

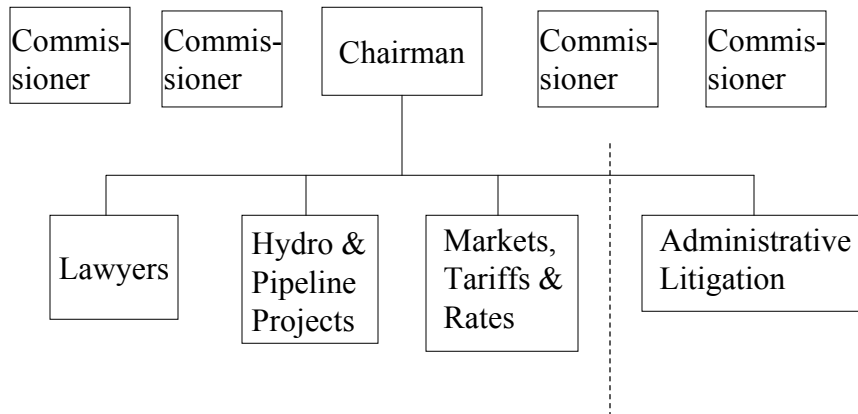
# **FERC & Electric Industry Restructuring**

ESD.126

## **Overview**

- Introduction to FERC
- Electric power industry structure
- Industry restructuring
- FERC rulemakings
- Creating competitive markets
  - How to price products
  - Impediments to competition
- Summary

## FERC Organization



3

## FERC Authority

- Independent agency
  - o Commissioners appointed by President
  - o Budget from Congress
- Industries
  - o Natural gas pipelines
  - o Oil pipelines
  - o Hydroelectric dams
  - o Electric transmission lines

4

## **Energy Legislation**

- FERC has jurisdiction over wholesale energy transactions, comes from Federal authority over interstate commerce
- 1935: Federal power act and public utility holding company act
- 1978: Public utility regulatory policy act
- 1992: Energy policy act
- 2002?: Legislation to address jurisdiction for reliability, mergers, mandate company restructuring

5

## **FERC Authority from the FPA**

- Approve transmission and wholesale energy rates
  - Rates must be “just and reasonable,” FPA 205 (Federal Power Act, section 205)
  - FERC control revenue from regulated facilities
- Approve transfers of ownership or control of regulated facilities
  - Filing must be “consistent with the public interest,” FPA 203
  - FERC authority over mergers, ISOs, RTOs

6

## **FERC Policy Making**

- FERC makes policy by
  - o Issuing rules (rulemaking) - not tied to any specific case
  - o Case by case - decisions on filings made under the FPA, refine interpretation previous Rules
  - o Litigation - Administrative law hearings
  - o Hold conferences - coordination with states and stakeholders

7

## **Recent FERC Electricity Rules**

- Orders 888 and 889: Open Access for the high voltage transmission system, issued 1996
- Order 592: Merger Policy Statement, issued 1996
- Order 2000: Regional Transmission Organizations, issued 12/1999

8

## **Traditional Power Industry Structure**

- Supply: Vertically integrated suppliers
  - Electric utilities control generation, transmission and distribution
- Demand: Native load
  - Captured customers in a monopoly franchise area
- Product: Buying and selling bundled electric service, energy (kWh) and transmission
- Market: No competitive marketplace

9

## **Power Industry Structure: Which Segments are Competitive?**

- Generation
  - Can be competitive
  - Public goods, joint products (ancillary services)
- Transmission network
  - Natural monopoly (common carrier)
  - \* *Can not direct or control power flows* \*
  - The control of transmission affects the operation of the energy market - source of market power concerns

10

## **Power Industry Structure: Which Segments are Competitive?**

- Distribution system
  - Natural monopoly
  - State jurisdiction
- System operation
  - Natural monopoly
  - Intangible good
  - Operation of the transmission system *and generators* together as one system (one machine)
  - FERC only has jurisdiction over transmission

11

## **Restructuring the Power Industry**

- Vertically Dis-integrate the Incumbent Utilities
  - Generation
    - Deregulate
    - Create competitive markets
    - Separate ownership?
  - Remaining segments
    - Continue regulation - State and Federal
    - Allow market based rates on case by case basis
    - Unbundle electricity products

12

# Restructuring the Power Industry

- The “unbundled” products are
  - Energy
  - Transmission
  - Generation capacity
  - Ancillary services: frequency and voltage support, energy reserves (joint products with energy)
- FERC’s objective
  - Ensure the independence of transmission and system operation
  - Promote competition everywhere else
  - Prevent abuse of market power

13

# FERC Order 888

- Require open access to the transmission system
  - All participants must have unencumbered access to the monopoly owned transmission system
- Define the format for tariffs that utilities must file with FERC
  - OATT - Open access transmission tariff
  - Tariffs define rates for transmission and ancillary services, and terms under which service is offered

14

## **FERC Order 889**

- Address how buyers and sellers meet
  - o Create OASIS - Open access same-time information system, web-based system to post transmission rates and availability (price & quantity)
- Define “codes of conduct” for communication between affiliated divisions of vertically integrated utilities
  - o Regulated transmission division
  - o Deregulated, merchant, generation division

15

## **Order 888 and ISOs**

- Eleven ISO (independent system operator) principles in Order 888
  - o ISO principles added to Order 888 almost as an afterthought
  - o All ISOs at that time were strong centralized power pools (or became one as in California)
  - o ISO owned nothing but controlled almost the entire system - transmission and generation

16

## **Problems Post-888**

- The number and variety of new market participants strained the structure designed by Order 888
  - Number and type of requests for transmission service
  - Demands for transparency in system operation decisions
- Numerous allegations of abuse of the codes of conduct
- Many unexpected forms of ISOs were proposed - Principles of Order 888 inadequate

17

## **Order 2000: Regional Transmission Organizations**

- Expand and discuss in great detail the eleven ISO principles of Order 888
- Create many new markets
  - Ancillary services
  - Balancing
  - Congestion management
  - Transmission rights
  - (Energy)

18

## **Order 2000**

- **Ratemaking:** Encourage “innovative” transmission pricing proposals
- **Reliability:** Maintain system reliability
- **Independence:** Ensure the independence of the transmission operator from energy market participants
- **Flexibility:** Allow regional flexibility in defining RTOs

19

## **Pending NOPR**

- **NOPR = Notice of Proposed Rulemaking**
- **Current topic is Standard Market Design (SMD)**
  - o White paper out now – a notice of a NOPR
  - o NOPR end of Spring
  - o Endless comments will be filed
- **Rulemaking**
  - o FERC does what it wants mixed with inputs from comments
  - o Rulemaking becomes federal policy

20

## Regulation

- What FERC does
  - o Approve transmission and wholesale energy rates
    - Price regulation
    - Rates must be “just and reasonable,” FPA 205 (Federal Power Act, section 205)
  - o Approve transfers of ownership or control of regulated facilities
    - Filing must be “consistent with the public interest,” FPA 203
  - o Reactive rather than proactive, but provide guidance

21

## Deregulation?

- Removing regulatory oversight from a highly concentrated, vertically integrated industry will not result in a competitive market.
- In this situation, competitive markets must be intentionally designed and created.
- The regulatory role changes, but will not disappear until ... ?

22





























