Uniform System of Accounts (USOA)
Uniform System of Accounts

- In the United States of America the Federal Energy Regulatory Commission (FERC) requires public utilities and licensees to maintain their books and records in accordance with the Commission’s Uniform System of Accounts (USOA).
- The USOA provides basic account descriptions, instructions, and accounting definitions that are useful in understanding the information for reporting.
Uniform System of Accounts

Classification of utilities.

For purpose of applying the system of accounts prescribed by the Commission, electric utilities and licensees are divided into classes –

Major, Non-major, and Non-operating utilities and licensees.
Uniform System of Accounts

• *Records.*

A. Each utility shall keep its books of account, and all other books, records, and memoranda which support the entries in such books of account so as to be able to furnish readily full information as to any item included in any account. Each entry shall be supported by such detailed information as will permit ready identification, analysis, and verification of all facts relevant thereto.
Uniform System of Accounts

• Records. (cont.)

B. The books and records referred to herein include not only accounting records in a limited technical sense, but all other records, such as minute books, stock books, reports, correspondence, memoranda, etc., which may be useful in developing the history of or facts regarding any transaction.

C. No utility shall destroy any such books or records unless the destruction thereof is permitted by rules and regulations of the Commission.
Uniform System of Accounts

• Records. (cont.)

D. In addition to prescribed accounts, clearing accounts, temporary or experimental accounts, and subdivisions of any accounts, may be kept, provided the integrity of the prescribed accounts is not impaired.

E. All amounts included in the accounts prescribed herein for electric plant and operating expenses shall be just and reasonable and any payments or accruals by the utility in excess of just and reasonable charges shall be included in account 426.5, Other Deductions.
Uniform System of Accounts

- **100 - 199** - Assets and other debits.
- **200 - 299** - Liabilities and other credits.
- **300 - 399** - Plant accounts.
- **400 - 432, 434-435** - Income accounts.
- **433, 436 - 439** - Retained earnings accounts.
- **440 – 459** - Revenue accounts.
- **500 – 599** - Production, transmission and distribution expenses.
- **900 – 949** - Customer accounts, customer service and informational, sales, and general and administrative expenses.

Source: PART 101—UNIFORM SYSTEM OF ACCOUNTS PRESCRIBED FOR PUBLIC UTILITIES AND LICENSEES SUBJECT TO THE PROVISIONS OF THE FEDERAL POWER ACT
Uniform System of Accounts - Excerpt

Balance Sheet Chart of Accounts
ASSETS AND OTHER DEBITS

1. Utility Plant

101 Electric plant in service (Major only).
101.1 Property under capital leases.
102 Electric plant purchased or sold.
103 Experimental electric plant unclassified (Major only).
103.1 Electric plant in process of reclassification (Nonmajor only).
104 Electric plant leased to others.
105 Electric plant held for future use.
106 Completed construction not classified—Electric (Major only).
107 Construction work in progress—Electric.
108 Accumulated provision for depreciation of electric utility plant (Major only).
109 [Reserved]
Cost Capitalization


Physical Assets

Asset Retirement Obligations

Capital Leases

Expenditures applicable to construction - General Administrative expenses, pay, training, insurance, interest, equity return
Property Records

*Continuing Plant Inventory Record* means company plant records for retirement units and mass property that provide, as either a single record, or in separate records readily obtainable by references made in a single record. The following information must be determined and retained.
Property Records (cont)

A. For each retirement unit:
   • (1) The name or description of the unit, or both;
   • (2) The location of the unit;
   • (3) The date the unit was placed in service;
   • (4) The cost of the unit; and
   • (5) The plant control account to which the cost of the unit is charged; and
Property Records (cont)

B. For each category of mass property:
   • (1) A general description of the property and quantity;
   • (2) The quantity placed in service by vintage year;
   • (3) The average cost; and
   • (4) The plant control account to which the costs are charged.
• *Cost* means the amount of money actually paid for property or services. When the consideration given is other than cash in a purchase and sale transaction, as distinguished from a transaction involving the issuance of common stock in a merger or a pooling of interest, the value of such consideration shall be determined on a cash basis.
Electric Plant To Be Recorded at Cost

