Rate Case Auditing – Part 2

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Course Information

- **Course Overview** – In this course, attendees will learn about regulatory auditing. It covers the foundation of auditing in general, and approaches and methods unique to regulatory accounting. This course also covers the regulatory challenges that are faced by auditors in the collection and analysis of public utility financial and operating data. This course is intended for students with an interest in regulatory audits their purpose and use by regulatory agencies.

- **Intended Audience** – Accountants and analyst that need a broader understanding of the process of regulatory auditing.

- **Learning Objectives** – After this course the student will have a foundational understanding of the foundations of general auditing and how distinctive approaches and techniques are used when reviewing the books and records of an economically regulated entity.

- **Course Level** – Advanced

- **Course Prerequisites** – A working understanding of accounting and regulatory reporting standards and report forms.

- **Advance Prep** – None

- **Delivery Method** – Online Group Live

- **NASBA National Registry Statement** – The Institute of Public Utilities is registered with the National Association of State Boards of Accountancy (NASBA) as a sponsor of continuing professional education on the National Registry of CPE Sponsors. State Boards of Accountancy have the final authority on the acceptance of individual course for CPE credit. Complaints regarding registered sponsors may be submitted to the National Registry of CPE Sponsors through its website: [www.nasbaregistry.org](http://www.nasbaregistry.org).

- **This course is eligible for CPE credit.**
Auditing the Income Statement
Adjustments

What does adjustments have to do with auditing?

Regulatory auditors are not financial auditors. The purpose of a regulatory auditor is to provide assurance to rate payers, companies and the regulators themselves that the rates approved will provide the company with a reasonable opportunity to earn a return on its investment while providing rate payers service at the least cost. Adjustments are one of the tools that the regulatory auditor uses to achieve that goal.
Regulatory Adjustments

- Various adjustments are needed to adjust a test year to reflect costs and revenues that are reasonably expected to be incurred in the rate year. This is especially true when working with small companies.
- Adjustments are required when working with a historically-based pro forma test year as well as when preparing a partial or fully projected test year.
- Future changes in the economic environment must be recognized in order to develop a forward-looking income statement and rate base.
Regulatory Adjustments — Small Companies

In audits of small companies it’s not uncommon to find personal expenses while at the same time finding no costs for other items such as personal vehicles used in the business.

- Review of a small company’s income taxes may provide additional information such as mileage claimed for income taxes,
- Add regulatory costs such as legal costs of filing a case or expert consultant – not known at time of filing,
- Adjust for other reasonably estimated, costs that will be incurred in its rate year.

*Remember, small companies serve small communities which deserve safe and reliable utility service.
Restating Adjustments

- Out-of-period
  - Auditors when reviewing invoices must be aware of transactions that took place prior to the beginning of the year but paid during the test year.
    - **Issue:** Are rates being set using a modified cash basis of accounting or full accrual?
  - Auditors must also look for transactions that belong in the test year,
    - The rental cost of a backhoe for a water main repair that was paid two months after the end of the test year.
Deferral Adjustments

Auditors routinely find expenses in a test year that are material but not expected to be recurring.

Auditors must decide to:
  a) Disallow the expense for future recovery or
  b) Defer and amortize, allowing recovery in the future

What is a possible problem with a disallowance?
What if It is a large one-time loss such as flood damage, the cost of which could simply bankrupt the company.
Deferral Adjustments

Auditors routinely find expenses in a test year that are material but not expected to be recurring.

Auditors must decide to:

a) Disallow the expense for future recovery or
b) Defer and amortize, allowing recovery in the future

What is a possible problem with the deferral option?
A company normally requires authorization from its regulatory agency to defer costs incurred in one period to recovered in a later period.
Projected or Pro Forma Adjustments

Annualization Adjustment

An auditor should be able to recognize changes in revenues or expenses through comparables. If a material change is identified,

The auditor should consider:

- Is the change durable, will it continue?
- If it will continue, is the cost measurable or reasonably predicted?

5% insurance premium increase
Normalization Adjustment

- Auditors must be able to think through the impact of unusual or abnormal events on revenue or expenses on the company’s test year,

  During the test year, there was a drought that dramatically increased the cost of electric power for a six-month period. The drought has ended, and hydro-provided power has returned to normal.

