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Commissioners

Investment Analysis and Monitoring, Ex-post

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General Outline of Presentation

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 2. Valuation
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Rate Base Items

Definition:

The investor funded or supplied plant, facilities and other investment by the utility in providing utility services to its customers.

Source: Rate Case and Audit Manual prepared by NARUC Staff Subcommittee on Accounting and Finance - 2003

Valuation

- Cost:
 - Original cost of the plant or equipment
 - Cost at the time it was first put into service
 - The cost remains with that item throughout its life
 - If the asset is purchased during its life from another utility, the original cost carries with it, and any difference between it and the purchased price is booked as an acquisition adjustment
 - Used and Useful:
 - Plant be functioning to be included in revenue requirement
 - Plant be necessary to be included in revenue requirement

Valuation

- Plant in Service:
 - The auditor should be aware of any Commission policy and State laws regarding how plant in-service is recoverable in rates. For example, one jurisdiction may have a policy of allowing plant to be included in rates as long as it is in-service prior to the time the rates go into effect, whereas another jurisdiction may not allow plant that is not in service by the end of the test year to be included in the revenue requirement.

Valuation

- Plant in Service continued:
 - Ohio recognizes a Date Certain concept for electric utilities
 - Other jurisdictions may look at the issue on a case Case-by-Case basis
 - Another concept that is common when looking at plant is that there should be no “gold plating” of facilities. In other words, the facilities should be reliable and adequate to the needs of providing service (and need not be Spartan) but should not be extravagant or extreme (e.g., no need for Taj Mahal-like facilities)

Audit Preparation

- Determine Scope and Purpose of the Audit
 - Reasonableness of the presented revenue requirement or operating earnings
 - Isolated category (substations, transformers)
 - Specific investment (recently complete construction projects)
 - Be aware of Commission/Staff resource constraints
 - Limited time and staff
 - May require focus on items with more impact on the revenue requirement

Audit Preparation

- Understand the Utility's Accounting System
 - Uniform system of accounts from State and Federal jurisdiction
 - Financial accounting vs Regulatory accounting
 - How is the reporting different and why
 - Chart of Accounts – become familiar with the utility's system
 - How comprehensive is the accounting system
 - How are work orders and construction estimates incorporated
 - Into the overall system
 - Entered manually

Audit Preparation

- Analyze Historical Financial Data
 - Major additions to facilities since last rate proceeding
 - Plant accounts should also include
 - Accumulated depreciation, Depreciation expense
 - Accounts most likely to have largest impact on revenue requirements
 - Identify most significant changes in investment
 - Identifying areas for which additional detail may need to be obtained during the field visit or through discovery process

Audit Preparation

- Focus the Audit
 - Identify items that really matter to the overall level of rates
 - Identify those costs that have changed the most from historic levels
 - Identify items that comprise a significant portion of investment
- Review Prior Audit Report and Workpapers
- Review External and Internal Audit Report and Workpapers

Audit Coordination

- Determine time and place
 - Single or multiple locations?
 - Will the people who can explain the records be available at same location where the records are being stored?
 - Set adequate time for the visit
 - Time for document and record review
 - Time for walk-through, explanation, and tour

Audit Coordination

- Schedule discussions with utility personnel
 - Provide general list of topics of interest to be discussed
 - Review invoices, ledgers and financial records
 - Conversations with utility personnel to discuss policies, processes, specific adjustments, budgeting forecasting, etc.
 - Access proprietary records
- Arrange field visit and review of property records
- Listing Personnel and Information to be Available

Audit Records To Review

- Affiliate Agreements for Inter-affiliate Transactions
- Audit Committee Minutes
- Billing Records (registers, etc.)
- Board of Director Minutes
- Chart of Accounts and Accounts Manual
- Construction Work Orders
- Construction Budgets
- Continuing Property Records
- Depreciation Studies
- External Independent Audit Reports and Workpapers
- General Ledger and Subsidiary Ledgers