A. All amounts included in the accounts for electric plant acquired as an operating unit or system, except as otherwise provided in the texts of the intangible plant accounts, shall be stated at the cost incurred by the person who first devoted the property to utility service. All other electric plant shall be included in the accounts at the cost incurred by the utility, except for property acquired by lease which qualifies as capital lease property and is recorded in Account 101.1, Property under Capital Leases, or Account 120.6, Nuclear Fuel under Capital Leases. Where the term cost is used in the detailed plant accounts, it shall have the meaning stated in this paragraph.
Electric Plant To Be Recorded at Cost  (cont)

B. When the consideration given for property is other than cash, the value of such consideration shall be determined on a cash basis. In the entry recording such transition, the actual consideration shall be described with sufficient particularity to identify it. The utility shall be prepared to furnish the Commission the particulars of its determination of the cash value of the consideration if other than cash.
C. When property is purchased under a plan involving deferred payments, no charge shall be made to the electric plant accounts for interest, insurance, or other expenditures occasioned solely by such form of payment.
Electric Plant To Be Recorded at Cost (cont)

D. The electric plant accounts shall not include the cost or other value of electric plant contributed to the company. Contributions in the form of money or its equivalent toward the construction of electric plant shall be credited to accounts charged with the cost of such construction. Plant constructed from contributions of cash or its equivalent shall be shown as a reduction to gross plant constructed when assembling cost data in work orders for posting to plant ledgers of accounts. The accumulated gross costs of plant accumulated in the work order shall be recorded as a debit in the plant ledger of accounts along with the related amount of contributions concurrently be recorded as a credit.
Cost of removal means the cost of demolishing, dismantling, tearing down or otherwise removing electric plant, including the cost of transportation and handling incidental thereto. It does not include the cost of removal activities associated with asset retirement obligations that are capitalized as part of the tangible long-lived assets that give rise to the obligation.
Submission of Reports

Reports are designed to collect comprehensive financial and operational information.

Annual reports generally are the minimum frequency for reporting. Depending on the level of rate change, review mechanisms and detail needed, quarterly or monthly reporting often is required.

Electronic filings of accounting trial balances and reports will assist in the account analyses to audit and set rates.
Templates and instructions

The Federal Energy Regulatory Commission for utilities in the USA provides its forms online at
http://www.ferc.gov/docs-filing/forms.asp

The annual report with instructions are available at
Transmission Plant Chart of Accounts

- 350 Land and land rights.
- 351 [Reserved]
- 352 Structures and improvements.
- 353 Station equipment.
- 354 Towers and fixtures.
- 355 Poles and fixtures.
- 356 Overhead conductors and devices.
- 357 Underground conduit.
- 358 Underground conductors and devices.
- 359 Roads and trails.
- 359.1 Asset retirement costs for transmission plant.
Distribution Plant Chart of Accounts

- 360 Land and land rights.
- 361 Structures and improvements.
- 362 Station equipment.
- 363 Storage battery equipment.
- 364 Poles, towers and fixtures.
- 365 Overhead conductors and devices
- 366 Underground conduit.
- 367 Underground conductors and devices
- 368 Line transformers.
Distribution Plant Chart of Accounts (cont)

- 369 Services.
- 370 Meters.
- 371 Installations on customers' premises
- 372 Leased property on customers' premises.
- 373 Street lighting and signal systems.
- 374 Asset retirement costs for distribution plant.
REGIONAL TRANSMISSION AND MARKET OPERATION PLANT CHART OF ACCOUNTS

- 380 Land and land rights.
- 381 Structures and improvements.
- 382 Computer hardware.
- 383 Computer software.
- 384 Communication Equipment.
- 385 Miscellaneous Regional Transmission and Market Operation Plant.
- 386 Asset Retirement Costs for Regional Transmission and Market Operation Plant.
Income Chart of Accounts - Excerpt

UTILITY OPERATING INCOME

- 400 Operating revenues.
- 401 Operation expense.
- 402 Maintenance expense.
- 403 Depreciation expense.
- 404 Amortization of limited-term electric plant.
- 405 Amortization of other electric plant.
- 406 Amortization of electric plant acquisition adjustments.
- 407 Amortization of property losses, unrecovered plant and regulatory study costs.
DEPRECIATION

• What is the basis for depreciation?

➢ Investors provide the funds to pay for the installation of the facilities or plant necessary to provide services. Part of the cost of service is not only a fair return on such investment, it is also a return of that investment over its service life.

