

**Chapter 480-85 WAC**  
**ELECTRIC AND NATURAL GAS COST OF SERVICE**

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**WAC 480-85-010 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.

[Statutory Authority: RCW 80.01.040, 80.04.160 and chapter 80.28 RCW. WSR 20-15-024 (Docket UE-170002 and UG-170003, General Order R-599), § 480-85-010, filed 7/7/20, effective 8/7/20.]

**WAC 480-85-020 Applicability.** The rules in this chapter apply to any person or party who files a cost of service study in any proceeding before the commission.

[Statutory Authority: RCW 80.01.040, 80.04.160 and chapter 80.28 RCW. WSR 20-15-024 (Docket UE-170002 and UG-170003, General Order R-599), § 480-85-020, filed 7/7/20, effective 8/7/20.]

**WAC 480-85-030 Definitions.** (1) "Allocation factor" means a mathematical expression of the specific cost relationship among revenue requirement and customer classes.

(2) "Common function" means costs that can be functionalized to both electric and natural gas operations.

(3) "Cost of service study" means a study that identifies and calculates, using regulatory accounting rules and 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.

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

(5) "Load study" means a statistical analysis of load data collected from sampled customers to estimate the load profiles of customer classes over a minimum twelve-month period. Load profile estimates of customer classes shall be hourly (or subhourly) for electric, and daily for natural gas. A load forecast or load projection model is not a substitute for a load study.

(6) "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.

(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.

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

[Statutory Authority: RCW 80.01.040, 80.04.160 and chapter 80.28 RCW. WSR 20-15-024 (Docket UE-170002 and UG-170003, General Order R-599), § 480-85-030, filed 7/7/20, effective 8/7/20.]

**WAC 480-85-040 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. 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.

[Statutory Authority: RCW 80.01.040, 80.04.160 and chapter 80.28 RCW. WSR 20-15-024 (Docket UE-170002 and UG-170003, General Order R-599), § 480-85-040, filed 7/7/20, effective 8/7/20.]

**WAC 480-85-050 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 subsection (1), (2), or (3) of this section, 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.

(2) Rate schedule usage data for any cost of service study must not be older than five years.

[Statutory Authority: RCW 80.01.040, 80.04.160 and chapter 80.28 RCW. WSR 20-15-024 (Docket UE-170002 and UG-170003, General Order R-599), § 480-85-050, filed 7/7/20, effective 8/7/20.]

**WAC 480-85-060 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 in subsection (3) of this section 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 in subsection (3) of this section.

(b) Natural gas studies shall use the FERC accounts outlined in Table 3 in subsection (3) of this section 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 in subsection (3) of this section.

(c) FERC accounts not included in Table 1 or Table 3 in subsection (3) of this section 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 in subsection (3) of this section 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 nondirect 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:

"Comm" is an abbreviation meaning the common function;

"Cust" is an abbreviation meaning the customer function;

"Dist" is an abbreviation meaning the distribution function;

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

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

"Stor" is an abbreviation meaning the storage function, for natural gas; and

"Tran" is an abbreviation meaning the transmission function.

(2) In addition to filing a cost of service study as required in subsection (1) of this section, a party may file a cost of service study based on a system-wide econometric study, a system-wide marginal cost study, or an embedded cost of service study with modifications to the methodologies outlined in Tables 1 through 4 in subsection (3) of this section provided that each modification is explained in narrative testimony and the party shows that each modification materially improves the cost of service study and is in the public interest.

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

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, 901-905, 907, 908* 909-910
Common	920-935, working capital allowance
Gen/Tran/Dist/Cust/Comm	301-303, 403, 403.1, 404-407
Gen/Tran/Dist/Comm	105, 107, 108, 111, 154, 165, 281, 282, 389-398
Allocate based on subaccount	182.3, 253, 254

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

Table 2  
Electric Cost of Service Approved Classification and Allocation Methodologies

Functionalized Cost	Classification Method	Allocation Method
Generation	Renewable future peak credit with net power costs allocated on energy	Load net of renewable generation, using 12 coincident peaks. Net power costs are allocated using annual energy usage at the point of generation.
Transmission	Demand	12 coincident peaks.
Distribution Substation	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.

Functionalized Cost	Classification Method	Allocation Method
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. Allocation to the lighting class(es) may be based upon its proportion of noncoincident peak to the sum of noncoincident peaks for all secondary voltage customers.
Distribution Poles and Wires	Demand	Primary system customers are allocated using the same method as distribution substation, where practical. When not practical, allocate using 12 distribution system noncoincident peaks. Secondary system customers are allocated using 12 distribution system noncoincident peaks.
Service Lines	Customer	Average installed cost for new service lines multiplied by customer count relative to total installed cost.
Meters	Customer	Average installed cost for new metering multiplied by customer or meter count.
Customer Service/Billing	Customer	All costs assigned by weighted customer counts.
Administrative & General and General Plant	Depends on functionalization of account	Property insurance and property taxes 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.

Table 3  
Natural Gas Cost of Service Approved  
Functionalization Methodologies

Functionalization	FERC Account Numbers
Production	800-813
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
Common	920-935, working capital
Prod/Tran/Dist/Stor/Comm	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, 389-398, 403
Allocate based on subaccount	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	Demand	Direct assignment of distribution mains to a single customer class where practical. All other costs assigned based on design day (peak) and annual throughput (average) based on system load factor.
Transmission Main	Follows distribution mains	Follows distribution mains.
Distribution Assets	Follows distribution mains	Follows distribution mains.
Storage	Determined on a case-by-case basis	Costs classified as balancing are allocated to all customers based on winter sales.  All remaining costs are allocated to sales customers with a ratio based on average winter sales that exceed average summer sales.
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 or meter count.
Customer Service/Billing	Customer	All costs assigned by weighted customer counts.
Administrative & General and General Plant	Depends on functionalization of account	Property insurance and property taxes 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.

[Statutory Authority: RCW 80.01.040, 80.04.160 and chapter 80.28 RCW. WSR 20-15-024 (Docket UE-170002 and UG-170003, General Order R-599), § 480-85-060, filed 7/7/20, effective 8/7/20.]

**WAC 480-85-070 Exemptions from rules in chapter 480-85 WAC.** The commission may grant an exemption from the provisions of any rule in this chapter in the same manner and consistent with the standards and according to the procedures set forth in WAC 480-07-110 (exceptions from and modifications to the rules in this chapter; special rules).

[Statutory Authority: RCW 80.01.040, 80.04.160 and chapter 80.28 RCW. WSR 20-15-024 (Docket UE-170002 and UG-170003, General Order R-599), § 480-85-070, filed 7/7/20, effective 8/7/20.]