

Regulation of Energy Companies

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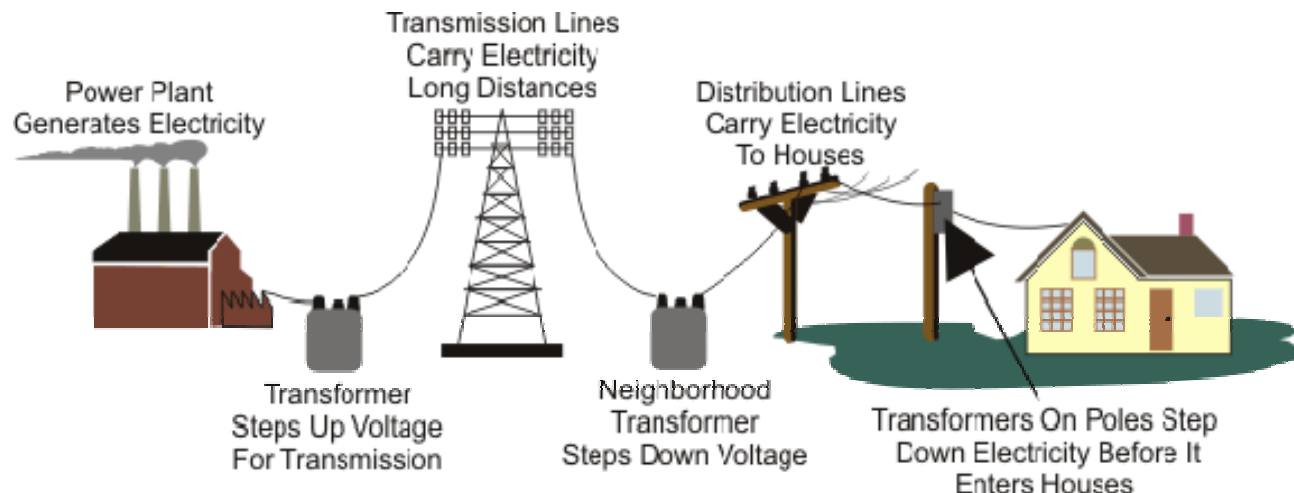
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Regulated Community

- Generators (“Gencos”)
- Transmission Companies (“Transcos”)
- Distribution Companies (“Discos”)
- Electricity Sales (including trades)





Regulated Activities

- Wholesale and retail sales of electricity
- Wholesale and retail power transmission
 - Bundled vs. Unbundled
- Wholesale and retail power distribution
- Mergers, acquisitions, and divestiture of assets
- Equity or debt issuance by regulated entities
- Jurisdictional facility siting
- Ownership, use, operation of bulk power system
- Nuclear plant operations and construction



Regulators

- Federal Energy Regulatory Commission (“FERC”)
- State Public Utility Commissions (“PUCs”)
- U.S. Dept. of Interior Minerals Management Service (“MMS”)
- Commodity Futures Trading Commission (“CFTC”)
- Electric Reliability Organization (“NERC”)
- Independent System Operators (“ISOs”) / Regional Transmission Organizations (“RTOs”)



FERC Authority

- Transmission / sale of natural gas for resale in interstate commerce (including trades)
- Transmission of oil by pipeline in interstate commerce
- Transmission / wholesale sales of electricity in interstate commerce (including trades)
- Construction, siting and operation of hydroelectric projects
- Construction, siting and operation of hydrokinetic projects
- Siting & abandonment of interstate natural gas pipelines
- Construction, siting and operation of LNG terminals
- Reliability of high voltage interstate electric transmission system
- Monitors and investigates energy markets
- Accounting / financial reporting regulations for regulated companies



FERC – Regulation of Rates

- Sales contract or a tariff of general applicability must propose rates which satisfy for FERC’s “just and reasonable standard”
- Rates, terms and conditions must not be unduly discriminatory or preferential
- “Market-based rates” appropriate where a seller and its affiliates lack or have mitigated market power
- Transmission system owners must provide “open access transmission tariff” to charge market-based rates
- Wholesale electricity markets are operated on a regional basis by an independent system operator (ISO or RTO)



Public Utility Commissions

- Regulate retail sales of electricity (rates) to consumers within a state
 - LDCs, IOUs, Competitive Brokers / Suppliers
- Siting authority (approve physical construction of in-state electric generation, transmission, or distribution facilities)



Minerals Management Service

- Authorizes leases, easements, or rights-of-way for activities on the Outer Continental Shelf that produce or support production, transportation, or transmission of energy
- Collects, accounts for, and distributes revenues associated with offshore and onshore oil, gas and mineral production from leased federal and Indian lands



Commodity Futures Trading Commission

- Regulates trading in electricity futures and other derivatives
 - Other electric rate derivatives: options, price swaps, basis swaps, and forward contracts
- Futures and options are traded on an exchange (NYMEX)
- Other hedging instruments are traded bilaterally in the “over-the-counter” (OTC) market
- Not all electric rate derivatives result in “transfer of legal title to power” (*i.e.*, not all are within FERC jurisdiction)



Electric Reliability Organization:

North American Electric Reliability Corporation (“NERC”)

- “Electricity reliability organizations” are independent entities that have the authority to develop and enforce mandatory standards for the reliable operation and planning of the **bulk power system** throughout North America (EPAct 2005)
- NERC was designated the national “electricity reliability organization” by FERC on July 20, 2006
- The **bulk power system** includes all of the continent’s electricity system except for local electricity facilities
- NERC develops and enforces Reliability Standards; monitors the bulk power system; assesses adequacy annually via 10-year and seasonal forecasts; audits owners, operators, and users for preparedness; and educates and trains industry personnel



Electric Reliability Organization: North American Electric Reliability Corporation (“NERC”)

- NERC delegates its authority to monitor and enforce compliance with Reliability Standards to 8 Regional Entities, with NERC continuing in an oversight role.



Source: <http://www.mapp.org/content/regionsmap.shtml>



ISOs / RTOs

- Independently operate transmission systems (to ensure that no preference is given to utility-owned generators over competitive generators)
 - Market Rules, Open Access Transmission Tariff
- Engage in regional planning to ensure that the right infrastructure gets built in the right place, at the right time
 - Detailed interconnection process



Wholesale Electricity Markets

- Participants
 - Generators
 - EWG, QF, IPP
 - Transmission Provider / IOU
 - Power Marketer
 - Load Aggregator / Broker
 - Alternative Resource Provider / DRP
 - End User



Wholesale Electricity Markets and Products

- Energy (Commodity) Markets
 - LMP, Day Ahead, Real Time
- Forward Capacity Market
- Ancillary Services Markets
 - FRM, Other Ancillary Services, RMR
- Demand-Side Management
- Financial Transmission Rights
 - Hedge costs of transmission congestion



Retail Electricity Markets

- Evolving competitive markets
- Customers may choose
 - Default service provider (typically the LDC)
 - Competitive broker / supplier
- New competitive retailers must obtain license
- Competition leads to new products and services
 - Green power, Time-of-day pricing, Interruptible contracts



Emerging Issues

- **Waxman-Markey bill (ACESA 2009)**
 - Establishes Renewable Electricity Standard, encourages CCS, encourages electric vehicle infrastructure, establishes Clean Energy Innovation Centers
 - Safe Climate Act
 - FERC (not CFTC) authorized to regulate CO₂ trades
- **Smart Grid Policy (126 FERC ¶ 61,253 (2009))**
 - Interoperability, communication, cyber security
 - Expansion of FERC siting authority