➢ In other words, the investor is not only entitled to earn interest (return) on his/hers principal – the investor is entitled to recover his/hers principal.
WHAT IS DEPRECIATION?

• Gradual conversion of the cost of a tangible capital asset or fixed asset (excluding land because it has unlimited life) into an operational expense (called depreciation expense) over the asset's estimated useful life. Depreciation is computed at the end of an accounting period (usually a year) and the method best-fitting the usage profile of the asset is chosen.

  ❖ http://businessdictionary.com/definition/depreciation.html
DEPRECIATION

The objectives of computing depreciation are to (1) reflect reduction in the book value of the asset due to obsolescence and wear and tear, (2) spread a large expenditure proportionately over a fixed period to match revenue received from it, and (3) reduce the taxable income by charging the amount of depreciation against the firm's total income. In effect, charging of depreciation means the recovery of invested capital, by gradual sale of the asset over the years during which output or services are received from it.
Depreciation Accounting

Method. Utilities must use a method of depreciation that allocates in a systematic and rational manner the service value of depreciable property over the service life of the property.

Service lives. Estimated useful service lives of depreciable property must be supported by engineering, economic, or other depreciation studies.
Depreciation Accounting

*Rate.* Utilities must use percentage rates of depreciation that are based on a method of depreciation that allocates in a systematic and rational manner the service value of depreciable property to the service life of the property. Where composite depreciation rates are used, they should be based on the weighted average estimated useful service lives of the depreciable property comprising the composite group.
Depreciation

*Depreciation*, as applied to depreciable electric plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of electric plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and requirements of public authorities.
USOA Definition Acct 403 Depreciation Expense

• A. This account shall include the amount of depreciation expense for all classes of depreciable electric plant in service except such depreciation expense as is chargeable to clearing accounts or to account 416, Costs and Expenses of Merchandising, Jobbing and Contract Work.
USOA Definition Acct 403 Depreciation Expense

B. The utility shall keep such records of property and property retirements as will reflect the service life of property which has been retired and aid in estimating probable service life by mortality, turnover, or other appropriate methods; and also such records as will reflect the percentage of salvage and costs of removal for property retired from each account, or subdivision thereof, for depreciable electric plant.
• **NOTE A**: Depreciation expense applicable to property included in account 104, Electric Plant Leased to Others, shall be charged to account 413, Expenses of Electric Plant Leased to Others.

• **NOTE B**: Depreciation expenses applicable to transportation equipment, shop equipment, tools, work equipment, power operated equipment and other general equipment may be charged to clearing accounts as necessary in order to obtain a proper distribution of expenses between construction and operation.

• **NOTE C**: Depreciation expense applicable to transportation equipment used for transportation of fuel from the point of acquisition to the unloading point shall be charged to Account 151, Fuel Stock.
Amortization

Amortization means the gradual extinguishment of an amount in an account by distributing such amount over a fixed period, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized.
# Table 1: Estimated Survivor Curves, Original Cost, Book Reserve and Calculated Annual Depreciation Accruals Related to Utility Plant at December 31, 2012

