Tiered Rate Methodology Rate Case

Tiered Rate Methodology

Initial Proposal

May 2008

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Tiered Rate Methodology
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TIERED RATE METHODOLOGY DEFINITIONS

Augmentation. A component of Tier 1 System Resources; BPA power purchases or resource acquisitions necessary to achieve an annual energy load-resource balance. The amount of Augmentation included in Tier 1 System Resources is subject to the limits of Augmentation established in this TRM. See section 3.2.

Average System Cost (ASC). The rate charged by a customer for BPA's purchase of power from that customer under section 5(c) of the Northwest Power Act. ASC is the quotient of contract system costs divided by contract system load.

Average System Cost Methodology or ASC Methodology. The methodology, as may be amended or superseded, used to determine ASC, as developed by BPA pursuant to section 5(c)(7) of the Northwest Power Act.

Balancing Authority Area. The collection of generation, transmission, and loads within the metered boundaries of a Balancing Authority (formerly called "control area"). The Balancing Authority maintains load-resource balance within a Balancing Authority Area. The Balancing Authority is responsible for integrating resource plans ahead of time, maintaining load-interchange-generation balance within a Balancing Authority Area, and supporting interconnection frequency in real time.

Balancing Power Purchases. BPA market power purchases or resource acquisitions made for periods within a year in which the output of the Federal system (including Augmentation) is insufficient, or is forecast to be insufficient, to meet BPA's loads and any other system obligations. See section 3.3.

Behind-the-Meter Resources. Generating resources situated such that the output of the resource flows directly to serve customer load without flowing through a BPA meter.

Billing Determinant. For a particular product or service, the amount of that product or service for which a customer is billed.

CHWM Contract. A Regional Dialogue Contract that contains a Contract High Water Mark (CHWM), allowing the customer to purchase power at tiered rates.

Composite Cost Pool. The Tier 1 Cost Pool that is the cost basis for the Composite Customer Rate.

Composite Customer Charge. The product of a customer's Tier 1 Cost Allocator (TOCA) multiplied by the Composite Customer Rate. This charge is the means of recovering the costs allocated to the Composite Cost Pool and applies to customers purchasing the Load Following, Block, and Slice/Block products. See section 5.1.

Composite Customer Rate. The rate that recovers the costs allocated to the Composite Cost Pool. This rate is expressed in dollars per one percent share of service from Tier 1 System Resources. See section 5.1.4.

Conservation Adjustment. The final step taken to determine the CHWM: BPA adjusts the preliminary CHWM for credited conservation. See Attachment D.

Contract Demand Quantity (CDQ). The historical quantity of demand that is subtracted from the Customer System Peak (CSP) as part of the process of determining the customer's Demand Charge Billing Determinant. See section 5.3.2.

Contract High Water Mark (CHWM). The amount used to define each customer's access to Tier 1-priced power, expressed in average megawatts. CHWM is equal to the customer's Eligible Load, proportionately scaled to the firm critical output of Tier 1 System Resources, and adjusted for credited conservation. The CHWM is specified in each eligible customer's CHWM Contract. See section 4.2.

Cooling Degree Days (CDD). A quantitative index that reflects demand for energy to cool homes and businesses; the summation of positive differences between the mean daily temperature and 65 degrees Fahrenheit for a specified unit of time.

Cost Allocation Method. The ratemaking step of assigning costs to Cost Pools in the process of developing rates for BPA products and services; in the TRM, the basis for setting Tier 1 and Tier 2 Rates. See section 2.2.

Cost Allocation Table. The table (Table 2.1 in this TRM) that implements the Cost Allocation Method. See section 2.2.

Cost Pool. A group of specific costs defined by the same cost driver(s) and allocated to a specific product, service, or customer type. See section 2.2.

Customer Charges. Each Customer Charge is the product of a Billing Determinant multiplied by a rate. Three Customer Charges for each Rate Period will collect the majority of Tier 1 Costs: 1) a Composite Customer Charge; 2) a Non-Slice Customer Charge; and 3) a Slice Customer Charge. Each customer will pay its prorated share of each Cost Pool (Composite, Non-Slice, and Slice). See section 5.1.

Customer System Peak (CSP). The customer's single highest Heavy Load Hour Tier 1 Load hourly energy purchase from BPA during each month. See section 5.3.

Demand Charge. The product of a customer's demand Billing Determinant multiplied by the applicable Demand Rate. See section 5.3.

Demand Rate. The rate BPA charges for the demand purchased by the customer. See section 5.3.3.

Direct-Service Industrial Customers (DSIs). The industrial customers that contract for the purchase of power from BPA for direct consumption.

Discretionary Obligations. Obligations placed on BPA resources that are the result of power marketing decisions by BPA's Power Services organization or its successor.

Diurnal Flattening Service. A service that converts a variable or intermittent resource into an equivalent resource that would generate power in a shape that is flat within each of the 24 Heavy Load Hour and Light Load Hour periods of a year. See section 8.1.

Eligible Load. The individual customer load eligible for BPA's determination of the CHWM, calculated by subtracting Existing Resource amounts from adjusted Measured FY 2010 Load.

Energy Savings. Any reduction in electric power consumption that is the result of increases in the efficiency of generation, distribution, or end use.

Existing Resources. Customer resource amounts BPA uses to calculate a customer's CHWM. Subject to exceptions identified in the Policy, these resources generally include the customer's dedicated non-Federal resources declared to serve its load in FY 2010 under its Subscription Contract and retail consumer resources that the customer dedicates to serve its load under the CHWM Contract. The resource amounts used to determine each customer's HWMs are established in a process external to the TRM and are set as shown in Attachment B. These resource amounts are subject to revision for the purposes of determining Net Requirement and for resource removal under BPA's 5(b)9(c) Policy as updated for the implementation of the Policy.

Federal Base System (FBS). Defined in the Northwest Power Act, section 3(10).

Federal Columbia River Power System (FCRPS). The integrated power system that includes the transmission system constructed and operated by BPA and the hydroelectric dams constructed and operated by the U.S. Army Corps of Engineers and the Bureau of Reclamation in the Pacific Northwest.

Fiscal Year (FY). For the Federal Government and this TRM, the period beginning October 1 and ending the following September 30, unless amended by Congress.

Forced Outage Reserves. An amount of BPA peak generating capability planned to be available to serve loads during forced outages. See section 8.3.

Forecast Contract High Water Mark (FHWM). A 2008 forecast of each customer's CHWM, used as a preliminary planning tool but not included in CHWM Contracts. See section 4.

Forecast Net Requirement. The forecast of each customer's Net Requirement that BPA performs in the RHWM Process. The Forecast Net Requirement includes a forecast of each customer's Total Retail Load and the expected application of Non-Federal Resources. It is not the determination of a customer's actual Net Requirement.

Forecast Year. The Fiscal Year ending one full year prior to the commencement of a Rate Period.

Heating Degree Days (HDD). A quantitative index that reflects demand for energy to heat homes and businesses; the summation of negative differences between the mean daily temperature and 65 degrees Fahrenheit for a specified unit of time.

Implementation Manual. The *BPA Conservation Rate Credit and Conservation Acquisition Agreement Implementation Manual* (or its successor) released by BPA's Energy Efficiency organization.

Investor-Owned Utility (IOU). A privately owned utility organized under state law as a corporation to provide electric power service and earn a profit for its stockholders.

Irrigation Rate Mitigation. A BPA fixed percentage rate discount for power purchases at Tier 1 Rates to utilities that resell power to irrigators during May through September. See section 10.2.

Load Shaping Charge. The amount billed a customer for Load Shaping Service, equal to the product of the Load Shaping Rate and the applicable Billing Determinant. See section 5.2.

Load Shaping Rate. The rate that recovers the cost for Load Shaping Service and also charges or credits the customer for differences in actual load compared to the Forecast Net Requirement. See section 5.2.2.

Load Shaping Service. Management of resources to serve customer loads with monthly/diurnal shapes that differ from the shape of the firm critical output of Tier 1 System Resources. This product must be purchased by each customer purchasing the Block product, including the Block portion of the Slice/Block product, or the Load Following product.

Low Density Discount (LDD). The discount provided by BPA to customers whose retail rates have been adversely affected by low system densities, as authorized by section 7(d)(1) of the Northwest Power Act. See section 10.1.

Measured FY 2010 Load. The historical FY 2010 Total Retail Load of a customer.

Melded Costs or Rates. The result of combining the costs of various products or services for purposes of establishing rates.

Net Requirement. The amount of Federal power that a customer is entitled to purchase from BPA to serve its consumer load. A customer's Net Requirement is equal to the difference between its consumer firm loads and the capability of non-Federal generation and power obtained through contracts that the customer uses to serve those loads, as determined pursuant to section 5(b) of the Northwest Power Act.

New Large Single Load (NLSL). A large single load as defined in section 3(13) of the Northwest Power Act and in BPA's NLSL policy. See section 4.2.1.

New Publics. Publicly owned utilities or Federal agencies that apply for service from BPA after the initial CHWM Contracts are executed. See section 4.2.6.

New Resources. Those dedicated, specific customer, or retail consumer resources or Unspecified Resource amounts applied to serve customer load after September 30, 2006, and not used by BPA to calculate a customer's CHWM.

New Tribal Utility. A utility formed by a tribal government, as defined in the Policy, to serve the retail electric load within its service territory. See section 4.2.6.4.

Non-Federal Power. Electric power produced at facilities not owned, operated, or contracted by BPA.

Non-Federal Resources. Generating facilities or a source of electric power or capability not owned, operated, or contracted by BPA.

Non-Slice Cost Pool. The Cost Pool containing costs or credits that are specifically tied to the operation or administration of the Load Following or Block product, including the Block portion of the Slice/Block product, and/or the associated CHWM Contract. See section 2.2.3.

Non-Slice Customer Charge. The product of a customer's Non-Slice TOCA multiplied by the Non-Slice Customer Rate. The Non-Slice Customer Charge is designed to recover the costs allocated to the Non-Slice Cost Pool and applies to customers purchasing the Load Following or Block products, including the Block portion of the Slice/Block product.

Non-Slice Customer Rate. The rate that recovers costs allocated to the Non-Slice Cost Pool. This rate is expressed in dollars per one percent share of service from Tier 1 System Resources.

Northwest Power Act. The Pacific Northwest Electric Power Planning and Conservation Act, 16 U.S.C. § 839, Public Law No. 96-501.

Overhead Cost Adder. A uniform adder BPA will include in the Tier 2 Cost Pools to account for non-specific costs of serving load at Tier 2 Rates. See sections 2.2.4 and 6.3.3.

Planning, Tracking, and Reporting System (PTR). The system used by utilities to report conservation achievements to BPA.

Point of Delivery (POD). The point where power is transferred from a transmission provider to a customer.

Policy. As used in this TRM, BPA's Long-Term Regional Dialogue Final Policy, published July 2007, as amended.

Power Services. The organization, or its successor organization, within BPA that is responsible for the management and sale of Federal power from the FCRPS.

Publics. Publicly owned utilities and Federal agencies eligible to purchase requirements power from BPA.

Rate Case Year. The Fiscal Year ending prior to the commencement of a Rate Period. The Rate Case Year immediately follows the Forecast Year and is the year in which the rate case is conducted.

Rate Period. The effective period of a particular rate schedule, generally two years; the period over which a rate is designed to recover its allocated costs.

Rate Period High Water Mark (RHWM). The amount used to define each customer's eligibility to purchase power at a Tier 1 price for the relevant Rate Period, subject to the customer's Net Requirement, expressed in average megawatts. RHWM is equal to the customer's CHWM as adjusted for changes in Tier 1 System Resources. The RHWM is determined for each eligible customer in the RHWM Process preceding each rate case. See section 4.3.

Regional Dialogue Contract. As stated in the Policy, BPA will offer Regional Dialogue contracts to all its customers—Publics, Investor-Owned Utilities, and Direct-Service Industrial Customers—for power service commencing October 1, 2011. These contracts will include new 20-year contracts for publics; RPSAs; and contracts for power service to the DSIs pursuant to section 5(d) of the Northwest Power Act.

Residential Exchange Program (REP). The arrangement, based on section 5(c) of the Northwest Power Act, whereby regional utilities sell BPA an amount of electric power equal to their residential and small-farm load at their Average System Cost (ASC) in exchange for the purchase of an equal amount of Federal electric power at the PF Exchange rate, and pass on the cost benefits to their residential and small-farm consumers in the form of lower retail rates.

