

Get Ready for FERC XBRL Requirements

Pre-read Materials

This document contains background information on the FERC program, the XBRL standard, and the FERC filing providers who will demonstrate during the February 16th and 18th webinars.

FERC Implementation Schedule

Annual Forms	Quarterly Forms
<ul style="list-style-type: none"> • 2021 FERC Form Nos. 1 and 1-F will be due on April 18, 2022. • 2021 FERC Form Nos. 2 and 2-A will be due on April 18, 2022. • 2021 FERC Form No. 6 will be due on April 18, 2022. • 2021 FERC Form No. 60 will be due on May 1, 2022. • 2021 FERC Form No. 714 will be due on June 1, 2022. 	<ul style="list-style-type: none"> • FERC Form No. 3-Q (electric) for Major Electric Utilities, Licensees, and Others for the third quarter of 2021, will be due on November 29, 2021. • FERC Form No. 3-Q (electric) for Non-major Public Utilities and Licensees for the third quarter of 2021, will be due on December 9, 2021. • FERC Form No. 3-Q (natural gas) for Major Natural Gas Companies for the third quarter of 2021 will be due on November 29, 2021. • FERC Form No. 3-Q (natural gas) for Non-major Natural Gas Companies for the third quarter of 2021, will be due on December 9, 2021. • FERC Form No. 6-Q for Oil Pipeline Companies for the third quarter of 2021 will be due on December 9, 2021.

Understanding the FERC Taxonomy

XBRL is an open, nonproprietary, global data standard that renders financial data in machine-readable format. XBRL is not a product, nor is it a technical format like XML, JSON, or CSV. XBRL features that FERC filers should understand, as they are widely employed in the FERC Taxonomy and the FERC implementation, include:

Taxonomy

A digital dictionary of XBRL concepts used to report data, describing both those concepts' semantic meanings and their relationships with each other. A taxonomy is composed of a schema file (.xsd) and linkbase files (.xml) directly referenced by that schema. Figure 1 below shows part of the FERC Taxonomy for facts reported on Form 6 for oil pipeline companies. The hierarchical structure of the taxonomy shows that *Current Assets* is comprised of facts reported for *Cash*, *Special Deposits*, *Temporary Investments*, etc. as shown in the hierarchical organization of the taxonomy.



Figure 1

Instance document (XBRL Report)

A report or document that has been prepared with XBRL tags, for example BP Pipeline’s XBRL-formatted Form 6, or Alaska Electric Light and Power Company’s XBRL-formatted Form 1.

Typed dimensions

A dimension is an XBRL feature that provides additional information to further define a fact. For example, a fact that you may need to report in a FERC Form 714 like “546” shown on Figure 2, represents the available plant capacity at annual peak demand for the generating plant, Navajo Dynamic. To accurately understand the meaning of “546” requires knowing information that can be read on the column and row headers. For example, characteristic of the value include that it represents *Plant Available Capacity at the Hour of the Annual Peak Demand on Net Energy for Load (MW)* (column header), and that the value is reported for the Arizona Electric Power Cooperative’s Navajo Dynamic Plant (row label).

Line No. (a)	Electric Utility Name (b)	Plant Name (c)	Plant Available Capacity at the Hour of the Annual Peak Demand on Net Energy for Load (MW) (d)	Integrated Net Load on the Plant at the Hour of the Annual Peak Demand Based on Net Energy for Load (MW) (e)
1	WALC	Davis Dam Power Plant	256	191
2	WALC	Parker Dam Power Plant	120	61
3	WALC	Hoover Dam Power Plant	1,426	342
4	Az. Electric Power Coop	Apache Plant	555	283
5	CALPINE	South Point Gen Str. (IPP)	236	211
6	WALC	Headgate Rock	19	10
7	Az. Electric Power Coop	Navajo Dynamic	546	215
8	Az. Electric Power Coop	Apache Solar	20	14

Figure 2

To identify this fact correctly for XBRL tagging, requires using the XBRL concept *Plant Available Capacity at the Hour of the Annual Peak Demand on Net Energy for Load (MW)* and associating it with the XBRL axis, *Generating Plants Included in Reporting Balancing Authority Area [Axis]*, with the member named “Navajo Dynamic” as shown on the taxonomy segment in Figure 3. The axis is called a “typed” dimension because the members of the dimension are limited to a certain “type” - string values that represent generating plants in the reporting balance authority area. The issuer is required to specify the name of the generating plant as the member, in this case, Navajo Dynamic.