- Auditors need to adjust revenues or expenses in the test year to smooth variable annual data. 

  weather normalization
Projected or Pro Forma Adjustments

The auditor will want to look for seasonality in the revenue data. If seasonality exists, it may be important to then determine whether the data has been normalized, or whether normalization is needed.

- If usage is seasonal or driven by weather…then any unusual weather patterns that occurred during the test year will skew the data to either under or over report revenues.
- This can be corrected by adjusting the usage to reflect normal weather patterns, based on historical weather data and either heating degree days or cooling degree days.

*(NARUC Rate case & Audit Manual)*

August through July averages ascribed to the year of the January Mean 10.5 C
Projected or Pro Forma Adjustments

Statistical Modeling to find trends or relationships

Linear Regression
Linear regression is a tool that is used to model the relationship between two variables (independent and dependent) by fitting a linear equation to observed data.

The most common method for deriving a regression line is the least-squares method.
Types of Adjustments

Poll Question

Is there a difference between Precision and Accuracy?

1. Yes
2. No
3. Sometimes
4. Only Mammals
Precision vs Accuracy

Do not confuse Precision with Accuracy.

\[ \sqrt{562} = 36.32546526 \]

is precise

But incorrect.

\[ \sqrt{562} = 23.7 \]

23.7 is less precise but much more accurate!
Review of the results of operations
Review of the results of operations

Look at a multi-year comparison of annual revenue to obtain a view of the trend for the utility.

- Is it growing and if so, is the growth relatively consistent?
- Is the growth related to new customers or additional usage of existing customers?

(NARUC Rate case & Audit Manual)

The auditor will also want to make sure that any other rate changes that occurred during the test year are reflected in the adjusted revenues.
Review of the results of operations

Fire Protection – should fire departments pay for water?

Ready-to-Serve – Service line installed

Stand-by – No Service line installed

Auditors should be aware of the policy for ready-to-serve and stand-by service. It could require a limited group of people to pay for a common system.
Review of the results of operations

601. Salaries and Wages - Employees
This account shall include the compensation (salaries, bonuses and other consideration for services) paid or accrued to employees of the utility company for work related to operation and maintenance of that utility.

NARUC Water USoA
Review of the results of operations

Salaries and Wages

- Closely review wage increases which will become effective during or outside the test year.
  - During the test year – annualization of the increase must be accounting for in the calculation of labor costs
  - Look for slippage – when a highly paid individual retires or otherwise leaves and is replaced by a lower paid individual.
Review of the results of operations

An auditor may wish to look at the percentage of overtime worked during the past few years and compare it to the percentage of overtime in the test year.

If there is a large difference between the historical numbers and the test year numbers, one will want to obtain an explanation.

(NARUC Rate case & Audit Manual)

- Look for dis-relatives on

Consider using a multiple-year average percentage of overtime to use in the computation of the revenue requirement in order to normalize any test year [overtime] anomalies. (NARUC Rate case & Audit Manual)
Salaries and Wages - Officers

- Owner Wages and Expenses
  - An owner that works in the company wears two hats
  - When reviewing questions of compensation for owners the auditor must clearly understand the role the person is in relative to the cost.
    - Owners do not get pension plans paid by ratepayers – employees do.
    - Disallowed owner-based costs are NOT prohibited from being incurred!
Review of the results of operations

Salaries and Wages - Officers

- Officer or management
  - What is the officer’s salary and bonuses based on?
    - Economic benchmarks associated with the value of the company should be looked at closely since they normally benefit shareholders
    - Service satisfaction or other reliability operating benchmarks such as SAIDI and SAIFI normally benefit ratepayers.