Residential Purchase and Sale Agreement (RPSA). A contract to implement the Residential Exchange Program between a customer and BPA.

Resource Shaping Charge. The customer-specific charge or credit that adjusts for the difference in value between a planned resource energy shape that is flat within each of the individual monthly/diurnal periods of the year and an equivalently sized flat annual block. See section 8.2.

Resource Shaping Rate. The rate that adjusts for the difference in value between a planned resource energy shape that is flat within each of the individual monthly/diurnal periods of the year and an equivalently sized flat annual block; equal to the Load Shaping Rate. See section 8.2.

Resource Support Services (RSS). The services provided to Federal or non-Federal resources to deem the resource suitable for serving above-RHWM load of Load Following customers. RSS also is available in some circumstances to customers purchasing other products. See section 8.

RHWM Process. The public process conducted during the Forecast Year prior to each rate case beginning with the WP-14 rate case, in which RHWMs and above-RHWM loads for each customer are determined for that rate case. BPA will determine the available output of Tier 1 System Resources in the RHWM Process, including Augmentation needs. BPA also will calculate each customer's Forecast Net Requirement for the Rate Period for the RHWM Process. See section 4.3.

Secondary Crediting Service. A service to allow customers to dedicate to load the entire output of an Existing Resource that has a firm critical component and a secondary energy component and receive monetary credits for the value of the secondary component. See section 8.4.

Shared Rate Plan. A service whereby each participating customer pays a rate calculated by combining the costs of all participating customers' expected purchases at the Composite Customer Rate, the Non-Slice Customer Rate, and the Tier 2 Load Growth Rate. See section 7.

Slice Cost Pool. Costs that are allocated solely to Slice customers, such as Slice Implementation Expenses. See section 2.2.2.

Slice Customer Charge. The product of a customer's Slice Percentage multiplied by the Slice Customer Rate. The Slice Customer Charge is designed to recover the costs allocated to the Slice Cost Pool and applies to customers purchasing the Slice product.

Slice Customer Rate. The rate that recovers costs allocated to the Slice Cost Pool. This rate is expressed in dollars per one percent share of service from Tier 1 System Resources.

Slice Implementation Expenses. Those costs incurred by BPA for the purpose of implementing the Slice product.

Slice Percentage. The percentage share of services from Tier 1 System Resources selected by the customer for its purchase under the Slice portion of the Slice/Block product contract. See section 3.5.

Slice True-Up Adjustment. An annual adjustment to the costs recovered from Slice customers determined in accordance with the TRM and billed or credited to the customer in accordance with the Slice contract. See section 9.4.

Subscription Contract. The power sales agreement for requirements purchases between BPA and a customer for power deliveries commencing October 1, 2001, and concluding September 30, 2011.

Super Peak Resource Credit. The amount of additional capacity provided by a Non-Federal Resource over the amount of capacity provided by an equivalent amount of energy delivered flat across the monthly Heavy Load Hour period.

System Shaped Load. For a Load Following or Block customer, the customer's Tier 1 Load as forecast by BPA, expressed in the shape of the forecast firm critical energy output of the Tier 1 System Resources in each of the 24 monthly/diurnal periods of the year.

Tier 1 Cost Allocator (TOCA). The percentage share of the Composite Cost Pool allocated to each customer purchasing services from Tier 1 System Resources under its CHWM Contract. See section 5.1.2.

Tier 1 Cost Pools. The Cost Pools that include the costs of Tier 1 System Resources and are the basis for Tier 1 Rates; Tier 1 Cost Pools are the Composite Cost Pool, Slice Cost Pool, and Non-Slice Cost Pool.

Tier 1 Costs. The costs allocated to the Tier 1 Cost Pools, to be recovered through the application of Tier 1 Rates.

Tier 1 Load. Customer load BPA serves at Tier 1 Rates.

Tier 1 Rate. A rate that applies for deliveries of Federal requirements power to meet a customer's Net Requirement up to its RHWM, reflecting the cost of Tier 1 System Resources. See section 5.

Tier 1 System Resources. Tier 1 System Resources includes Federal system regulated and independent hydro projects that BPA markets or is contracted to market; plus designated non-Federally owned resources that are contracted for or assigned to BPA; plus designated BPA contract purchases; less designated BPA contract obligations; plus any Augmentation. See section 3.

Tier 2 Cost Pools. The collections of Tier 2 Costs, to be recovered by means of the application of Tier 2 Rates. Each Tier 2 Rate will be based on a corresponding Tier 2 Cost Pool.

Tier 2 Costs. The costs allocated to serve above-RHWM load purchased from BPA, including the forecast costs of all power purchases and resource acquisitions.

Tier 2 Rate Alternatives. The rate options available for customers to select for the purchase of BPA power to serve their above-RHWM load. See section 6.

Tier 2 Rate. A rate that applies for deliveries of Federal requirements power to meet a customer's Net Requirement above its RHWM, reflecting the costs allocated to that service. A customer may be charged one or more Tier 2 Rates. See section 6.

Tier 2 System Resources. The specific resources and power purchases whose costs are allocated to the Tier 2 Cost Pools. See section 3.6.

Tiered Rate Methodology (TRM). This document: the long-term methodology that implements the Regional Dialogue Policy construct of tiering BPA's Priority Firm Power rates. See section 1.

Total Retail Load (TRL). All measured retail electric power consumption, including electric system losses, within a customer's distribution system, excluding 1) unmetered loads or generation; 2) nonfirm or interruptible load as agreed to by BPA and the customer; 3) transfer loads of other utilities served by the customer; and 4) any loads not on the customer's distribution system that are not agreed to by BPA.

Transition Period. The first 3 years of the CHWM Contracts, FY 2012-2014; a transition into the full implementation of tiered rates. BPA will estimate above-RHWM loads for the Transition Period in 2009. Based on those above-RHWM estimates, customers will elect to purchase power from BPA at Tier 2 Rates for at least the first 2 years of the Transition Period or to self-supply. See section 4.4.

Transition Period High Water Mark (THWM). The HWM to be calculated in FY 2009 that will be used to establish a customer's above-RHWM obligation for the Transition Period. See section 4.4.1.

Transmission Services. The organization, or its successor organization, within BPA that is responsible for the management and sale of transmission service on the Federal Columbia River Transmission System.

Treasury Payment Probability (TPP). The probability (expressed as a percentage) that BPA will be able to make all of its planned payments to the US Treasury in a Rate Period in full and on time.

Unspecified Resources. Those amounts of power declared by a customer in its Regional Dialogue Contract to serve its Total Retail Load for which the power amount is not ascribed to a particular generation resource or power contract.

Weather Normalization. The process by which the effects of a particular year's temperatures are removed from the loads of customers.

White Book. The Pacific Northwest Loads and Resources Study publication BPA issues each year to help plan for long-term load service for the Federal system and the region. The White Book provides BPA's projections of retail loads, contract obligations, contract purchases, and resource capabilities over a 10-year study horizon.

1 BACKGROUND AND PURPOSE

Under the Long-Term Regional Dialogue Policy (Policy), BPA will offer 20-year Regional Dialogue power sales contracts to its Federal agency and publicly owned utility customers (hereafter jointly referred to as public utility customers or Publics).

This Tiered Rate Methodology (TRM) provides for a two-tiered Priority Firm Power (PF) rate design applicable to firm requirements power service for public utility customers that sign Regional Dialogue Contracts that provide for tiered rate service (the CHWM (Contract High Water Mark) Contracts). The TRM establishes a predictable and durable means by which to tier BPA's PF rate for firm requirements power service, beginning in FY 2012. Tiered rate design differentiates between the costs of service associated with Tier 1 System Resources and the cost associated with additional amounts of power needed to serve any remaining portion of public utility customers' Net Requirement (Tier 2). This TRM specifies how rates will be developed that ensure to the maximum extent possible that customers purchasing at Tier 1 Rates do not pay any of the costs of serving other public utility customers' above-Rate Period High Water Mark (RHWM) load.

Determinations of specific rate levels will be made in a manner consistent with the TRM in the respective Northwest Power Act section 7(i) proceedings, 16 U.S.C. § 839e(i), during the term of this TRM. BPA will set power rates on a two-year cycle throughout the term of the Regional Dialogue contracts. If an unexpected financial condition threatens BPA's ability to recover costs, however, BPA may revise rates within a two-year cycle. A revision of rates resulting from the application of risk mitigation tools, such as a Cost Recovery Adjustment Clause, also will not be considered a violation of the two-year rate cycle commitment. A change to the two-year rate cycle will require a change to this TRM pursuant to section 12, except near the end of the term of the Regional Dialogue contracts, which does not coincide with two-year rate cycles.

Major topics covered in this TRM include:

1) how costs will be allocated to the PF Tier 1 and Tier 2 Rates (sections 2 and 6)
2) how to determine the amount of power available at Tier 1 Rates (section 3)
3) how to determine a customer's eligibility to purchase power at Tier 1 Rates (section 4)
4) how rates for Tier 1 and Tier 2 sales will be designed (sections 5, 6, and 7)
5) how rates for Resource Support Services (RSS) will be designed (section 8)
6) what procedural protections exist for customers for changes to the TRM (sections 12 and 13)

The provisions of the TRM are limited to the design and implementation of the PF tiered rates. The TRM does not address issues relating to other BPA rates, including but not limited to the PF rate applicable to customers that do not sign CHWM Contracts, and it does not bind BPA's action regarding those other rates.

RHWMs, determined according to this TRM (section 4.3), are the basis for determining how much of each customer's Net Requirement purchase from BPA is charged Tier 1 Rates and how much is charged Tier 2 Rates. Each customer may purchase up to its RHWM, limited by its Net Requirement, at Tier 1 Rates. To meet its above-RHWM load, a customer may purchase Federal power or procure Non-Federal Power, or both. To the extent a customer purchases Federal power for its above-RHWM load, a PF Tier 2 Rate(s) will be applied to the Federal power service.

Power products are not determined in this TRM; however, a brief description of the products is included as Attachment A to facilitate understanding of the rates to be applied to the products.

2 COST ALLOCATIONS

When BPA sets its rates, it allocates costs to rate pools based on statutory rate directives, and as appropriate, cost causation.

2.1 Cost Allocation Principles

The following principles were applied in developing the TRM Cost Allocation Method and are to be used to provide guidance to BPA for addressing circumstances that may arise during the term of the CHWM Contracts for allocating costs that are not specifically addressed in the TRM.

1) Tiering is a ratemaking construct implemented through an allocation of costs rather than an allocation of power.

2) Tier 1 Costs will be kept separate and distinct from Tier 2 Costs. Tier 1 Costs will be recovered through the Tier 1 Rates. Tier 2 Costs will not be recovered through the Tier 1 Rates except when necessary to ensure BPA's cost recovery during the Rate Period or to conform to court order, or as otherwise provided for in sections 12 and 13.

3) Individual Tier 2 Cost Pools are to be kept separate from one another; customers paying the cost of one Tier 2 Cost Pool will not be responsible for paying the cost of another Tier 2 Cost Pool.

4) BPA will achieve the separation of costs between Tiers 1 and 2 and among the Tier 2 Cost Pools through the ratemaking process, and the separation will not affect the operation or dispatch of the FCRPS. BPA will use available resources to serve system load in the most efficient and cost effective manner possible, without considering the ratemaking aspects of tiering.

5) The ratemaking separation of costs between the tiers and among the Tier 2 Cost Pools will not necessarily be the same as BPA's accounting treatment of the costs because tiering is a ratemaking methodology, not an accounting practice. When differences arise between ratemaking and accounting, the ratemaking allocations determined in accordance with this section should govern BPA's ratemaking.

6) BPA's allocation of costs between the Composite and Non-Slice Cost Pools will recognize the types of costs distinct to the type of service each group receives and how they pay for that service. Composite costs will not include the costs of converting resource output into load service, such as Balancing Power Purchases, and the costs of risk mitigation not directly attributable to Slice purchasers. Because Slice customers purchase surplus power directly from BPA through the Slice product, the Composite Cost Pool will not be allocated the revenues and costs of BPA's surplus marketing, such as secondary revenue credits, costs of wheeling secondary power, and any judgments and settlements related to those transactions. The administrative costs of surplus marketing (primarily staffing costs) will be allocated to the Composite Cost Pool.

Section 3.4 contains additional guidance regarding the allocation of specific resource costs.

