

Regulator's Perspective

- Why Utilities are Regulated
- Expectations of Utility Regulation
- Setting the rates of a regulated electric utility
- Regulatory incentives

What Constitutes a Public Utility?

- Natural Monopoly
 - “An industry where the most efficient operation is through a monopoly”
 - “A single firm can supply a good or service to an entire market at a smaller cost than could two or more firms”
 - Market forces result in the survival of only one firm
 - Capital Intensive
 - Barriers to Entry
 - Economies of Scope and Scale
 - a product without close substitutes
- Provides a critical public service
 - “A high degree of public interest attached to the services rendered”
- Defined by Law

Why Utilities are Regulated

- Intended to replace the discipline of competition
 - “The visible hand of public regulation is intended to replace the invisible hand of Adam Smith in order to protect consumers against extortionate charges, restrictions of output, deterioration of service, and unfair discrimination.”

Expectations of Utility Regulators

- Generally, as provided by enabling statutes
 - “sufficient and efficient”
 - Reliable, and just and reasonable
 - “not unduly discriminatory”
 - In the end its all about rate design
- The public interest
 - Includes the interest of utilities, customers, economic development, etc.
 - Objective of all “utility regulators”
 - Municipal authorities
 - Cooperative boards

Expectations of Utility Regulators (cont)

- Requirements by other policy makers
 - Utilities are affected by more than utility regulators
 - Environmental requirements
 - Safety requirements
 - Both employee and public
 - Zoning requirements
 - Taxation and other social contributions
 - Shareholders or owners
 - Creditors and financial markets
- Utility regulators must recognize costs of utility's other requirements and obligations
 - Part of the broad public interest as defined by other policy makers

Setting the rates of Electric Utilities

- Determine the revenue requirement
 - The amount the utility is entitled to earn for its services
- Determine how the revenue will be collected
 - Rate Design

Determining the Revenue Requirement

- Determine annual expenses
 - Review historic costs
 - Pick some test period – generally a “test year”
 - Adjustments
 - Consider forecasts
 - Fuel costs, etc
 - Normalize expenses
 - Weather, customer growth etc.
 - Changes in employees, inventories, taxes, etc.

Determining the Revenue Requirement (cont)

- Treatment of utility investments - Ratebase
 - Recovery of Investment
 - Depreciation
 - Recover over the life of the benefits
 - Generally straight line recovery
 - Recovery on investment
 - Rate of return
 - Cost of debt
 - Cost of equity
 - Capital structure
 - Recovery of income taxes
 - Profits also reflect return on equity

Determining the Revenue Requirement (cont)

- Regulators Perspective on Expenses
 - Were utility expenditures necessary?
 - Were the expenditures needed to address a responsibility of the utility?
 - Were expenditures reasonable?
 - Of all of the possible methods to address its responsibilities was the one selected by the utility among the better (or reasonable) solutions.
 - Were the expenditures prudent?
 - Did the utility efficiently implement its selected method or process.

Regulatory Incentives

- Regulatory Lag
- Price Caps
- Performance Based Incentives

Regulatory Lag

- Principles
 - Utility has every incentive to lower costs between ratecases
 - Most effective for electric utilities
 - Utility expected to meet certain obligations, reliability standards and quality of service requirements between ratecases
 - Expectation is that investments stay in utility business
 - Utility or regulator can review rates at any time
- Regulatory lag is a powerful incentive for electric utilities!

Regulatory Lag (cont)

- Incentive – electric utilities
 - Electric utilities make large or lumpy investments
 - Depreciation likely decreases ratebase over time until the next large investment
 - A \$1 billion power plant depreciated over 40 years yields a 10% decrease in ratebase over a 4 year period.
 - » This alone decreases revenue requirement by over \$10 million
 - Productivity improvements
 - Utility costs per unit of service go down in real terms over time
 - like all industries
 - Customer and load growth
 - Over time increased sales may generate increased revenue over decreasing costs

Regulatory Lag (cont)

- Regulatory lag assumes the utility meets its obligations
 - Utility still expected to make necessary expenditures
 - Reliability, safety, quality of service, environmental protection, etc.
 - Works best when utility's obligations are clearly defined
 - Clear standards, regulations and policies

Regulatory Lag (cont)

- Utility investments expected to stay in utility business
 - Little ability to grow demand for product
 - Major issue for electric utilities
 - Large investments made infrequently
 - Routine investments insufficient to stop decreasing ratebase
 - Incentive to either buy back shares or decrease ROE
 - » The natural incentive for organizations is to grow
 - » Buying back shares is expensive if business is stable
 - » Paying off debt decreases ROE between ratecases
 - Temptation is to diversify
 - Often promoted by financial community

