DRAFT COST OF SERVICE RULES

Chapter 480-07 WAC

WAC 480-07-510(6).

(6) Cost of service studies. The ~~company's~~ initial filing must~~: (a) I~~include a~~ny~~ cost of service study~~ies~~ that complies with Chapter 480-xxx WAC.~~the company performed or relied on to prepare its proposals; (b) identify all cost studies conducted in the last five years for any of the company's services; and (c) describe the methodology the company used in all such cost studies. If the cost studies are in the form of a model, the company must provide a copy of, or reasonable access to, the model that will enable the commission to verify and modify the model's inputs and assumptions.~~

New Chapter

WAC 480-xxx-010 Purpose.

(1) The purpose of these rules is to establish minimum filing requirements for any cost of service study filed with the commission. These rules are designed to streamline, improve, and promote efficiency in analyzing rate cases, clarity of presentation, and ease of understanding. The minimum filing requirements will allow for comparisons of cost of service studies.

(2) The cost of service study is one factor among many the commission considers when determining rate spread and rate design. The commission may also consider, as appropriate, such factors as fairness, perceptions of equity, economic conditions in the service territory, gradualism, and rate stability.

WAC 480-xxx-020 Applicability.

(1) The rules in this chapter apply to any person or party who files a cost of service study in any proceeding before the commission.

WAC 480-xxx-030 Definitions.

(1) "Allocation factor" means a mathematical expression of the specific cost relationship among revenue requirement and customer classes.

(2) "Cost of service study" means a study that identifies and calculates, using regulatory accounting principles, the extent to which customers in various customer classes cause costs to a utility. This study correlates a utility's costs and revenues with the service provided to customers in each customer class.

(3) "Distribution system peak" means the maximum load of the Washington portion of a utility's distribution system within an identified time frame.

(4) "Load study" means a statistical analysis of interval load data collected from sampled customers to estimate the load profiles of customer classes over a minimum 12-month period. Load profile estimates of customer classes shall be hourly (or sub-hourly) for electric, and daily for natural gas. A load forecast or load projection model is not a substitute for a load study. Load studies should be conducted at a minimum every five years.

(5) "Parity ratio" means a customer class's revenue-to-cost ratio divided by the system's revenue-to-cost ratio. This ratio shall only be presented to the commission as either a percentage or a decimal.

(6) "Revenue-to-cost ratio" means revenue at current rates divided by the revenue requirement. This ratio shall only be presented to the commission as either a percentage or a decimal.

(7) "Special contract" means a negotiated service agreement between a utility and a customer approved pursuant to WAC 480-80-143.

WAC 480-xxx-040 Minimum Filing Requirements.

(1) All cost of service study results must be filed in the following forms, available from the commission: electric cost of service template; and, gas cost of service template. In addition, the following must be provided contemporaneously with all cost of service studies:

(a) Supporting testimony. All cost of service studies must be filed with supporting testimony and exhibits. If supporting testimony or exhibits reference, discuss, or specifically rely on data, models, calculations, or associated information found only in the supporting work papers, the supporting testimony or exhibit must cite to the work papers.

(b) Supporting work papers. In addition to complying with WAC 480-07-140(6)(a)(ii), all supporting models, calculations, data, and associated information must be provided to the parties in a manner that allows for the verification and modification of all of the model's inputs and assumptions. This includes:

(i) All models must be fully functional, which requires, at a minimum, that cells are linked where possible and all formulas are calculable. Wherever practical, all associated calculations necessary to support the results of the study must be consolidated in the same electronic workbook file.

(ii) Any macros in a model must be explained in a narrative. The narrative must also identify where each macro is found in the model.

(iii) Each electronic cost of service workbook must have an index identifying links to any external spreadsheet.

(2) Companies that provide electric and natural gas service must file a cost of service study for their electric and natural gas operations simultaneously. If a company providing electric and natural gas service files a general rate case for only one of its services, the company must apportion the common costs shared by both services in lieu of filing a cost of service study for the service not included in the general rate case.

WAC 480-xxx-050 Cost of Service Study Inputs.

(1) The rate schedule usage data for any cost of service study must come from the best available source: advanced metering technology, including advanced metering infrastructure (AMI) and advanced meter reading (AMR); or, a load study.

(a) For utilities with AMI, the use of data from a load study must be explicitly justified.

(b) For utilities with AMR, data from AMR may be used if granularity of the data meets or exceeds hourly for electric and daily for natural gas. For utilities with AMR with the data granularity required by this subsection, the use of data from a load study must be explicitly justified.