2.2 Cost Allocation Method and Cost Allocation Table

In each applicable rate proposal, BPA will allocate Tier 1 Costs among three Tier 1 Cost Pools for determining Tier 1 Rates, and Tier 2 Costs to one or more Tier 2 Cost Pools corresponding to each Tier 2 Rate Alternative. The Tier 1 Cost Pools are the Composite Cost Pool, Slice Cost Pool, and Non-Slice Cost Pool. The allocation of costs into Cost Pools is a ratemaking exercise

that is performed according to the directives in section 7 of the Northwest Power Act. The establishment and modification of any allocation will be conducted in a rate proceeding consistent with the provisions of Northwest Power Act section 7(i). See section 12.

The Cost Allocation Table, Table 2.1, shows an example of cost allocations based on the WP-07 power rate case cost categories as a guide for allocating costs in future Rate Periods. All BPA costs functionalized to the Power function will be included in the Cost Allocation Table. Although Table 2.1 currently contains one Tier 2 Cost category, BPA will add additional Tier 2 categories as additional Tier 2 Rate Alternatives are developed and the associated Cost Pools are established. See sections 6 and 12. The Cost Allocation Table will conform to BPA's cost accounting reporting of expenses and may be modified from time to time to incorporate changes of such reporting. Such modifications will not change the underlying allocation of costs to the respective Cost Pools, which will form the basis for setting Tier 1 and Tier 2 Rates.

2.2.1 The Composite Cost Pool

The Composite Cost Pool will include all Tier 1 Costs or credits functionalized by BPA to the Power function except for any cost or credit that BPA determines meets the specified criteria for inclusion in either the Slice Cost Pool or the Non-Slice Cost Pool. The Composite Cost Pool costs will be allocated to all customers purchasing services from Tier 1 System Resources.

2.2.2 The Slice Cost Pool

The Slice Cost Pool will include all Tier 1 Costs or credits that BPA determines are specifically attributable to the operation or administration of the Slice product, including the Slice portion of the Slice/Block contract, or the Slice Customer Rate. BPA's administrative costs will not be specifically assigned to Slice customers; rather, such costs will be assigned to all customers in the Composite Cost Pool.

2.2.3 The Non-Slice Cost Pool

The Non-Slice Cost Pool will include all Tier 1 Costs or credits that BPA determines are specifically attributable to the operation or administration of the Load Following or Block products, including the Block portion of the Slice/Block product, and/or the associated CHWM Contracts. It also will include any costs or credits specifically assigned by BPA to BPA's marketing of secondary power, including the wheeling of such energy; the costs or credits of Balancing Power Purchases; the costs or credits arising from risk mitigation (e.g., Planned Net Revenues for Risk); and the costs or credits arising from capacity resource purchases that are incurred for the Non-Slice product. BPA will not specifically assign its administrative costs to Non-Slice customers; rather, such costs will be assigned to all customers in the Composite Cost Pool.

2.2.4 Tier 2 Cost Pools

BPA will include in the Tier 2 Cost Pools all costs or credits that are specifically assigned to resources and services that BPA plans for ratemaking purposes to use for serving above-RHWM load. BPA will forecast costs of all power purchases and resource acquisitions used to serve the loads of Tier 2 purchasers and will include them in a Tier 2 Cost Pool. BPA will identify resource costs, including associated capital costs, if any, and any applicable RSS charges. BPA will include a uniform adder, the Overhead Cost Adder, in the Tier 2 Cost Pools to account for non-specific costs of serving load at Tier 2 Rates. BPA will credit the forecast revenue from the Overhead Cost Adder to the Composite Cost Pool, which also is allocated the direct costs of the overhead activities. See section 6.3 for a fuller discussion of costs allocated to Tier 2 Rate pools and section 6.3.3 for discussion of the Overhead Cost Adder.

2.3 Inclusion of New Costs or Credits

BPA will allocate new costs or credits not previously included in a Cost Allocation Table used in a prior rate case to the Cost Pools based on the cost allocation principles in section 2.1. BPA will propose an allocation of the new costs and credits to the appropriate Cost Pools in the next regularly scheduled section 7(i) rate proceeding. See section 9.4 for related issues.

2.4 Interest Earned on the Bonneville Fund

On the first day of the Slice contract, October 1, 2001, BPA had financial reserves attributed to the Power function of $495.6 million. All PF customers contributed to the accretion of these reserves. At that time, BPA had some uncertain liabilities and assets arising from disputes over transactions during the California energy crisis; all of these have not yet been resolved on a final basis. However, beginning in FY 2002, Slice customers have not further contributed to the accretion of reserves.

BPA will allocate to the Composite Cost Pool an interest credit based on that pre-FY 2002 level of reserves, $495.6 million, as adjusted for any eventual resolution of the uncertain assets and liabilities. BPA will allocate to the Non-Slice Cost Pool a credit equal to the total anticipated credit earned on Bonneville Fund balances attributed to the Power function less the amount of interest credit included in the Composite Cost Pool. The credit to the Non-Slice Cost Pool will be negative if the interest credit allocated to the Composite Cost Pool is greater than the total interest credit for a particular year.

BPA may receive funds as collections of outstanding receivables or it may make or receive payments for settlements or judgments pertaining to transactions that occurred before FY 2002. Any amounts of such receipts that have not been shared (e.g., through the Slice True-up) with Slice customers in proportion to the Slice Percentage will be added to the $495.6 million used for calculating the interest credit included in the Composite Cost Pool. Similarly, any amounts of

such payments that have not been proportionally collected from the Slice customers will be subtracted from the $495.6 million value. (The "amounts that have … been shared" and the "amounts that have … been proportionally collected" are the gross amounts; i.e., they are equal to the net size of the payments to or collection from the Slice customers, divided by the Slice Percentage.) If funds of this type are received by BPA or if payments of this type are made by BPA, and the entire amounts are proportionally shared with or collected from Slice customers, the receipts or payments will not result in a change to the $495.6 million value.

It is possible that future circumstances will occur that make it reasonable and fair to make additional adjustments to the size of the base amount (the $495.6 million) on which interest credit is calculated for ratemaking purposes for crediting to the Composite Cost Pool. The amount of such adjustments will be decided in a rate case.

3 FEDERAL SYSTEM RESOURCES

BPA will determine the projected amounts of Federal system resource output, contract purchases, and contract obligations necessary for developing tiered rates in accordance with this TRM.

3.1 Tier 1 System Resources Used to Establish RHWM

As shown on Table 3.1, the Federal system resources, contract purchases, and contract obligations used to establish the quantity of power available to be sold at Tier 1 Rates (Tier 1 System Resources) will be comprised of BPA's forecast of the firm critical output of the following: 1) Federal system hydro generation estimates for regulated and independent hydro projects that BPA markets or is contracted to market; plus 2) designated non-Federally owned resources that are contracted for or assigned to BPA; plus 3) designated BPA contract purchases; less 4) designated BPA contract obligations; plus 5) any Augmentation (see section 3.2 for further details). Table 3.1 lists the specific resources, purchases, and obligations that BPA will use in determining the firm critical output of Tier 1 System Resources for use in the RHWM Process for each applicable Rate Period.

3.1.1 Federal System Hydro Generation Forecast

BPA markets the hydro generation from regulated and independent hydro projects. The Federal system regulated hydro projects are owned and operated by either the U.S. Bureau of Reclamation (Reclamation) or the U.S. Army Corps of Engineers (COE). For each Rate Period, BPA will develop a hydroregulation study that will incorporate known reservoir operating assumptions and include information from any agreed-upon or anticipated operations concerning a Federal Columbia River Power System (FCRPS) Biological Opinion (BiOp). BPA's hydroregulation study currently does not model or regulate Federal system independent hydro projects. Although BPA markets the power from independent hydro projects, generation forecast

updates are provided by Reclamation, the COE, and other project owners. In the event that a final BiOp for any future year is not available, BPA will forecast anticipated BiOp operations during the Rate Period.

The regulated and independent hydro projects included as Federal hydro in Tier 1 System Resources are listed in Table 3.1. The named resources shown on Table 3.1 will not be removed or added to for the duration of this TRM. The Rate Period forecast of the output of these resources can change; however, the entire forecast firm critical output of these resources is committed as Tier 1 System Resources, except for unused RHWM amounts as provided in section 4.3.

3.1.2 Designated Non-Federally Owned Resources Forecast

The forecast of designated non-Federally owned resources includes generation from projects that BPA contracted for the output and other project generation directly assigned to BPA. Forecasts of output for these designated non-Federally owned resources are typically provided by the project's owner. If the project owner does not provide a forecast, BPA will provide its own forecast for these resources for each Rate Period.

The designated non-Federally owned resources included as Tier 1 System Resources are listed in Table 3.1. The named resources on this list will not be removed or added to for the duration of this TRM. BPA's forecast of the Rate Period output of these resources can change, but the entire firm critical output of these resources is committed as Tier 1 System Resources, except for unused RHWM amounts as provided in section 4.3. If BPA's contract for a designated non-Federally owned resource expires during the term of this TRM, and the contract is renewed, the contracted resource shall remain in Tier 1 System Resources. If the contract is not renewed, then the resource will not be replaced as a Tier 1 System Resource.

3.1.3 Designated BPA Contract Purchases

BPA acquires power under various contractual arrangements to meet its firm load obligations. Such arrangements include 1) power purchases and resource acquisitions; 2) power or energy exchange contracts; 3) capacity or capacity-for-energy exchange contracts; and 4) power purchased or assigned to BPA under the Columbia River Treaty. These designated BPA contract purchases are considered firm resources that are delivered to the Federal system regardless of weather, water, or economic conditions. The designated BPA contract purchases existing on October 1, 2006, that continue past FY 2011 are included as Tier 1 System Resources.

BPA's designated contract purchases included as Tier 1 System Resources are listed in Table 3.1. The named contracts on this list will not be removed or added to for the duration of this TRM. The annual energy available from these contracts can change, but the entire firm energy from these contracts will be committed as Tier 1 System Resources, except for unused RHWM amounts as provided in section 4.3. If a contract expires during the term of this TRM, then the contract amount will be set to zero beginning with the month of expiration. If a new contract is executed, including a replacement of an expiring contract, it will not be included as a Tier 1 System Resource.

3.1.4 Designated BPA Contract Obligations

There are a number of obligations that are imposed on BPA by statutes, treaties, memoranda of agreement, court orders, and contracts that require the generation or delivery of power, or forbearance from generating power, in order to support the operation of the FCRPS. BPA's designated contract obligations (the successor to System Obligations as used in the Subscription Slice contract) include the Canadian Entitlement; Reclamation loads; power sales and exchanges existing as of October 1, 2006; real power transmission losses; and other Federal system

obligations. In addition, designated BPA contract obligations include, but are not limited to, contracts pertaining to BPA transmission and reliability services, Resource Support Services, contract agreements that are load obligations on the Federal system, and other estimated reductions to Federal system resources that may or may not have specific signed contracts. These contract obligations can change over time and are assumed to be served by Federal system firm resources regardless of weather, water, or economic conditions. BPA will forecast these contract obligations for each Rate Period as the amounts of power change through time.

BPA's designated contract obligations reduce power available from Tier 1 System Resources; these specific obligations are listed in Table 3.1. Obligations on this list will not be removed for the duration of this TRM. However, if there is a cessation of an obligation, the obligation amount will be set to zero when the obligation expires. Statutory and treaty obligations, as well as contracts and obligations specified in the "Designated BPA Contract Obligations" section of Table 3.1, may continue even if the implementing contract expires, and the successor contract will replace the listed contract. Discretionary Obligations that are shown in Table 3.1 will not be replaced upon expiration, and new Discretionary Obligations occurring after October 1, 2006, will not be added to Table 3.1.

3.1.5 Calculation of the Output of Tier 1 System Resources

BPA will forecast the firm critical output of Tier 1 System Resources by summing the forecasts of Federal system hydro resources (section 3.1.1), other Federal system resources (section 3.1.2), and designated BPA contract purchases (section 3.1.3) and subtracting forecasts of designated BPA contract obligations (section 3.1.4). The netting of forecast Federal system resources against forecast contract obligations will become BPA's forecast of the firm critical output of Tier 1 System Resources prior to any Augmentation. This forecast will be based on BPA's most recently published White Book, or its successor, updated for known changes in river operations

and resource availability. Power that BPA can call upon from the WP3 Settlement contracts (85BP-92185 and 85BP-92186) will be excluded from the forecast of Tier 1 System Resources firm critical output.