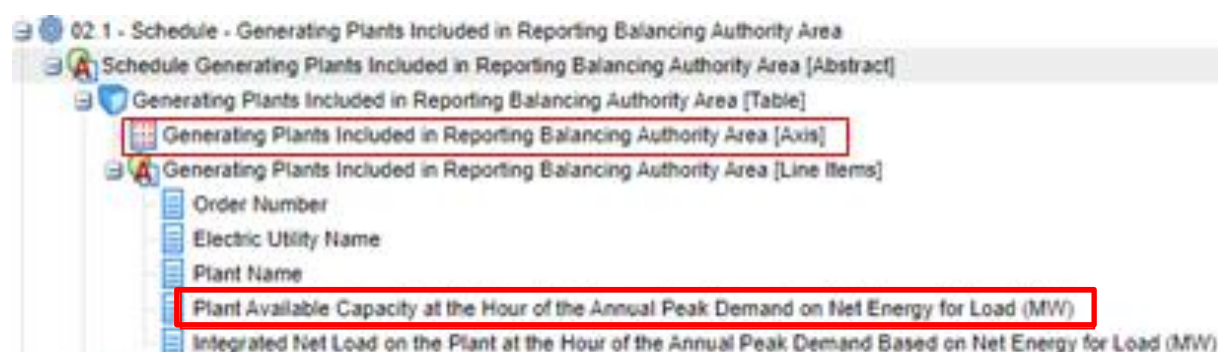


Figure 3

Typed dimensions are used throughout the FERC Taxonomy to help issuers provide their own company-specific names for facts that maybe reported in lists, such as names of company directors, officers, generating plants, names of companies controlled by respondents, etc.

Explicit dimensions

An explicit dimension is similar to a typed dimension in that it is an XBRL feature that provides additional information to further define a fact. Explicit dimensions, however, have predefined members that must be used by the issuer. For example, the Statement of Income on Form 1 can contain data about electric

utilities, gas utilities or other utilities. In Figure 4 the value 6,998,093 represents operating expense for electric utilities.

Line No.	Title of Account (a)	(Ref.) Page No. (b)	Total Current Year to Date Balance for Quarter/Year (c)	Total Prior Year to Date Balance for Quarter/Year (d)	Current 3 Months Ended - Quarterly Only - No 4th Quarter (e)	Prior 3 Months Ended - Quarterly Only - No 4th Quarter (f)	Electric Utility Current Year to Date (in dollars) (g)	Electric Utility Previous Year to Date (in dollars) (h)	Gas Utility Current Year to Date (in dollars) (i)	Gas Utility Previous Year to Date (in dollars) (j)	Other Utility Current Year to Date (in dollars) (k)	Other Utility Previous Year to Date (in dollars) (l)
1	UTILITY OPERATING INCOME											
2	Operating Revenues (400)	300	12,656,870	11,098,129			12,656,870	11,098,129				
3	Operating Expenses											
4	Operation Expenses (401)	320	6,998,093	5,479,091			6,998,093	5,479,091				
5	Maintenance Expenses (402)	320										
6	Depreciation Expense (403)	336										
7	Depreciation Expense for Asset Retirement Costs (403.1)	336										
8	Amort. & Depl. of Utility Plant (404-405)	336	314,767	314,767			314,767	314,767				

Figure 4

To “XBRL tag” this data, the issuer needs to use the XBRL concept *Operation Expense* with the *Electric Utility [Member]* on the *Utility Type [Axis]* as shown in the taxonomy section on Figure 5.

