

ELECTRICITY MARKET IN A MULTI-JURISDICTION AREA: CHALLENGES IN CROSS-BORDER ENERGY ISSUES

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Discussions during October 2007

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- ❑ **Structure, functions and working relationships of AERS and PAPUC**
- ❑ **Key regulatory issues confronting AERS and PAPUC**
- ❑ **Issue of security of supply in short-, mid-, and long-term**
- ❑ **Regulatory developments in natural gas distribution and storage**
- ❑ **Price regulation and tariff setting in power sector**
- ❑ **Electricity markets, restructuring; regional market initiatives; market monitoring**
- ❑ **Service quality regulation, institutional and capacity issues**

Overview of presentation

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- Various organizations
- Stakeholders
- Governance process
- Process for establishing changes
- Current challenges
- Benefits of cross-border energy trade

Various Organizations

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GOVERNMENT

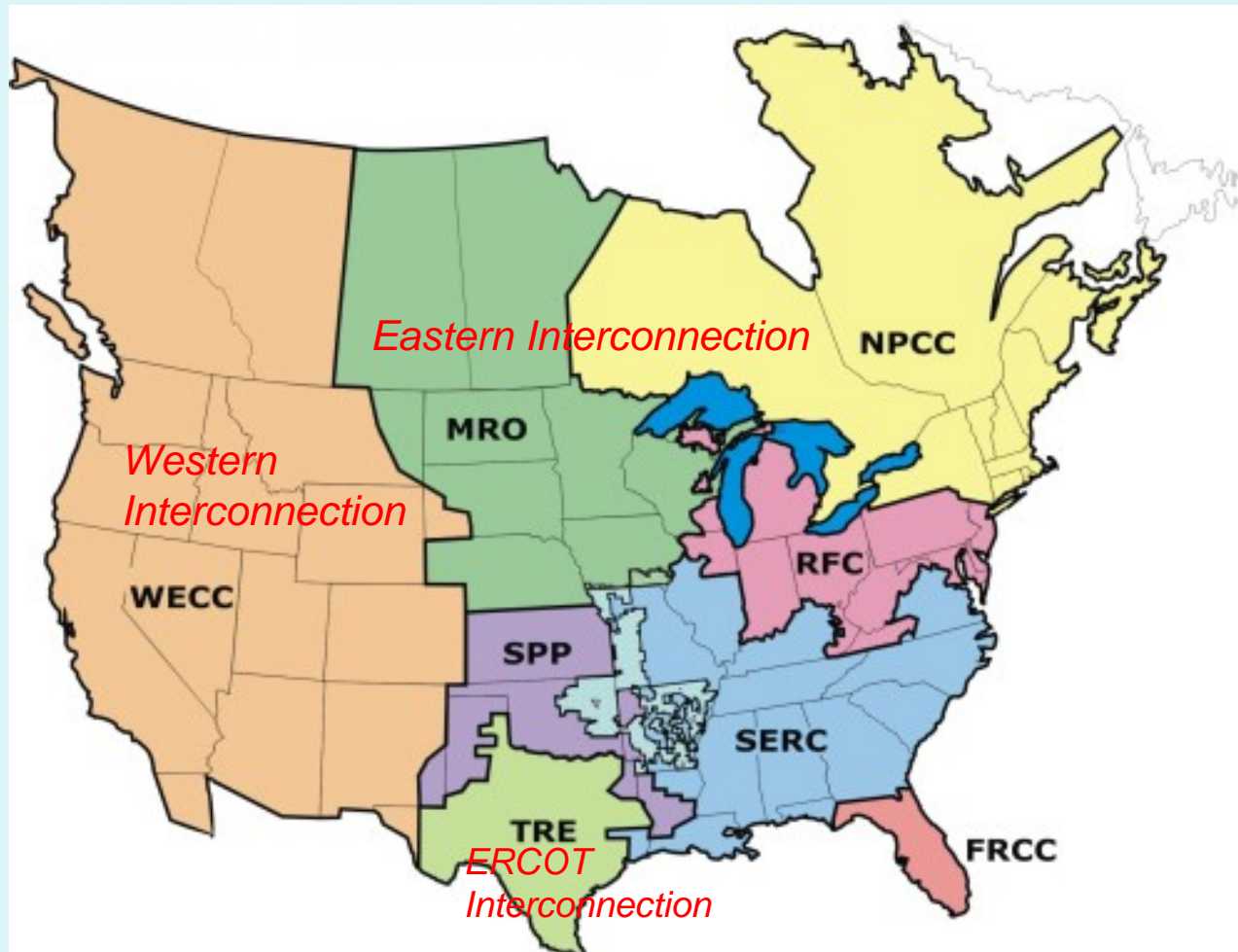
- Department of Energy; FERC; NRC; Power Administration/Authority
- State Commissions
- Municipal Utilities;

