

## 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) include any cost of service studies 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.~~

PROPOSED

## 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.

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**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.

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## WAC 480-xxx-030 Definitions.

(1) “Allocation factor” means a mathematical expression of the specific cost relationship among revenue requirement and ~~rate schedules~~customer classes.

~~(4)~~(2) “Common function” means costs that can be functionalized to both electric and natural gas operations.

~~(2)~~(3) “Cost of service study” means a study that identifies and calculates, using regulatory accounting rules and principles, the extent to which customers ~~on-in~~ various ~~rate schedules~~customer classes cause costs to a utility. This study correlates a utility’s costs and revenues with the service provided to customers in each ~~rate schedule~~customer class.

~~(4)~~ “Electric Distribution System peak” means the maximum load of the Washington portion of a utility’s distribution system within an identified time frame.

~~(3)~~(5) “Load study” means a statistical analysis of ~~interval~~ load data collected from sampled customers to estimate the load profiles of ~~rate schedules~~customer classes over a minimum 12-month period. Load profile estimates of ~~rate schedules~~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.

~~(4)~~(6) “Parity ratio” means a ~~rate schedule~~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.

~~(5)~~(7) “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.

~~(6)~~(8) “Special contract” means a negotiated service agreement between a utility and a customer approved pursuant to WAC 480-80-143.

~~(7)~~(1) “System peak” means the maximum load of the Washington portion of a utility’s distribution system within an identified time frame.

## 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), aAll 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 ~~possible~~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~~each spreadsheet and its relationship to other spreadsheets.~~

(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 ~~is~~ meets or exceeds hourly ~~or sub-hourly~~ for electric and, ~~or~~ 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.

~~(e)(d)~~ For utilities that do not have advanced metering technology described in subsections (1)(a), (1)(b), or (1)(c), AMI or AMR with the data granularity required by subsection (1)(b); a load study must be used. Data from special contracts may be used in a load study.

~~(d)(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:

“Gen” is an abbreviation meaning the generation function, for electric;

“Prod” is an abbreviation meaning the production function, for natural gas;

“Tran” is an abbreviation meaning the transmission function;

“Dist” is an abbreviation meaning the distribution function;

“Stor” is an abbreviation meaning the storage function, for natural gas;

“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, <del>253</del> <u>152</u> , 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 – 905, 907, 908* 909– 910
Common	920 – 935, working capital allowance
<u>Gen/Tran/Dist/Cust/Comm</u>	301 – 303, 403, 403.1, 404 – 407
<u>Gen/Tran/Dist/GeneralComm</u>	105, 107, 108, 111, <u>154, 165, 281, 282, 389-398</u>
<del>Gn/Tr/Dist/Comm</del>	<del>154, 165, 281, 282</del>
Allocate based on sub-account	182.3, <u>253</u> , 254

\*Expenses included in account 908 that are related to conservation must be functionalized as power-generation related.



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

Functionalized Cost	Classification Method	Allocation Method
Generation	<del>Scenarios</del> Renewable future peak credit with net power costs allocated on energy	<del>Scenarios</del> Load net of renewable generation, using 12 coincident peaks. Net power costs are allocated using annual energy usage at the point of generation.
Transmission	<del>Scenarios</del> Demand	<del>Scenarios</del> 12 coincident peaks.
Distribution Substation	<del>TBD based on the results from the scenarios</del> Demand	Direct assignment to large customer classes based on load ratio share of substations they are fed from; <del>for this allocator only, the utility may determine “large customer.”</del> All other classes use an average of the relative share of the summer <u>distribution system</u> coincident peak and the relative share of the winter <u>distribution system</u> coincident peak.
Distribution Line Transformers	<del>TBD based on the results from the scenarios</del> Demand	Secondary customers directly assigned where <del>possible</del> practical. All remaining costs are allocated using a relative ratio of transformers at current installation costs. <u>Allocation to the lighting class(es) may be based upon its proportion of non-coincident peak to the sum of non-coincident peaks for all secondary voltage customers.</u>
Distribution Poles and Wires	<del>TBD based on the results from the scenarios</del> Demand	Primary system customers are allocated using the same method as distribution substation, <u>where practical.</u> <u>When not practical, allocate using 12 distribution system non-coincident peaks.</u> Secondary system customers are allocated using <u>12 distribution system non-coincident peak</u> <del>the same method as distribution line transformers.</del>
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 <u>or meter</u> count.
Customer Service/Billing	Customer	All costs assigned by weighted customer counts.
Administrative & General and General Plant	Depends on functionalization of account	Property insurance <u>and property taxes</u> 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 <del>of the lower</del> of 0.5% of intangible plant <del>or \$750,000</del> will be applied.
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Table 3 – Natural Gas Cost of Service Approved Functionalization Methodologies

Functionalization	FERC Account Numbers
Production	<del>710, 711-736, 740-742,</del> 800-813, <del>804.1, 805.1, 808.1, 808.2, 809.1, 809.2,</del>
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
<del>Common</del> <del>General</del>	<del>389-399, 920-929, 930.1, 930.2, 931</del> <del>920-935, working capital</del>
<del>Prod/Tran/Dist/General</del> <del>Stor/Common</del>	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, <del>389-398, 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</del>
<del>Common</del>	<del>Working capital</del>
Allocate based on sub-account	182.3, 254

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

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

Functionalized Cost	Classification Method	Allocation Method
Distribution Mains	<del>Scenarios</del> <u>System load factor</u>	<del>Scenarios</del> <u>Design day (peak) and annual throughput (average) based on system load factor.</u>
<del>Transportation</del> <del>Transmission Main</del>	<del>Scenarios</del> <u>Follows Distribution Mains</u>	<del>Scenarios</del> <u>Follows dDistribution mMains.</u>
Distribution Assets	<del>TBD based on the results from the scenarios</del> <u>Demand</u>	<del>Measuring and regulating station equipment is allocated the same as distribution mains</del> <u>Follows distribution mains [TBD on methodology] except large industrial customers are allocated all average related costs, unlike the distribution main allocator which excludes small pipe.</u>
<u>Storage</u>	<u>Determined on a case-by-case basis.</u>	<u>Costs classified as balancing are allocated to all customers based on winter sales.</u> <u>All remaining costs are allocated with a ratio based on average winter sales that exceed average summer sales.</u>
Services	Customer	Allocated to <del>rate schedule</del> <u>customer class</u> 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 <u>or meter</u> count.
Customer Service/Billing	Customer	All costs assigned by weighted customer counts.
Administrative & General and General Plant	Depends on functionalization of account	Property insurance <u>and property taxes</u> 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 <del>of the lower</del> of 0.5% of intangible plant <del>or \$750,000</del> 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~~In addition to the requirements of WAC 480-07-110(2)(c), any petition for exemption from this chapter must provide evidence sufficient to demonstrate:~~

(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.

~~(a) The proposal significantly improves the accuracy of the cost of service study in comparison with a cost of service study complying with this chapter, including:~~

~~(i) A detailed explanation of how the proposal significantly improves the accuracy of the cost of service study; and,~~

~~(ii) A description of the conditions under which the proposal should be applied, and how the conditions are currently met.~~

~~(b) The proposal represents improvements so significant and compelling that the commission should consider incorporating the proposal into this chapter.~~

(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 a commission order has granted an exemption from this chapter.