System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI).
Review of the results of operations

Salaries and Wages - Officers

- Officer or management
  - Determination of Salaries and other compensation?
  - Transparency in reporting
    - Ratecase filing / Data Requests
    - Shareholders Proxy statement
      - Will always contain the breakdown of Salaries,
      - Stock awards,
      - Bonuses

<table>
<thead>
<tr>
<th>Line No.</th>
<th>Operating &amp; Maintenance Expenses</th>
<th>2019 Results As filed Company Filing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Operating Revenue</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Unmetered Water Revenue</td>
<td>27,825</td>
</tr>
<tr>
<td>3</td>
<td>Metered Water Revenue</td>
<td>634,252</td>
</tr>
<tr>
<td>4</td>
<td>Fire Protection Revenue</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Ready to Serve</td>
<td>2,222</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>636,474</td>
</tr>
<tr>
<td>9</td>
<td>Operating &amp; Maintenance Expenses</td>
<td></td>
</tr>
</tbody>
</table>
Review of the results of operations

Rental of Building / Real Property

- Arms-Length transaction
  - Is rent market value?
  - Location?
    - Is the location reasonably-priced area?
    - Growth for the facility
- Non Arms-Length (major shareholder owns property)
  - Is rent market value?
  - Imputed Asset approach
    - Impute depreciation expense
    - Impute return on Original Cost less Depreciation

Lower cost or market?
Review of the results of operations

403. Depreciation Expense

A. This account shall be charged with depreciation credited to account 108 - Accumulated Depreciation of Water Plant and credited with amortization debited to account 272 - Accumulated Amortization of Contributions in Aid of Construction. Depreciation shall be accrued on a straight-line remaining life basis or straight-line basis, as required by the Commission. A single composite depreciation rate may be used if approval from the Commission is obtained.
Depreciation Expense (Water)

Journal Entry:

<table>
<thead>
<tr>
<th>Dr</th>
<th>Cr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation Expense – Straight Line</td>
<td>XXX</td>
</tr>
<tr>
<td>Accumulated Amortization of CIAC</td>
<td>XX</td>
</tr>
</tbody>
</table>

Accumulated Depreciation XXX
Amort. of CIAC XX

To record regulatory basis depreciation expense
Depreciation Computation - Water

Analysis of Depreciation Expense

Plant in Service - YE 2008  $ 54,240

Less:
Non-depreciable Plant e.g., Land (2,500)
Advances for Construction (460)

Depreciable Plant 51,280

Composite Depreciation Rate 2%

$ 1,026 $ 1,026

Contribution in Aid of Construction (1,100)

Composite Amortization Rate 2%

$ (22) (22)

Net Regulatory Depreciation Expense $ 1,004
Depreciation Computation

272. Accumulated Amortization of Contributions in Aid of Construction

A. This account shall reflect the amortization accumulated on account 271 - Contributions in Aid of Construction, if recognized by the Commission.

B. Specifically, balances in account 271 which represent contributions of depreciable plant shall be amortized by charges to this account over a period equal to the estimated service life of the related contributed asset. A group or overall composite rate may be used for contributed balances that cannot be directly related to a plant asset.

C. The concurrent credit for the amortization recorded in this account shall be made to account 403 - Depreciation Expense.

D. If a regulatory body allows the amortization of any portion of the monies collected to pay the tax obligation caused by the receipt of CIAC, such amortization shall also be reflected in a sub-account of this account. Specifically, balances in account 271 which represent monies collected for the gross-up of CIAC (See Definition 15.) shall be amortized by charges to this account over a period determined by the regulatory body.

Net Regulatory Depreciation Expense $1,004
Review of the results of operations

426. Miscellaneous Nonutility Expenses

This account shall contain all expenses other than expenses of utility operations and interest expense. Items which are included in this account are:

1. Expenses disallowed in a proceeding before the Commission.
2. Amortization of an Acquisition Adjustment not approved by the Commission.
3. Depreciation associated with plant not used and useful in the public service.
4. Depreciation of Nonutility Plant.
5. Imprudent expenses.
6. Donations for charitable, social or community welfare purposes.
7. Life insurance on officers and employees where utility is beneficiary (net premiums less increase in cash surrender value of policies).
8. Penalties or fines for violations of statutes pertaining to regulation.
9. Expenditures for the purpose of:
   a. Influencing public opinion with respect to the election or appointment of public officials, or the adoption, repeal, revocation or modification of referenda, legislation or ordinances.
   b. Influencing public opinion with respect to obtaining approval, modification or revocation of franchises.
   c. Influencing the decisions of public officials not including such expenditures that are directly

Nonutility Expenses

This account shall contain all expenses other than expenses of utility operations and interest expense.
Review of the results of operations

Dues and Donations
The auditor should focus on identifying those dues and donations that are reasonably included in rates relative to the provision of service. Dues to trade organizations may assist in the provision of service… it is not the intent to direct where the utility can spend its money, but rather, to decide how much of that expense should be paid by ratepayers rather than shareholders.