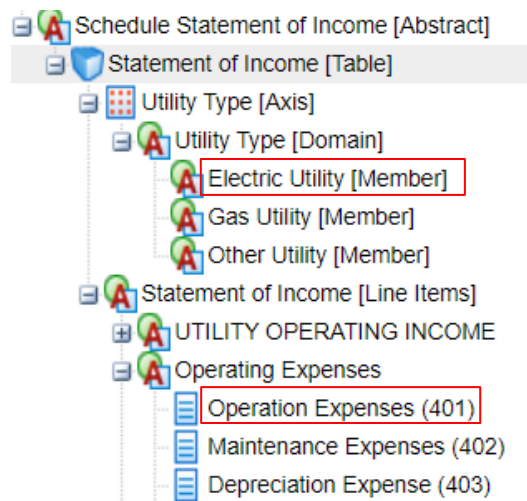


Figure 5

Text block

A text block is exactly what it sounds like - a block of text which can contain tables and text like the one shown in Figure 6. XBRL allows for the “tagging” of entire sections of text and tables like this, with formatting retained. This example would be identified in XBRL by using the concept *Changes During the Quarter or Year* which is on Schedule 108 from Form 6.

Name of Respondent BP Pipelines (North America) Inc.	This Report Is: (1) <input type="checkbox"/> An Original (2) <input checked="" type="checkbox"/> A Resubmission	Date of Report 10/30/2019	Year/Period of Report End of: 2018/ Q4
Important Changes During the Quarter/Year			
<p>Give particulars (details) concerning the matters indicated below. Make the statements explicit and precise, and number these in accordance with the inquiries. Each inquiry should be answered. Enter "none" or "not applicable" where applicable. If information which answers an inquiry is given elsewhere in the report, make a reference to the schedule in which it appears.</p> <ol style="list-style-type: none"> 1. Changes and important additions to franchise rights: Describe the actual consideration given therefor and state from whom the franchise rights were acquired. State if no consideration was given. 2. Acquisition of ownership in other carrier operations by reorganization, merger, or consolidation with other companies: Give names of companies involved, particulars concerning the transactions, and reference to dates of Commission authorization and journal entries filed if applicable. 3. Important extension or reduction of carrier pipeline operations: State territory added or relinquished and date operations began or ceased and give reference to Commission authorization, if any was required. 4. State briefly the status of any materially important legal proceedings pending at the end of the year, and the results of any such proceedings culminated during the year. 5. If the important changes during the year relating to the respondent appearing in the annual report to the stockholders are applicable and furnish the data required by the above instructions, such notes may be included herein. 			

Figure 6

Validation rules

The FERC has created validation (business) rules which help issuers identify errors that can be corrected before the form is submitted. For example, when run, certain rules check that totals add and cross-add; other rules check periods, units and required elements. Validation rules that issuers run apply to the entire form. For example, rules for annual Form 6 are the same as rules for quarterly Form 6-Q. Every issuer should run the validation rules and can do so by running them on the FERC Web site.

Rendering

After issuers have submitted their XBRL filing to the FERC, the FERC will render the XBRL into Inline XBRL format and post it for data users for presentation purposes. They will also make raw XBRL filings available for data extraction. Inline XBRL is a combined HTML (human-readable) and XBRL (machine-readable) file. See examples of rendered filings for [Form 1](#) and [Form 2](#). Any FERC filer can also render selected schedules¹ in their FERC filing prior to submission to the FERC through the [XBRL US Renderer](#). XBRL US FERC Filer members can render any schedule or their entire Form.

Sorting of data

Many FERC Form tables contain lists of content such as the Form 6 Directors Table in Figure 7. Issuers are required to add numbering to tables which specifies the order of the list. The order number must be a decimal so that issuers can insert new rows in the list by adding a new order number. For example, on the table in Figure 7 below, the number 100.1 can be added to insert a new row in the list between "G.J. Maret (President)" and "D. Rush (Director)" which have order numbers of 100 and 200. *When this data was migrated, the historic ordering for these lists was retained.*

¹ For Forms 1, 1F, 1-Q, 3-Q electric, 2, 2-Q, 2-A, 3-Q gas, 6, and 6-Q: Schedules 110, 114, 118, and 120. For Form 60: Schedules 001, 015, and 016. For Form 714: 02.1, 02.3, and 02.6b.