NON-GOVERNMENT

- NERC, NAESB, RTOs/ISOs
- Investor-Owned Utilities (IOUs)
- Rural Cooperatives

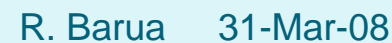
NERC Regions

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Source:
NERC
(North
American
Electric
Reliability
Corporation)

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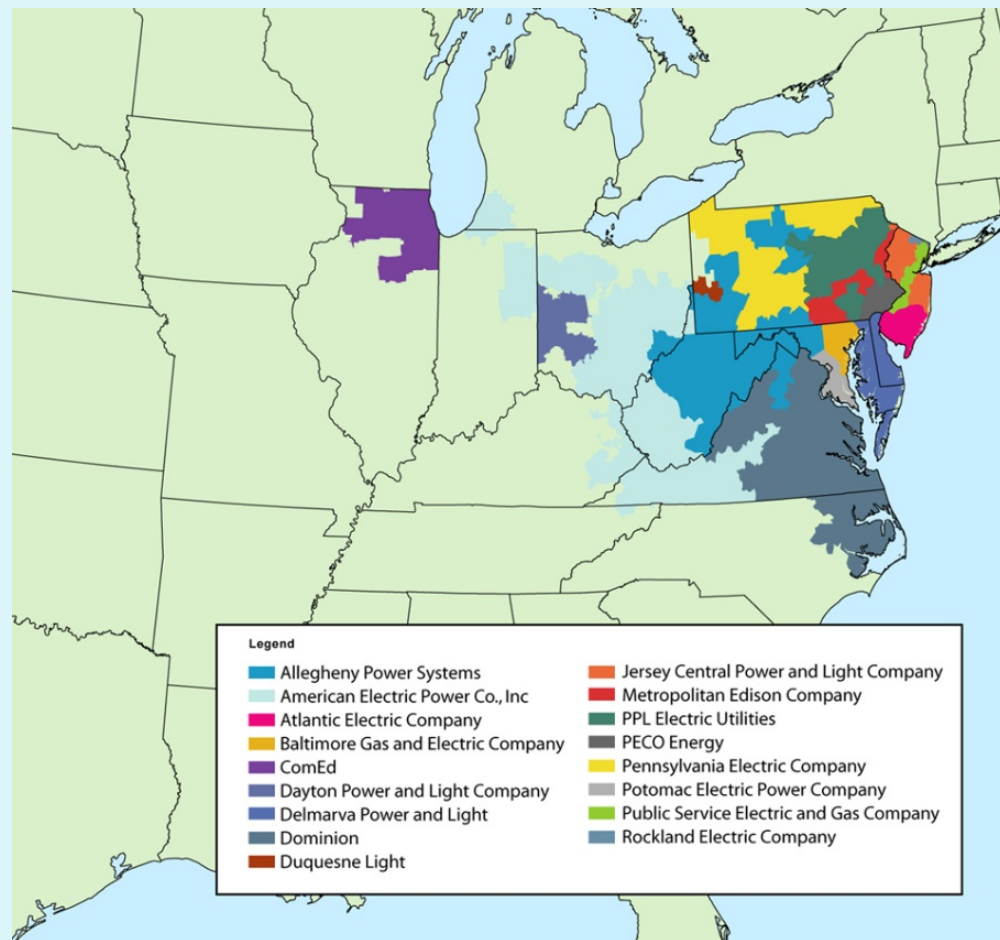


PJM Service Territory

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All or parts of:

- Delaware
- District of Columbia
- Illinois
- Indiana
- Kentucky
- Maryland
- Michigan
- New Jersey
- North Carolina
- Ohio
- Pennsylvania
- Tennessee
- Virginia
- West Virginia



