



Bureau of
Energy Resources,
United States
Department of State



National
Association of
Regulatory
Utility
Commissioners

Electricity Regulation in the US: State and Federal Jurisdictions

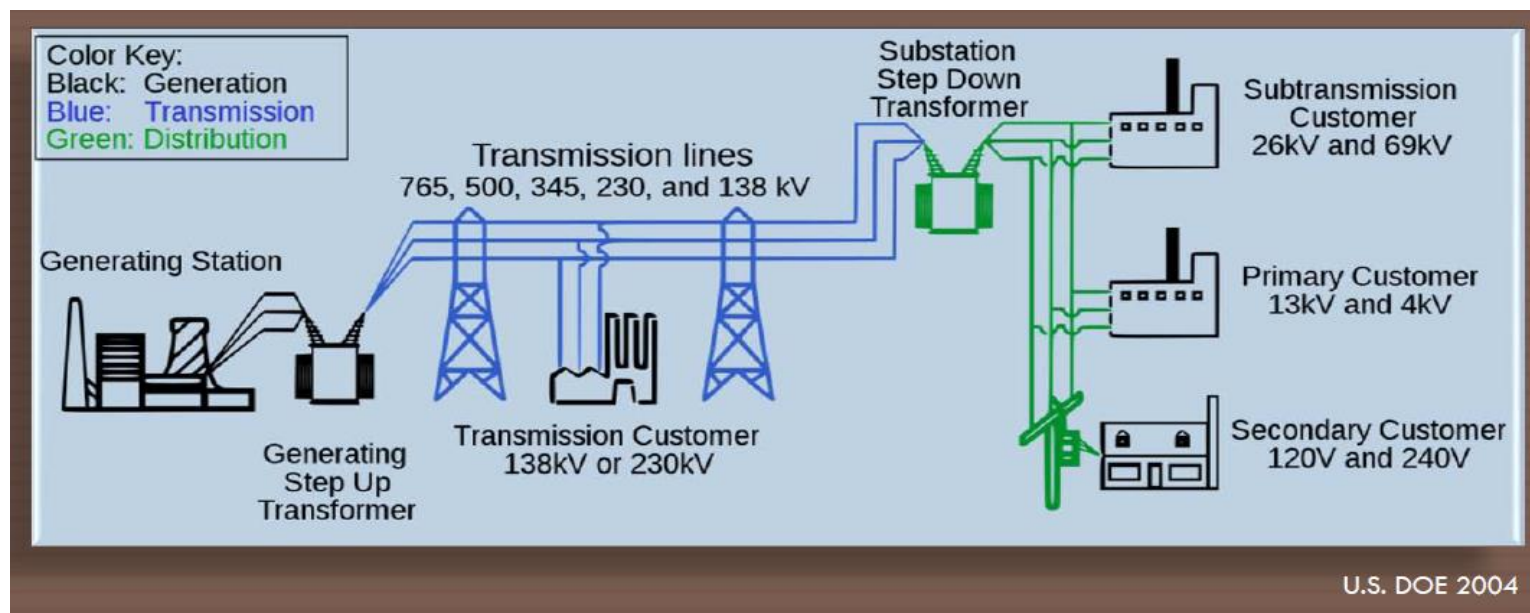
Jeff Orcutt
Illinois Commerce Commission
August 31, 2015





