**Washington**

**West Control Area Inter-Jurisdictional Allocation Methodology (WCA) Manual**



**Overview**

Pacific Power & Light Company, a division of PacifiCorp, uses the West Control Area inter-jurisdictional allocation methodology (WCA) for the purpose of allocating its costs to customers in the state of Washington. This method was adopted by the Washington Utilities and Transportation Commission in Docket No. UE-061546. In its final order, the Commission stated, “We approve PacifiCorp’s proposed West Control Area (WCA) inter-jurisdictional cost-allocation for Washington modified by … Staff’s adjustments …. We approve the Company’s recommended five-year trial period and Staff’s recommended ‘oversight committee’.”

(Order 08, ¶ 43)

The WCA consists of PacifiCorp’s California, Oregon and Washington jurisdictions. Generation and transmission resources assigned to the WCA consist of company-owned resources located within the PacifiCorp West balancing authority are (PACW) or with physical capability to deliver energy into the WCA. The WCA includes: (1) the Hermiston and Chehalis natural-gas-fired generating plants; (2) the Jim Bridger and Colstrip Unit 4 coal-fired generating plants; (3) the Leaning Juniper, Marengo, Marengo II, and Goodnoe Hills wind generating facilities; (4) the Lewis River, North Umpqua, Klamath, and Prospect (Rogue River) major hydroelectric projects, as well as minor hydroelectric projects in California, Oregon, and Washington; (5) wholesale contracts and sales with third parties, including the Bonneville Power Administration (BPA); (6) power purchase agreements with qualifying facilities (QF) located in the PACW[[1]](#footnote-1).

The WCA identifies the costs associated with these resources, purchases, and sales, and allocates them to Washington based on Washington’s relative contribution to the west control area’s demand and energy requirements.

**Purpose of this Manual**

This allocation manual illustrates how the WCA factors are calculated and how they are used in determining Washington’s revenue requirement. The Energy Allocation Notes below provide general explanations on methods of allocation. Part II of the manual explains each factor in detail, how it is calculated, and gives a brief description of the types of costs allocated on each factor. Part II provides the calculation of factors using calendar year 2013 data. Part III is a list of PacifiCorp’s accounts that shows the factors used to allocate the costs of those accounts.

**Energy Allocation Notes**

**I. Classification of Resource Costs**

All resource fixed costs, wholesale contracts, and short-term purchases and sales are classified as 75 percent demand-related, 25 percent energy-related. All costs associated with fuel, non-firm purchases, and sales are classified as 100 percent energy-related.

**II. Allocation of Resource Costs and Wholesale Revenues**

Generation and transmission resources are assigned to either the east control area (ECA) or the WCA. The factors used to allocate these costs are the Control Area Generation East (CAGE) and Control Area Generation West (CAGW) factors. Certain generation and transmission expenses such as administration and engineering cannot be assigned to specific resources. These costs are allocated using the System Generation (SG) factor. Control area fuel-related costs and non-firm sales and purchase are allocated using the control area energy factors; Control Area Energy West (CAEW) and Control Area Energy East (CAEE). The factors used to allocate costs associated with the Jim Bridger plant are weighted to reflect the fact that the total output of the plant cannot be delivered to the west control area. Resource and fixed costs related to the Jim Bridger Plant are allocated using the Jim Bridger Generation (JBG) factor. Fuel-related costs associated with the Jim Bridger Plant are allocated using the Jim Bridger Energy (JBE) factor. The factors used to allocate wheeling revenues are based on the control area allocation of net transmission plant. Firm wheeling revenues are allocated using the Wheeling Revenue—Generation (WRG) factor. Non-firm wheeling revenues are allocated using the Wheeling Revenue—Energy (WRE) factor.

**III. Assignment of Distribution Costs**

All distribution-related expenses and investments that can be identified with a specific state are directly assigned to the state in which they are located. Certain distribution costs such as administration and engineering that cannot be assigned to a specific state are allocated using the System Net Plant Distribution (SNPD) factor.