Comparison of Areas

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	ERRA	S.E. Europe	PJM
Population	412 million	57 million	51 million
Electricity consumption	1624 TWh	169 TWh	729 TWh
Monthly per capita consumption	328 kWh	246 kWh	1191 kWh

Activity in States within PJM

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- Almost all of the states in the PJM region have:
 - ▣ restructured their electricity utility industry
 - ▣ deregulated generation
- Generation can be built anywhere by anybody
- Wholesale/bulk energy output is sold either as a bilateral contract or in PJM's open market
- States still have responsibility of retail/distribution rates
- Retail rates dependent on wholesale market prices

States' Relationship With PJM

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- 1998: PJM and state utility commissions in the PJM region (Mid-Atlantic only) sign MOU
 - ▣ Creates a State Commission Liaison Committee
- State Commission Liaison Committee
 - ▣ Direct channel of communication between PJM's Board of Managers and all of the state commissioners in the PJM region
- PJM expands west and south
 - ▣ To include all 14 jurisdictions, the Organization of PJM States, Inc. (OPSI) is formed

Background of OPSI

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- Established in May 2005 as a non-profit corporation
- Primary purpose: To act as a liaison group to PJM, its Board of Managers, and its Market Monitor
- OPSI is an NGO recognized by the FERC as a “regional state committee” and is not a member of PJM
- Funded by a FERC-approved PJM tariff as a small charge on per MWh basis
 - *Less than one cent per capita annually*
- A new MOU is signed between OPSI and PJM

Regional Cooperation and MOU

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- ❑ OPSI members are not members of PJM
- ❑ OPSI Board and PJM Board meet regularly (at least 2 times a year)
- ❑ Monthly teleconferences with PJM technical staff on current issues and updates
- ❑ OPSI also has teleconferences with FERC staff and other industry groups
- ❑ OPSI members participate in PJM committee and working group discussions
- ❑ PJM's Market Monitor has ability to discuss any issue with OPSI
- ❑ RTO training provided by PJM to OPSI members at no cost
- ❑ Monthly funds deposited directly by PJM based on per MWh calculation; PJM does not have any input/influence on OPSI budget

OPSI Board and Voting Structure

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- ❑ OPSI has 14 members as its Board of Directors with one from each jurisdiction
- ❑ Each have an equal vote on all issues
- ❑ Other commissioners and staff members of 14 jurisdictions are members of OPSI
- ❑ Most of OPSI's other meetings are held via teleconferences.
- ❑ Elections are held every year for a president, vice-president, secretary, treasurer, and three regional representatives
- ❑ Presidency rotates among three regions (Mid-Atlantic, South, West)

Regular Activities

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- ❑ Monthly meetings via teleconference except during the Annual Meeting
- ❑ Board of Directors vote
- ❑ Other commissioners and staff members participate
- ❑ Non-voting participation in various PJM meetings
- ❑ Monthly teleconferences with PJM's technical staff
- ❑ OPSI members identifies relevant issues and PJM makes technical staff available to respond
- ❑ Organize workgroups (WG) based on current issues

Process for establishing changes

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- When an important issue needs background information and deliberation, a WG is formed
- Chaired by one or more commissioners
- Other commissioners and staff from all member state commissions who are interested in that issue join that WG
- OPSI Board directs the WG to deliberate on the issue and recommend a position to the OPSI Board for further deliberation and/or vote for an official OPSI position

Resolving Issues

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- Member jurisdictions are diverse in geography and type of regulation leading to diverse positions on any given issue
- Three geographical regions: the Mid-Atlantic, the South, and the West
- Some members have retail choice and some have traditional regulation of the electricity distribution industry
- Wholesale generation is not under the purview of the state regulators
- Some states are net exporters of electricity and some states are net importers of electricity
- Dominant resources for electricity generation vary by state, such as, nuclear, coal, natural gas, oil, etc.

Current Challenges

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- DOE's designation of National Corridors
- Investment in transmission
- Investment in generation
- Environmental issues
- 20% increase in the energy CPI last year
- "At risk" population

Benefits of Cross-Border Energy Market

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- ❑ Large number of generating resources
- ❑ Diversity in fuel mix
- ❑ Regional planning and coordination for transmission
- ❑ Resource rich areas can sell electricity to areas in need
- ❑ Environmental issues can be better resolved in a regional context