Utility Regulation in the US: A Brief Introduction
Outline for Today’s Discussion

1. Welcome
2. The Purpose of Utility Regulation
3. A Brief History of Regulation
4. Industry Structure
5. Regulatory Commissions
6. What Does a State PUC Actually Regulate?
7. Participating in the Regulatory Process
For more detail on these topics.
The Purpose of Utility Regulation
2.1 Why We Regulate

- *Natural monopolies* and their tendencies
- Electric utilities provide *essential services*
- They’re *affected with the public interest*
2.2 Why We Regulate

Regulation is a needed intervention into these markets to help secure public benefits that the markets may not provide on their own.
2.3 Why We Regulate

“All Regulation is *Incentive* Regulation”
2.4 The Purpose of Utility Regulation--Takeaways

- Utilities are “essential services”
  - They are there for us, the public

- The industries or parts of them are “natural monopolies”
  - The need for regulation of utilities arises primarily from the monopoly characteristics of the industry.

- General objective: to ensure the provision of safe, adequate, and reliable service at prices (or revenues) that are sufficient but no more than sufficient, to compensate the regulated firm for the costs (including returns on investment) that it incurs to fulfill its obligation to serve.
A Brief History of Regulation
3.1 Medieval England Accommodations

- Business “affected with the public interest.”
- Prices regulated due to monopoly stature

New Inn, Gloucester, 1454
3.2 US Origin: Munn v. Illinois (1877)

- Grain elevators charging monopoly prices to farmers
- Supreme Court ruled “affected with the public interest” and subject to price regulation
3.3 Bluefield Water Works (1935)

- Prudent investment rule
- Utility entitled to a return comparable to companies with similar risks
3.4 Hope Natural Gas (1944)

• “Just and reasonable” standard upheld
• Rate must be sufficient to allow the utility to attract additional capital under prudent management, given the level of risk that the utility business faces
3.5 Market Street Railway (1945)

- Company not entitled to recover costs of stranded assets due to technological evolution
3.6 History of Regulation -- Takeaways

• Utilities private property affected with the *public interest*
• 5th and 14th Amendments to constitution protect utilities against unjust takings
• Entitled to returns comparable to companies with similar risks
• Prudent management required
• Companies not protected from technological evolution
4 Industry Structure
4.1 Utility Structures

- Vertically Integrated Utilities
  - Responsible for generation, transmission, and distribution of power to retail customers.
  - May also buy power through contracts from others.

- Distribution Only Utility
  - Many electric utilities are not vertically integrated and provide only distribution service.
    - Do not own any generating resources.
    - They either buy their power from one or more upstream wholesale providers or, in the restructured states, consumers may obtain their power directly from suppliers.

- Alternative Suppliers
4.2 US Electric Power Industry -- A Snapshot

- **Investor-owned utilities** (serve about 75 percent of the US population)
  - These are private companies, subject to state regulation, and financed by a combination of shareholder equity and bondholder debt.

- **Public Power: Municipal Utilities, Utility Districts, and Cooperatives** (serve about 25% of population)
  - City-owned or **municipal utilities**, known as “munis,” governed by the local city council or another elected commission;
  - **Public utility districts**, utility-only government agencies, governed by a board elected by voters within the service territory;
Cooperatives (co-ops), mostly rural, private nonprofit entities governed by a board elected by the customers of the utility.

- Most co-ops were formed in the years following the Great Depression, to extend electric service to remote areas that IOUs were unwilling to serve; there are also some urban cooperatives; and

- Others, including a variety of Native American tribes, irrigation districts, mutual power associations, and other public and quasi-public entities providing electric service in a few parts of the United States.
### 4.3 Electricity Service: Wholesale/Retail

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<tr>
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<th>Wholesale</th>
<th>Retail</th>
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<tbody>
<tr>
<td>1</td>
<td>Generating Station</td>
<td>Customers</td>
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<td>Electricity is typically generated by a steam- or hydro-driven turbine at the power plant.</td>
<td>Power is then delivered to customers via local lines.</td>
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<td>2</td>
<td>Step-Up Transformer</td>
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<td>The power is then ramped up to high voltage for long-distance transmission.</td>
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<td>3</td>
<td>Transmission</td>
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<td>Next, a series of high voltage lines transmit the electricity through the power grid.</td>
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<td>4</td>
<td>Step-Down Transformer</td>
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<td>Power is then reduced to a lower voltage for use in homes and businesses.</td>
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<td>5</td>
<td>Subtransmission Customer</td>
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<td>The electricity then passes through a series of switches to distribution lines.</td>
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4.4 Industry Structure -- Takeaways