**IV. Allocation of Administrative and General Costs**

Administrative and general expenses are allocated on the following factors: state-specific —Situs (S); customer-related—Customer Number (CN); and general administrative and general expenses—System Overhead (SO). General and Intangible plant are allocated on the following factors: state-specific—Situs; customer-related—CN; generation and transmission—SG, CAGW, JBG, CAGE; fuel-related – SE, CAEW, JBE, CAEE; general office—SO.

**PacifiCorp WCA Allocation Manual – Part II**

1. **SYSTEM ENERGY (SE)**



**System Energy** (SE) is based on each state's annual energy (Mwh) as a percentage of total system annual (Mwh). The SE factor is used to allocate fuel and non-firm energy-related costs that are general in nature and cannot be assigned to a control area.

SE (WA) = 4,473,152 divided by the sum of the Total energy for all states = 7.5698%.

**System Capacity** (SC) is based on each state's contribution to the total system's 12 monthly coincidental peaks (MW). The SC factor is not used to allocate any costs. It is used to develop the capacity weighting for the System Generation (SG) factor below.

SC (WA) = 7,997 divided by the sum of all states = 8.0177%.

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SC (WA) = 7,997 divided by the sum of all states = 8.0177%.

1. **SYSTEM GENERATION (SG)**

**System Generation** (SG) is calculated using the SE and SC factors [i & ii above]. It is based on a 75% capacity weighting (SC) and 25% energy weighting (SE). SG is used to allocate generation and transmission related costs that cannot be assigned to a specific control area.

SG (WA) = (8.0177% x 75%) + (7.5698% x 25%) = 7.9057%.

1. **SITUS (S)**

**Situs** (S) directly assigns 100 percent of costs to one state. This factor is used to assign general business revenues, miscellaneous revenues, distribution costs, and customer-related costs that can be identified with a specific state.

1. **SYSTEM OVERHEAD (SO)**



**System Overhead** (SO) is based on the allocation of total gross plant. The SO factor is calculated by dividing the gross plant allocated to each state (excluding SO allocated plant) by total Company gross plant. The SO factor is used to allocate general and intangible plant and administrative & general expenses.

SO (WA) = 1,605,558,188 divided by 23,425,347,112 =6.8539%.

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1. **CUSTOMER NUMBER (CN)**



**The Customer Number** (CN) is based on each state's number of customers compared to total company customers. The CN factor is used to allocate customer-related plant and expenses.

CN (WA) = 132,784 divided by 1,919,575 = 6.9174%.

SO (WA) = 1,605,558,188 divided by 23,425,347,112 =6.8539%.

1. **WEST CONTROL AREA – COINCIDENTAL PEAKS**



**West Control Area - Coincidental Peak** is based on each WCA state's contribution to the control area 12 monthly coincidental peaks (MW). This factor is not used to allocate any costs. It is used to develop the capacity weighting for the Control Area Generation West (CAGW) factor below.

1. **EAST CONTROL AREA – COINCIDENTAL PEAKS**



**East Control Area - Coincidental Peak** is based on each ECA state's contribution to the control area 12 monthly coincidental peaks (MW). This factor is not used to allocate any costs. It is used to develop the capacity weighting for the Control Area Generation East (CAGE) factor below.

1. **CONTROL AREA ENERGY WEST (CAEW)**



**Control Area Energy West** (CAEW) is based on each WCA state's annual energy (Mwh) as a percentage of the west control area's annual energy (Mwh). The CAEW factor is used to allocate fuel and non-firm energy-related costs that are assigned to the west control area.

CAEW (WA) = 4,473,152 divided by 19,669,666 = 22.7414%.

1. **CONTROL AREA ENERGY EAST (CAEE)**



**Control Area Energy East (CAEE)** is based on each ECA state's annual energy (MWh) as a percentage of the east control area's annual energy (MWh). The CAEE factor is used to allocate fuel and non-firm energy-related costs that are assigned to the east control area.