<table>
<thead>
<tr>
<th>Depreciable Group</th>
<th>Survivor Curve</th>
<th>Original Cost at December 31, 2012</th>
<th>Book Reserve</th>
<th>Future Accruals</th>
<th>Annual Accrual Amount</th>
<th>Composite Remaining Life</th>
<th>Annual Accrual Rate, Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Plant</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>389.4 Land Rights</td>
<td>65-R4</td>
<td>4,398.53</td>
<td>1,395</td>
<td>3,004</td>
<td>124</td>
<td>24.2</td>
<td>2.82</td>
</tr>
<tr>
<td>390.2 Structures and Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Buildings - Major</td>
<td>50-S0</td>
<td>365,872.93</td>
<td>69,307.362</td>
<td>297,565.514</td>
<td>15,627.747</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Buildings - Minor</td>
<td>45-R3</td>
<td>4,013,400.34</td>
<td>983,723</td>
<td>3,119,679</td>
<td>126,661</td>
<td>24.6</td>
<td>3.09</td>
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<tr>
<td>Total Account 390.2</td>
<td></td>
<td>370,076,273.27</td>
<td>70,291,056</td>
<td>300,885,193</td>
<td>15,754,408</td>
<td>19.1</td>
<td>4.25</td>
</tr>
<tr>
<td>390.21 Structures and Improvements - Leaseholds</td>
<td>10-SQ</td>
<td>741,657.92</td>
<td>293,190</td>
<td>448,468</td>
<td>68,995</td>
<td></td>
<td></td>
</tr>
<tr>
<td>390.4 Structures and Improvements - Air Cond.</td>
<td>30-R2</td>
<td>31,608,400.25</td>
<td>13,308,529</td>
<td>18,300,313</td>
<td>903,096</td>
<td></td>
<td>20.5</td>
</tr>
<tr>
<td>391.2 Office Furniture and Equipment - Furniture</td>
<td>20-SQ</td>
<td>19,552,300.19</td>
<td>6,059,657</td>
<td>11,532,643</td>
<td>1,080,436</td>
<td>10.7</td>
<td>5.51</td>
</tr>
<tr>
<td>391.4 Office Furniture and Equipment - Equipment</td>
<td>15-SQ</td>
<td>2,812,744.67</td>
<td>764,956</td>
<td>2,027,789</td>
<td>202,220</td>
<td></td>
<td>10.0</td>
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<tr>
<td>391.6 Office Furniture and Equipment - Computers</td>
<td>5-SQ</td>
<td>2,241,100.78</td>
<td>1,227,720</td>
<td>1,013,391</td>
<td>623,166</td>
<td></td>
<td>27.8</td>
</tr>
<tr>
<td>391.8 Office Furniture and Equipment - Power Mgmt. Sys.</td>
<td>7-SQ</td>
<td>38,155,394.44</td>
<td>38,155,394</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>392.1 Transportation Equipment - 5 Years</td>
<td>5-SQ</td>
<td>5,765,767.22</td>
<td>3,071,403</td>
<td>2,697,363</td>
<td>718,294</td>
<td>3.8</td>
<td>12.45</td>
</tr>
<tr>
<td>392.2 Transportation Equipment - 8 Years</td>
<td>8-SQ</td>
<td>19,017,367.70</td>
<td>13,108,917</td>
<td>5,908,450</td>
<td>807,377</td>
<td>6.6</td>
<td>4.72</td>
</tr>
<tr>
<td>392.3 Transportation Equipment - 10 Years</td>
<td>10-SQ</td>
<td>72,057,630.31</td>
<td>35,516,575</td>
<td>36,541,054</td>
<td>6,312,098</td>
<td>5.8</td>
<td>8.76</td>
</tr>
<tr>
<td>392.4 Transportation Equipment - Trailers</td>
<td>19-L-60</td>
<td>5,987,167.38</td>
<td>2,104,761</td>
<td>3,882,409</td>
<td>257,303</td>
<td>15.1</td>
<td>4.30</td>
</tr>
<tr>
<td>392.5 Transportation Equipment - 15 Years</td>
<td>15-SQ</td>
<td>2,818,775.35</td>
<td>1,192,573</td>
<td>1,626,205</td>
<td>199,000</td>
<td>8.2</td>
<td>7.06</td>
</tr>
<tr>
<td>392.6 Transportation Equipment - 20 Years</td>
<td>20-SQ</td>
<td>653,780.36</td>
<td>122,462</td>
<td>531,318</td>
<td>45,933</td>
<td>11.6</td>
<td>7.03</td>
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<tr>
<td>393 Stores Equipment</td>
<td>25-SQ</td>
<td>2,595,510.71</td>
<td>1,178,602</td>
<td>1,407,309</td>
<td>134,873</td>
<td>10.4</td>
<td>5.22</td>
</tr>
<tr>
<td>394.2 Tools and Work Equipment - Tools</td>
<td>20-SQ</td>
<td>158,955.93</td>
<td>(17,432)</td>
<td>175,388</td>
<td>39,333</td>
<td>4.5</td>
<td>24.81</td>
</tr>
<tr>
<td>394.4 Tools and Work Equipment - Const. Dept</td>
<td>20-SQ</td>
<td>1,892,630.71</td>
<td>670,565</td>
<td>912,065</td>
<td>33,467</td>
<td>9.8</td>
<td>5.51</td>
</tr>
<tr>
<td>394.6 Tools and Work Equipment - Other</td>
<td>20-SQ</td>
<td>20,664,663.10</td>
<td>6,802,780</td>
<td>13,861,885</td>
<td>1,122,006</td>
<td>12.2</td>
<td>5.48</td>
</tr>
<tr>
<td>394.8 Tools and Work Equipment - Garage Equipment</td>
<td>20-SQ</td>
<td>5,302,656.93</td>
<td>3,709,814</td>
<td>1,562,752</td>
<td>316,624</td>
<td>5.1</td>
<td>5.86</td>
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<tr>
<td>396 Power Operated Equipment</td>
<td>20-SQ</td>
<td>5,968,287.41</td>
<td>1,024,916</td>
<td>4,414,371</td>
<td>304,315</td>
<td>13.6</td>
<td>3.10</td>
</tr>
<tr>
<td>397 Communication Equipment</td>
<td>15-SQ</td>
<td>1,730,624.87</td>
<td>1,008,402</td>
<td>730,624</td>
<td>76,763</td>
<td>9.5</td>
<td>4.41</td>
</tr>
<tr>
<td>398 Miscellaneous Equipment</td>
<td>20-SQ</td>
<td>2,306,162.36</td>
<td>726,872</td>
<td>1,579,293</td>
<td>166,106</td>
<td>9.5</td>
<td>7.20</td>
</tr>
<tr>
<td><strong>Total General Plant</strong></td>
<td></td>
<td>631,937,175.87</td>
<td>215,529,735</td>
<td>416,407,455</td>
<td>29,878,346</td>
<td>13.9</td>
<td>4.73</td>
</tr>
</tbody>
</table>
Accumulated provision for depreciation of electric utility plant (Major only)