Directors				
1. Report below the information called for concerning each director of the respondent who held office at any time during the year. Include in column (a), abbreviated titles of the directors who are officers of the respondent. 2. Enter "True" in columns (c) and (d) to designate the Chairman of the Executive Committee and members of the Executive Committee, respectively.				
Line No.	Name and Title of Director (a)	Office Address (Street, city, state, zip) (b)	Chairman of the executive committee (c)	Member of the executive committee (d)
100	1	G. J. Maret (President) 30 S. Wacker Drive, Chicago, IL 60606		
200	2	D. Rush (Director) 30 S. Wacker Drive, Chicago, IL 60606		
300	3	S. Baur (Vice President) 501 Westlake Park Blvd., Houston, TX 77079		
400	4	L. Benton (Controller) 501 Westlake Park Blvd., Houston, TX 77079		

Figure 7

All such FERC lists must be used with a dimension. The Director Table in Figure 7 is used with the *Director [Axis]* shown in the taxonomy section in Figure 8. *Order Number* is the concept used to report the ordering of the director names.

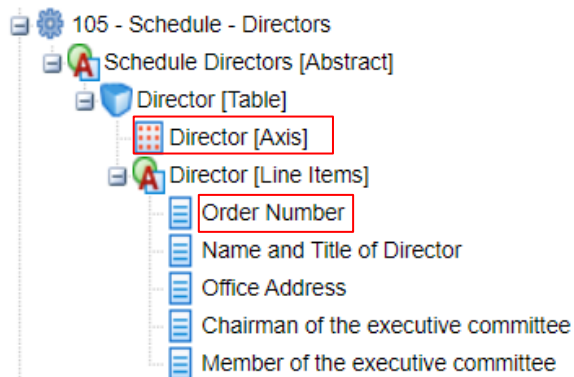


Figure 8

Linking Facts and Footnotes

FERC filers should use software that supports the creation of footnotes and the ability to link a fact to a footnote that appears below the schedule, and to link a fact to a fact. Figure 9 below shows a linked footnote.

Statement of Cash Flows			
1. Codes to be used: (a) Net Proceeds or Payments; (b) Bonds, debentures and other long-term debt; (c) include commercial paper; and (d) identify separately such items as investments, fixed assets, intangibles, etc. 2. Information about noncash investing and financing activities must be provided on Page 122 Notes to the Financial Statements. Also provide a reconciliation between "Cash and Cash Equivalents at End of Period" with related amounts on the Balance Sheet. 3. Operating Activities - Other: include gains and losses pertaining to operating activities only. Gains and losses pertaining to investing and financing activities should be reported in those activities. Show on Page 122 Notes to the Financial Statements the amounts of interest paid (net of amount capitalized) and income taxes paid. 4. Investing Activities: include at Other net cash outflow to acquire other companies. Provide a reconciliation of assets acquired with liabilities assumed on Page 122 Notes to the Financial Statements. Do not include on this statement the dollar amount of leases capitalized, instead provide a reconciliation of the dollar amount of leases capitalized with the plant cost. 5. Under "Other" specify significant amounts and group others. 6. Enter on Page 122 clarifications and explanations.			
Line No.	Description (See Instructions No. 5 for Explanation of Codes) (a)	Current Quarter/Year Amount (b)	Previous Quarter/Year Amount (c)
1	Cash Flow from Operating Activities:		
2	Net Income	77,303,807	689,717,302
3	Noncash Charges (Credits) to Income:		
4	Depreciation	13,370,601	11,882,827
5	Amortization	538,651	507,850
6	Other Non Cash Adjustments		
6.1	Undistributed Earnings of Investees	1,792,058,207	(554,167,164)
FOOTNOTE DATA			
(a) Concept: NetIncomeLoss Subsequent to the original filing for FERC Form 6 for 2018/Q4 dated April 17, 2019, it was determined that an incorrect value was used in our calculation of the value of the deferred tax provision. This re-submission reflects the correct deferred tax in the Balance Sheet (FERC 04, FERC 75) and Income Statement (FERC 671) as of 2018/Q4.			

