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Regulatory Asset Base

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Essential Nature of Public Service

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- Two attributes of public utility
 - Necessity of service provided
 - Possession of assets to provide the service
- Monopoly in nature
- Large investments in assets for a long-term period
- Decision to invest has to be made carefully
- Return on the investment necessary

Regulation as a substitute for competition

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- Rates have to be just and reasonable to provide safe and reliable service
- Large assets need large investments
- Attract capital sufficient to build and adequate maintain service
- Rates have to mimic market conditions as close as possible otherwise investors will put their funds elsewhere
- Rates are not retroactive: utility's responsibility to know when rates need to change to provide the service
- Important to correctly identify regulatory asset base

Traditional Rate Regulation

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- Regulator permits a regulated company to set rates that will cover the company's:
 - Operating costs; and,
 - An opportunity -- *not guarantee* -- to earn a reasonable rate of return.
- Rates must be non-discriminatory among customers in the same class of service but could be different between different classes of service
- Revenue Requirement (RR) =
Rate of Return (ROR) x Rate Base (RB) + Expenses (E)

Rate Base Determination

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General Definition of Rate Base

A utility's rate base is the total value of its various properties; for an electric utility, it would be -

- Power Plants
- Transmission Lines
- Buildings
- Fuel Stocks

Rate of Return

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- The utility is given the opportunity, through its rates, to collect a percentage of profit or margin on the value of its rate base.
- This percentage of profit – known as the rate of return – varies, but generally can range 5 to 11 percent.

Important Concepts

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- **Used and Useful:** Only plant currently providing or capable of providing utility service to the consuming public is allowed in rate base.
- **Prudent Investment:** Only plant prudently purchased or constructed is allowed in rate base.
- **Original Cost:** The cost of such property to the person/company *first* devoting to public service.
- **Time Period:** End of test year approach.

Elements of Rate Base

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Rate Base =

Original Cost of Electric Plant in Service

- Accumulated Depreciation Reserves
- Accumulated Provision for Deferred Income Taxes
- Operating Reserves
- + Electric Plant Held for Future use
- + Construction Work in Progress (if allowed)
- + Working Capital

Changes in Inputs

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- Some input items that can change significantly from year-to-year be normalized in a rate case:
 - Weather
 - Tax rates
 - Fuel cost fluctuation
 - Currency exchange fluctuation