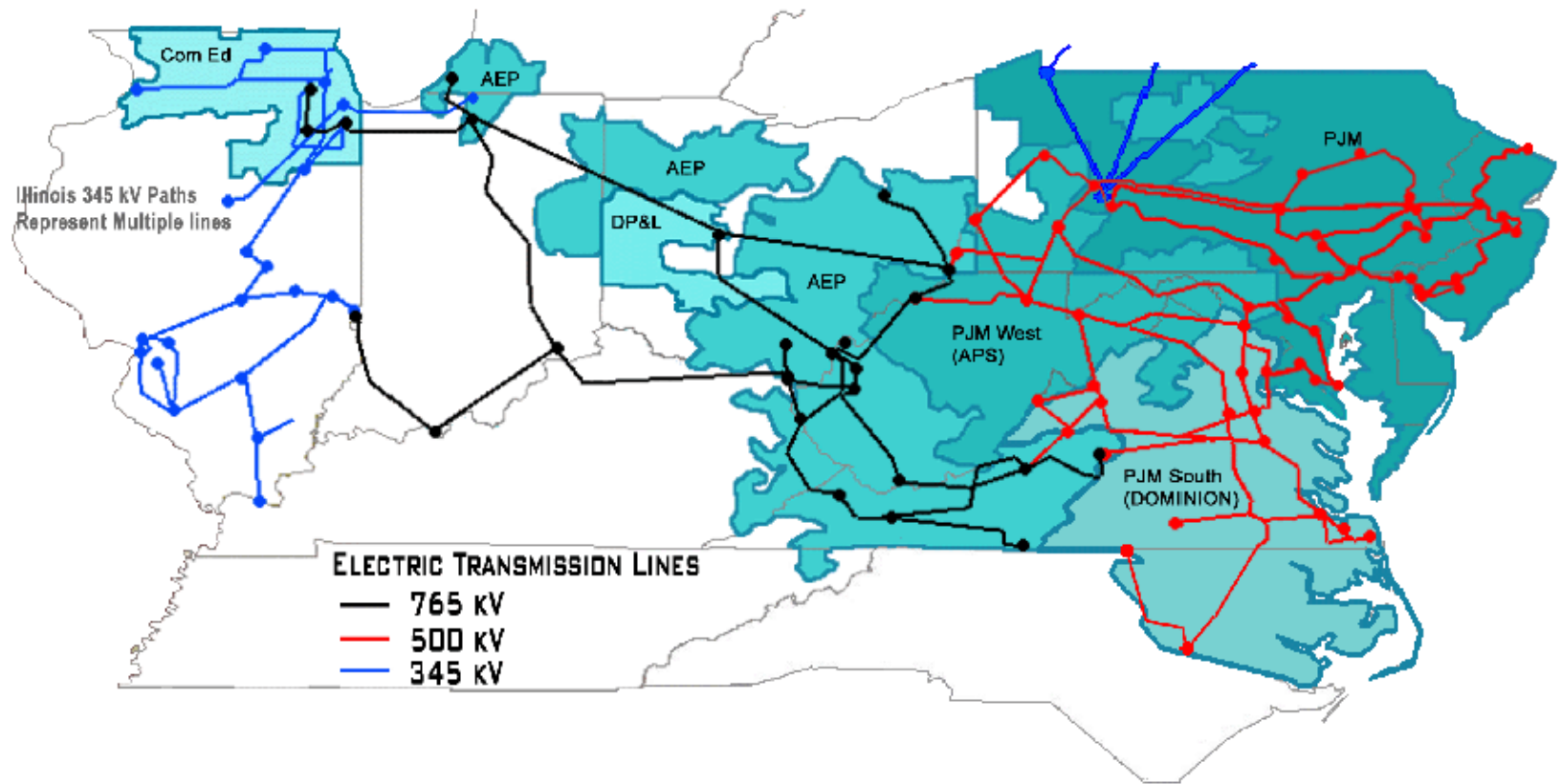
- **Integration of New PJM Participants**

- Congestion Management “White Paper”
- MISO/PJM Joint Operating Agreement
- AEP/DP&L Reliability Plan
- ComEd Reliability Plan

- **Reaction to August 14th Blackout**

- Delay ComEd Integration
- Advocate for Root Cause Analysis
- Self-Evaluation / Lessons Learned
- Assure Compliance with NERC Near-Term Action List

- It is a regional perspective with local interest.