The forecast of the firm critical output of Tier 1 System Resources, including Augmentation (section 3.2), will be completed by August 15 of the Forecast Year for use in the RHWM Process and may be modified by the RHWM Process. This same resource forecast will be the basis for Tier 1 System Resources in the ensuing rate case but may be revised during the rate case, in order to ensure cost recovery, for new information that becomes available after the RHWM Process. Resource forecasts revised after September 15 will not change the results of the RHWM Process, however.

3.1.6 Changes to Planned Amounts of Federal System Resources

Tier 1 System Resources listed on Table 3.1 will not change for the duration of this TRM, except as noted below. While the named Tier 1 System Resources will not change, the forecast of the firm critical output of any particular resource is subject to change. If a resource listed on Table 3.1 ceases to operate, the output will be set to zero on the table. BPA will not replace the resource on Table 3.1; the generation output of Tier 1 System Resources will be reduced for the duration of the TRM or until the resource is available again, and Augmentation will be used as necessary, subject to Augmentation limits. Modifications to the component resources and obligations of Tier 1 System Resources are limited as defined in sections 3.1.1, 3.1.2, 3.1.3, and 3.1.4.

The term “Tier 1 System Resources” is not synonymous with “Federal Base System (FBS).” FBS is a term used in the Northwest Power Act to designate 1) the FCRPS hydroelectric projects; 2) resources acquired by BPA under long-term contracts in force in 1980; and

3) replacements in capability of the resources in 1) and 2). FBS will be the first group of resources used to supply the loads of public body, cooperative, and Federal agency customers and residential exchange customers. The FBS can and will include both Tier 1 System Resources and Tier 2 System Resources.

3.2 Augmentation of Tier 1 System Resources

In each RHWM Process, BPA will determine the amount of Augmentation to be included in Tier 1 System Resources. This Augmentation amount will be determined by calculating the difference between the forecast of annual firm energy to be sold under the Composite Customer Rate and the forecast annual energy firm critical output of Tier 1 System Resources before Augmentation is included. This Augmentation amount will be subject to established limits (see section 3.2.1).

If BPA has acquired specific resources for the purpose of Augmentation, the costs of those resources will be included in the total costs of Augmentation. In each rate case, BPA will forecast the costs of purchasing any remaining Augmentation included in the firm critical output of Tier 1 System Resources. The total costs of this Augmentation will be allocated to the Composite Cost Pool.

3.2.1 Limits to Augmentation for Tier 1 System Resources

Tier 1 System Resources may be augmented beyond the specific resources and contracts discussed in section 3.1. This Augmentation will be included in the forecast firm critical output of Tier 1 System Resources and may increase each customer's CHWM (and thereafter, continue to be reflected in each customer's RHWM). Augmentation amounts included in Tier 1 System Resources are limited during the term of the TRM. Augmentation for existing publics is limited to a maximum amount determined necessary in setting the CHWMs, but will not exceed

300 aMW. As an additional limit, Augmentation for existing publics used in establishing the CHWMs will not cause the forecast of firm critical output of Tier 1 System Resources to exceed 7,400 aMW. After determination of the CHWMs, Augmentation for any of the defined purposes may cause the output of Tier 1 System Resources to exceed 7,400 aMW.

Additional Augmentation is allowed to be included in Tier 1 System Resources for New Publics, DSI sales, and certain U.S. Department of Energy (DOE-Richland) load; these exceptions are detailed below. Augmentation for these exceptions will not affect the CHWM of other customers. To the extent such exceptions occur, the costs for this Augmentation will be shared by all Tier 1 Rate purchasers.

3.2.1.1 Augmentation of Tier 1 System Resources for Existing Publics

In its calculation of CHWMs, BPA will establish the maximum amount of Augmentation that can be added to the forecast of the firm critical output of Tier 1 System Resources for existing publics. This amount of Augmentation will be between 0 and 300 aMW. To determine the specific Augmentation, BPA will subtract the forecast of the firm critical output of Tier 1 System Resources for FY 2012, as forecast by BPA in FY 2011 and prior to any Augmentation, as specified in section 3.1, from the sum of all customers' Eligible Load established in the CHWM determination process, as specified in section 4.2.3. The resulting amount of Augmentation is subject to the following limitations:

1) If the result is zero or less, the Augmentation amount will be zero.
2) If the result is greater than zero, then the Augmentation amount is the lesser of the result or 300 aMW, subject to the limit in 3) below.
3) The total amount of CHWMs will not exceed 7,400 aMW in the FY 2011 calculation.

In each rate case, BPA will forecast the costs of Augmentation for existing publics and allocate these costs to the Composite Cost Pool.

3.2.1.2 Augmentation for Service to DOE-Richland

DOE-Richland has the right to increase its CHWM by up to 70 aMW in order to serve new on-site defense materials production and waste processing/disposal loads, if such loads occur. If such loads are added, BPA will augment Tier 1 System Resources up to 70 aMW, as necessary, to avoid reducing the HWMs of other customers and will include the forecast costs of this Augmentation in the Composite Cost Pool.

3.2.1.3 Augmentation for New Publics

BPA may augment Tier 1 System Resources up to 250 aMW for the CHWMs of New Publics during the term of the Regional Dialogue contracts. Pairing this Augmentation with the CHWM increases for New Publics will avoid adjusting the HWMs of other customers. Specific amounts of this 250 aMW are also available for the load growth of New Tribal Utilities. To the extent that requests for Net Requirement service for New Publics exceed the 250 aMW CHWM limit, then the New Publics must purchase the remainder of their Net Requirement at Tier 2 Rates unless they have elected to apply Non-Federal Resources that reduce BPA's obligation for Net Requirement service. BPA will forecast the costs of Augmentation for New Publics and allocate these costs to the Composite Cost Pool.

Augmentation of Tier 1 System Resources for CHWM additions for New Publics is limited to 50 aMW for each Rate Period, except for amounts provided under the exceptions for small New Publics and New Tribal Utilities, discussed in section 4.2.6.

3.2.1.4 Augmentation for DSI Loads

BPA is exploring alternatives for providing service benefits to DSIs. If BPA decides to sell power to the DSIs, BPA may augment Tier 1 System Resources for this service. If so, Augmentation for such sales will not decrease the Publics' HWMs. See section 10.3 for further discussion regarding DSI service. If BPA augments Tier 1 System Resources for this DSI service, BPA will forecast the costs of Augmentation for DSIs and allocate these costs to the Composite Cost Pool, and Tier 1 Rates will reflect the revenues recovered from the DSIs.

3.2.2 Determining Augmentation Amounts for Each Rate Period

BPA will determine the actual amount of Augmentation of Tier 1 System Resources for each Rate Period in the RHWM Process. Augmentation amounts determined for each Rate Period will generally be lower than the allowable amounts, because the RHWMs set a cap on power available for each utility's Tier 1 purchase from BPA in that Rate Period. A utility that loses load may not be able to purchase its full RHWM amount, because its Tier 1 purchase is limited by its Net Requirement.

During the RHWM Process, BPA will forecast amounts of RHWM that exceed customers' Forecast Net Requirement for the Rate Period. The treatment for this unused RHWM amount is discussed in section 4.3. The Augmentation amounts for sales to DSI customers will be established in the applicable rate case.

3.2.2.1 Rate Treatment for Excess Augmentation Purchases

BPA may acquire resources on a long-term basis during the term of the Regional Dialogue Contracts as part of Tier 1 System Resources Augmentation needs. In the event resources acquired on a long-term basis become surplus to supplying the Net Requirements of BPA's customers in total at Tier 1 Rates, BPA will forecast the remarketing of such surplus. The forecast revenues from such remarketing will be credited to the Composite Cost Pool. The costs

of the acquiring the resources that create the surplus Augmentation will continue to be allocated Composite Cost Pool.

3.2.2.2 Tier 1 System Resources Not Augmented for Loss of Resource

In the event that there is a loss of a Tier 1 System Resource subsequent to September 15 of the Forecast Year (the cutoff date for establishing the Tier 1 System Resources and RHWMs for the following Rate Period), in that Rate Period Tier 1 System Resources will not be augmented for the loss of the resource. In this instance, any forecast costs of necessary replacement resources will be included in Balancing Power Purchases for the Rate Period. Loss of that resource, if it persists, will be recognized in the ensuing rate case in determining Tier 1 System Resources and the Tier 1 Costs of serving load.

3.2.2.3 Rate Treatment When Augmentation Amounts Are Not Established Prior to the Final Rate Proposal

If Augmentation amounts are not secured by contract purchases prior to the final rate proposal, BPA will forecast costs for the Augmentation based on expected market prices during the Rate Period.

3.2.2.4 Source of Forecast Data and Customer Review Rights

The source of the data BPA will use to establish the forecast firm critical output of Tier 1 System Resources will be the most recently published BPA White Book, or its successor, adjusted for known and reasonably anticipated changes after publication. During the RHWM Process, customers will have the right to review the data and assumptions BPA used to forecast the output of Tier 1 System Resources, to receive clarification of the data and the forecast in general, and to offer modifications for BPA's consideration.

3.3 Balancing Power Purchases

BPA makes market power purchases or resource acquisitions for monthly, diurnal, and hourly periods within a year in which the firm critical output of the Federal system (including Augmentation) is insufficient, or is forecast to be insufficient, to meet BPA's loads and any other system obligations. The costs of market power purchases and resource acquisitions to serve capacity requirements of the Non-Slice customers will be allocated to Balancing Power Purchases. BPA will forecast costs of Balancing Power Purchases and will allocate these costs to the Non-Slice Cost Pool. Tier 1 customers purchasing the Slice product will not receive a share of Balancing Power Purchases and thus will not pay the costs of Balancing Power Purchases.

3.4 Allocation of New Federal System Resource Acquisitions

The costs of Federal resource acquisitions made after September 30, 2006, will be allocated to Cost Pools on a Rate Period or longer basis. Once BPA allocates a particular resource's costs to a particular Cost Pool, that resource's costs will remain in that Cost Pool for the duration of the resource purchase or the Regional Dialogue Contract period, whichever ends sooner, with limited exceptions. One exception is when Cost Pool commitments are reduced due to load loss or expiration of customer purchase obligation elections. The other exception is when BPA designates the allocation of the costs of a particular resource as being temporary until loads subscribing to a particular Cost Pool increase. In this instance, BPA may allocate the resource acquisition cost to another Cost Pool on a temporary basis. BPA may allocate costs of a particular resource to more than one Cost Pool.

To ensure cost recovery, BPA will allocate to the Composite Cost Pool costs for energy and capacity resources not fully recovered through the revenues from the obligation for which the costs were incurred. Examples of cost allocations for these Federal resource acquisitions include:

1) Energy Augmentation for Existing Publics—costs allocated to the Composite Cost Pool.
2) Energy Augmentation for New Publics—costs allocated to the Composite Cost Pool.
3) Energy Balancing Power Purchases—costs allocated to Non-Slice Customer Rates in the Non-Slice Cost Pool.
4) Energy purchases or acquisitions for Tier 2 loads—costs allocated to Tier 2 Rates.
5) Capacity for load following customer service—costs allocated to the Non-Slice Cost Pool.
6) Transmission Services capacity obligations—costs allocated to the Composite Cost Pool, offset by revenue from Transmission Services related to the specific obligation being met. The capacity output deemed to be used for a specific Transmission Services obligation would result in a reduction of BPA obligations as defined in section 3.1.4.
7) RSS capacity obligations—costs allocated to the Composite Cost Pool, offset by revenue from RSS. The capacity output deemed to be used for an RSS obligation would result in a corresponding reduction of BPA obligations, as defined in section 3.1.4.

3.5 Resources Used to Provide the Slice Product

Resources used to provide the Slice product will be the same set of resources, contract purchases, obligations, and Augmentation amounts BPA uses to determine the firm critical output of Tier 1 System Resources. Tier 1 System Resources are described in sections 3.1 and 3.2 and shown in Table 3.1. BPA will establish rates so that each Slice customer is allocated according to its Slice Percentage the costs and revenue credits allocated to the Composite Cost Pool and the Slice Cost Pool on Table 2.1. BPA will include known and reasonably forecast costs and revenues associated with Tier 1 System Resources in the Composite Cost Pool, which BPA will charge to all Tier 1 customers, including Slice customers. These costs and revenues will be subject to the

annual Slice True-Up process, as discussed in section 9.4, along with other costs and revenues in the Composite and Slice Cost Pools.

