Gas Pipeline & New FERC XBRL Requirements

November 4, 2020
Agenda

- XBRL Fundamentals
- CPE Questions
- Instructions on preparing Forms 2, 2-A and 3-Q natural gas
- CPE Questions
- Other programs and events
XBRL (eXtensible Business Reporting Language)

- Open
- Nonproprietary
- Maintained by XBRL International – global nonprofit standards body, responsible for maintaining and expanding upon the specification, multiple country jurisdictions
- Supported by XBRL US – national standards setter, responsible for development work and adoption efforts in the United States
- XBRL is not:
  - A technical format like XML or JSON
  - A product
XBRL gives meaning to data

<table>
<thead>
<tr>
<th></th>
<th>CURRENT AND ACCRUED ASSETS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>Cash (131)</td>
<td>10,990,758</td>
<td>0</td>
</tr>
<tr>
<td>33</td>
<td>Special Deposits (132-134)</td>
<td>2,090,720</td>
<td>2,433,653</td>
</tr>
<tr>
<td>34</td>
<td>Working Funds (135)</td>
<td>24,534</td>
<td>24,650</td>
</tr>
<tr>
<td>35</td>
<td>Temporary Cash Investments (136)</td>
<td>50,000,240</td>
<td>73,363,294</td>
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<tr>
<td>36</td>
<td>Notes Receivable (141)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>37</td>
<td>Customer Accounts Receivable (142)</td>
<td>60,017,312</td>
<td>66,293,962</td>
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<tr>
<td>38</td>
<td>Other Accounts Receivable (143)</td>
<td>3,313,926</td>
<td>320,639</td>
</tr>
<tr>
<td>39</td>
<td>(Less) Accr. Provision for Uncollectible Accounts - Credit (144)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>40</td>
<td>Notes Receivable from Associated Companies (145)</td>
<td>230,000,000</td>
<td>150,000,000</td>
</tr>
<tr>
<td>41</td>
<td>Accounts Receivable from Associated Companies (146)</td>
<td>7,429,914</td>
<td>7,472,725</td>
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<tr>
<td>42</td>
<td>Fuel Stock (151)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>43</td>
<td>Fuel Stock Expenses Undistributed (152)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Cash**
- Data Type: Monetary
- Documentation: This account shall include the amount of current cash funds except working funds.
- Entity: Northern Natural Gas Company
- Units: US Dollars
- Period: 2019

XBRL for Gas Pipeline, November 4, 2020
Taxonomy

Digital “dictionary” of concepts representing data needed to be reported
**Taxonomy**

110 - Schedule - Comparative Balance Sheet - Assets And Other Debts

- Schedule Comparative Balance Sheet (Assets and Other Debts) [Abstract]
- Comparative Balance Sheet (Table)
- Assets and Other Debts
  - Utility Plant
  - OTHER PROPERTY AND INVESTMENTS
  - CURRENT AND ACCRUED ASSETS
    - Cash (131)

- Special Deposits (132-134)
- Working Funds (135)
- Temporary Cash Investments (136)
- Notes Receivable (141)
- Customer Accounts Receivable (142)
- Other Accounts Receivable (143)
- (Loss) Accum. Provision for Uncollectible Accounts - Credit (144)
- Notes Receivable from Associated Companies (145)
- Accounts Receivable from Associated Companies (146)
- Fuel Stock (151)
- Fuel Stock Expenses Undistributed (152)
- Residuals (Elec) and Extracted Products (Gas) (153)
- Plant Materials and Operating Supplies (154)
- Merchandise (155)

**Cash**

- **Type**: Cash
- **Lang**: en
- **Label**: Cash (131)

**References**

- **Type**: Account
  - **Lang**: en
  - **Label**: 131
- **Form Location**
  - **Type**: Form 2
  - **Lang**: en
  - **Label**: 110 - Schedule - Comparative Balance Sheet - Assets And Other Debts
    - **Column**: a
    - **Row**: 32
    - **ValueType**: Label
    - **ColumnName**: F2ComparativeBalanceSheet

**Properties**

- **Property**: Name
  - **Value**: Cash
- **Property**: Namespace
  - **Value**: http://ftc.gov/form/2020-01-01/ftc
- **Property**: XBRL Type
  - **Value**: monetary/itemType
- **Property**: Substitution Group
  - **Value**: xbrli:item
- **Property**: Period Type
  - **Value**: instant
- **Property**: Abstract
  - **Value**: false
- **Property**: Nilatable
  - **Value**: true
- **Property**: Balance
  - **Value**: debit