1. **CONTROL AREA GENERATION EAST (CAGE)**

**Control Area Generation East** (CAGE) is calculated using the ECA Coincidental Peak and CAEE factors [viii & x above]. It is based on a 75% capacity weighting (ECA 12 CP) and 25% energy weighting (CAEE). CAGE is used to allocate generation and transmission related costs that are assigned to the east control area.

**Control Area Generation East** (CAGE) is calculated using the ECA Coincidental Peak and CAEE factors [viii & x above]. It is based on a 75% capacity weighting (ECA 12 CP) and 25% energy weighting (CAEE). CAGE is used to allocate generation and transmission related costs that are assigned to the east control area.

1. **CONTROL AREA GENERATION WEST (CAGW)**

**Control Area Generation West** (CAGW) is calculated using the WCA Coincidental Peak and CAEW factors [vii & ix above]. It is based on a 75% capacity weighting (WCA 12 CP) and 25% energy weighting (CAEW). CAGW is used to allocate generation and transmission related costs that are assigned to the west control area.

CAGW (WA) = (23.1994% x 75%) + (22.7414% x 25%) = 23.0849%.

1. **GROSS PLANT SYSTEM (GPS)**



**Gross Plant System (GPS)** is based on the allocation of total gross plant. The GPS factor is calculated by dividing the gross plant allocated to each state by total Company gross plant. The GPS factor is used to allocate property taxes.

GPS (WA) = 1,647,982,661 divided by 24,044,326,862 = 6.8539%.

1. **SYSTEM NET PLANT (SNP)**



**System Net Plant** (SNP) factor is based on the allocation of total net plant. The SNP factor is calculated by dividing the net plant allocated to each state by the total company net plant. The SNP factor is used to allocate interest expense and certain income tax related items.

SNP (WA) = (WA Gross Plant, 1,647,982,661 (xiii) less WA Accumulated depreciation 655,770,992 (xiv)) divided by (Total Company Gross Plant, 24,044,326,862 (xiii) less Total Company Accumulated. Depreciation, 8,094,221,982 (xiv)) = 6.2207%.

1. **SYSTEM NET PLANT DISTRIBUTION (SNPD)**



**System Net Plant Distribution (SNPD)** factor is based on the allocation of net distribution plant. The SNPD factor is calculated by dividing net distribution plant allocated to each state by the total company net distribution plant. The SNPD factor is used to allocate distribution related expenses that cannot be directly assigned to a specific state.

SNPD (WA) = 225,755,683 divided by 3,594,646,393 = 6.2803%

1. **CONTRIBUTIONS IN AID OF CONSTRUCTION (CIAC)**

**Contributions in Aid of Construction (CIAC)** factor is based on the allocation of net distribution plant. The CIAC factor is calculated by dividing net distribution plant allocated to each state by the total company net distribution plant. The CIAC factor is used to allocate a Schedule M item related to contributions received in aid of construction.

CIAC (WA) = 6.2803%

1. **SYSTEM NET PLANT TRANSMISSION (SNPT)**



**System Net Plant Transmission (SNPT)** factor is based on the allocation of net transmission plant. The SNPT factor is calculated by dividing net transmission plant allocated to each state by the total company net transmission plant. The SNPT factor is not used to directly allocate any costs. It is used in the calculation of the Wheeling Revenue - Generation (WRG) and Wheeling Revenue - Energy (WRE) factors (see xx and xxi below).

SNPT (WA) = 175,806,582 divided by 3,681,773,778 = 4.7751%

1. **JIM BRIDGER GENERATION (JBG)**



**Jim Bridger Generation (JBG)** factor is based on two other factors; CAGW [xi above] and Jim Bridger's WCA transmission capacity. Jim Bridger's WCA transmission capacity is 99.43 %. The transmission capacity is calculated by dividing Jim Bridger's WCA transmission capacity by the Jim Bridger plant nameplate capacity (see calculation above. The JBG factor is used to allocate production and transmission plant and operating costs associated with the Jim Bridger plant.