Figure 9

Accuracy, Units, and Periods

Monetary amounts on FERC forms are reported in US dollars; validation rules will check that the units (set to US dollars) are correct. Monetary numbers must be accurate to the dollar, therefore decimals should be set to zero. Other facts with different data types, for example integers, decimals, kilowatts, and miles, are generally specified by the label on the concept used. Details about the data type are easily found in the FERC Taxonomy Viewer as shown in Figure 10. The concept highlighted, Voting Stock of Respondent Owned by Others, Percentage, is described on the right side of the viewing tool. The top right-side panel provides the definition (documentation label) and label (standard label). The middle right-side panel includes the FERC Form location as a reference. The bottom panel provides the concept properties including name, data type (percent) and period type (instant).

Network Browser

Network: definitionLink: domain-memb Lang: en

- 001 - Schedule - Annual Corporate Officer Certification
- 001 - Schedule - Identification
- 002 - Schedule - List of Schedule
- 101 - Schedule - General Information
- 102 - Schedule - Control Over Respondent
 - Schedule Control over Respondent [Abstract]
 - Control over Respondent [Line Items]
 - Order Number
 - Name of Company Controlling Respondent
 - State of Incorporation
 - Intermediate Name
 - State of Incorporation, Intermediate
 - Direct Parent Name
 - State of Incorporation, Direct Parent
 - Voting Stock of Respondent Owned by Others, Percentage**
- 103 - Schedule - Companies Controlled by Respondent
- 104 - Schedule - Principal General Officers
- 105 - Schedule - Directors
- 110 - Schedule - Comparative Balance Sheet
 - Schedule Comparative Balance Sheet [Abstract]
 - Comparative Balance Sheet [Line Items]
 - Current Assets [Abstract]
 - Cash
 - Special Deposits
 - Temporary Investments
 - Notes Receivable
 - Receivables from Affiliated Companies
 - Accounts Receivable
 - Accumulated Provision for Uncollectible Accounts
 - Interest and Dividends Receivable (Major Only)
 - Oil Inventory

Details Relationships Tree Locations

Voting Stock of Respondent Owned by Others, Percentage

Type	Lang	Label
Standard Label	en	Voting Stock of Respondent Owned by Others, Percentage
Documentation	en	The percentage of voting stock of the respondent that is owned by others.
Form 6 Control Over Respondent labels	en	Percent Voting Stock Owned

Type	Reference
Form	Form 6
Schedule	102 - Schedule - Control Over Respondent
Column	c
RowStart	1
Form Location	1
RowEnd	32
Period	Current
Dimension	ferc:ControlOverRespondentAxis
ValueType	Value

Property	Value
Name	VotingStockOfRespondentOwnedByOthersPercentage
Namespace	http://ferc.gov/form/2020-01-01/ferc
Data Type	num.percentItemType
XBRL Type	pureItemType
Substitution Group	xbrli:item
Period Type	instant
Abstract	false
Nilable	true

Figure 10

XBRL US Members Offering FERC Tools

Advanced Computer Innovations

Contact: Vin Saini, aci@acii.com, 585-385-3810

FERCxbri™ prepares FERC forms 1/2/3-Q/6/60/714 filings in the new XBRL/iXBRL format on a Windows PC. At a basic level, it presents familiar FERC forms into which you enter information. You can also copy/paste into these forms (including bulk copy/paste) from your existing spreadsheets or data bases. The forms are pre-tagged and require no XBRL expertise. Additionally, the software can connect with your existing data bases, and also supports smart import from previous filings as well as collaboration features. Interactive validation makes it easy to correct errors. It natively creates instance and inline XBRL documents, and provides automated submission to FERC.