(NARUC Rate case & Audit Manual)

One should also examine the invoices for the dues paid, since these invoices often indicate what portion of the dues is for the support of political activity.

(NARUC Rate case & Audit Manual)
### Restating Adjustment RA-8

**Bad Debt Expense**

<table>
<thead>
<tr>
<th>Per Books</th>
<th>$ 53,613</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Method</td>
<td>18,526</td>
</tr>
<tr>
<td>Adjustment</td>
<td>$(35,088)</td>
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</table>

#### Average Method

<table>
<thead>
<tr>
<th>Year</th>
<th>Write-off Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>-</td>
</tr>
<tr>
<td>2017</td>
<td>-</td>
</tr>
<tr>
<td>2018</td>
<td>-</td>
</tr>
<tr>
<td>2019</td>
<td>57,540</td>
</tr>
<tr>
<td>2020</td>
<td>-</td>
</tr>
<tr>
<td>2021</td>
<td>53,613</td>
</tr>
<tr>
<td>Total</td>
<td>111,153</td>
</tr>
<tr>
<td>Average</td>
<td>18,526</td>
</tr>
</tbody>
</table>

Percent of revenue: 3,075,000 / 3,075,000 = 0.60%
Review of the results of operations

<table>
<thead>
<tr>
<th>Line No.</th>
<th>Account Description</th>
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<td>4</td>
<td>Fire Protection Revenue</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Ready to Serve</td>
<td>2,222</td>
</tr>
<tr>
<td>8</td>
<td>Operating &amp; Maintenance Expenses</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Salary &amp; Wages</td>
<td>372,000</td>
</tr>
<tr>
<td>12</td>
<td>Salary &amp; Wages - Officers</td>
<td>62,000</td>
</tr>
<tr>
<td>13</td>
<td>Payroll taxes</td>
<td>52,080</td>
</tr>
<tr>
<td>14</td>
<td>Officer Pensions</td>
<td>23,252</td>
</tr>
<tr>
<td>15</td>
<td>Bank Service Charges</td>
<td>330</td>
</tr>
<tr>
<td>16</td>
<td>Materials and supplies</td>
<td>-</td>
</tr>
<tr>
<td>17</td>
<td>Rental Expense - Buildings/Real Property</td>
<td>32,525</td>
</tr>
<tr>
<td>18</td>
<td>Employee Pension</td>
<td>-</td>
</tr>
<tr>
<td>19</td>
<td>Insurance</td>
<td>12,562</td>
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<tr>
<td>20</td>
<td>Miscellaneous Expenses</td>
<td>876</td>
</tr>
<tr>
<td>21</td>
<td>Depreciation Expense</td>
<td>43,643</td>
</tr>
<tr>
<td>22</td>
<td>Amort of CLAC</td>
<td>-</td>
</tr>
<tr>
<td>23</td>
<td>Office Supplies</td>
<td>1,200</td>
</tr>
<tr>
<td>24</td>
<td>Other Tax &amp; Licenses</td>
<td>341</td>
</tr>
<tr>
<td>25</td>
<td>Regulatory Expense</td>
<td>-</td>
</tr>
<tr>
<td>26</td>
<td>Postage Mailing</td>
<td>276</td>
</tr>
<tr>
<td>27</td>
<td>Contractual Services - CPA</td>
<td>1,200</td>
</tr>
<tr>
<td>28</td>
<td>Contractual Services - Legal</td>
<td>2,320</td>
</tr>
<tr>
<td>29</td>
<td>Contractual Services - Engineering</td>
<td>-</td>
</tr>
<tr>
<td>30</td>
<td>Legislative Expense</td>
<td>1,200</td>
</tr>
<tr>
<td>31</td>
<td>Charitable Contributions</td>
<td>3,666</td>
</tr>
<tr>
<td>32</td>
<td>Bad Debt</td>
<td>2,700</td>
</tr>
<tr>
<td>33</td>
<td>Repair &amp; Maintenance</td>
<td>341</td>
</tr>
<tr>
<td>34</td>
<td>Telephone</td>
<td>655</td>
</tr>
<tr>
<td>35</td>
<td>Dues and Fees</td>
<td>492</td>
</tr>
<tr>
<td>36</td>
<td>Fuel and Transportation</td>
<td>1,690</td>
</tr>
<tr>
<td>37</td>
<td>Supplies &amp; Materials</td>
<td>437</td>
</tr>
<tr>
<td>38</td>
<td>Utility / Power</td>
<td>7,192</td>
</tr>
<tr>
<td>39</td>
<td>Water Treatment &amp; Testing</td>
<td>5,643</td>
</tr>
<tr>
<td>40</td>
<td>Total Operating Expenses</td>
<td>628,620</td>
</tr>
<tr>
<td>41</td>
<td>Operating Income</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>Before Interest and Taxes</td>
<td>7,854</td>
</tr>
<tr>
<td>46</td>
<td>Net Operating Income</td>
<td>7,854</td>
</tr>
</tbody>
</table>
ACRONYMS