- Electric companies’ structures and business models vary
- Power is sold at both wholesale and retail
5 Regulatory Commissions
5.1 Federalism and State Authority

- “Federalism” describes relationships between the federal government and state governments.
- If the federal government isn’t doing something, States still may be able to.
5.2 The Federal Energy Regulatory Commission (FERC)-What Does It Regulate?

- Rates and Services
  - Electric transmission in interstate commerce and
  - Electric wholesale power sales in interstate commerce
  - Natural gas pipeline transportation,
  - Storage facilities
  - LNG facilities; certification of new facilities; and abandonment of existing facilities
  - Oil pipeline transportation

- Hydroelectric dam licensing and safety

- Certification and decertification of “Qualifying Facilities” and oversight of QF-utility

- Reliability: established a mandatory electric reliability regime, certified an “electric reliability organization” (North American Electric Reliability Corporation-- NERC), approve proposed standards; review NERC-imposed penalties; and exercise independent enforcement authority
5.3 What Does FERC Not Regulate?  
(See also State Utility Commissions)

- **Local** electric distribution, and any related rates, terms, and conditions of service
- **Retail** sales of energy, and any related rates, terms, and conditions
- What generation gets built, including the choice, siting and construction (except hydroelectric generation).
- What transmission gets built, including the choice, siting and construction.
- But **wholesale rate recovery** of generation and transmission costs and wholesale rate recovery of any other cost, is subject to FERC review.
5.4 How Does FERC Take Action?

• Generic, industry-wide decisions
  • Initiated by FERC or in response to a petition
  • Rulemaking
  • Policy Statement (typically, not changing adopted rules)

• Party-specific, adjudications:
  • Typically, in response to submittals from jurisdictional companies, their customers, other market participants.
5.5 State Public Utilities Commissions (PUCs)
50 States, Washington DC, Puerto Rico, Guam and Virgin Islands
5.6 PUCs

- Structure and Organization
- Appointed vs. Elected
- Limited Powers
- Consumer Advocates
- Consumer-Owned Utilities
5.7 PUCs’ Structure and Organization

- Typically, 3 to 7 appointed or elected commissioners supported by professional staff

- While it may vary, staff carry out the following functions:
  - Managing their own personnel, facilities, operations: administrative staff;
  - Conducting hearings: administrative law judges, hearings examiners, attorneys;
  - Analyzing rate filings through testimony (usually pre-filed) and
  - Enforcing rules and tariffs
  - Providing technical assistance to the commissioners: advisory staff;
  - Legal analysis: attorneys;
  - Legislative analysis and reporting: policy staff; and
  - Facilitating alternative dispute resolution processes, including
  - Settlement negotiations among parties.
5.8 PUCs – Appointed vs. Elected

- In most states,
  - Commissioners are appointed by the governor, and subject to confirmation by the legislature.
- In some states,
  - Commissioners are elected by the general population or the legislature
- Most commissioners serve terms of four to six years--staggered.
- In some states there are limits to how many consecutive terms a commissioner may serve.
5.9 PUCs Have Limited Powers

- Their authority is defined by law, and their decisions are subject to appeal to the state courts.

- Reviewing courts generally defer to the expertise of the regulators, unless
  - They find that regulators have exceeded their statutory authority, misinterpreted the law, or conducted an unfair process.

- Courts generally retain to themselves the authority to interpret statutes and regulations but will defer to reasonable interpretations by the commissions.

- “...[O]nly such powers as are expressly conferred upon it by the Legislature together with such incidental powers expressly granted or necessarily implied as are necessary to the full exercise of those granted.”