Audit Records To Review

- Income Tax Returns
- Internal Audit Reports and Workpapers
- Invoices
- Lead-Lag Studies
- List of Property Units
- Monthly or Quarterly Operating/Financial Reports
- Monthly or Quarterly Trial Balances
- Organizational Charts
- Property Tax Statements
- Risk Committee Minutes and Documentation

Plant Audit

A concept that is common when looking at plant is that there should be no “gold plating” of facilities. In other words, the facilities should be reliable and adequate to the needs of providing service (and need not be Spartan) but should not be extravagant or extreme (e.g., no need for Taj Mahal-like facilities)

Plant Audit

- Some analysis of this can be done by looking at the cost per square foot of office space, or cost per installed megawatt (MW) of capacity. The auditor will also be required to use judgment in these areas.
- Examine major additions by year in facilities since the last rate proceeding
 - Specify the type of project
 - The need for the project
 - Total cost of the project
 - Project start and completion dates

Plant Audit

- One this list is received, the auditor should follow-up on specific projects.
 - Examine detailed work orders
 - Examine initial project estimates (construction budgets) with actual cost.
 - Examine the approval process (who authorized the build)
 - Examine if plant was replaced and verify that it was properly retired.

Plant Audit

- Review current net plant balance and historic net plant balance
 - Increasing net balance – why?
 - New investment
 - Slower depreciation
 - Decreasing net balance – why?
 - Decline in investment
 - Growth rates, economic conditions
 - New corporate policies
 - Purchasing power vs constructing power plants
 - Service quality risk
 - Reliability risk

Plant Audit

- Review any Sales of plant or equipment since last rate case
 - Gains or losses from the sale properly treated
 - Properly removed from accumulated depreciation/depreciation expense
 - Properly removed from deferred taxes
 - Update continuing property records
- Leased plant in service rather than owned
 - Used and useful, prudent
 - Properly recorded
 - Capital lease vs. Operating lease
 - Arms length transactions
 - Policy on pricing affiliate transactions

Audit Assertions to be Tested

- Occurrence
 - For the period – transactions and events that have been recorded have occurred and pertain to the entity
- Completeness
 - For the period – transactions and events that should have been recorded have been recorded
 - At the period end – assets, liabilities, and equity are included in the financial statements in correct amounts, and valuation and allocation adjustments are properly recorded
- Authorization
 - For the period – transactions have been properly authorized
- Classification
 - For the period – transactions and events have been recorded in the proper accounts

Audit Assertions to be Tested

- Accuracy
 - For the period – amounts and other data relating to recorded transactions and events have been recorded appropriately
 - At the period end – financial information is disclosed fairly and in appropriate amounts
- Cutoff
 - For the period – transactions and events have been recorded in the correct accounting period
- Existence
 - At the period end – assets, liabilities and equity interests exist
- Rights and Obligations
 - At the period end – the entity holds or controls the rights to assets, and liabilities are the obligation of the entity

Evidence and Documentation

- Inspection of records and documents
 - Internal documents vs. external documents (viewed as more reliable)
 - Vouching – select document from ledger or journals and examine underlying source document
 - Tracing – select source document and follow it to the journal or ledger
- Inspection of tangible assets
 - Physical examination of assets
- Observation
 - Looking at a process or procedure being performed by others
- Inquiry
 - Seeking information from knowledgeable persons (written or oral)

Evidence and Documentation

- Confirmation
 - Written responses from a third-party
- Recalculation
 - Checking mathematical accuracy of documents and records
 - Manually or electronically
 - Footing, crossfooting, reconciling balances, testing posting to journals and ledgers, etc.
- Reperformance
 - Auditor performs independent execution of procedures or controls
- Analytical Procedures
 - Evaluation of financial information through analysis
- Scanning
 - Identify significant or unusual items