Poll Question

Which of the below is NOT an acronym?

1. NARUC
2. GAAP
3. AFUDC
4. All of the above are acronyms
acronym  

**noun**

Save Word

**Definition of acronym**

A word (such as NATO, radar, or laser) formed from the initial letter or letters of each of the successive parts or major parts of a compound term.

**Frequently Asked Questions About acronym**

What is the difference between an acronym and an initialism?

Both acronyms and initialisms are made up of the first letter or letters of the words in a phrase. The word *acronym* typically applies when the resulting thing can be read as a word; for example, *radar* comes from "radio detection and ranging" and *scuba* comes from "self-contained underwater breathing apparatus." The word *initialism* only applies when the resulting thing is read as an abbreviation; for example *DIY*, which comes from "do it yourself," is pronounced by saying the names of the letters.
The future of regulatory audits
The future of regulatory audits

Before Excel

Before Lotus was

VisiCalc

VisiCalc, the first computer spreadsheet for personal computers, was released in the 1980s

“VISICALC represented a new idea of a way to use a computer and a new way of thinking about the world.”
– Ted Nelson
The future of regulatory audits

FAST FORWARD 40 Years!

FoxPro, the main database for data collection for the FERC for almost three decades, was replaced in September 2021, with an XBRL-based reporting system.
The future of regulatory audits

“XBRL is a revolutionary standard business reporting software language, which is being adopted by leading companies worldwide.”

“XBRL is a standardized XML which allows automated data validation, data exchange and data analysis in real time. Standardization of design gives XBRL its unique edge over other data platforms.“

Frederic Chapus – UBPartner, XBRL pioneer
The future of regulatory audits

- XML is:
  - Non-proprietary,
  - A Single Standard,
  - Facilitates the Sharing of Data,
  - Uses Structured Data using tags identifying data elements.
In a FERC issued order describing the FERCs blueprint for transition to the new XBRL reporting standard it stated:

- Reports will be filed with the commission in the XBRL format
- Software will not be provided by the FERC to reporting companies,
- Companies or private vendors will develop their own XBRL system allowing for a seamless transfer of data from the company to the commission,
- Validation data will be accomplished at the company level.
The use of XBRL should make the information in these forms easier for filers and data users to analyze and assist in automating regulatory filings and business information processing.
Impact of the transition to XBRL

- Uses structured data to store information,
- Allows for validation of data prior to filing,
- Provides the ability to use Business Intelligence (BI) software to retrieve or analyze filed data,
FERC Electronic Regulatory Filings
The Current State

Regulatory Oversight Challenges

- Time lag inherent in filing the report – by necessity, reports are often filed months after the reported period has ended.

- Time lag in the preparation of the data – An analyst must manually input the data from the reports into spreadsheets. That is, the relevant data must be located, entered, validated, and re-entered if mistakes are found.

- Time lag in the actual analysis – Financial models require preparation or creation before a single piece of information can be distilled, analyzed and evaluated. Models often result in information overload.