Infrastructure

- Generation
- Transmission
- Distribution





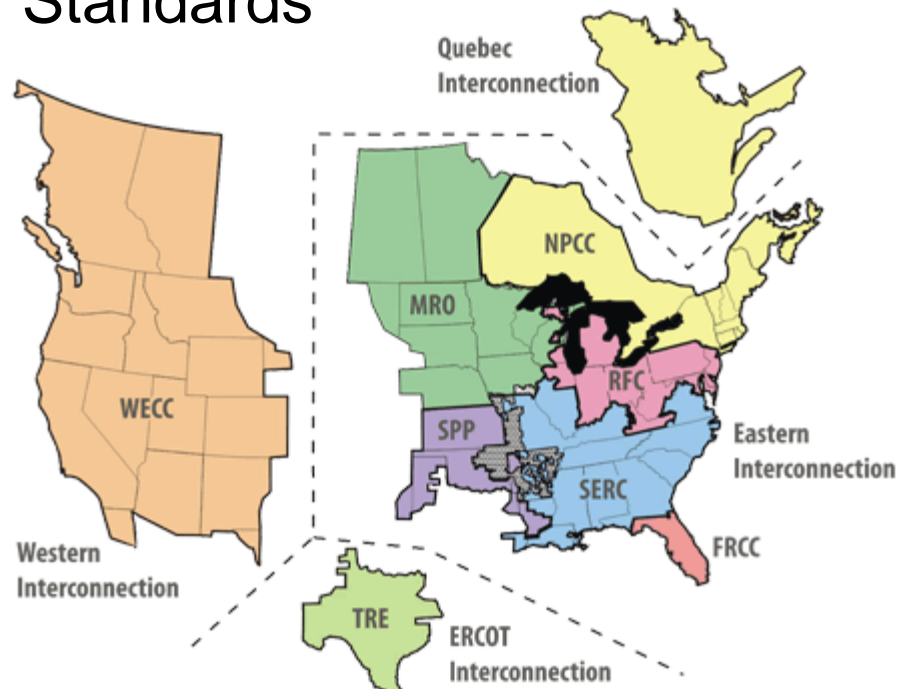
Different Layers of Regulation

- The North American Electric Reliability Corporation (NERC)
- The Federal Energy Regulatory Commission (FERC)
- Regional Transmission Organizations (RTO)
- States
 - Vertically integrated
 - Restructured