Each Slice customer will pay a percentage share (equal to the customer's Slice Percentage) of all costs of Augmentation for existing publics (section 3.2.1.1) included in Tier 1 System Resources. Each Slice customer will receive a percentage share (equal to the customer's Slice Percentage) of these Augmentation power purchase amounts as determined in the final rate proposal for the applicable Rate Period in a flat annual shape. All Tier 1 customers will be charged for the costs of purchasing Augmentation amounts that are assumed to be in a flat annual shape. These Augmentation costs will not be subject to the Slice True-Up.

BPA also will establish rates so that each Slice customer will pay a percentage share (equal to the customer's Slice Percentage) of all costs of "specified augmentation" established in this TRM. "Specified augmentation" for purposes of this TRM means the Augmentation resources acquired as discussed in sections 3.2.1.2, 3.2.1.3, and 3.2.1.4. For these specific amounts, BPA will recalculate the Slice Percentage. Each Slice customer will receive a percentage share (equal to the customer's Slice Percentage) of these Augmentation power amounts as determined in the final rate proposal for the applicable Rate Period in a flat annual shape. All Tier 1 customers will be charged for the costs of purchasing Augmentation amounts that are assumed to be in a flat annual shape. These Augmentation costs will not be subject to the Slice True-Up.

If a Slice customer's Slice Percentage is changed from the level forecast in the relevant rate case due to loss of load, BPA will forecast the value of the related unused Slice RHWM power and include the value in the Slice True-Up. The value will be established based on the forecast market prices determined in the relevant rate case. This value will not be further trued up to actual market prices. Through the Slice True-Up, the Slice customers will receive their Slice

Percentage share of the forecast value of the unused Slice RHWM power due to Slice customers' load loss.

The Slice Percentage for each customer purchasing the Slice product will be determined by contract prior to FY 2012 and will not change during the Slice/Block contract period except in the two following situations.

3.5.1 Reduction in a Customer's Block Amounts and Slice Percentage Due to Load Loss

If BPA's forecast of a Slice/Block customer's TRL indicates that its Forecast Net Requirement will be below its RHWM, and the Slice customer has exhausted its ability to remove resource amounts consistent with BPA's 5(b)9(c) Policy, BPA first will reduce forecast power deliveries under the Block portion of the customer's contract. If after BPA removes the entire forecast Block portion of power deliveries to the customer, the Slice customer's Forecast Net Requirement is less than the Slice portion (the customer's Slice Percentage multiplied by the firm annual output of Tier 1 System Resources), BPA will reduce the Slice Percentage until the Forecast Net Requirement matches the product of the Slice Percentage and the firm critical output of Tier 1 System Resources. Any unused amounts of RHWM caused by this reduction will be treated as forecast unused RHWM, as specified in section 4.3. Any adjustment of the contract Slice Percentage due to load loss will be based on the annual Net Requirement determination.

3.5.2 Reduction in a Customer's Slice Percentage Due to Specified Augmentation

A customer's Slice Percentage will be recalculated as part of the RHWM Process when Augmentation purchases are made for DOE-Richland, for New Publics, and for DSI power sales, as discussed in sections 3.2.1.2, 3.2.1.3, and 3.2.1.4. Because this specified Augmentation will increase the firm critical output of Tier 1 System Resources, the Slice Percentages will be

recalculated to maintain the same amount of annual average megawatts for each Slice customer as before the Augmentation. As these specified Augmentation purchases are increased or decreased on a Rate Period basis, the Slice Percentages will be decreased or increased in a proportional manner.

3.5.3 Effects of Reduction in Slice Percentage

When BPA reduces the Slice Percentages as a result of either of the circumstances set forth in sections 3.5.1 and 3.5.2, the Slice Billing Determinant (which is equal to the customer's Slice Percentage established in the CHWM Contract) for the Composite Customer Rate and Slice Customer Rate also will be reduced.

3.6 Federal System Resources Acquired for Tier 2 Service

BPA will acquire the resources necessary to serve customers' above-RHWM load that they elect to place on BPA (Tier 2 System Resources), the costs of which will be recovered through Tier 2 Rates. These resources may consist of contracts for the output of specific resources, a system sale from another utility, or market purchases. BPA may use available energy from Tier 1 System Resources for service to Tier 2 customers to the extent any such energy is forecast by BPA to be available for the Rate Period as a result of unused RHWM amounts. The use of such energy shall be charged to the Tier 2 Cost Pool at its marginal cost, however, and BPA will credit the resulting revenue to the appropriate Tier 1 Cost Pools. The appropriate Tier 1 Cost Pool for firm energy resulting from unused RHWM amounts is the Composite Cost Pool. The appropriate Tier 1 Cost Pool for secondary energy is the Non-Slice Cost Pool.

4 ELIGIBILITY TO PURCHASE POWER AT TIER 1 RATES

High Water Marks (HWMs) are measured in annual average megawatts and are the starting point for determining each customer's eligibility to purchase power at Tier 1 Rates. BPA will limit the sum of all HWMs to the planned firm power output of the existing Federal system (as determined using critical water) as it is currently defined for regional planning purposes, plus a limited amount of Augmentation. The Augmentation limits are described in section 3.2.1.

This section describes the functions of and processes for developing HWMs. It also describes the FY 2012-2014 Transition Period, under which customers will select their power supplier(s) to serve their above-RHWM load. If a customer selects BPA to supply any portion of that load, it will commit to purchase a specific amount of power at a Tier 2 Rate(s). The Tier-2 Rate design is addressed in section 6.

The TRM requires BPA to calculate four HWMs for each public utility customer, as described in detail in later subsections. A brief overview of the timing and purpose of these HWMs follows:

1) **The Forecast Contract High Water Mark (FHWM)** is calculated by BPA before Regional Dialogue Contracts are signed, to give each customer a preliminary planning tool to assess the amount of power it may be entitled to purchase at Tier 1 Rates and how it will serve its future load. The FHWM is calculated outside of a TRM process.
2) **The Transition Period High Water Mark (THWM)** is calculated by BPA in FY 2009 and will be used to establish a customer's above-RHWM load for all or part of the Transition Period, depending on the customer's product choice.
3) **The Contract High Water Mark (CHWM)** is calculated by BPA in 2011 and sets each customer's initial eligibility for power service priced at Tier 1 Rates. The CHWM determination process also defines the maximum limit for Augmentation to be included in Tier 1 System Resources to serve the loads of existing publics at Tier 1 Rates during the term of the CHWM Contracts. See section 3.2.1 for specific Augmentation limits.

4) **The Rate Period High Water Mark (RHWM)** is set by BPA prior to each section 7(i) rate proceeding and defines a customer's maximum eligibility to purchase power at Tier 1 Rates for that Rate Period, subject to the customer's Net Requirement limitation.

A timeline for BPA's HWM, contract, and relevant rate determinations is included in Table 4.1.

4.1 Existing Resource Amounts

The Non-Federal Resource amounts designated for use in FY 2010 in Exhibit C of customers' Subscription Contracts as of September 30, 2006, will establish the Existing Resource amounts used for BPA's HWM calculations, with the following specific exceptions:

1) **Renewable Resources.** The output of new renewable resources added during the term of the Subscription contracts will not be included in the calculation of CHWMs.
2) **Centralia Resource.** Contingent on the signing of the CHWM Contract and a final determination under BPA's 5(b)9(c) Policy, the output of the Centralia resource will not be included in the calculation of CHWMs for Seattle City Light, Tacoma Power, Snohomish PUD, or Grays Harbor PUD. Consequently, BPA may not decrement due to the Centralia resource the amount of Federal power those customers can buy from BPA.
3) **Grant PUD.** Grant PUD has indicated that it will be recalling from purchasers hydropower from the Priest Rapids and Wanapum projects. Grant's doing so would result in a redistribution of resources for Grant and the affected customers for CHWM purposes. The treatment of the resources for CHWM purposes will be established prior to BPA signing CHWM Contracts through the Supplemental Record of Decision (ROD) discussed later in this section.
4) **Raft River Annexation.** The Unspecified Resources associated with Raft River's service territory annexation will not be included for CHWM purposes.

5) **PURPA Resources.** The PURPA resource amounts used to calculate a customer's CHWM will be the smaller of the declared output of the resource for FY 2010 in the customer's Subscription contract or the actual output of the resource applied to serve the customer's load in FY 2010.

6) **Consumer-owned Resources.** Consumer-owned generation amounts will be established at the time of CHWM Contract signing for each customer. Customers will identify in their CHWM Contracts what consumer-owned generation amounts they will apply to serve their Total Retail Load.

Additionally, BPA has reviewed the resource declarations in customers' Subscription contracts and has calculated preliminary resource amounts for each customer based on that review. In some instances, customer resource data was not provided for FY 2010 or was defective. BPA is making preliminary determinations where the specific information referenced is not readily available. Attachment B shows the placeholder table that will be populated with preliminary resource amounts that will be used for each customer for purposes of calculating its CHWM. BPA will discuss these numbers with individual customers through a process outside of a TRM process. After this consultation, BPA will establish the Existing Resource amounts that will be used for the CHWM calculations. BPA will amend Attachment B with those updated customer resource amounts. BPA will describe the criteria related to this determination that were not specifically contemplated in the Policy in a supplemental ROD to the July 2007 Long-Term Regional Dialogue ROD.

4.2 Contract High Water Mark

The calculation of Contract High Water Marks is illustrated in Figure 4.1 and Attachment C.

4.2.1 Step 1: Determine Measured FY 2010 Load

Within the BPA Balancing Authority Area, BPA's metering infrastructure is capable of measuring load on an hourly basis at the Point of Delivery (POD) of BPA power to most customers. For customers within the BPA Balancing Authority Area, their FY 2010 TRL will be calculated by aggregating the annual load measured at the customer's POD(s), then adding the measured output of any Behind the Meter Resources. The amount of any FY 2010 wholesale power transactions, including those made behind the meter (i.e., sales to an adjacent service area or where the wholesale customer is directly connected to the customer's distribution system) by the customer will then be subtracted from this load amount.

For the remaining customers, including those outside the BPA Balancing Authority Area, equivalent metered, measured, and verifiable POD load data will be required from customers where BPA metering is not available. The measured POD load amounts will be aggregated and then, as described above, will be increased for the output of Behind the Meter Resources and reduced by the amount of any wholesale power transactions.

Two BPA datasets—FY 2010 customer load data, aggregated to a monthly level, and the customer's historical monthly load data for FY 2005-2009—will be used to weather normalize the FY 2010 load (see section 4.2.1.2). Customers will be required to provide this historical load data in cases where BPA metering data is not available.

When meter readings are not available due to meter hardware failure or when data is determined to be invalid due to meter malfunction or calibration/configuration error, BPA will estimate the erroneous readings in accordance with BPA's Metering Services' Editing and Estimating Procedures or its successor. Customers will be required to follow equivalent procedures in cases where meters are not directly available to BPA.

New Large Single Loads, when served by BPA, are served at a section 7(f) New Resource rate and not at a section 7(b) PF rate. Therefore, NLSLs will be removed from the Measured FY 2010 Load for purposes of determining CHWMs. After CHWMs are calculated, if a load included in a customer's Measured FY 2010 Load is determined to be an NLSL, the customer's CHWM will be reduced by the NLSL amount.

4.2.1.1 Adjust Measured FY 2010 Load for Anomalies

BPA will adjust the Measured FY 2010 Load data, if appropriate, for load or data anomalies that materially affect the accurate determination of a customer's CHWM calculation. Such adjustments could result from a customer or third party request or may be initiated by BPA independently. This step does not include correcting for meter errors, which is part of the load data gathering step described in section 4.2.1; nor does it include adjusting for the effect of atypical weather, which occurs as described in section 4.2.1.2. Notwithstanding any of the criteria below, BPA reserves the right to reduce a customer's Measured FY 2010 Load to account for a customer's actions that increase its FY 2010 loads through practices that are outside of accepted, prudent utility standards and practices or actions that make no economic sense outside of attempting to establish a larger CHWM than the customer would otherwise have. This would include, but not be limited to, offering power at low or no cost.

BPA will apply the following threshold criteria to determine whether an event qualifies as a load or data anomaly:

1) The effect of the event on Measured FY 2010 Load must be material. To qualify as material, the event must cause a distortion in load data that had the event not occurred would result in the smaller of a 10 aMW or 10 percent increase or decrease in the customer's CHWM.