XBRL Solves These Challenges!
FERC Electronic Regulatory Filings
Taxonomy Basics

- XBRL, or eXtensible Business Reporting Language, is an XML standard for tagging business and financial reports to increase the transparency and accessibility of business information by using a uniform format.

- The XBRL specification is developed and published by XBRL International, Inc. a non-profit consortium of more than 650 companies and agencies.

  - All publicly listed companies are required to use XBRL to submit financial reports to the SEC.
XBRL provides comprehensive definitions and accurate data tags allowing the:

- preparation
- validation
- publication
- exchange
- consumption; and
- analysis of business information of all kinds.

Information in reports prepared using the XBRL standard is interchangeable between different information systems in entirely different organizations.

https://www.xbrl.org/the-standard/what/an-introduction-to-xbrl/
Taxonomy – The taxonomy maps out such things as the name, amount, year or even the currency if the data is financial in nature.

It also reflects the relationships of data, for example cash is a sub-category of current assets whereas current assets are a sub-category of assets.

Taxonomies and the related structures, are highly complex and detailed.
**FERC Electronic Regulatory Filings**

**Taxonomy Basics**

Taxonomy Example for FERC Form 1 Sch 320

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### FERC FORM NO. 1 (ED. 12-93) Page 320

<table>
<thead>
<tr>
<th>Line No.</th>
<th>Account</th>
<th>Amount for Current Year (b)</th>
<th>Amount for Previous Year (c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>D. Other Power Generation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>Operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>(546) Operation Supervision and Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>(547) Fuel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64</td>
<td>(548) Generation Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65</td>
<td>(549) Miscellaneous Other Power Generation Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>66</td>
<td>(550) Rents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>67</td>
<td>TOTAL Operation (Enter Total of lines 62 thru 66)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>68</td>
<td>Maintenance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>69</td>
<td>(551) Maintenance Supervision and Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>(552) Maintenance of Structures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>71</td>
<td>(553) Maintenance of Generating and Electric Plant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>(554) Maintenance of Miscellaneous Other Power Generation Plant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>73</td>
<td>TOTAL Maintenance (Enter Total of lines 69 thru 72)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>TOTAL Power Production Expenses-Other Power (Enter Tot of 67 &amp; 73)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>E. Other Power Supply Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>76</td>
<td>(555) Purchased Power</td>
<td></td>
<td></td>
</tr>
<tr>
<td>77</td>
<td>(556) System Control and Load Dispatching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>78</td>
<td>(557) Other Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>79</td>
<td>TOTAL Other Power Supply Exp (Enter Total of lines 76 thru 78)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>TOTAL Power Production Expenses (Total of lines 21, 41, 59, 74 &amp; 79)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>81</td>
<td>2. TRANSMISSION EXPENSES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>82</td>
<td>Operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>(560) Operation Supervision and Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>(561.1) Load Dispatch-Reliability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>86</td>
<td>(561.2) Load Dispatch-Monitor and Operate Transmission System</td>
<td></td>
<td></td>
</tr>
<tr>
<td>87</td>
<td>(561.3) Load Dispatch-Transmission Service and Scheduling</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FERC Electronic Regulatory Filings
Taxonomy Basics

FERC XBRL Viewer (Yeti)  [https://xbrlview.ferc.gov/yeti/resources/yeti-gwt/Yeti.jsp](https://xbrlview.ferc.gov/yeti/resources/yeti-gwt/Yeti.jsp)
Types of Adjustments

Poll Question

What database format is currently used by the FERC?

1. FoxPro
2. SQL
3. XBRL
4. Yahtzee
FERC Electronic Regulatory Filings
Current State
FERC Electronic Regulatory Filings

Nine VFP Forms are being initially used in FERC’s new XBRL Standard

Form 1: Annual Report of Major Electric Utility
Form 1–F: Annual Report of Non-major Electric Utility,
Form No. 2: Major Natural Gas Pipeline Annual Report
Form No. 2–A: Non-major Natural Gas Pipeline Annual Report
Form No. 3–Q: Quarterly Financial Report of Electric Utilities, Licensees, and Natural Gas
Form No. 6: Annual Report of Oil Pipeline Companies
Form No. 6-Q: Quarterly Report of Oil Pipeline Companies
Form No. 60: Annual Report of Centralized Service Companies
Form No. 714: Annual Electric Control and Planning Area Report
## FERC Electronic Regulatory Filings