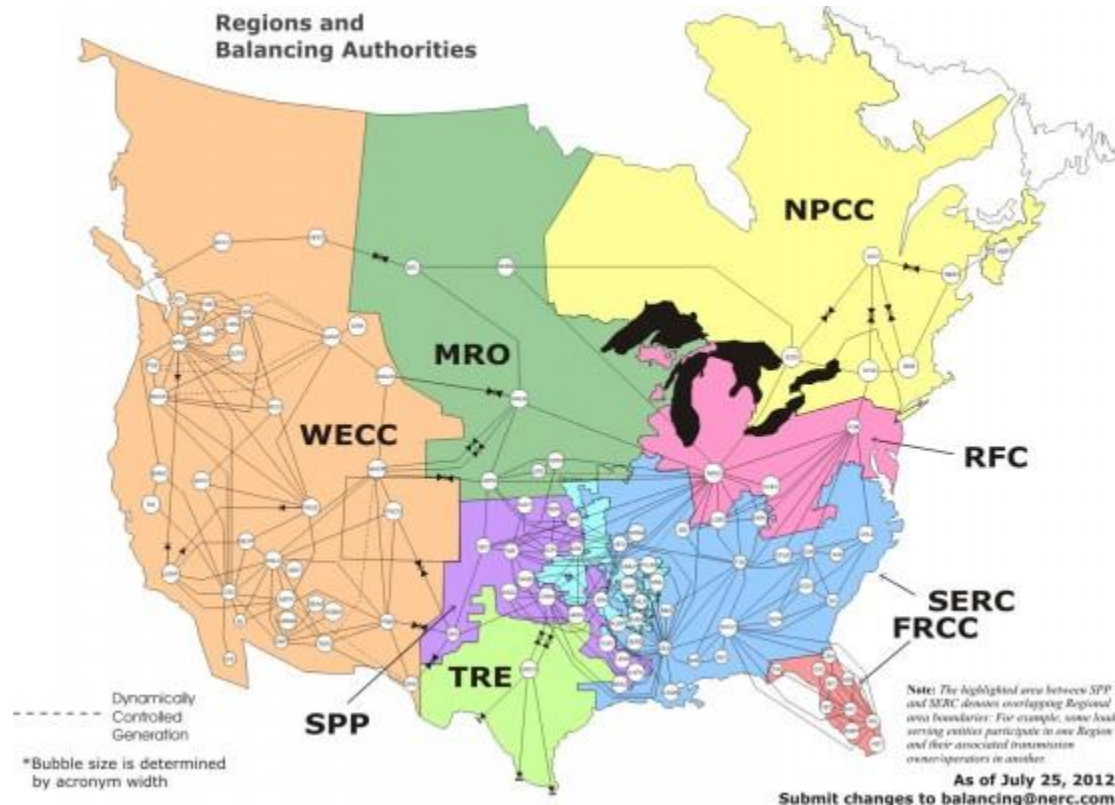
Physical Grid

- Three Interconnections in US
- NERC: Not-for-profit international regulatory authority
- Reliability Standards





Balancing Authorities





The Federal Energy Regulatory Commission (FERC)

- Regulates the transmission and wholesale sales of electricity in interstate commerce;
- Reviews certain mergers and acquisitions and corporate transactions by electricity companies;
- Licenses and inspects private, municipal, and state hydroelectric projects;
- Protects the reliability of the high voltage interstate transmission system through mandatory reliability standards;
- Monitors and investigates energy markets;
- Administers accounting and financial reporting regulations and conduct of regulated companies



The Federal Energy Regulatory Commission (FERC)

- Formed in 1977 from the Federal Power Commission
- Many changes since the late 90s
- FERC Order 888 (1996)
 - Open access, non-discriminatory transmission tariffs
- FERC Order 2000
 - Fostering participation in RTOs

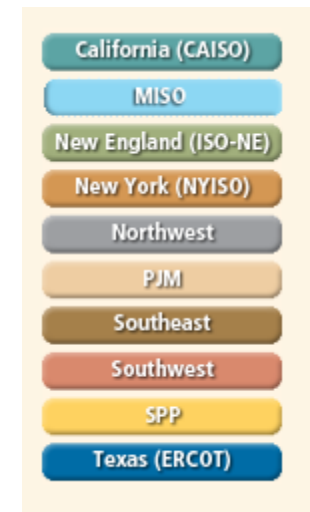
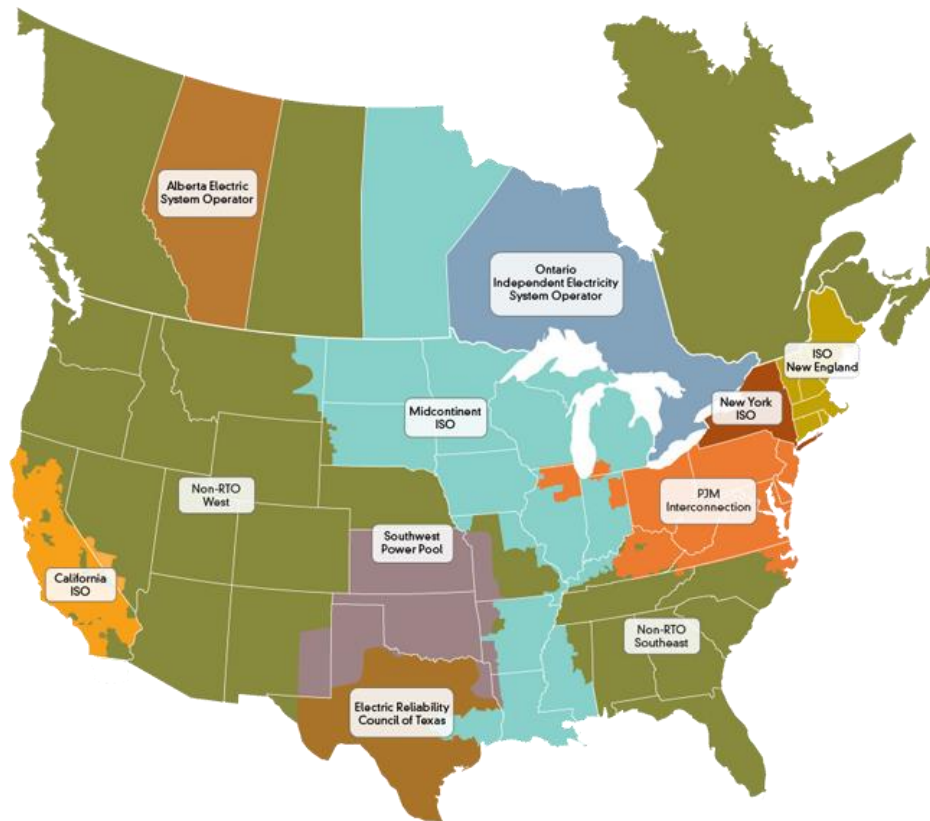