A. This account shall be credited with the following:

• (1) Amounts charged to account 403, Depreciation Expense, or to clearing accounts for current depreciation expense for electric plant in service.

• (2) Amounts charged to account 403.1, Depreciation expense for asset retirement costs, for current depreciation expense related to asset retirement costs in electric plant in service in a separate subaccount.
Accumulated depreciation (Cont)

(3) Amounts charged to account 421, Miscellaneous Nonoperating Income, for depreciation expense on property included in account 105, Electric Plant Held for Future Use. Include, also, the balance of accumulated provision for depreciation on property when transferred to account 105, Electric Plant Held for Future Use, from other property accounts. Normally account 108 will not be used for current depreciation provisions because, as provided herein, the service life during which depreciation is computed commences with the date property is includible in electric plant in service; however, if special circumstances indicate the propriety of current accruals for depreciation, such charges shall be made to account 421, Miscellaneous Nonoperating Income.
Accumulated depreciation (Cont)

• (4) Amounts charged to account 413, Expenses of Electric Plant Leased to Others, for electric plant included in account 104, Electric Plant Leased to Others.

• (5) Amounts charged to account 416, Costs and Expenses of Merchandising, Jobbing, and Contract Work, or to clearing accounts for current depreciation expense.

• (6) Amounts of depreciation applicable to electric properties acquired as operating units or systems.
Accumulated depreciation (Cont)

• (7) Amounts charged to account 182, Extraordinary Property Losses, when authorized by the Commission.

• (8) Amounts of depreciation applicable to electric plant donated to the utility.

(The utility shall maintain separate subaccounts for depreciation applicable to electric plant in service, electric plant leased to others and electric plant held for future use.)
Accumulated depreciation  (Cont)

• B. At the time of retirement of depreciable electric utility plant, this account shall be charged with the book cost of the property retired and the cost of removal and shall be credited with the salvage value and any other amounts recovered, such as insurance. When retirement, costs of removal and salvage are entered originally in retirement work orders, the net total of such work orders may be included in a separate subaccount. Upon completion of the work order, the proper distribution to subdivisions of this account shall be made. Separate subsidiary records shall be maintained.
Above the Line versus Below the Line

• By using the FERC Income Chart of Accounts, utilities and regulators can find the determination of “Net Utility Operating Income”.
• Accounts above this line are “Above the Line” and recovered by ratepayers.
• Accounts below this line are “Below the Line” and recovered by shareholders.
• Allows for a more transparent rate case audit process and allows the utilities to separate out shareholder and ratepayer expenses and revenues.
Above the Line versus Below the Line

- Allocating specific accounts to ratepayers and shareholders simplifies the ratemaking process by:
  - Allowing utility to track shareholder and ratepayer items separately.
  - Reduces the need for adjustments and exclusions at the time of the application.
  - Allows the utility to book prudent but none recoverable items accurately.