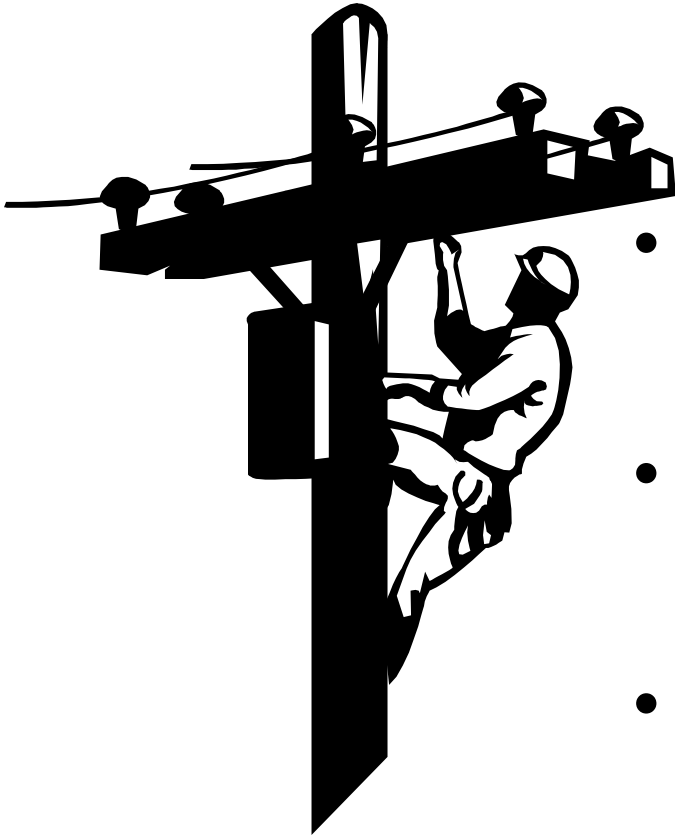
Regulatory Lag (cont)

- Rates can be reviewed at any time
 - Utility can come in and request a rate increase when needed
 - Doesn't mean its easy – but raising prices isn't easy in competitive realm either!
 - Regulator can request rate setting at any time
 - Periodic reviews
 - By agreement or regulatory policy
 - Should be done for rate design regardless of revenue requirements!
 - Show cause may be legally difficult and allows extra lag

Price Caps and PBR

- Price Caps are essentially a rate moratorium but allows discounting
 - Electric utilities often have ability to discount anyway
 - Special contracts
 - Special tariffs
- Performance Based Ratemaking (PBR)
 - Allows automatic rate adjustment
 - Must account for productivity
 - Must have a detailed expectation of service quality and reliability
 - Requires a detailed financial model
 - Requires a detailed economic model for fuel costs, purchase power expenses, etc.

Kansas Electric Utilities



- Municipal utilities
 - 118 – 60 have generation
- Rural Cooperatives
 - 30 distribution and 2 G&Ts
- Investor-owned
 - 6 – all with generation, transmission and distribution

Kansas Electric Utility Regulation

Kansas Corporation Commission (KCC)

- Three commissioners appointed by the Governor
 - Confirmed by State Senate
- Four year staggered terms
- No more than two (2) from any one political party
- Chair elected by Commissioners
- Staff is not protected by civil service
- Legislative – not constitutional



KCC Electric Utility Regulation

- Jurisdiction

- All investor-owned and cooperative transmission, generation and distribution
 - FERC pre-empts investor owned wholesale and transmission
- Municipal electric utilities beyond 3 mile zone
- Certain distribution cooperatives may opt out
- Retail rates and services



KCC Electric Utility Regulation (cont)

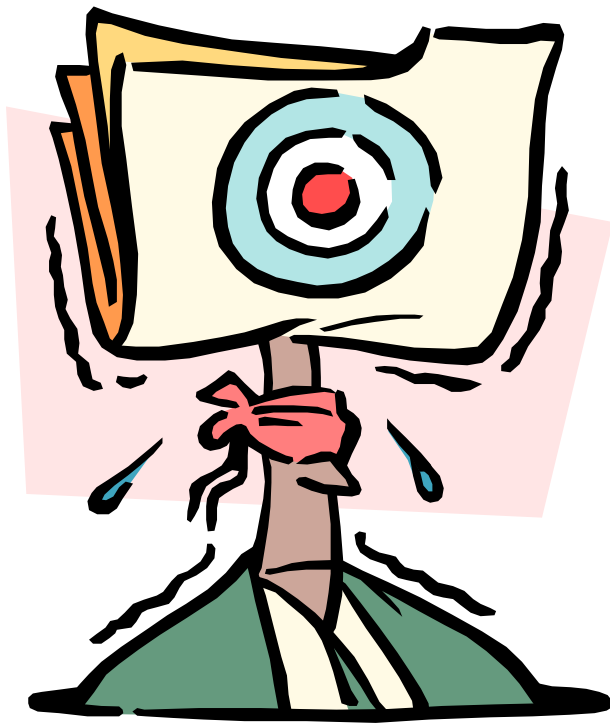
- Responsibilities

- Judicial

- Commission must consider evidence and decide issues, set rates and services, etc.
 - Decisions may be appealed to the State court of appeals

- Advocacy

- Commission must represent Kansas in Federal, regional or other jurisdictions
 - State energy office also part of KCC
 - This can be a concern