### Current State

Due Dates for the first XBRL Filings with FERC

<table>
<thead>
<tr>
<th>Form No.</th>
<th>Description</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Q (electric)</td>
<td>Q3 2021 due 12/31/2021</td>
<td></td>
</tr>
<tr>
<td>3-Q (gas)</td>
<td>Q3 2021 due 12/31/2021</td>
<td></td>
</tr>
<tr>
<td>6-Q (oil)</td>
<td>Q3 2021 due 12/31/2021</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2021 Filing due 4/18/2022</td>
<td></td>
</tr>
<tr>
<td>1-F</td>
<td>2021 Filing due 4/18/2022</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2021 Filing due 4/18/2022</td>
<td></td>
</tr>
<tr>
<td>2-A</td>
<td>2021 Filing due 4/18/2022</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>2021 Filing due 4/18/2022</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>2021 Filing due 5/1/2022</td>
<td></td>
</tr>
<tr>
<td>714</td>
<td>2021 Filing due 6/1/2022</td>
<td></td>
</tr>
</tbody>
</table>

* Order 859 (June 20, 2019) which adopted XBRL as the standard for filing Commission Forms.

* Order on Technical Conference (July 17, 2020, Docket No. RM19-12-000) which finalized the XBRL Taxonomy and established the first deadlines for implementation.
## FERC Electronic Regulatory Filings

### Current State - Dashboard

<table>
<thead>
<tr>
<th></th>
<th>Last 5 yrs</th>
<th>Last Yr.</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Δ Revenue</td>
<td>-1.8%</td>
<td>-0.1%</td>
<td></td>
</tr>
<tr>
<td>Δ Utility Op Expense</td>
<td>-3.6%</td>
<td>-0.2%</td>
<td></td>
</tr>
<tr>
<td>Op Ratio</td>
<td>89.38</td>
<td>88.28</td>
<td></td>
</tr>
<tr>
<td>Working Capital</td>
<td>-69,721</td>
<td>-53,077</td>
<td></td>
</tr>
<tr>
<td>Net Plant Growth Rate</td>
<td>6.2%</td>
<td>9.0%</td>
<td></td>
</tr>
<tr>
<td>Asset Turnover Ratio</td>
<td>56.81</td>
<td>49.74</td>
<td></td>
</tr>
</tbody>
</table>

### Revenue vs Utility Op Expense

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
<th>Utility Op Expense</th>
<th>Op Ratio</th>
<th>Current Assets</th>
<th>Current Liabilities</th>
<th>Working Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1,602,043,842</td>
<td>1,439,975,392</td>
<td>89.884</td>
<td>293,497,874</td>
<td>362,989,647</td>
<td>(69,492)</td>
</tr>
<tr>
<td>2014</td>
<td>1,617,162,384</td>
<td>1,456,974,449</td>
<td>90.995</td>
<td>276,366,633</td>
<td>333,434,461</td>
<td>(62,798)</td>
</tr>
<tr>
<td>2015</td>
<td>1,494,227,540</td>
<td>1,340,000,457</td>
<td>93.340</td>
<td>234,673,968</td>
<td>299,186,386</td>
<td>(46,541)</td>
</tr>
<tr>
<td>2016</td>
<td>1,574,887,368</td>
<td>1,391,029,230</td>
<td>88.320</td>
<td>286,236,561</td>
<td>384,956,898</td>
<td>(98,722)</td>
</tr>
<tr>
<td>2017</td>
<td>1,572,976,141</td>
<td>1,388,579,712</td>
<td>88.277</td>
<td>268,614,396</td>
<td>321,591,142</td>
<td>(53,077)</td>
</tr>
</tbody>
</table>