XBRL for Gas Pipeline, November 4, 2020
## Schedule mapping

<table>
<thead>
<tr>
<th>Row Number</th>
<th>Column Number</th>
<th>Label</th>
<th>Element</th>
<th>Period</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>c</td>
<td>Utility Plant (101-106, 114)</td>
<td>UtilityPlant</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>d</td>
<td>Utility Plant (101-106, 114)</td>
<td>UtilityPlant</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>c</td>
<td>Construction Work in Progress (107)</td>
<td>ConstructionWorkInProgress</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>d</td>
<td>Construction Work in Progress (107)</td>
<td>ConstructionWorkInProgress</td>
<td>Current</td>
<td></td>
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<tr>
<td>4</td>
<td>c</td>
<td>TOTAL Utility Plant (Enter Total of lines 2 and 3)</td>
<td>UtilityPlantAndConstructionWorkInProgress</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>d</td>
<td>TOTAL Utility Plant (Enter Total of lines 2 and 3)</td>
<td>UtilityPlantAndConstructionWorkInProgress</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>c</td>
<td>Net Utility Plant (Enter Total of line 4 less 3)</td>
<td>UtilityPlantNet</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>d</td>
<td>Net Utility Plant (Enter Total of line 4 less 3)</td>
<td>UtilityPlantNet</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>c</td>
<td>Nuclear Fuel in Process of Ref., Conv., Enrich., and Fab. (120.1)</td>
<td>NuclearFuelInProcessOfRefinementConversionEnrichmentAndFabrication</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>d</td>
<td>Nuclear Fuel in Process of Ref., Conv., Enrich., and Fab. (120.1)</td>
<td>NuclearFuelInProcessOfRefinementConversionEnrichmentAndFabrication</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>c</td>
<td>Nuclear Fuel Materials and Assemblies-Stock Account (120.2)</td>
<td>NuclearFuelMaterialsAndAssembliesStockAccount</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>d</td>
<td>Nuclear Fuel Materials and Assemblies-Stock Account (120.2)</td>
<td>NuclearFuelMaterialsAndAssembliesStockAccount</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>c</td>
<td>Nuclear Fuel Assemblies in Reactor (120.3)</td>
<td>NuclearFuelAssembliesInReactor</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>d</td>
<td>Nuclear Fuel Assemblies in Reactor (120.3)</td>
<td>NuclearFuelAssembliesInReactor</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>c</td>
<td>Spent Nuclear Fuel (120.4)</td>
<td>SpentNuclearFuel</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>d</td>
<td>Spent Nuclear Fuel (120.4)</td>
<td>SpentNuclearFuel</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>c</td>
<td>Nuclear Fuel Under Capital Leases (120.6)</td>
<td>NuclearFuelUnderCapitalLeases</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>d</td>
<td>Nuclear Fuel Under Capital Leases (120.6)</td>
<td>NuclearFuelUnderCapitalLeases</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>c</td>
<td>(Less) Accum. Prov. for Amort. of Nuc. Fuel Assemblies (120.5)</td>
<td>AccumulatedProvisionForAmortizationOfNuclearFuelAssemblies</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>d</td>
<td>(Less) Accum. Prov. for Amort. of Nuc. Fuel Assemblies (120.5)</td>
<td>AccumulatedProvisionForAmortizationOfNuclearFuelAssemblies</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>c</td>
<td>Net Nuclear Fuel (Enter Total of lines 7-11 less 12)</td>
<td>NuclearFuelNet</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>d</td>
<td>Net Nuclear Fuel (Enter Total of lines 7-11 less 12)</td>
<td>NuclearFuelNet</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>c</td>
<td>Net Utility Plant (Enter Total of lines 6 and 13)</td>
<td>UtilityPlantAndNuclearFuelNet</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>d</td>
<td>Net Utility Plant (Enter Total of lines 6 and 13)</td>
<td>UtilityPlantAndNuclearFuelNet</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>c</td>
<td>Utility Plant Adjustments (116)</td>
<td>OtherElectricPlantAdjustments</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>d</td>
<td>Utility Plant Adjustments (116)</td>
<td>OtherElectricPlantAdjustments</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>c</td>
<td>Gas Stored Underground - Noncurrent (117)</td>
<td>GasStoredUndergroundNoncurrent</td>
<td>Current</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>d</td>
<td>Gas Stored Underground - Noncurrent (117)</td>
<td>GasStoredUndergroundNoncurrent</td>
<td>Current</td>
<td></td>
</tr>
</tbody>
</table>
• Able to represent all types of data (monetary, integer, percent, string, text block, enumerated lists, area, volume, energy)

• Contains structure to explain relationships between concepts
  • Presentation (hierarchy)
  • Calculations (A + B = C)
  • Definition
  • References (authoritative)
  • Labels (standard, abbreviated, preferred, start and end of period)
XBRL for Gas Pipeline, November 4, 2020
CPE Questions
Instructions

- Tagging
  - Typed dimensions
  - Sorting items
  - Duplicate values
  - Accuracy
  - Periods (quarterly roll forwards)
  - Text block items
    - From other filings (copying from other non-FERC filings)
  - Subtotals
- Validation
- Rendering
- Footnotes
Typed Dimensions

• Allows the reporting of sequences.
  • Directors, Transmission lines
  • Blank rows
    • Cash-Flow
    • Retained earnings
  • Members defined by filer.
  • Should be consistent over time.
  • Fact will have the sequence dimension.
  • Sequences have totals – leave off the sequence axis.
Sorting

- Use Order Number
- Does not appear on the schedule
- Must be a decimal
- Allows insertion to reorder items i.e. 1.02
- Must always use a dimension
- Order for migrated data was taken from original filing
- Some schedules have multiple dimensions
Duplicate Values

• Must not enter duplicate values.