www.ferc-filing.com

DataTracks

Contact: Prasanna Venkatesh, prasanna.v@datatracks.com, +914440089000 (Ext 411)

DataTracks' Glacier is a cloud based collaborative platform wherein users can input the data in templates that are similar to FERC's layout and convert to XBRL in a few clicks enabling quick and seamless adaptation. Glacier's inbuilt validation module can process thousands of FERC validation rules with great speed & accuracy, Glacier also displays the results online with an ability to trace back to the templates for users to make easy edits. Built on 'Data Point Model', edits to the data are comprehensively tracked by control features like audit trail and version comparison. The ability for users to directly submit the XBRL report to FERC assures data integrity for users, and this is an integral feature of the product.

<https://www.datatracks.com/us/ferc/>

IRIS BUSINESS SERVICES LLC

Contact: Anand Padmanabhan, anand.p@irisbusiness.com

FERC Pro brings together IRIS CARBON® and Data hub. IRIS CARBON® is an XII Certified, cloud-based solution which meets FERC mandate requirements. A template-based reporting solution with XBRL tags and business rules embedded in the application obviates the need to manually tag. You could upload a MS Excel file or key-in or integrate with your internal systems. Built in workflow, commenting or attach supporting documents, IRIS CARBON® is a comprehensive and simple collaborative application. A complementing analytics platform – Data Hub, as an optional application allows issuers to do granular analytics of their own data but also of peers in the industry.

<https://iriscarbon.com/us/ferc-reporting/> and <https://www.fercpro.us>

Novaworks, LLC

Contact: Paul Dorris, sales@novaworkssoftware.com, 585-424-1700

As a leader in producing software solutions for XBRL formatted filings, Novaworks presents XBRLworks, a cloud-based system that fully supports the FERC XBRL mandate. XBRLworks features a streamlined HTML interface that produces well-structured, compliant XBRL behind the scenes as users interact with intuitive forms and collaboration tools.

<https://www.novaworkssoftware.com/fercxbml.php>

P3 Data Systems

Contact: Chris Taylor, CHRIS@P3DATASYS.COM

P3 collaborates with clients through its innovative solution, XML Edge, the first true single-source platform, to structure content with precision, improve reporting efficiency, enhance communication channels, and empower "File with Style" compliance.

www.p3datasys.com

RDG Filings

Contact: Jonathan Elliott, jonathan@rdgfilings.com, 415-643-6010

RDG's ThunderDome portal makes your FERC document creation, tagging and management a snap. Our team of certified XBRL experts will work with you to create your initial templates and create the most accurate and highest quality filings. We offer both full-service and self-service editing, depending on which process works best for your company's needs. ThunderDome's Linked Excel Data feature and in-line tagging ability will allow you to apply, modify and review XBRL tags in seconds. Our robust editing features and streamlined filing process make submission of filings as smooth as possible.

<https://rdgfilings.com/federal-energy-regulatory-commission-ferc-xbml-filing-solution/>

Systrends USA

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The eFINForms is a web-based application and user-friendly enterprise system that does not require the end user to interact with XBRL or Tagging to the Taxonomy. Our software will contain your previous years Form Submissions provided by FERC, which can be rolled over to create the next Form Filing with ease. It will pre-populate previous years data and maintain all the footnotes. eFINForms will store, manage, generate, and provide reports on all your Form data. It is multi-user and multi-company capable and provides a multi-level approval process.

<https://www.systrends.com/eFINForms-XBML-Software>

Workiva

Contact: Melissa Raber - welcome@workiva.com

Workiva, the leader in XBRL® software, simplifies complex work. Customers trust Workiva's open, intelligent, and intuitive platform to connect data, documents, and teams. The results: improved efficiency, greater transparency, and less risk. Find Workiva, used by more than 70% of top 100 energy companies at <https://www.workiva.com/solutions/ferc-reporting>