Justifying Investments in Emergency Situations



Ohio Administrative Code 4901:1-10-08 Emergency Planning

- Each utility shall maintain an emergency plan
 - Describes the electric utility's requirements for restoring service
 - Identification of electric utility's critical facilities
 - Contingency planning: training, backup staff, backup power supplies, company communications
 - 24 hour telephone numbers of police, fire & county emergency management directors in service area
 - Procedures for requesting aid

Ohio Administrative Code 4901:1-10-08 Emergency Planning

- Each utility shall maintain an emergency plan
 - Procedures for prompt identification of outage areas and timely damage assessment
 - Estimate materials, equipment, personnel, and hours required to restore service
 - Restoration of service by priority and list of priorities
 - Live wire down situations
 - Providing information to critical customers

Ohio Administrative Code 4901:1-10-08 Emergency Planning

- Each utility shall maintain an emergency plan
 - Policy and procedures for outage response and restoration of service
 - Maximum outage response plans (major event)
 - Mutual assistance and communications methodologies
 - Continuity of operations plans
 - An after action assessment including deficiencies in response and in the emergency plan
 - Actions taken to correct those deficiencies
 - Available for review by Commission's outage coordinator

Emergency Contact Reports

- Shall contain:
 - The names, position titles, areas of functional responsibility, business addresses, e-mail addresses, business telephone numbers, cellular telephone numbers, and home telephone numbers of at least three individuals who will serve as emergency contacts.
 - Any available emergency hotline number.
 - The fax number(s) of its emergency contacts.

Annual Reporting Requirements

- Shall review its emergency plan and if it has revised or updated the plan or established a new plan. All revisions & updates or new plan shall be submitted.
- If the electric utility has not implemented its emergency plan within the past year, a written statement attesting to that fact.

Annual Reporting Requirements

- If the electric utility has implemented part or all of its emergency plan within the past year, a written summary of both of the following:
 - Any major interruption of service not the result of a major event where the electric utility implemented its emergency plan.
 - The electric utility's efforts to minimize recurrence of such failures.

Emergency Reporting Requirements

- Each electric utility shall:
 - Promptly notify the commission's outage coordinator of any change in its emergency contacts.
 - Maintain and annually verify and update its list of critical customers.
 - Provide critical customers, within 10 business days after acceptance of their application, with a written statement of their options and responsibilities during outages, i.e., the need for backup generators, an alternative power source, or evacuation to another location.

Emergency Response Capability Requirements

- Annually notify customers of its critical customer program by bill insert or other notice.
- Every three years, conduct a comprehensive emergency exercise inviting to the exercise:
 - Mayors and other elected officials.
 - County/regional emergency management directors.
 - Fire and police departments.
 - Community organizations such as the American Red Cross.
 - The Commission's outage coordinator.

OTHER: WAIVERS & INDUSTRY COORDINATION

- When an electric utility has implemented its emergency plan:
 - The utility may request the Commission waive the testing and evaluation of the emergency plan for a 3 year period
- Each utility shall coordinate the implementation of its emergency plan with:
 - Any regional transmission provider
 - Any generation provider connected to the utility's system
 - Any other electric utility connected to the utility's system
 - Local, state & regional emergency managers

Company Outage Reporting Requirements

- Outage (definition)
 - 2,500 customers for 4 hours or more
 - 100+ customers for projected 24 hours or more
 - Includes municipally-owned and cooperatively-owned utilities
 - When any police, fire, hospital or 9-1-1 system is projected to be out for 4 hours or more
- Each electric utility shall immediately report each outage to the Commission's outage coordinator

Public Utilities Commission of Ohio Outage Report Form

[Electric]

Ohio Administrative Code 4901:1-10-07

- (A) As used in this rule, "outage" means an interruption of service to:
- 1 Two thousand five hundred (2,500) or more customers in an area for a projected period of four hours or more.

