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National
Association of
Regulatory
Utility
Commissioners

Utility Accounting Approaches and Asset Valuation

**Presented By:
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OVERVIEW

1. Financial Analysis
2. Techniques Employed in Asset Valuation
3. Treatment of Depreciation
4. Models for Predicting Revenue & Investment Requirements
5. Mechanisms to Review Investment Decisions



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1. FINANCIAL ANALYSIS

Proper and adequate financial analysis requires:

1. Common accounting standards for all public utilities – for us that means FERC's Uniform System of Accounts (USOA)
2. Development of specific forms/reports utilizing USOA
3. Regular/periodic interval for report submission
4. Supplemented through special reports & filings with PUCO and other regulatory agencies
5. Also supplemented through independent evaluations including those by investment community



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1. FINANCIAL ANALYSIS - SOURCES OF INFORMATION

- Investment community analyses & reports
 - Debt Analysts
 - Standard & Poor's
 - Equity Analysts
 - Salomon Brothers
- Governmental filings
 - SEC 10-K, 10-Q
 - FERC Form 2
 - PUCO Annual Reports
- Independent evaluations
 - Examination of financial health of publicly traded public utilities (independent auditor's reports for Annual Reports)



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1. FINANCIAL ANALYSIS

Regular/periodic reports

- Annual Reports filed with PUCO – overall financial statement, including:
 1. Ownership
 2. Board of Directors & Officers
 3. Sales & Throughput
 4. Revenues recovered by customer class
 5. Income & Expenses
 6. Customer counts
 7. Plant depreciation, etc.
- GCR/PGA filings



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1. FINANCIAL ANALYSIS

Rate Case Filings

- Pre-filing notice (PFN)
- Rate Case Filings
- Staff Report
- Intervenor testimony & information



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2. TECHNIQUES EMPLOYED IN ASSET VALUATION

- Original book cost – traditional means of putting used and useful assets into rate base
- Market value – may be used by investment community but generally not used by regulatory bodies
- Debt recovery on sale of assets



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3. TREATMENT OF DEPRECIATION

- What is depreciation?
 - The recognition of the decrease in value suffered by an asset with a long life
- Straight line depreciation
 - Handy-Whitman index
 - Index for asset life
- Accelerated depreciation
 - For tax purposes
 - Double-declining
 - Sum of years' digits



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3. TREATMENT OF DEPRECIATION

- Depreciation
 - Wear and tear
 - Decay
 - Inadequacy
 - Changes in demand
 - Obsolescence
 - Technological advances
 - Changes in requirements of regulatory authorities



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3. TREATMENT OF DEPRECIATION

- Depreciation Rates
 - Methods: straight line and accelerated
 - Procedures: broad group, vintage group, unit depreciation
 - Techniques: whole life, remaining life



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3. TREATMENT OF DEPRECIATION

- Straight Line
 - Most common form of depreciation
 - Equal amounts of depreciation expense allocated each year in the service life
- Accelerated Depreciation
 - For U.S. income tax purposes, federal government often allows accelerated depreciation on certain assets to promote investment



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3. TREATMENT OF DEPRECIATION

- Procedure: Group or Unit Depreciation
 - Except for buildings and major equipment, service lives more predictable for groups rather than individual units
 - Derives from insurance industry; stable statistical ratios normally appear with large group data, allowing for reasonably accurate calculation of average life



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3. TREATMENT OF DEPRECIATION

- Techniques: Whole life or Remaining life
 - Whole life: rate determined by property's average service life
 - Remaining life: rate determined by property's average service life less average age of property
- Service life estimated by past experience as modified by reasonable expectations related to future events



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4. PREDICTIVE MODELS – REVENUE & INVESTMENT

- Rate Case issues
 - Rate design & cost allocation issues:
 - Balancing fixed costs and incremental/variable costs across rate structure
 - Monthly charge (fixed) vs. throughput
- Decoupling revenues from sales
 - Vectren Energy Delivery of Ohio
 - Gradualism - rate design trend towards allocating costs based on causation



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4. PREDICTIVE MODELS – REVENUE & INVESTMENT

Gradualism



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5. INVESTMENT DECISION REVIEW MECHANISMS

- Rate cases
- Defined triggers
- AUDITS
- Compliance Investigations (a type of audit)
- Other regular, periodic reviews by the regulatory authority