- It is proven performance.

Reliability Improved

Generator Performance Improved by 35%

New Power Supply Attracted

7500 MW's of new generation on line

775M\$ of transmission upgrades completed

Wholesale Energy Prices Reduced

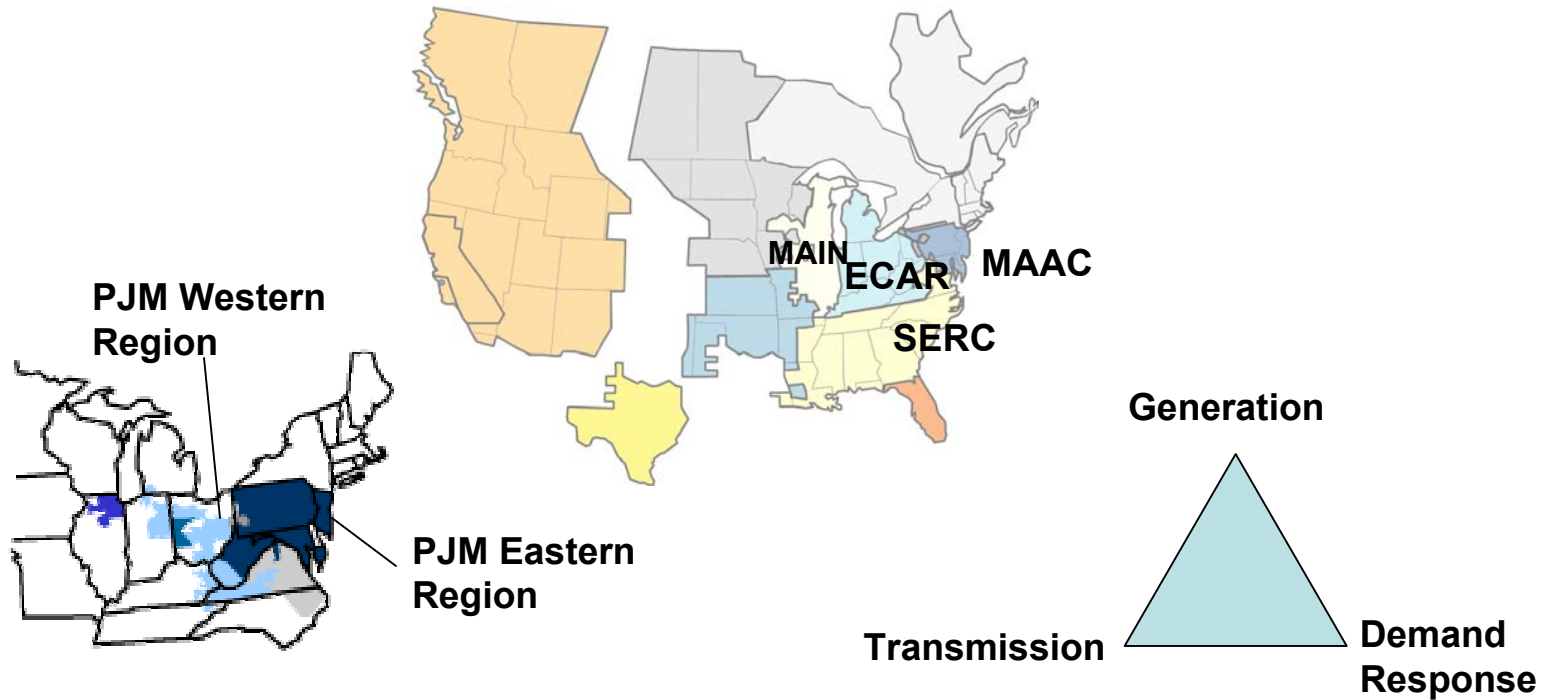
Wholesale prices dropped to \$35.33/MWH in 2002