2 One hundred or more customers in an area for a projected period of twenty-four hours or more.

3 A facility of any telephone company, electric light company, natural gas company, water-works company, or a sewage disposal system company, as defined in section 4905.03 of the Revised Code and including a company that is operated not-for-profit, or owned or operated by a municipal corporation, when an interruption to that facility for a projected period of four hours or more, affects or will affect public safety.

4 Any police department, fire department, hospital, or countywide 9-1-1 system, for a projected period of four hours or more.
- *****

As used in this paragraph, "area" means the electric utility's certified territory within a county or all adjoining municipalities and townships in an electric utility's certified territory.

- (B) Each electric utility shall immediately report each outage to the commission's outage coordinator. Each electric utility shall report to the commission's outage coordinator by voice mail message or e-mail or, during normal business hours, by faxing the outage report on a model form approved by the commission's outage coordinator.

Initial Report

Date: 7/8/14

Time: 4:30 PM

Follow-up Report

Revision Number:

Date:

Time:

Company:

AEP Ohio

City:

Pomery

County:

Meigs

Location:

Coolville & Bashan area

Number of Customers Affected:

5245

Reporter's Name:

Charlie Tolliver

Phone Number:

Estimated total restoral

Date: 7/8/14

Time: 9:00 PM

Please check any of the following that may be affected by the reported interruption for 4 or more hours or that may affect or will affect public safety:

☐ Police Dept.

☐ Fire Dept.

☐ Hospital

☐ Countywide 9-1-1 System

☐ Telephone Company *

☐ Natural Gas Company *

☐ Water Company *

☐ Sewage Disposal System Company *

☐ Other

* including a company that is operated not-for-profit, or owned or operated by a municipal corporation

Cause/Comments:

At 2:07 PM on 7/8/14 Transmission outage on the 69kv line feeding Coolville & Bashan and Hemlock locked out possible tree down on line this outaged two Coolville North, South and Bashan South And Hemlock North feeders, 5245 distribution customers.



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Utility Company Emergency Contacts

[illegible]

Ohio Emergency Management Agency

- Primary mission: to coordinate activities to mitigate, prepare for, respond to and recover from disasters by closely interfacing with local, state and federal agencies in an effort to bring resources of recovery and support to Ohioans impacted by the disaster.
- Ohio EMA also provides: education, training, planning and preparedness -strengthening Ohio's first responder capabilities and improving communication across the state.

Emergency Support Functions

- ESF #1 Transportation
- ESF #2 Communications and Information Technology
- ESF #3 Engineering and Public Works
- ESF #4 Firefighting
- ESF#5 Information and Planning
- ESF #6 Mass Care
- ESF #7 Resource Support and Logistics
- ESF #8 Public Health and Medical Services
- ESF #9 Search and Rescue
- ESF #10 Hazardous Materials
- ESF #11 Agriculture
- **ESF #12 Energy**
- ESF#13 Law Enforcement
- ESF #14 Recovery and Mitigation
- ESF #15 Emergency Public Information and Public Affairs

OEMA Emergency Operations Center: where agencies conduct a coordinated response to disasters; approximately 20 agencies; 52 workstations organized by Emergency Support Functions, including the command and control stations.



Public Utilities Commission of Ohio (Primary Agency)

ESF #12 Energy

- Lead & coordinate overview of statewide energy usage & needs, emergency activities, and repair status during state of emergency
- •Coordinate the accurate and timely reporting of customer outages, fuel shortages and repair time estimates.
- •Interface with federal ESF-12 agencies (U.S. Department of Energy, U.S. Department of Homeland Security) during emergencies.

Public Utilities Commission of Ohio (Primary Agency)

ESF #12 Energy

- Staff the State of Ohio Emergency Operations Center (EOC)
- Maintain an internal procedure to address the following:
 - 24-hour notification procedure for staff
 - Internal energy (electricity and fuel) response procedures and strategies
 - Management assignments during state assessment, response, and recovery operation.