2) The event affecting the Measured FY 2010 Load must be a discrete event that occurred in FY 2009 or FY 2010. BPA will not consider requests for load data adjustments that combine the effects, negative or positive, of multiple discrete events to attain materiality. For example, the load loss associated with a gas explosion at a mill cannot be combined with the load loss resulting from a shopping center fire that occurred months later in a different town in order to reach the materiality threshold. However, it is recognized that the load loss associated with a discrete event, such as a levee failure, could consist of many small loads.

3) The load affected must be a verifiable, historical load for which three previous years of load data is available. If BPA determines that an adjustment to a customer's historical load amount is appropriate, the adjusted load amount will not exceed the average of the previous three years. Load that does not occur even though it was expected to occur in FY 2010 will not qualify as a reason to adjust Measured FY 2010 Load. Accordingly, for purposes of determining CHWMs, measured load amounts will not be adjusted to account for a customer's yet-to-be-realized Contracted for/Committed to (CFCT) loads as defined by section 3(13)(A) of the Northwest Power Act. Requests for load adjustments to compensate for lost historical load that was not captured in Measured FY 2010 Load will be considered only if there is substantial evidence that the lost load will return in FY 2011 and is reasonably projected to exist for the duration of the CHWM Contract. The determination of whether a load adjustment will be made will be at BPA's sole discretion.

4) BPA will not adjust Measured FY 2010 Load as an anomaly to reflect a full year's load in the case of a new consumer load that comes on line during FY 2010 or that does not have verifiable historical load during the previous 3 years. Only the load that was measured in FY 2010 will be used for calculating a customer's CHWM.

5) For any load adjustment to be considered, the load distortion must not have been caused by an action or inaction of the customer. This requirement includes intentional and unintentional acts and omissions.

4.2.1.2 Adjust Measured FY 2010 Load for Atypical Weather (Weather Normalization)

Following any adjustments for load or data anomalies, BPA will adjust the Measured FY 2010 Load for the cumulative effect on load of atypical weather occurring during the year. Different normalization methods will be used for non-irrigation loads, such as residential loads, and for irrigation loads. Non-irrigation loads vary within the year primarily in response to temperature changes, whereas irrigation loads vary within year and year-to-year primarily in response to precipitation, the differing water needs of various crops, and the effect of wind on water lost to evaporation. BPA will separate each customer's Measured FY 2010 Load into non-irrigation load and irrigation load, weather normalize these loads separately, and then recombine them. The result, the utility's adjusted, normalized Measured FY 2010 Load, is the load from which declared Non-Federal Resource amounts will be subtracted. This process is shown in the flow charts contained in Figure 4.2 for non-irrigation load and Figure 4.3 for irrigation load.

For non-irrigation load, BPA will use temperature data obtained from the National Oceanic and Atmospheric Administration (NOAA) weather station nearest to a utility's POD(s) to weather normalize the load data for each utility. The differences between daily average and daily actual temperatures are used to determine cumulative levels of above- and below-average temperatures, measured in Heating Degree Days (HDD) or Cooling Degree Days (CDD). The HDD and CDD then will be multiplied by weather coefficient values to result in an electric load adjustment value (in average megawatts) associated with the non-average temperature conditions. Finally, the measured base load and the HDD and CDD adjustment values will be combined to obtain the weather-normalized load.

For irrigation load, BPA will use historical load averaging to determine the irrigation normalization adjustment. BPA will calculate a 5-year average of each customer's irrigation load for years FY 2006 through FY 2010. BPA then will adjust the FY 2010 irrigation load to match its calculation of the customer's calculated 5-year average. BPA will quantify customer irrigation loads primarily through customer reporting. To determine irrigation load, customers will be required to submit irrigation data based on periodic meter reads. A principal source of this data will be through customer reporting, using the Financial and Statistical Report (BPA Form 110) when the needed data is not fully captured in other reports normally submitted to BPA. The reporting period for irrigation load data will be extended to include the months of May through September. Customers must submit the report for May through September 2008 by December 31, 2008, and thereafter provide the annual report by December 31 of each year. For years prior to 2008, BPA will assess the irrigation data it currently has and request further data from the customer on a case-by-case basis.

4.2.2 Step 2: Determine Existing Resource Amounts

Except for the addition of consumer-owned resources and PURPA resources, the Existing Resource amounts, determined as discussed in section 4.1, establish the amounts that will be used for the CHWM. Each customer will establish how its consumer-owned generation will be treated under its CHWM Contract at the time of contract signing. PURPA resource amounts will be the smaller of declared amounts for FY 2010 or actual generation of that resource in FY 2010. Accordingly, for the CHWM calculation, the amounts of Existing Resources in Attachment B will be adjusted by the corresponding amounts of consumer-owned generation and PURPA resources.

4.2.3 Step 3: Preliminary Calculation of CHWMs

After BPA determines each customer's adjusted Measured FY 2010 Load, BPA will subtract Existing Resource amounts. The result is the Eligible Load for BPA's preliminary determination of the CHWM. The preliminary calculation of CHWMs has two steps, described in the following two subsections.

4.2.3.1 Determine Limited Augmentation for Existing Publics

BPA will compare the sum of Eligible Load for all PF purchasers to the forecast firm critical output of Tier 1 System Resources for FY 2012-2013 (see section 3.1). If the cumulative Eligible Load is greater than the output of the unaugmented Tier 1 System Resources, BPA will augment Tier 1 System Resources, subject to the limits stated in section 3.2.1.

The limited Augmentation determined in this step will set the maximum amount of Augmentation for existing publics used in the RHWM Process (see section 4.3).

4.2.3.2 Scale Adjusted Measured FY 2010 Loads to Tier 1 System Resources

BPA will proportionally scale each customer's Eligible Load such that the sum of all customers' Eligible Load is equal to the forecast output of Tier 1 System Resources. If the sum of the customers' Eligible Load is greater (less) than the firm critical output of Tier 1 System Resources after the limited Augmentation, each customer's Eligible Load will be scaled down (up) in proportion to the shortfall (excess). The result of this scaling process is BPA's preliminary determination of the customer's CHWM.

4.2.4 Step 4: Conservation Adjustment to Determine CHWM

The final step is adjusting the CHWMs for conservation. The Conservation Adjustment to the CHWM is made to minimize the disincentive for individual customers to undertake conservation measures during FY 2007 through FY 2010. Because conservation may reduce a customer's

FY 2010 load and consequently its CHWM, BPA will adjust the initial CHWM determination to account for the amount of eligible conservation each customer has achieved.

For BPA to credit conservation toward the Conservation Adjustment, the conservation must be cost-effective, verified, and achieved from FY 2007 through FY 2010 and have reduced the customer's load in FY 2010. For calculation purposes, each utility's preliminary CHWM will be credited 100 percent (1 aMW for each 1 aMW) of customer self-funded conservation savings and 75 percent (0.75 aMW for each 1 aMW) of BPA-funded savings (i.e., through the Conservation Rate Credit, bilateral contracts, and so forth). The CHWMs, after including any Conservation Adjustments, then will be adjusted proportionately so that the sum of the CHWMs is equal to the forecast firm critical output of Tier 1 System Resources used in the prior scaling. The Conservation Adjustment redistributes the CHWM amounts among customers and does not change the total CHWM amount calculated in section 4.2.3.2. The result of the Conservation Adjustment is each customer's final CHWM.

Attachment D describes the implementation of the Conservation Adjustment.

4.2.5 Publishing and Finalizing CHWMs

After calculating each customer's CHWM according to the procedures in this section, BPA will publish the CHWMs on its website. A two-week public comment period will follow publication of the CHWMs, giving stakeholders an opportunity to comment on the individual CHWMs along with adjustments BPA made to account for data or load anomalies. Following the close of comment, BPA will work with customers to resolve any issues raised by the comments. Within two weeks following the close of comment, BPA will republish the CHWMs, which will reflect any updates or changes. The finalized CHWM for each customer will be incorporated into each customer's CHWM Contract.

4.2.6 CHWM for New Public Utility Customers

Separate from the CHWMs for existing public utilities, CHWMs also will be created for New Publics that form after the initial CHWM Contracts are executed. CHWMs for New Publics will be limited to 250 aMW in aggregate total during the term of CHWM Contracts, of which only 50 aMW will be added in any single Rate Period, with limited exceptions. The Augmentation associated with the addition of CHWMs for New Publics is discussed in section 3.2.1.3.

Once qualified under BPA's Standards of Service, a New Public (including New Tribal Utilities) must provide a three-year binding notice before it will be eligible to purchase power using its CHWM. During the intervening period, if necessary to serve load, the New Public may purchase power from BPA at rates that are established for this specific purpose. Details of these rates will be determined in the applicable rate cases.

4.2.6.1 CHWM for a New Public Formed from an Existing Public Utility

BPA will adjust the CHWM of an existing utility that has a portion of its load transferred to a New Public. A New Public that forms out of all or part of an existing public utility will receive a share of the existing public's CHWM. Such an assignment will be proportionate to the New Public's annexed share of the existing utility's TRL. The CHWM transferred from the existing public utility will not count toward the aggregate 250 aMW or 50 aMW Rate Period CHWM limits for New Publics.

4.2.6.2 CHWM for New Publics Formed from an Investor-Owned Utility

The CHWM for a New Public formed out of all or part of an Investor-Owned Utility will be the New Public's Forecast Net Requirement for the year deliveries begin, multiplied by the percentage derived by dividing the then-existing CHWMs (not including the portion of the New

Public(s) eligible for a new CHWM) by the existing customers' total Forecast Net Requirement plus amounts of above-CHWM load that the existing customers choose to serve by applying Non-Federal Resources. The CHWM for the New Public is subject to limits described in section 4.2.6.3, below.

4.2.6.3 Rate Case CHWM Limit for New Publics

CHWM additions for the initial loads of New Publics, including New Tribal Utilities, are limited to 50 aMW for each Rate Period, except for amounts provided under the exceptions for small New Publics and New Tribal Utilities described below. If requests by New Publics exceed the 50 aMW Rate Period limit, BPA will phase in the CHWMs for New Publics by proportionally reducing the New Publics' individual CHWM requests so that the total CHWM addition for the Rate Period is capped at 50 aMW. If requests from New Publics, including New Tribal Utilities, for initial or additional CHWM for a Rate Period exceed the remaining amount of the 250 aMW aggregate limit, each new request will be proportionately reduced such that the sum of the new requests equals the amount of the remaining 250 aMW aggregate limit for New Publics. See section 4.2.6.5.

4.2.6.3.1 Exceptions to Rate Case CHWM Limit

There are two circumstances under which BPA will provide additional CHWM amounts for the Rate Period that would cause total CHWM additions for a Rate Period to exceed the 50 aMW limit:

1) If requests by New Publics exceed the 50 aMW Rate Period limit, BPA will provide additional CHWM amounts for New Publics whose size is less than 10 aMW and that otherwise would have had their requests adjusted downward. BPA will provide these utilities with the additional amount of CHWM needed to make up the difference between their prorated "phase-in" amount and their original request. These additional

amounts will exceed the 50 aMW rate case limit. This exception is limited for the full period of this TRM to the first five requesting utilities that meet the size threshold and that would otherwise have had their CHWM prorated downward.

2) New Tribal Utilities that already have a CHWM may have their CHWM increased to account for load growth or load they annex, as described in section 4.2.6.4. Any amounts provided for this purpose would not be subject to the 50 aMW Rate Period limit, because it is not an addition to serve initial load. Correspondingly, the initial CHWM amount provided to a New Tribal Utility does not count toward the 40 aMW limit for load growth, as described below.

4.2.6.4 Rate Case Limit for CHWMs for New Tribal Utility Load Growth

The CHWMs for New Tribal Utilities can be increased over time for load growth and the expansion of service territory up to a total of 40 aMW. Any such amounts will not count toward the 50 aMW Rate Period limit but will count toward the 250 aMW aggregate limit for New Publics. This exception for New Tribal Utilities will expire at the earlier of 1) the end of FY 2021; or 2) when the overall 250 aMW CHWM limit for New Public Utilities is reached. New Tribal Utility customers will not face Tier 2 Rates or the need to provide Non-Federal Resource amounts for this first 40 aMW of load growth unless constrained by the 250 aMW CHWM limit. They will be exposed to service priced at Tier 2 Rates or the need to provide Non-Federal Resource amounts, however, as other customers will be, if the amount of power available from Tier 1 System Resources is reduced and their RHWM becomes lower than their CHWM through the RHWM calculations.