### Total Utility Plant vs Acc Depreciation

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Utility Plant</th>
<th>Acc Deprec.</th>
<th>Net Plant</th>
<th>NP Growth Rate</th>
<th>Asset Turnover Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>3,768,607,461</td>
<td>1,284,830,029</td>
<td>2,483,777,432</td>
<td>5.56%</td>
<td>0.65</td>
</tr>
<tr>
<td>2014</td>
<td>3,955,107,069</td>
<td>1,333,212,160</td>
<td>2,621,894,909</td>
<td>5.86%</td>
<td>0.62</td>
</tr>
<tr>
<td>2015</td>
<td>4,183,698,822</td>
<td>1,408,153,972</td>
<td>2,775,548,850</td>
<td>5.86%</td>
<td>0.54</td>
</tr>
<tr>
<td>2016</td>
<td>4,392,883,763</td>
<td>1,492,643,210</td>
<td>2,902,240,553</td>
<td>4.49%</td>
<td>0.54</td>
</tr>
<tr>
<td>2017</td>
<td>4,744,314,464</td>
<td>1,582,201,803</td>
<td>3,162,112,661</td>
<td>9.03%</td>
<td>0.50</td>
</tr>
</tbody>
</table>

### Analysis

- (g) = (a) - (b)
- (h) = (c) - (d)
- (i) = (j) / (k)
- (j) = (g) / (h)
- (k) = (a) / (i)

**Total Revenue Growth Rate:** 27%

**Net Plant Growth Rate:** 6.24%

**Asset Turnover Ratio:** 0.57
FERC Electronic Regulatory Filings
Current State - Dashboard

Sales for Resale

<table>
<thead>
<tr>
<th>Service</th>
<th>Megawatt-HoursSold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Term firm service</td>
<td>3,508,270</td>
</tr>
<tr>
<td>For intermediate-term firm service</td>
<td>14,226</td>
</tr>
<tr>
<td>Long Term firm service</td>
<td>228,105</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,050,611</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service</th>
<th>Total Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Term firm service</td>
<td>$161,202,982</td>
</tr>
<tr>
<td>For intermediate-term firm service</td>
<td>$888,097</td>
</tr>
<tr>
<td>Long Term firm service</td>
<td>$25,796,067</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$187,887,146</strong></td>
</tr>
</tbody>
</table>
Regulatory Oversight Challenges

...[we] suggest that the development of a FERC based taxonomy should include the capacity for state-specific data along with FERC based interstate operational and financial data.

Since, as conceived by the FERC, companies will be filing with the commission their interstate XBRL data, there is no reason not to assume that each state would also like to enjoy the same ability by having those companies operating in each state file state-specific information with each respective regulatory agency.

Without the FERC developed taxonomy inclusion of a states function, the states would be required to recreate a new taxonomies which would not necessarily be readable by other commissions.
The FERC decision to adopt XBRL will dynamically change regulatory audits
are performed.

- Decreasing the time to audit filed cases
- Real time access to data will change hindsight regulation to oversight regulation,
- Increasing the quality of audits,
- Allowing greater transparency to all parties.
Ironically, annual reports themselves may not be needed once reporting is fully converted to XBRL. FERC will receive its required data from the company itself or from a cloud service provider specializing in XBRL, as a stream of structured data. The data will be tagged to indicate its location in the report, but no actual report will exist in the FERC files, changing the way companies currently submit reports from hundred-page PDF files to a simple download of data from the cloud.
Questions regarding XBRL?
Exercise - Expenses

A water company finds out that a local asphalt plant has been storing asphalt over the local watershed and the company fears that the asphalt byproducts may, over time, leach into its water supply. The company has hired the top ecology law firm in the state to file a cease-and-desist order with the courts and prepare a case for damages. It has also hired a national engineering firm to test for contamination.

The company has filed to recover the costs of both the law firm and the engineering studies. After research, the auditor has found that the county has also begun its own legal actions and water contamination studies along with a local environmental protection group.

Issues:

• Does the company have a duty to protect the water shed?
• Did they need to hire the most expense available representation?
• Others are already doing the work to address the water contamination

Options:

• Disallow all expenses
• Allow a portion of the expense
“...the problem of ratemaking is one which has taxed, and will continue to tax, the ingenuity of man to the extent of time.”

Commissioner John V. Smith of Alabama July 16, 1903, to the fifteenth annual convention of NARUC
Questions or Comments?
Thank You!