- Below the Line examples:
  - Power sold outside the native load and the fuel cost associated with those sales.
  - Lobbying fees.
COST ALLOCATION

- Certain costs are directly assignable to specific customers or classes. For example, a residential customer uses a much different meter (and less expensive) than an industrial customer, therefore, the costs associated with meters are directly assigned to the appropriate classes, otherwise the residential customers (which number thousands more than industrials) would be paying a disproportionate share of meter expenses.
COST ALLOCATION

- Allocation Schedules are developed, using customer class sales, load research samples and quantitative models, to determine the extent (expressed as a percentage) that each customer class uses the various portions of the electrical system.

- Percentages determined in the Allocation Schedules are used by the Cost of Service witness to determine rate class cost responsibility.

- Because all customer classes do not utilize the full distribution system to take delivery of electrical service, the Allocation Schedules are developed to assign only the portions of the system actually used by each customer class.
**ALLOCATION FACTORS**

Allocation factors must align with the underlying cost classification.

- **Demand Related Costs** – are allocated among the customer classes on the basis of demands (kW) imposed on the system by each of the customer classes.

- **Energy Related Costs** – are allocated among the customer classes on the basis of the amount of energy (kWh) which the system must supply, including losses, to serve each of the customer classes.

- **Customer Related Costs** – are allocated among the customer classes based on the number of customers within each class.

- **Direct Assignments** – some costs are specifically assigned to a particular customer or class of customers if it can be determined that those costs relate only to that customer or customer class.
REGULATORY AUDIT
REGULATORY AUDIT

Preliminary Procedures

• Review appropriate Uniform System of Accounts to determine the proper account numbers.

• Review the plant instructions in the Uniform System of Accounts.

• Trace per book numbers to the appropriate ledgers, journals, work orders, etc. and investigate any unusual fluctuations.
REGULATORY AUDIT

• Obtain the work order and journal entries related to any major additions, reclassifications or retirements to plant.

• Analyze the plant in service to insure the components are utility related and used and useful.
REGULATORY AUDIT

• Verify exhibits and schedules for mathematical accuracy, foot and cross-foot.

• Examine the Pro Forma adjustments:
  – Ask for back up to each adjustment and verify to source documents.
  – Determine if the adjustments are too far out of the test year to be included.
  – Review adjustments to see if the known and measurable criteria are met.
  – Look for other areas that may require an adjustment.
REGULATORY AUDIT
PROPERTY, PLANT, AND EQUIPMENT

The terms property, plant, and equipment include all tangible assets with a service life greater than one year used in the operation of a business. The major functions associated with these assets are purchases, maintenance and repair, depreciation, and retirement. The auditor’s work is directed more toward the transactions as opposed to the ending balances.
1. Purchases and Retirements

Additions to fixed assets should originate by requisition showing description, reason for acquisition, amount to be charged, probable cost, and proper approval.

Retirements of assets should be documented on a sequentially numbered work order containing evidence of proper authorization and the reason for retirement.

The auditor should also review related repair and maintenance expense accounts for proper classification of additions and repairs as expenses or as capitalized betterment of the asset.
2. **Authorization**

The board of directors or proper authority should approve acquisitions of assets over a certain amount whether these assets are purchased or constructed.

3. **Identification Plates**

Fixed assets should have identification plates. The serial number on the plate should be listed in the control account. The control account should also list each acquisition, its life, and the method of depreciation applied. Comparison of the actual serial number to the control account should be made.
4. Depreciation

Written depreciation policies and records should be maintained. Specific capitalization policies are necessary to prevent misstatement of revenue and expenditures. The auditor should recalculate depreciation charges taken for accuracy and conformity with Generally Accepted Accounting Principles or Other Comprehensive Basis of Accounting.
INTERNAL CONTROLS
INTERNAL CONTROLS
PROPERTY, PLANT, AND EQUIPMENT

The internal control for property, plant, and equipment include the controls in both the purchase and the sales cycles discussed earlier as well as the following special controls:

1. Acquisition

   A special requisition form is generated for acquisitions. This form is then approved by top management. Acquisitions are tied to the capital budget, which the Board of Directors usually approves.
INTERNAL CONTROLS

2. Subsidiary Ledgers

Detailed information concerning each asset is kept in the subsidiary ledger. Usually such information as the asset’s description, identification number, location, acquisition date, cost, depreciation method, and amount of depreciation can be found in this ledger.
INTERNAL CONTROLS