4.2.6.5 Phasing In CHWM Amounts for New Publics

When competing requests from New Publics exceed the 50 aMW Rate Period limit, New Publics will have the amount of their CHWM requests over 10 aMW phased in over subsequent rate

periods. This is to ensure that access to the contract period limit of 250 aMW is spread broadly and not used solely by one large New Public. The phase-in would be 33.3 percent for the next 24 aMW and 20 percent for any remaining amounts. The phased-in amounts may be subject to further reduction on a proportional basis each Rate Period due to the 50 aMW Rate Period limit discussed in section 4.2.6.3. Residual amounts not provided due to this proportional reduction will be added to the allowed phase-in amounts as a CHWM request for consideration for subsequent Rate Periods. See Figure 4.4 for an example of this phase-in.

4.3 Rate Period High Water Mark

The RHWM sets the maximum amount of Tier 1-priced power that a customer may purchase each year of the Rate Period, subject to its Net Requirement. BPA will calculate a RHWM for each customer in a separate process, the RHWM Process, prior to each rate case beginning with the WP-14 rate case. The RHWM will be the same for each year of the Rate Period. During the first Rate Period (FY 2012-2013), BPA will not calculate a RHWM through the RHWM Process; rather, the CHWM will define the RHWM amount. As described in section 4.4, for the first (FY 2012-2013) Rate Period the Transition Period method will be used for determining above-RHWM load. The RHWM will be used for billing purposes during this Rate Period, however.

In the RHWM Process, BPA will establish a RHWM for each customer by adjusting the customer's CHWM to account for changes in the forecast firm critical output of Tier 1 System Resources (e.g., changing fish-flow requirements, efficiency improvements to generation, or loss of a generation resource). BPA will determine the available firm critical output of Tier 1 System Resources, including Augmentation needs, in the RHWM Process as an input to the RHWM calculation. The available firm critical output is calculated as the average of BPA's forecast of Tier 1 System Resources for each year of the Rate Period.

The RHWM Process will change the Augmentation included in Tier 1 System Resources based on two considerations. First, an increase in the forecast firm critical output of Tier 1 System Resources will result in an equal decrease in the amount of Augmentation that was set during the CHWM calculation process until the Augmentation amount is zero. Thereafter, any remaining forecast increase in the firm critical output of Tier 1 System Resources will result in increased RHWMs. Correspondingly, a decrease in the forecast firm critical output of Tier 1 System Resources will result in an equal increase in Augmentation, not to exceed the limits set during the CHWM calculation process, as described in section 3.2. Thereafter, further decreases in the firm critical output of Tier 1 System Resources will result in decreased RHWMs.

Second, Augmentation of Tier 1 System Resources may be adjusted for RHWM amounts that customers will not be able to access, based on their Forecast Net Requirements. Because each customer's eligibility to purchase at Tier 1 Rates will be limited by its annual Net Requirement, BPA will perform a forecast of Net Requirements for the Rate Period for the RHWM Process. In some instances, BPA's forecast of a customer's Forecast Net Requirement will be lower than the customer's RHWM, in which case the unused RHWM amounts represent excess firm critical output of Tier 1 System Resources on a forecast basis. To the extent possible, BPA will reduce the Augmentation purchases for existing publics by a corresponding amount during that Rate Period. If it is necessary to reduce Augmentation power already purchased, the forecast market value of power equal to the remaining unused RHWM amounts will be credited to the Composite Cost Pool; see section 3.2.2.1.

The above-RHWM load for each customer is also determined in the RHWM Process. As described in section 6.2, to determine the above-RHWM load for each year of the Rate Period, the RHWM for each customer will be subtracted from the amount of its forecast Total Retail Load, reduced by Existing Resources, for each year of the Rate Period. To the extent that customers have elected BPA as their provider, their above-RHWM loads will be served at Tier 2

Rates. A Transition Period method to set above-RHWM load for all or a portion of the Transition Period, depending on product choice, will be used for FY 2012-2014 instead of this method. See section 4.4.

4.3.1 RHWM Calculation

Expressed as a formula, the RHWM will be calculated by BPA for each customer as follows:

$$RHWM = \frac{CHWM}{\sum CHWM} \times T1SR$$

where:

RHWM = Rate Period High Water Mark, expressed in average megawatts

CHWM = Contract High Water Mark

ΣCHWM = sum of all customers' Contract High Water Marks

T1SR = forecast output of Tier 1 System Resources, averaged for the Rate Period

4.3.2 RHWM Timing and Transparency

The RHWM is an input to the rate case and will be developed by BPA through the separate RHWM Process prior to each rate case. See Table 4.1.

BPA will publish the RHWM for each customer, including the determination of the available firm critical output of Tier 1 System Resources for the upcoming Rate Period, on its website by August 15 of the Forecast Year. A two-week public comment period will follow publication of the RHWMs, during which BPA will consider stakeholder feedback. BPA will then work with customers to resolve any issues raised by the comments. Following the close of comment, BPA will republish the RHWMs by September 30 of the Forecast Year, reflecting any updates or changes.

4.4 Transition Period Method for Setting Above-RHWM Loads

The first three years of the CHWM Contract, FY 2012-2014, will be a Transition Period prior to the full implementation of CHWMs and RHWMs. The purpose of the Transition Period method is to establish above-RHWM loads in advance of the first deliveries so customers can decide how to serve that portion of their load. Customers will commit for at least the first two years of the Transition Period either to specific power purchases from BPA at Tier 2 Rates or to self-supply, based on the above-RHWM loads.

BPA's Transition Period method will establish above-RHWM loads but will not define the amount of power that a utility may purchase from BPA or the amount that will be available at Tier 1 Rates. For the Transition Period, the customer's actual CHWM, which BPA will calculate in FY 2011, will set the rights to Tier 1-priced power, and the customer's Net Requirement for each year will set the total amount of BPA requirements power it can purchase.

4.4.1 Calculating the THWM

BPA will use the Existing Resource amounts from Attachment B for both the FHWM calculation and the THWM calculation. For the THWM, BPA will adjust the Existing Resource amounts as necessary to reflect customers' dedication of PURPA and consumer-owned resources to serve their load. Outside of this difference, the only different variables between FHWM and the THWM will be BPA's forecasts of the FY 2010 TRL and the average FY 2012-2013 firm critical output of Tier 1 System Resources. BPA will use an updated 2009 forecast of these variables for the THWM. BPA will calculate the THWM for each customer as follows:

$$THWM =$$
$$[\ (2010\ forecast\ TRL_{2009} - 2010\ nonFederal\ resources_{2008})$$
$$\div \Sigma(2010\ forecast\ TRL_{2009} - 2010\ nonFederal\ resources_{2008})\ ]$$
$$\times\ Average\ of\ 2012,\ 2013\ T1SR_{2009}$$

where:

THWM = Transition Period High Water Mark, expressed in average megawatts

2010 forecast TRL_{2009} = 2009 BPA forecast of a customer's Total Retail Load for 2010

2010 nonFederal resources$_{2008}$ = Existing Resources; see section 4.1

Average of 2012, 2013 $T1SR_{2009}$ = the average of the 2009 forecast Tier 1 System Resources for FY 2012 and FY 2013 (the first Rate Period)

4.4.2 Establishing Above-RHWM Load and FY 2012, 2013, and 2014 Loads

BPA will establish each customer's above-RHWM load for the applicable year of the Transition Period in 2009. BPA will set this above-RHWM load by subtracting a customer's THWM from the difference between a forecast of each customer's TRL and Existing Resources for the Transition Period years. This method of establishing above-RHWM load differs from the section 4.2 CHWM-based method primarily in BPA's use of forecast load data rather than the Measured FY 2010 Load that will be used to establish CHWMs. In addition, this method excludes the Weather Normalization and Conservation Adjustment steps included in the CHWM calculation. Expressed as a formula, the above-RHWM load will be calculated by BPA for each customer as follows:

Above-RHWM load = [(2012, 2013, 2014 forecastTRL_{2009}*) – ExistingResources – THWM]*

where:

Above-RHWM load = customer's load above its Rate Period High Water Mark, expressed in average megawatts

2012, 2013, 2014 forecast TRL_{2009} = 2009 BPA forecast of a customer's Total Retail Load for each year of the Transition Period

ExistingResources = customer resource amounts BPA uses to calculate a customer's CHWM; see section 4.1

THWM = Transition Period High Water Mark, expressed in average megawatts

4.4.3 2-Year and 3-Year Elections

By November 1, 2009, each customer will be required to elect 1) whether the customer or BPA or a combination of the two will serve the customer's above-RHWM load during the Transition Period and 2) specific amounts of power priced at Tier 2 Rates the customer will purchase from BPA for at least the first two years of the Transition Period.

Each customer will make a three-year election as to how it will serve its established above-RHWM load for the Transition Period. Block and Block/Slice customers will elect any above-RHWM load amounts that they require BPA to serve with power at Tier 2 Rates for the entire Transition Period. In contrast, Load Following customers are required to establish specific amounts for only the first two years of the Transition Period. Specifically:

1) For a Block or Slice/Block customer, or a Load Following customer that chooses a set purchase amount to serve its above-RHWM load at Tier 2 Rates, the customer is obligated to purchase power from BPA at Tier 2 Rates based on the specific customer elections for each of the three years of the Transition Period.
2) For a Load Following customer that selects BPA to serve all of its above-RHWM load, specific purchase amounts of Tier 2-priced power will be fixed and required to be purchased for only the first two years of the Transition Period, FY 2012-2013. For a Load Following customer, the Tier 2-priced purchase obligation for FY 2014 will be determined through what will become the standard approach for establishing above-RHWM amounts in the RHWM Process. At that time, the Tier 2-priced purchase obligation for FY 2014 will be the amount that the Load Following customer's Forecast

Net Requirement for FY 2014 exceeds its RHWM set for the FY 2014-2015 Rate Period (after accounting for specific amounts of power at Tier 2 Rates, such as Vintage Tier 2-priced power the Load Following customer has otherwise elected to purchase, if applicable).

3) For FY 2015 and thereafter, the standard method for determining above-RHWM elections will be as described in section 4.5.

4.4.4 Mitigation of Transition Period Forecast Error

Load Following customers are not likely to be significantly harmed or benefited if the above-RHWM load established in 2009 differs from would have been established according to the RHWM Process. The Load Shaping Charge will function to make Tier 1 purchasers whole by charging or crediting them for amounts that are different from what was established through the Transition Period method. This function is further described in section 5.2. Customers do bear the risk that the Load Shaping values will likely differ from the amount they pay for the above-RHWM load, but the risk is balanced, because the difference could be positive or negative. Resource removal rights or Tier 2 remarketing provisions will mitigate the risk for customers applying resources or electing to purchase defined amounts of power at Tier 2 Rates.

4.5 Determination of Above-RHWM Load after the Transition Period

Following the Transition Period, a customer's above-RHWM load is its RHWM subtracted from the difference between its forecast TRL and its Existing Resources, as adjusted for PURPA and consumer-owned resources. The customer's actual Tier 2-priced purchase amount is based on the election the customer has already made of what portion of its above-RHWM load will be served by BPA.

If a customer has committed to apply Non-Federal Resources to serve all or a part of its above-RHWM load, it must provide those resources such that its Net Requirement does not exceed the sum of its RHWM and any purchase obligations for power supplied by BPA at Tier 2 Rates.

5 TIER 1 RATE DESIGN

The Tier 1 Rate design described in this section is applicable to customers who sign a CHWM Contract. The Tier 1 Rate structure consists of three elements: Customer Charges; a Demand Charge; and a Load Shaping Charge. Each of these is described below. For a Load Following customer that uses Non-Federal Resources to serve its above-RHWM load, a Resource Shaping Charge also will apply, as described in section 8.2.

5.1 Customer Charges

The Customer Charges are defined as the product of a Billing Determinant multiplied by a rate and are designed to collect the majority of Tier 1 Costs. BPA will calculate three Customer Charges for each Rate Period: 1) a Composite Customer Charge that recovers the costs allocated to the Composite Cost Pool and applies to all customers with a CHWM Contract regardless of the product choice; 2) a Non-Slice Customer Charge that recovers the costs allocated to the Non-Slice Cost Pool and applies only to customers with a CHWM Contract purchasing the Load Following or Block products (including the Block portion of the Slice/Block product); and 3) a Slice Customer Charge that recovers the costs allocated to the Slice Cost Pool and applies to customers with a CHWM Contract that purchase the Slice product. Each customer will pay for its prorated share of the costs allocated to each applicable Cost Pool (Composite, Non-Slice, and Slice).