• Validation rules check for this.

• Values on sub-schedule are tagged the same as main schedule. i.e. CommonStockIssued. (110 & 250)

• Use a note to indicate a difference.
Accuracy and Units

• All monetary amounts are in USD.
• Other items will include a label indicating the unit type.
• Validation rules check that the unit used is correct.
• Numbers must be accurate to the dollar so decimals should be set to 0.
Periods

- All facts have a period.
- Periods are determined based on the report year and the report period.
- If these are changed then the location of facts in the report will change.
- Across the schedules there are various periods that can be used.
- Be careful to ensure the correct period is used.
- Validation rules check that appropriate periods are used.
- For quarterly reports the CF closing balance of cash will not equal the opening.
- Schedules report cumulative amounts.
- Some rollforwards are for the quarter vs the year to date. This was not clear on the original schedules.
Text Block Items

• Taxonomy contains number of text block items.
• If rendered should use valid xhtml.
• Can copy html notes from SEC filings but should remove inline. SEC rendered text block items remove inline tags.
• Styling is included in rendered filings. Check styling does not conflict.
Subtotals

• Some schedules have subtotals.
• FERC data migration tagged these as distinct lines.
• When preparing filing don’t use the migrated data as an example. Some schedules have this as historical data.
• See Schedule 250.
Validations

• Validation rules apply to an entire form. i.e. the same rules are used for the annual, quarterly and form 2A.
• Validations generally check the totals add and cross add.
• Cross check across schedule when the values differ.
• Check periods.
• Check units.
• Check required elements.
• Validations described in instructions.
• Published by the FERC using the open source XBRL software (Arelle), so can validate locally.
Rendering

• Can render the entire form.
• Can render a specific schedule.
• Creates a valid inline XBRL document.
• See XBRL US site.
Footnotes

• Link fact to the footnote beneath schedule.
• Software should support creation of footnotes.
• Most footnotes will be fact->footnote.
• Also need support for fact->fact as well
  • If want to be able to request confidential data.
  • Indicate confidential data with a footnote.
Working with XBRL Vendors

• XBRL US members that can help:
  • Advanced Computer Innovations, Inc.
  • DataTracks
  • Donnelley Financial Solutions (DFIN)
  • Iris Business Services
  • Novaworks, LLC
  • P3 Data Systems
  • RDG Filings
  • Workiva, Inc.

• Questions you should ask:
  • Does your application support FERC validation? Typed dimensions?
  • What experience do you have preparing XBRL for other entities?
  • How long will it take to prepare the XBRL filing?
  • How can I review the XBRL tags used on each fact? What if multiple parties internally need to review the form?
  • If I need to change a value in a report, how long will the vendor need to make the change?
  • How will the process differ the second time around?
  • Can the vendor give you a printout of the FERC rendering of your filing?
CPE Questions

XBRL for Gas Pipeline, November 4, 2020
Tools & Instructions
Get step by step instruction and mapping guides to XBRL-format your FERC Form data. Render and review your own XBRL-formatted Form. Inspect the FERC Taxonomy. Check your filing for data quality with FERC Validations.

Run Applications Locally
Get code and instructions to run the FERC Renderer and Validations in your own local environment.

Data
Analyze your own and peer historical data. Find out how you can collect your vendor’s financial data in machine-readable XBRL format.

Education
Access resources to support FERC filers complying with new XBRL requirements.

Public utilities reporting to the FERC are required to submit Forms 1 and 3-Q (electric utilities), Forms 2, 2-A, and 3-Q natural gas (gas pipeline companies), Forms 6 and 6-Q (oil pipeline companies), Form 60 (centralized service companies) and Form 714 (electric transmitting companies) in XBRL format, starting in 2021. Read the FERC rule.

Find out about becoming an XBRL US FERC Filer Member.
More XBRL US events for utilities

• Instructional webinars:
  • Oil pipeline companies, December 1, 2020
  • Centralized service companies, December 2, 2020
  • Electric transmitting utilities, December 10, 2020

• XBRL US Investor Forum, November 17-18, 2020
  • Keynotes SEC Commissioner Allison Herren Lee, PwC Vice Chair Wes Bricker
  • [http://xbrl.us/forum](http://xbrl.us/forum)