3. Disposition

An asset retirement order form is usually used in order to document and authorize the retirement of an asset. This document is the basis for recording any cash received and removing the asset from the subsidiary ledger.
INTERNAL CONTROLS
4. Controls

Other controls that are important to property plant and equipment include:

a. Written policies concerning the categorization of asset vs. expense.

b. Written policies concerning the determination of depreciation.

c. Physical controls to safeguard assets from theft, destruction, or unauthorized disposition.
TRADITIONAL RATEMAKING PROCESS

• Determination of Revenue Requirement
  ➢ Total revenues necessary to recover prudent investment, to recover reasonable and necessary costs, and to earn a fair profit.
  ➢ Driven by actual or projected costs.

• Allocation of Costs to Customers
  ➢ Generally based on usage

• Establishment of Actual Rates to Customers (e.g., Usage based versus Flat Rates)
  ➢ Price Elasticity
  ➢ Subsidization
  ➢ Affordability
  ➢ Price Signals
Regulated Asset Base – Rate Base

Rate Base = “Used and Useful” Plant in Service

Less: Accumulated Depreciation

Other Adjustments:

• Construction Work in Progress (CWIP)
• Contributions in Aid of Construction
• Advances in Aid of Construction
• Allowance for Funds Used During Construction (AFUDC)
• Plant Held for Future Use
• Construction Work in Progress
• Materials and Supplies
• Working Capital Allowance
• Special Amortizations
• Other
## PPL Electric Utilities Corporation

**R-2012-2290597**

**MEASURE OF VALUE SCHEDULE**

**Test Year Ending December 30, 2012**

<table>
<thead>
<tr>
<th></th>
<th>Total T&amp;D Operations (JJS-2)</th>
<th>Remove Transmission &amp; Resale Primary</th>
<th>Company PA Jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plant In Service</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intangible</td>
<td>$80,871,566</td>
<td>$10,540,000</td>
<td>$70,331,566</td>
</tr>
<tr>
<td>Distribution</td>
<td>$4,225,699,977</td>
<td>$2,697,000</td>
<td>$4,223,002,977</td>
</tr>
<tr>
<td>Transmission</td>
<td>$1,543,367,519</td>
<td>$1,543,367,519</td>
<td>$0</td>
</tr>
<tr>
<td>General</td>
<td>$642,451,815</td>
<td>$26,662,000</td>
<td>$615,789,815</td>
</tr>
<tr>
<td>Less: Smart Meter Plan Assets</td>
<td>($4,655,327)</td>
<td></td>
<td>($4,655,327)</td>
</tr>
<tr>
<td><strong>Total Plant in Service</strong></td>
<td>$6,487,735,550</td>
<td>$1,583,266,519</td>
<td>$4,904,469,031</td>
</tr>
</tbody>
</table>

**DEDUCT:**

- Allocated Book Reserve: $2,379,356,764 - $566,381,000 = $1,812,975,764
- Less: Smart Meter Plan Assets: ($115,472) - ($115,472)

**Depreciated Utility PIS:** $4,108,494,258 - $1,016,885,519 = $3,091,608,739

**ADDITIONS:**

- Plant Held For Future Use: $0 - $0 = $0
- Cash Working Capital: $40,506,000 - $7,437,000 = $33,069,000
- Materials and Supplies: $47,287,000 - $13,577,000 = $33,710,000

**Subtotal Additions:** $87,793,000 - $21,014,000 = $66,779,000

**DEDUCTIONS:**

- Customer Deposits: $16,862,000 - $0 = $16,862,000
- Customer Advances: $180,000 - $0 = $180,000
- Accumulated Deferred Tax: $889,855,000 - $170,615,000 = $719,240,000

**Subtotal Deductions:** $906,897,000 - $170,615,000 = $736,282,000

**TOTAL RATE BASE:** $3,289,390,258 - $867,284,519 = $2,422,105,739
Revenue Requirement Formula

\[ RR = E + D + T + (RB \times ROR) \]

- **RR** - Revenue Requirement
- **E** - O & M Expense
- **D** - Depreciation Expense
- **T** - Taxes
- **RB** - Rate Base [consisting of Plant in Service \textit{minus} (accumulated depreciation) \textit{plus} (additions and subtractions)]
- **ROR** - Overall Rate of Return
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