JBG (WA) = CAGW of 23.0849% x 99.43% = 22.953%

1. **JIM BRIDGER ENERGY (JBE)**

**Jim Bridger Energy (JBE)** factor is based on two other factors; CAEW [viii above] and Jim Bridger's WCA transmission capacity (see calculation above). The JBE factor is used to allocate fuel related costs associated with the Jim Bridger plant.

JBE (WA) = CAEW of 22.7414% x 99.43% = 22.6123%

1. **WHEELING REVENUE – GENERATION (WRG)**

**Wheeling Revenue Generation (WRG)** factor is based on two other factors; CAGW (xii above) and SNPT for the WCA states (Oregon, Washington and California (see xv above)). The WRG factor is used to allocate firm wholesale wheeling revenues.

WRG (WA) = CAGW of 23.0849% x SNPT of 20.6848% (sum of CA, OR, WA) = 4.7751%.

1. **WHEELING REVENUE – ENERGY (WRE)**

**Wheeling Revenue Energy (WRE)** factor is based on two other factors; CAEW (ix above) and SNPT for the WCA states (Oregon, Washington and

California (see xv above)). The WRE factor is used to allocate non-firm wholesale wheeling revenues.

WRE (WA) = CAEW of 22.7414% x SNPT of 20.6848% (sum of CA, OR, WA) = 4.7040%.

1. **BAD DEBT EXPENSES**



**Bad Debt Expense (BADDEBT)** factor is based on balances in FERC Account 904. The BADDEBT factor is calculated by dividing each state’s balance of account 904 by the total Company account 904 balance. This factor is used to allocate only the situs portion of deferred federal income taxes relating to unrecoverable customer account balances.

BADDEBT (WA) = 1,542,629 divided by 12,924,355 = 11.9358%

1. **TROJAN DECOMMISSIONING ALLOCATOR (TROJD)**



**Trojan Decommissioning Allocator (TROJD)** was created in order to allocate the costs of decommissioning the Trojan Nuclear Plant which closed in 1993. This factor is calculated by dividing each WCA states' portion of the decommissioning costs by the WCA total in account 228.42.

TROJD (WA) = 3,458,561 divided by 15,021,880 = 23.0235%

1. **ACCUMULATED INVESTMENT TAX CREDIT (ITC)**



**Accumulated Investment Tax Credit (ITC)** ITC 84, ITC 85, ITC 86, ITC 88, ITC 89 & ITC 90 are the factors used to allocate the rate base reduction called Unamortized ITC (Investment Tax Credit) in FERC Account 255. These are static factors that were calculated in the year the ITC originated and do not change.

1. **DEFERRED INCOME TAX EXPENSE (DITEXP)**



**Deferred Income Tax Expenses (DITEXP)** is generated by the Company's tax model, "Power Tax" based on state allocations of property-related deferred tax expenses. This factor is used only for allocating property-related deferred tax expense calculated in adjustments.

1. **DEFERRED INCOME TAX BALANCE (DITBAL)**



**Deferred Income Tax Balance (DITBAL)** is generated by the Company's tax model, "Power Tax" based on state allocations of property-related deferred tax balances. This factor is used to allocate property related deferred income tax balances.

1. **TAX DEPRECIATION (TAXDEPR)**



**Tax Depreciation (TAXDEPR)** is based on the state allocation of functional property-related tax depreciation. This factor is used to allocate the Schedule M adjustment for property-related tax depreciation.

1. **SCHEDULE M DEPRECATION EXPENSES (SCHMDEXP)**



**Schedule M Depreciation Expenses (SCHMDEXP)** is based on the book depreciation per state as a percentage of total Company book depreciation. This factor is used to allocate the Schedule M for book depreciation.

**PacifiCorp WCA Allocation Manual – Part III**

**Allocation factor applied to each component of revenue requirement**

































































































1. In this rate case, the Company proposes to include all QFs located in Oregon, California, and Washington in rates. Please refer to the direct testimony of Mr. Gregory N. Duvall. [↑](#footnote-ref-1)