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Tariff Construction: Identification of Major Components

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Key steps in ratemaking process

- Determine **revenue requirement** (cost assessment) for a given test year
- **Allocate costs** to customers based on usage patterns
- **Design rates** to recover costs through rates and charges



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Revenue Requirement

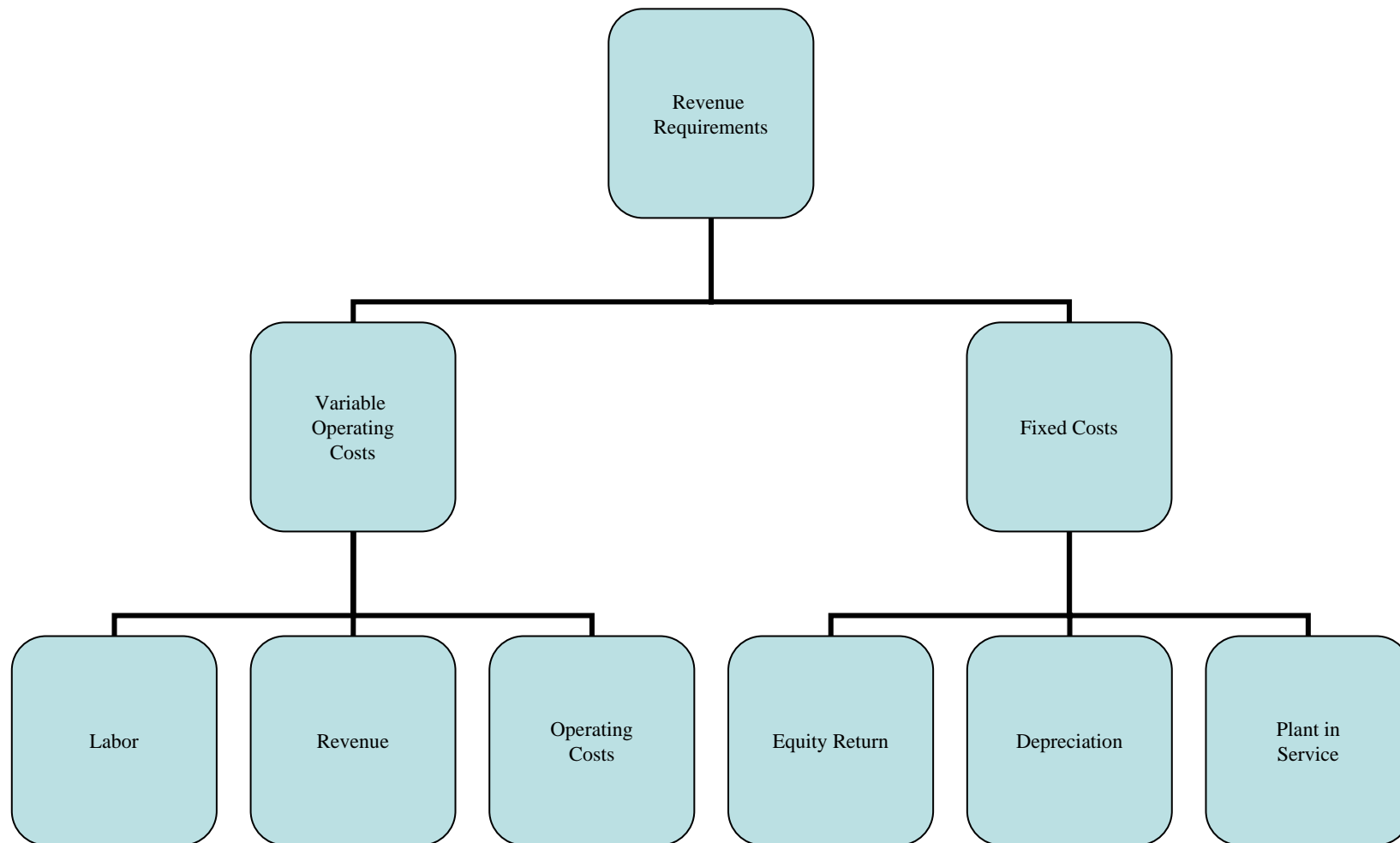
- Net Operating Income (operating revenues minus operating expenses)
- Rate Base: the utility's investment in plant "used and useful" in the public service (fixed costs)
- Rate of Return: Overall weighted cost of capital applied to the rate base in order to calculate a fair rate of return for investors (financial analysis)



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Cost Allocation: Allocating costs to customers

- Revenue requirements, i.e. costs of service, are allocated to classes of customers based on the impact of their usage on the utility system
 - Residential
 - Commercial
 - Industrial
 - Wholesale
 - Agricultural
- Individualized rates are discouraged, although special, negotiated (contract) rates may be an exception for large users



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Rate Design: Designing rates to recover costs through rates and charges

- Fixed charges (do not vary with consumption)
- Variable charges (vary with consumption)
- Special charges
 - Automatic adjustment clauses
 - Special purpose surcharges
- Additional considerations
 - Rate design should not be overly complex
 - Benefits of any rate design should not outweigh costs



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Pricing and Affordability

- Rates must be high enough to cover cost of service and send efficient price signals to guide consumption and production –
- But at the same time, be low enough to be affordable to customers
- When rates are not affordable
 - Abandonment of service
 - Sacrifice of service quality
 - Subsidization through taxes and levies