

History and Philosophy of Ratemaking



NARUC Energy Regulatory Partnership Program

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Economic Regulation

- ❖ The explicit public or governmental intervention into a market to achieve a public policy or social objective that the market fails to accomplish on its own.



Rationale for Economic and Price Regulation

- ❖ Product is considered essential
- ❖ Product is most efficiently provided by a single supplier
- ❖ natural monopoly
- ❖ Other market failures
 - External (environmental) costs not fully reflected in costs
 - Consumer Protection
 - Collusion (antitrust concerns)
 - Excessive market power
 - Discriminatory Pricing
- ❖ Economic Efficiency
- ❖ Other Policy Considerations
- ❖ Information Asymmetry



Early Stages of Economic Regulation

- ❖ 1877 Rate Regulation permitted under law (grain elevators)
- ❖ Railroads, other entities with local monopolies



Rationales for Regulation

- ❖ Concept of businesses "affected by the public interest"
 - natural monopoly - single firm can produce a desired level of output necessary at a lower cost than any output combination of more than one firm
 - increasing economies of scale.
- ❖ Causes of natural monopoly
 - Technologies
 - Capital intensity
 - High ratio of fixed costs to total costs



Beginning of Utility Regulation

- ❖ By 1914, majority of the states regulated local electric companies
- ❖ Viewed as natural monopolies
- ❖ Regulation desired to avoid competition
- ❖ Limits on regulation - jurisdictional boundaries
 - interstate pipelines
 - transmission lines



Federal Regulation - 1930s

- ❖ Response to holding companies. 10 companies owned 75% of power business
- ❖ Restricted holding companies
- ❖ Federal regulation over electric transmission (although not siting!!)
- ❖ Also natural gas pipelines (including siting)
- ❖ Coupled with support for rural areas



General Characteristics of Pre-1978 Regulation

- ❖ Little competition
- ❖ Regulation of entire enterprise
- ❖ Bundled services. (E.g., natural gas commodity *and* transmission purchased as one)
- ❖ Result in some cases was higher costs (gas)



Post-1978 Regulation

- ❖ Responses to energy crises and rate increases
- ❖ Alternative energy sources encouraged (small power)
- ❖ Unbundling
 - separate natural monopoly functions from competitive ones
 - purchase directly from the provider
 - transport separated from commodity
- ❖ Increased competition
 - Initially, natural gas
 - Electric generation has followed
 - Electric restructuring



Conclusion: Objectives of Economic Regulation

- ❖ Economic efficiency
- ❖ Fair prices, to consumers, producers and regulated entity
- ❖ Reasonable service, with non-discriminatory access
- ❖ Adequate quality and reliability
- ❖ Other policy consideration (social objectives)