(c) For utilities with other advanced metering technology, data from that metering technology may be used if granularity of the data meets or exceeds hourly for electric and daily for natural gas. For utilities with other advanced metering technology with the data granularity required by this subsection, the use of data from a load study must be explicitly justified.

(d) For utilities that do not have advanced metering technology described in subsections (1)(a), (1)(b), or (1)(c), a load study must be used. Data from special contracts may be used in a load study.

(e) Street lighting schedules may be estimated and, if so, the estimation method must be explicitly presented in testimony and exhibits.

WAC 480-xxx-060 Cost of Service Methodology.

(1) A cost of service study filed with the commission must be calculated using an embedded cost method.

(a) Electric studies shall use the FERC accounts outlined in Table 1 of subsection (3) to functionalize the cost of service. Costs shall be directly functionalized where information is available. Functionalized costs will be classified and allocated by the methods outlined in Table 2 of subsection (3).

(b) Natural gas studies shall use the FERC accounts outlined in Table 3 of subsection (3) to functionalize the cost of service. Costs shall be directly functionalized where information is available. Functionalized costs will be classified and allocated by the methods outlined in Table 4 of subsection (3).

(c) FERC accounts not included in Table 1 or Table 3 of subsection (3) but identified in a cost of service study must be accompanied by a rationale for the functional method chosen in the supporting testimony.

(d) If an allocation method in Table 2 or Table 4 of subsection (3) requires direct assignment, any similar remaining costs in the account may not be allocated to the classes included in the direct assignment; except in circumstances where that class derives a direct benefit from the non-direct assigned costs. If a particular account contains several cost items, of which only certain items in the FERC account are directly-assigned, the cost items that are not directly-assigned will be allocated as appropriate.

(e) The abbreviations for the functionalized costs are:

"Gn" is an abbreviation meaning the generation function, for electric;
"Pr" is an abbreviation meaning the production function, for natural gas;
"Tr" is an abbreviation meaning the transmission function;
"Dist" is an abbreviation meaning the distribution function;
"St" is an abbreviation meaning the storage function;
"Cust" is an abbreviation meaning the customer function; and,
"Comm" is an abbreviation meaning the common function.

(2) In addition to filing a cost of service study as required in subsection (1), a party may file a cost of service study based on a system-wide econometric study or a system-wide marginal cost study.

(3) Tables 1 – 4 of this subsection outline the functionalization, classification, and allocation methods required by subsection (1).

Table 1 – Electric Cost of Service Approved Functionalization Methodologies

Functionalization	FERC Account Numbers
Generation	151, 152, 310 – 317, 330 – 337, 340 – 348, 500 – 515, 535 – 545.1. 546 – 557
Transmission	350 – 359.1, 560 – 573
Distribution	252, 360 – 374, 580 – 598
Customer	235, 901 -903, 905, 907, 908* 909– 910 (Remove 904, it is usage related)
Common	~~920~~ 909 – 935, working capital allowance (909 Major instructional expenses, and 910 major informational expenses as well as 911-917 , sales expense.
Gn/Tr/Dist/Cust/Comm	301 – 303, 403, 403.1, 404 – 407, 904 (uncollectible accounts are driven by usage, not by customer. For example, if an industrial customer goes bankrupt, they could have millions of dollars of uncollectables.)
Gn/Tr/Dist/Comm	105, 107, 108, 111, 154, 165, 281, 282
Allocate based on sub-account	182.3, 253, 254

*Expenses included in account 908 that are related to conservation must be functionalized as generation related. We agree and this is extremely important.

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Table 2 – Electric Cost of Service Approved Classification and Allocation Methodologies

Functionalized Cost	Classification Method	Allocation Method
Generation	Time-differentiated energy ~~Renewable future peak credit with net power costs allocated on energy~~	~~Load net of renewable generation, using 12 coincident peaks.~~
Transmission	Time-differentiated energy ~~Demand~~	~~12 coincident peaks.~~
Distribution Substation	Time-differentiated energy ~~Demand~~	Direct assignment to large customer classes based on load ratio share of substations they are fed from; for this allocator only, the utility may determine "large customer." All other classes use an average of the relative share of the summer distribution system coincident peak and the relative share of the winter distribution system coincident peak.
Distribution Line Transformers	Demand	Secondary customers directly assigned where practical. All remaining costs are allocated using a relative ratio of transformers at current installation costs.
Distribution Poles and Wires	Time-differentiated energy ~~Demand~~	Primary system customers are allocated using the same method as distribution substation. Secondary system customers are allocated using ~~12 distribution system non-coincident peaks.~~time-differentiated energy usage.
Service Lines	Customer	Average installed cost for new service lines multiplied by customer count relative to average installed cost.
Meters	Customer	Average installed cost for new metering multiplied by customer count.
Customer Service/Billing	Customer	All costs assigned by weighted customer counts.
Administrative & General and General Plant	Depends on functionalization of account	Property insurance based on allocated plant; pensions and employee insurance based on salary and wages; FERC fees based on energy; revenue-based fees allocated by class relative share of total revenue. The remainder of administrative & general and general plant costs shall be allocated ~~as deemed appropriate~~based on a subtotal of plant and expenses allocated to each class, including production, transmission and distribution costs. An explanation of