Wholesale Electricity

- **Wholesale power markets** refer to the exchange of energy, ancillary services, and capacity in the bulk power system, which comprises the interconnected resources at the high-voltage level—generation, transmission, and interties to neighboring systems.
NERL Oct 7, 2013
- LSE – Load Serving Entity, Suppliers



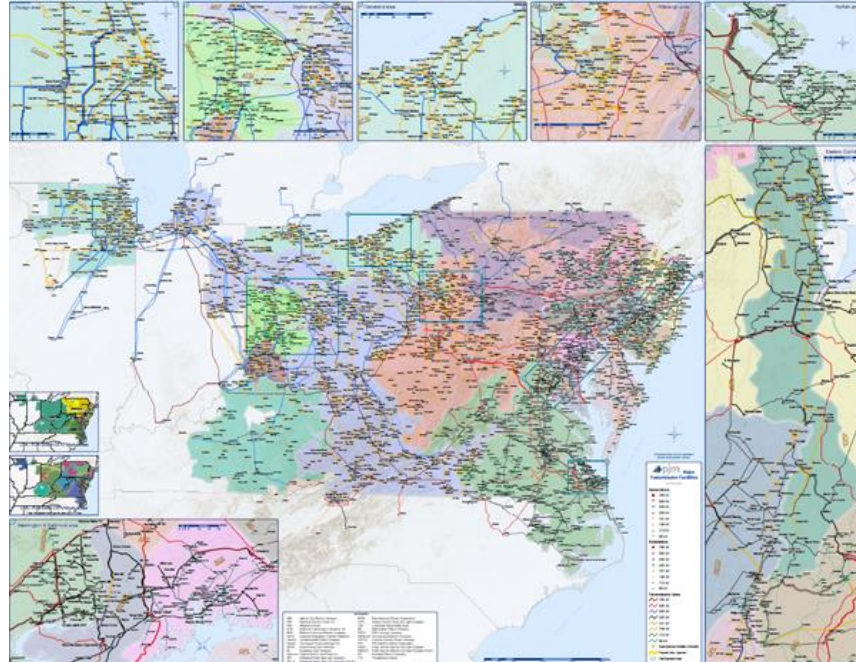
Regional Transmission Organizations





Example - PJM

- Independent, non-profit
- Coordinates the movement of wholesale electricity
- Long-term planning and capacity markets





Example - PJM

- Markets
 - Locational Market Pricing and Transmission Constraints
 - Day ahead and real-time markets
 - Capacity
 - Ancillary Services



Retail Electricity

- **Electricity retailing** is the final process in the delivery of electricity from generation to the consumer.



Regulation by the States

- Every state is different
- State PUCs
- Illinois Commerce Commission



States

- Vertically Integrated
 - IOUs (Investor-owned utility) owning generation, transmission, and distribution
 - Retail prices set by cost of service and litigation
 - Long-term planning
- “Restructured” – Illinois example
 - Utility not allowed to earn a return on generation
 - “Bundled” or “default” supply rates set by 3rd party agency
 - All prices largely dependent on efficiency of Wholesale Markets
 - Long-term planning handled by the RTO (PJM or MISO)
 - Alternative Retail Suppliers



Illinois Example

- Utilities - distribution operations/rates set by State
- Municipal utilities - by the municipality
- Cooperatives - by directors elected by the customers/owners



Illinois Example

- Other commission duties
 - Policy implementation
 - Reliability
 - Customers
 - Prices, Prices, Prices



Questions?

Electric Power Markets: National Overview