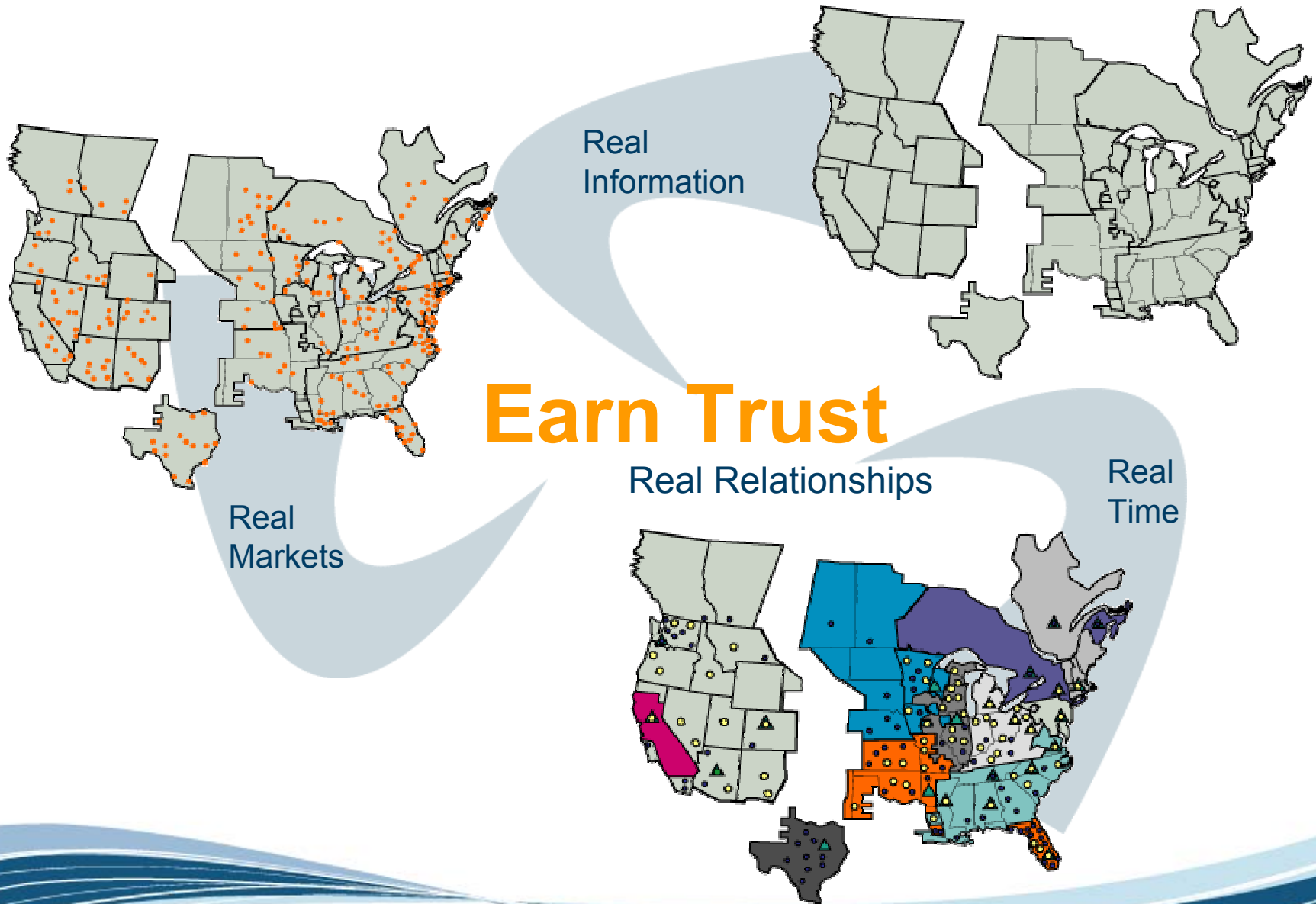
from \$43.63/MWH in 2001

Demand Response Empowered

PJM's demand response programs grew 300 percent in 2002.

- It is a model that is not tied to a particular geography or market segment.





Earn Trust

Real Information

Real Markets

Real Relationships

Real Time



Any questions?