Commented [WG1]: The only costs that should be allocated based on peak demand are the costs of demand response involved during those peak hours. All other assets are used for much broader peaks, and the costs should be assigned to all hours when the assets are providing service.

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Commented [WG2]: Transmission should not be allocated based on demand. Transmission is build to deliver bulk power. Transmission costs should be allocated to the hours when transmission assets are utilized. If they are mostly utilized in off-peak hours, the cots should follow the benefits into those hours.

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Commented [WG3]: This has the effect of providing favorable treatment to some customers. This direct assignment could be applied to all customer classes, on a substation by substation basis.
Some substations are sized to summer loads (irrigation), some are sized to winter loads. This type of allocation proposed here limits the parties from proposing cost-based allocation of these costs where the "average of summer and winter" are not reflective of relevant costs. Apportionment of these costs on a time-differentiated energy basis will ensure that customers using them at high-demand periods will pay an appropriate amount. Basing allocation on demand exempts some customers (using off-peak energy) from any responsibility for costs.

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		the allocation method used must be included in testimony.
Intangible Plant	Depends on functionalization of account	Each type of intangible and amortization in a separate account, allocated using appropriate factors. A materiality threshold of 0.5% of intangible plant will be applied.

Table 3 – Natural Gas Cost of Service Approved Functionalization Methodologies

Functionalization	FERC Account Numbers
Production	710, 711-736, 740-742, 800-813, 804.1, 805.1, 808.1, 808.2, 809.1, 809.2,
Storage	350-356, 352.1, 352.2, 352.3, 814-826, 830-837, 840-843, 842.1-842.3, 843.1-843.9,
Transmission	365.1, 365.2, 366-371, 850-867, 870,
Distribution	374-387, 871-881, 885-894
Customer	901-905, 907, 908*, 909-910
General	389-399, 920-929, 930.1, 930.2, 931
Pr/Tr/Dist/St/Common	101.1, 104-108, 111, 114, 115, 117.1-117.4, 165, 182.3, 186, 190, 228.1-228.4, 229, 235, 252, 253, 255, 281-283, 301-303, 403, 403.1, 404-407, 407.1-407.4, 408.1, 409.1, 410.0-411.1, 411.4, 411.6-411.9, 412-414, 421,
Common	Working capital
Allocate based on sub-account	182.3, 254

*Expenses included in account 908 that are related to conservation must be functionalized as production related.

Table 4 – Natural Gas Cost of Service Approved Classification and Allocation Methodologies

Functionalized Cost	Classification Method	Allocation Method
Distribution Mains	System load factor	Design day
Transportation Main	Follows Distribution Mains	Follows Distribution Mains
Distribution Assets	Demand	Measuring and regulating station equipment is allocated the same as distribution mains.
Services	Customer	Allocated to customer class based on the class average service installation cost. Large customers are directly assigned based on a special study; for only this allocator, it is up to the utility to determine "large customer."
Meters	Customer	Average installed cost for new metering multiplied by customer count.
Customer Service/Billing	Customer	All costs assigned by weighted customer counts.
Administrative & General and General Plant	Depends on functionalization of account	Property insurance based on allocated plant; pensions and employee insurance based on salary and wages; FERC fees based on energy; revenue-based fees allocated by class relative share of total revenue. The remainder of administrative & general and general plant costs shall be allocated as deemed appropriate. An explanation of the allocation method used must be included in testimony.
Intangible Plant	Depends on functionalization of account	Each type of intangible and amortization in a separate account, allocated using appropriate factors. A materiality threshold of 0.5% of intangible plant will be applied.

WAC 480-xxx-070 Exemptions.

(1) A petition for exemption from any part of this chapter pursuant to WAC 480-07-110 must include:

(a) A cost of service study that complies with this chapter;

(b) The proposed cost of service study for which the petitioner seeks an exemption; and

(c) A description of the circumstances under which the exemption should be granted.

(2) Under WAC 480-07-500(4), the commission will reject or require revision of any filing presenting a cost of service study that does not fully comply with this chapter unless the commission has granted an exemption from this chapter.