





#### National Association of Regulatory Utility Commissioners 3rd Partnership Activity of the Energy Regulation Board of Zambia & Pennsylvania Public Utility Commission

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### **Electric Utility System of Accounts**

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Classification of Electric Distribution Utilities (52 Pa. Code §57.41)

### Annual Operating Revenues

- Class A more than \$2.5 million
- Class B \$1.0 million to < \$2.5 million</li>
- Class C \$150,000 to < 1.0 million
- Class D \$25,000 to <\$150,000









System of Accounts Prescribed (52 Pa. Code §57.42)

- All EDU classes must keep accounts in conformity with the "Uniform System of Accounts" established by the Federal Energy Regulatory Commission (FERC).
- The USoA for Electric, Gas & Oil Companies can be accessed from FERC's website at: http://www.ferc.gov/legal/acct-matts/usofa.asp









# Uniform System of Accounts (USoA)

- Developed for all industries.
- NARUC and FERC worked together to develop USoA for electric utilities.
- Goal is to provide uniformity and consistency in reporting financial information.









# Generally Accepted Accounting Principles (GAAP)

- GAAP is a series of rules for the treatment of financial matters.
- Developed by the Financial Accounting Standards Boards (FASB)
- FASB is a private organization that operates under the guidance of the federal Securities And Exchange Commission (SEC). 4







# **FASB Standards**

• Defines the need for consistency as:

"Accounting standards are essential to the efficient functioning of the economy because decisions about the allocation of resources rely heavily on credible, transparent and understandable financial information."

 All published financial statements of regulated public utilities must conform to GAAP.









### **Reliable Accounting Information**

- Critical for proper review of a utility's operations in order to make reasonable decisions.
- Makes it easier for the Commission to obtain adequate information related to revenues, operating costs, plant investment, reliability and other pertinent information necessary in making decisions









# Reliable Accounting Information (continued)

Reliable Accounting Information assists in:

- Distinguishing between capital expenditures and operating costs.
- Separating property being used to provide utility service from non-utility operations.
- Making it easier for the Commission to identify costs that are "fixed, known and measurable" as opposed to non-recurring one time expenses or other normal expenses occurring every 18
  months or 2 years (e.g., rate case expense).









Annual Financial Reporting Requirements (52 Pa. Code § 57.47)

- The Pennsylvania PUC requires electric utilities to file annual financial reports containing account and other information:
  - By April 30 following the reporting year, for reports based on calendar year.
  - By July 31 for reports permitted to be based upon the fiscal year ending May 31.



Penalties may apply for failure to comply.







Annual Financial Reporting Requirements (52 Pa. Code § 57.47) (cont'd)

Annual Reports provide:

- A basis for routine annual reporting of detailed financial information.
- An important historical reference of utility costs that is helpful in the rate setting process.
- Example: See PPL Annual Report http://www.puc.state.pa.us/PcDocs/539568.xls









# Continuing Property Records (52 Pa. Code §57.46)

- Continuing Property Record (CPR) A perpetual collection of records required by the NARUC Uniform System of Accounts showing the detailed original costs, quantities, and locations of plant in service.
- Useful for determining the original cost of plant in service.









# Continuing Property Records (52 Pa. Code §57.46) (cont'd)

- Continuing Property Records should contain:
  - an inventory of property record units which can be readily checked for proof of physical existence,
  - the association of costs with such property record units to ensure accurate accounting for retirements, and
  - the dates of installation and removal of plant to provide data for use in connection with depreciation studies.









# USoA Accounting System Details

- Accounts are numbered (series) and grouped by category.
- Accounts are titled and contain a brief description of the items to be included in it.
- Definition describes the transactions to be recorded each account.
- Instructions are provided on recording the transaction in the account.







# USoA Accounting System Details (continued)

- Balance Sheet Accounts are generally listed first, followed by detail accounts for physical plant.
- Next would be all income Statement accounts followed by detailed revenue and expense accounts.
- Revenue and Expense accounts are particularly
  scrutinized in general rate cases.









# **Utility Plant In Service Accounts**

- Plant Accounts are divided among production type (steam, nuclear, hydraulic), transmission, distribution and general.
- Utility must provide the following for each plant account:
  - Balance for Previous Year
  - Additions
  - Retirements
  - Balance at End of Year









# **Utility Plant In Service Accounts**

 Plant Account Information is useful for determining used and useful plant for allowance in rate base.









### Revenue

- Revenue Accounts are divided into individual sources such as "sales from electricity" and "other operating revenues."
- Electricity sales are further divided to reflect revenues from each customer type.
- This is helpful in determining how much each customer class is contributing to the total cost of service.









### Expenses

- Expense Accounts are also divided into subcategories such as: power production costs, transmission, distribution, maintenance, taxes, customer service, general administrative, etc.
- This division helps Commission staff to determine those costs of service that are legitimate and reasonable.