KCC Electric Utility Regulation (cont)

- Advocacy (cont)

- FERC

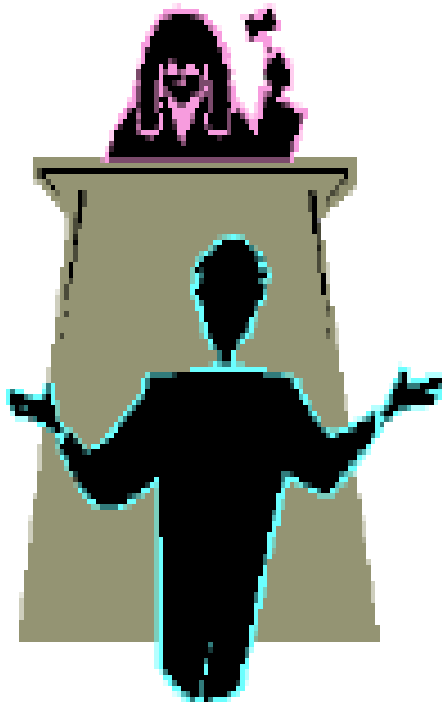
- Wholesale rate cases
 - Policy decisions
 - Transmission tariffs

- Regional Transmission Organizations (RTOs)

- Future governance role

- Regional transmission siting boards

- Federal and state lawmakers



KCC Electric Utility Regulation (cont)

- KCC organization
 - Legal division
 - Information services
 - Computer services
 - Public Information Office
 - Complaints, press releases, etc.
 - 1-800-662-0027

Transportation Division

- Truck and railroad safety
- Conservation Division
 - Oil and Gas Drilling
- Energy Office
- Utilities Division
 - Electric, natural gas,
 - telecommunications, pipeline safety



KCC Electric Utility Regulation (cont)

- Kansas Law
 - Single certified territories for retail electric suppliers
 - Commission may not order retail competition (wheeling) without legislative action
 - Legislature has studied retail competition and has not taken action



KCC Electric Utility Regulation (cont)

- Kansas Law (cont)
 - Generation
 - Commission responsible for assuring adequate capacity margin
 - KCC no longer has siting authority except for nuclear plants



Transmission

- KCC sites transmission lines 230 KV or larger, greater than 5 miles in length, and on new corridors
- KCC Complaint process
- Coordination with other utilities

KCC Electric Utility Regulation (cont)

- Kansas Law (cont)
 - Renewables and conservation
 - Incentives allowed by legislation
 - Up to 2% increased ROE
 - Electric safety
 - Commission has responsibility outside city limits
 - Overhead clearance requirements
 - KCC has authority to review and approve
 - Affiliate transactions
 - Mergers
 - KCC given broad authority over electric utilities



KCC Electric Utility Regulation (cont)

- Kansas Law (cont)
 - Time limits for KCC review of rate changes
 - 30 days with extension up to 240 days
 - Almost all major filings extended
 - Utility property must be used and useful within one year
 - Some exceptions
 - Burden of proof on utility to prove need for charges



KCC Electric Utility Regulation (cont)

- Kansas Law (cont)
 - KCC proceeding must meet requirements of Kansas Administrative Procedures Act
 - Miscellaneous Requirements
 - Nuclear decommissioning trust
 - Review of loans based on utility property
 - Annual reports
 - Annual KCC legislative report



KCC Electric Utility Regulation (cont)

- Rate filings
 - KCC regulations for specific filing requirements
 - General proceedings
 - Rate filing
 - 4 months of discovery then Staff and interveners file testimony
 - 1 month later rebuttal testimony filed
 - 2 weeks later technical hearing
 - Public hearing in 4 to 5 month timeframe
 - Brief 1 month later
 - Commission decision in remaining timeframe
 - Annual filings



Publicly-Owned Utility Regulation



- Municipal utilities
 - Generally regulated by city commissions or boards
- Federal power agencies
- Public power districts
 - State, counties or regions
- Rural Electric cooperatives
 - Member control

Special Topics for public utility regulation



- Regulatory Objectives
- Social and environmental agendas
- Authority
- Command and Control
- Restructuring

Regulatory Objectives



- The public interest
 - Must balance the interest of:
 - Companies
 - Customers
 - Economics
 - Process must give public confidence
 - Public input
 - Public education

Social and Environmental Agendas



- Public policy direction
 - Input from other policy makers
 - In Kansas historically legislative
 - Commissions should avoid “going it alone”
 - Avoid “fashion trends”
- Kansas examples
 - Cold weather rule
 - Renewable energy

Authority



- Philosophy
 - You can only regulate to the extent they let you
- Process
 - Successful utilities and Commissions sell the change
 - Public meetings
 - Press releases and interviews

Command and Control



- What the regulator can do
 - Price incentives
 - Penalties and fines
 - Certificates and approvals
 - Coordinate other government agencies
- What the regulator can't do
 - Manage and run the utility
 - Invest for the utility
 - Control the public perception