5.10 Consumer-Owned Utilities

COUs typically have a different regulatory structure

- Municipal Utilities, for example, subject to City Council, a special board or committee
- Public Power Districts have dedicated, elected boards

- Some state utility laws still may apply to them, e.g.,
  - Notice requirements for rate adjustments
  - Resource portfolio requirements
5.11 Regulatory Commissions -- Takeaways

- Federal and state jurisdictions
- Interstate/Intrastate—wholesale/retail
- Rulemakings & Party-specific adjudications
- State Commissioners appointed/elected
- Limited Powers
What Specifically Does a State PUC Regulate?
6.1 PUCs Regulate

In most states, PUCs

- Regulate all investor-owned utilities or “IOUs” in their state.
- In general, do not regulate
  - municipal utilities,
  - coops, or
  - public power districts

- One or more state agencies are responsible for issuing permits necessary to build and operate generation and transmission, pre-empting local authorities.
6.2 State PUCs Determine

• Determine a utility’s **revenue requirement** and to establish the prices or rates for each class of consumers.

• Some authority over the utility’s **choice of power sources** to serve its consumers,
  - **Portfolio Standards**: Renewables, energy efficiency, other resources.
  - **Integrated Resource Planning (IRP)** -- a long-term plan prepared by a utility to guide future energy efficiency, generation, transmission, and distribution investments.
  - **Construction Authorization**: Many state commissions have the authority to proposed power plants. Some states require specific approval (a certificate of public convenience and necessity).
  - **General Authority**: Regulators are usually broadly empowered to “regulate in the public interest” and this has resulted in some regulators taking on issues that others do not. This may include some aspects of environmental regulation, economic justice, or long-run reliability planning. This power is not unlimited; it is constrained by the enabling statutes.
6.3 PUCs Also Regulate

- Service Standards
- Resource Planning
- Energy Efficiency *
- Low-Income Programs
- Any Issue Assigned by Legislature
- Any Issue Brought by Complaint

- Mergers/Acquisitions
- Affiliated Interests
- Competitive Activities
- Environmental Effects of Utility Activity
- Accounting Policies
- Securities Issuance
Once a power plant or other capital project is completed, the commission may conduct a prudence review to determine if it has been constructed or implemented as proposed, according to sound management practices, and at a reasonable cost and with reasonable care.
6.5 PUCs are Quasi Judicial

- Legislative, e.g., Rulemakings
  - PUC develops Draft Rule
  - PUC publishes Draft Rule
  - PUC takes written/public comments and makes changes to Rule
  - Agency publishes Final Rule
    - Subject to judicial review
Judicial, e.g., “Contested Cases”

- Petition Filed at PUC
- Docket Number and Hearing Officer Assigned
- Opening Order, identifies issues, establishes procedure, including intervention deadlines
- Interventions
- Discovery
- Public Hearings
- Filing testimony
- Evidentiary Hearings (record developed, briefs filed)
- Staff Recommendations
- Disposition (possible settlement, final order)
- Motions to reconsider/appeals or compliance filings
What PUCs Regulate -- Takeaways

- Quasi-Judicial
- Largely IOU-focused
- Review specific mandates, e.g., IRP, portfolio standards, construction
- General authority, e.g., utility business practices
- Power to review prudence of utility decision making
Participating in the Regulatory Process
7.1 Typical PUC Stakeholders

- Consumer Advocates
- Investor-Owned Utility Companies
- Industrial Energy Users
- NGOs
- Local Government
- Community Groups
7.2 Participation Before a PUC Can Take Many Forms

- “Paper” Proceedings
- Generic Proceedings and Policy Statements
- Stakeholder Collaboratives
- Public Hearings
- Proceedings of Other Agencies Affecting Utilities
Participation Before a PUC -- Intervention

In formal cases, generally, intervention is granted to:

• A person that has an interest in the type of matter or is mentioned in the statute;

• The proceeding will affect you regarding a specific interest that you have that is different from the interest of the public or your interests are not well represented by the other parties in the case.

See, [MN PUC Intervention](#); [VT PUC Participation and Intervention](#)
Participating in the Regulatory Process—Takeaways

• Different parties
  • Statutory and other
• Informal and formal proceedings (with different rules)
• Intervention – answer the question: “what are your interests?”
About RAP

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