## **Account Series**

As prescribed by FERC, the USoA is categorized by "Series" from Series 100 to Series 900:

- 100 Series Assets & Other Debits
- 200 Series Liabilities & Other Credits
- 300 Series Electric Plant Accounts
- 400 Series Operating Revenue & Income
- 500 Series Electric O&M Expenses



» (also Wastewater Revenue Accounts)







# Account Series (continued)

- 600 Series not used in electric (Water Expense Accounts)
- 700 Series not used in electric

(Gas Production Expense Accounts & Wastewater Expense Accounts)

• 800 Series – not used in electric

(Gas Expense Accounts)



900 Series – General Expense Accounts







# Series 100 Accounts Assets & Other Debits

#### Examples:

#### **Utility Plant**

- Electric plant in service
- Plant held for future use
- Plant leased to others
- Accumulated depreciation & amortization
- Plant Acquisition adjustments
- Nuclear Fuel

#### **Other Property & Investments**

- Non-utility property
- Investments in associated and subsidiary companies
- Sinking Funds
- Special and other special funds







### Series 100 Accounts Assets & Other Debits (cont'd)

#### Examples:

#### **Current & Accrued Assets**

- Cash and working funds
- Cash
- Customer accounts receivable
- Plant Material and Supplies
- Interest & dividends receivable
- Rents receivable

#### **Deferred Debits**

- Extraordinary property losses
- Unrecovered plant and regulatory study costs
- Research Development & Demonstration Expenditures
- Accumulated Deferred Income Taxes









# Series 200 Accounts Liabilities & Other Credits

#### Examples:

#### **Proprietary Capital**

- Common & preferred stock issued & subscribed
- Donations from stockholders
- Capital Stock Expense

#### Long-Term Debt

- Bonds
- Advances from associated companies

#### **Other Non-Current Liabilities**

- Accumulated provision for property insurance
- Accumulated provision for injuries and damages
- Accumulated Provision for Pensions and Benefits







### Series 200 Accounts Liabilities & Other Credits (cont'd)

Examples:

**Current & Accrued Liabilities** 

- Notes Payable
- Accounts Payable
- Customers' Deposits-Billing
- Accrued Taxes (income & other than income)
- Dividends declared
- Accrued interest on long-term debt & other liabilities

**Deferred Credits** 

- Customer advances for construction
- Accumulated deferred income taxes
- Deferred Gains from disposition of utility plant









# Series 300 Accounts Electric Plant Accounts

**Intangible Plant** 

- Organization
- Franchise & consents

Steam/Nuclear/Hydraulic/Other Production

- Land & land rights
- Structures & improvements
- Boiler Plant
- Generators
- Reactor Plant Equipment
- Turbogenerator
- Water wheels, turbines and generators
- Roads, railroads and bridges









### Series 300 Accounts Electric Plant Accounts (cont'd)

#### Transmission/Distribution/General Plant

- Land & land rights
- Structures and improvements
- Station Equipment
- Towers and fixtures
- Poles and fixtures
- Overhead conductors & devices
- Underground conduit
- Road & trails
- Storage battery equipment
- Line transformers
- Services
- Meters
- Leased property on customers' premises
- Street lighting and signal systems
- Office furniture & equipment
- Tools, shop & garage Equipment Laboratory Equipment
- Communication equipment









### Series 400 Accounts Operating Revenue & Income

#### Examples:

#### **Operating Revenues**

- Residential, Commercial & Industrial Sales
- Public Street & Highway Lighting
- Sales to Railroads & Railways
- Interdepartmental Sales & Rents
- Sales of Water and Water Power

#### **Operating Expenses**

- Operation Expenses
- Maintenance Expenses
- Depreciation Expenses
- Amortization of Electric Plant
- Income Taxes
- Taxes other than Income

#### Other Income

- Interest & Dividend Income
- Allowance for Other Funds Used During Construction









# Series 500 Accounts Electric O&M Expenses

#### Examples:

#### Other Power Supply Expenses

- Purchased Power
- System Control & Load Dispatching

**Transmission & Distribution Operations Expense** 

- Operation Supervision & Engineering
- Load Dispatching
- Line & Station Expenses
- Overhead Line Expense
- Underground Line Expense
- Meter Expense
- Customer Installation Expense
- Street Lighting & Signal System Expenses









### Series 500 Accounts Electric O&M Expenses (cont'd)

### Transmission & Distribution Maintenance Expense

- Maintenance Supervision & Engineering
- Maintenance of Structures
- Maintenance of Station Equipment
- Maintenance of Lines (Overhead, Underground)
- Maintenance of Transformers
- Maintenance of Transmission & Distribution Plant









### Series 900 Accounts General Expense Accounts

**Examples:** 

#### **Customer Accounts Expenses**

- Supervision
- Meter Reading
- Customer Records & Collection Expenses
- Uncollectible Accounts

#### Customer Service & Informational Expenses

- Supervision
- Customer Assistance Expenses
- Informational & Instructional Advertising Expenses

#### Sales Expense

- Supervision
- Demonstrating & Selling Expenses
- Advertising Expense
- Sales Expense









### Series 900 Accounts General Expense Accounts (cont'd)

Examples:

Administrative & General Expenses

- Administrative & General Salaries
- Office Supplies & Equipment
- Property Insurance
- Injuries & Damages
- Employee Pension & Benefits
- Regulatory Commission Expenses
- General Advertising Expenses
- Rents
- Transportation Expenses









# Accuracy of Data

- It is common for financial data to be audited either by Commission staff or an independent accounting or auditing firm.
- The PA PUC's Audits Bureau conducts financial audits on a wide variety of financial issues including original cost audits, original cost studies, and continuing property records audits. The audits determine the propriety of the property, plant and equipment records together with an evaluation of the usefulness of that equipment. The CPR audits are scheduled on a five-year cycle whereas the OC audits are dependent upon certain conditions being met and the utility submitting an OC study. Compliance audits examine a broad range of utility operations and determine adherence to prescribed laws and regulations.
- The Commission relies on all of this evidence and verification in its decision making process.









# Accuracy of Data Management Efficiency Audits

- The PA PUC's Audit Bureau also conducts Management Efficiency Audits every 5-8 years to:
- Determine the extent to which a utility has contained costs; developed reasonable long-range and short-range plans for its continued operation and maintenance; provided proper service to customers; and provided proper management and organizational structure.
- Examine management effectiveness and the operating efficiency of the utilities.
- Assess the utilities' progress in implementing recommendations from prior management audits.