5.1.1 Shaping of Customer Charges during Fiscal Year

Because the proposed rate design may result in within-year cash flow impacts to customers, BPA will, to the maximum extent practicable, accommodate individual customer requests to reshape charges within the Fiscal Year to mitigate adverse cash flow effects on the customer. Such reshaping of charges must recover the same amount of dollars on a net present value basis within the Fiscal Year as would have been recovered without the reshaping. The reshaping of the

payments will be accomplished prior to the start of the Fiscal Year as mutually agreed between BPA and the customer. Absent agreement, the customer must pay the charge without shaping.

The reshaping of the Customer Charges will take into account the Customer Charges, a forecast of Load Shaping Charges, and a forecast of Demand Charges. The reshaping will be accomplished by specifying 12 Composite Customer Rates for the individual customer that recover, in total, the same amount of dollars on a net present value basis as the constant Composite Customer Rates applicable to that Fiscal Year. BPA will accommodate requests to reshape Customer Charges as long as the aggregate reshaping requested by customers does not adversely impact BPA's cash flow, as determined solely by BPA, in its discretion.

5.1.2 Customer Charge Billing Determinants – Tier 1 Cost Allocator (TOCA)

A Tier 1 Cost Allocator (TOCA) will be calculated for each customer for each year of the Rate Period. A customer's TOCA is its Billing Determinant for Customer Charges. Each customer's annual TOCA will be based on the lesser of the customer's RHWM or the customer's Forecast Net Requirement and is calculated as a percentage of the total of RHWMs for all customers. Expressed as a formula, the annual TOCA is calculated as follows:

$$TOCA = \frac{\min(RHWM, Netreq)}{\sum RHWM} \times 100$$

where:

TOCA = customer's Tier 1 Cost Allocator, expressed as a percentage

RHWM = customer's Rate Period High Water Mark

Netreq = customer's annual Forecast Net Requirement

$\sum RHWM$ = sum of RHWMs for all customers (expected to be 100 percent of the forecast output of Tier 1 System Resources)

For most customers, annual TOCAs calculated in the rate case are not expected to change for billing purposes within a Rate Period; however, a customer's TOCA may need to be adjusted during the Rate Period. TOCAs will be adjusted for Slice/Block or Block customers if the annual Net Requirement determination for a customer demonstrates that its annual Net Requirement is below its RHWM and is different from the Forecast Net Requirement used to set rates. If so, BPA will adjust the TOCA to correspond with the customer's eligibility to purchase power from BPA. TOCAs may be adjusted for Load Following customers if unanticipated changes in a Load Following customer's load create excessive Load Shaping Charges (either a charge or a credit) that would otherwise result in large end-of-year Load Shaping Charge True-up payments. These excessive Load Shaping Charges can result if a Load Following customer's rate case forecast TOCA is noticeably too large or too small when forecasts are updated in August before the Fiscal Year. In these circumstances, BPA may elect to use its more current forecast of customer load for setting the customer's TOCA for the year.

5.1.3 Slice Customer Billing Determinants

BPA will charge a customer purchasing the Slice/Block product based on three types of TOCA for each year of the Rate Period. The first, an annual TOCA for the customer's Slice product purchase, will be applied to the Slice Customer Rate. The second, an annual TOCA for the customer's Block product purchase, referred to as its Non-Slice TOCA, will be applied to the Non-Slice Customer Rate. The third, an annual TOCA that combines the customer's Slice and Block product purchases, will be applied to the Composite Customer Rate. The Non-Slice TOCA is defined as the customer's TOCA (as defined in section 5.1.2) minus its Slice Percentage. Expressed as a formula, the Non-Slice TOCA for Slice product purchasers is calculated as follows:

$$NonSliceTOCA = TOCA - Slice\%$$

where:

NonSliceTOCA = annual TOCA for a customer's Block product purchase

TOCA = customer's Tier 1 Cost Allocator

Slice% = customer's annual Slice Percentage, also equal to its Slice TOCA

5.1.4 Composite Customer Rate

BPA will charge the Composite Customer Rate to all customers that sign a CHWM Contract. The Composite Customer Rate will recover all costs BPA allocates to the Composite Cost Pool and will be a dollar per one percent of the forecast firm critical output of Tier 1 System Resources (see Table 2.1 for a listing of specific cost items in the Composite Customer Rate). The Composite Customer Rate will not change in the event BPA adjusts a customer's TOCA during a particular Rate Period.

$$CompositeRate = \frac{CompositeCost}{\sum TOCA}$$

where:

CompositeRate = annual rate expressed as a dollar per one percent

CompositeCost = Tier 1 Costs allocated to the Composite Cost Pool

$\sum TOCA$ = sum of TOCAs for all Tier 1 purchasers as forecast in each rate case

5.1.5 Non-Slice Customer Rate

BPA will charge the Non-Slice Customer Rate only to customers purchasing the Load Following or Block products, including the Block portion of the Slice/Block product. Generally, the Non-Slice Customer Rate will collect those costs that the Slice product specifically excludes and will credit forecast net secondary revenues against those costs (see Table 2.1 for a listing of specific items in the Non-Slice Customer Rate). The Non-Slice Customer Rate will recover the costs

allocated to the Non-Slice Cost Pool and will be a dollar per one percent of the forecast firm critical output of Tier 1 System Resources. The Non-Slice Customer Rate will not change in the event BPA adjusts a customer's TOCA during a particular Rate Period.

$$NonSliceRate = \frac{NonSliceCost}{\sum NSCTOCA}$$

where:

NonSliceRate = annual rate expressed as a dollar per one percent

NonSliceCost = Tier 1 Costs allocated to the Non-Slice Cost Pool

$\sum NSCTOCA$= sum of TOCAs for Load Following and Block purchasers plus NonSliceTOCAs for Slice purchasers as forecast in each rate case

5.1.6 Slice Customer Rate

BPA will charge the Slice Customer Rate only to customers purchasing the Slice portion of the Slice/Block product. Generally, the Slice Customer Rate will collect those costs allocated to the Slice Cost Pool (see Table 2.1 for a listing of specific items in the Slice Customer Rate) and will be a dollar per one percent of the forecast firm critical output of Tier 1 System Resources. The Billing Determinant will be the customer's contractually specified Slice Percentage. The Slice Customer Rate will not change in the event BPA adjusts a customer's TOCA during a particular Rate Period.

$$SliceRate = \frac{SliceCost}{\sum SCTOCA}$$

where:

SliceRate = annual rate expressed as a dollar per one percent

SliceCost = Tier 1 Costs allocated to the Slice Cost Pool

$\sum SCTOCA$ = sum of TOCAs for Slice purchasers as forecast in each rate case

5.2 Load Shaping Charge

BPA will charge or credit customers at Load Shaping Rates that are based on the need to shape the firm critical output of Tier 1 System Resources to the monthly/diurnal shape of a customer's Tier 1 Load. BPA will apply this charge only to customers purchasing Block (including the Block portion of the Slice/Block product) or Load Following products. Customers purchasing the Slice product do not receive this Load Shaping Service. BPA will forecast revenues from the Load Shaping Charge for inclusion as a credit to the Non-Slice Cost Pool.

5.2.1 Load Shaping Billing Determinants

As part of establishing a Load Shaping Charge, BPA will develop a System Shaped Load for each customer. A customer's System Shaped Load is its forecast Tier 1 Load, expressed in the shape of the forecast firm critical output of the Tier 1 System Resources in each of the 24 monthly/diurnal periods of the year. BPA will compare a customer's System Shaped Load to its actual Tier 1 Load to establish Load Shaping Billing Determinants. During billing periods when the customer's System Shaped Load exceeds its actual Tier 1 Load, BPA will provide the customer a credit. Conversely, during periods when the System Shaped Load is less than the actual Tier 1 Load, BPA will charge the customer.

For each Rate Period, BPA's first step in calculating the Load Shaping Billing Determinants will be to quantify the firm critical output of the Tier 1 System Resources. BPA will forecast the firm critical output for Tier 1 System Resources for each diurnal Heavy Load Hour (HLH) and Light Load Hour (LLH) period in each month of the Rate Period (yielding 24 monthly/diurnal energy values). Once established, these 24 monthly/diurnal values will not be modified for the duration of the Rate Period.

For the second step, BPA will multiply the customer's annual TOCA by the 24 monthly/diurnal values from the first step. The customer's System Shaped Load represents the amount of energy

the customer would receive in each monthly/diurnal period if its forecast Tier 1 Load was in the shape of the firm critical output of Tier 1 System Resources.

$$SystemShapedLoad = T1SRoutput \times TOCA$$

where:

SystemShapedLoad = customer's forecast load served at Tier 1 Rates, expressed in the shape of the forecast firm energy output of Tier 1 System Resources for each monthly/diurnal period

T1SRoutput = firm critical output of Tier 1 System Resources for each monthly/diurnal period, expressed in kilowatthours, as determined in the RHWM Process

TOCA = customer's TOCA for that year, or annual Non-Slice TOCA for Slice/Block product purchasers

The third step is for BPA to calculate the monthly/diurnal Load Shaping Billing Determinants. To calculate the monthly/diurnal Load Shaping Billing Determinant for a Load Following customer, BPA will subtract the customer's System Shaped Load from its actual Tier 1 Load for each monthly/diurnal period. For Block customers, the calculation is the same, but the actual Tier 1 Load will be its billed contract power purchase.

5.2.2 Load Shaping Rates

BPA will establish the Load Shaping rates in each rate case. The Load Shaping Rate for each of the monthly/diurnal periods during the particular Rate Period (24 monthly/diurnal values) will be BPA's forecast of the market price for each monthly/diurnal period during that Rate Period.

5.2.3 Calculating the Load Shaping Charges

BPA will calculate Load Shaping Charges by multiplying the Load Shaping Billing Determinants by the Load Shaping Rates. If a specific Load Shaping Billing Determinant for the particular monthly/diurnal period is greater than zero, the result will be a charge on the customer's bill (actual Tier 1 Load minus System Shaped Load > 0). If a specific Load Shaping Billing Determinant is less than zero, the result will be a credit on the customer's bill (actual Tier 1 Load minus System Shaped Load < 0).

5.2.4 True-up of Load Shaping Charge for Load Following Customers

BPA will charge the Load Shaping Charge True-up only to Load Following customers. BPA will apply the Load Shaping Charge True-up only when a Load Following customer's annual load (either forecast or actual) is less than its RHWM. The Load Shaping Charge True-up is designed to avoid crediting or charging a customer at a market-based rate for energy that was or should have been purchased from BPA at its cost-based Tier 1 Rates.

5.2.4.1 Identifying the Need for a Load Shaping Charge True-up

BPA will subject a Load Following customer to an annual true up of its total annual Load Shaping Charge after the conclusion of each Fiscal Year when specific circumstances are met. This true-up will compare BPA's forecast of annual Tier 1 Load for each Load Following customer with the customer's actual annual Tier 1 Load. There are two situations where there will be a true-up. The first situation occurs when actual annual Tier 1 Load is less than the customer's RHWM. In this case, BPA will true up the Load Shaping Charge to reflect that the customer was charged or credited at the Load Shaping Rate for Tier 1 Loads less than the customer's RHWM. To the extent actual annual Tier 1 Load is lower because forecast above-RHWM load did not occur, there will be no true-up.

The second situation occurs when the Forecast Net Requirement used by BPA to determine the customer's TOCA is less than the customer's RHWM, but the customer's actual Tier 1 Load is greater than the original forecast. In this case, BPA will true up the Load Shaping Charge to reflect that a portion of the Tier 1 Load should have been charged a rate less than the Load Shaping Rate. BPA will bill the customer the difference between the 1) system weighted average of the Load Shaping Rates and 2) the Composite Customer Rate plus the Non-Slice Customer Rate, expressed in dollars per megawatthour, called the Load Shaping Charge True-up rate (see section 5.2.4.3). This calculation may result in a charge or a credit.

At the end of each Fiscal Year, BPA will determine for each Load Following customer its actual annual Tier 1 Load purchased, based on the customer's monthly bills. BPA will compare a customer's actual annual Tier 1 Load to its RHWM and to its Forecast Net Requirement used to determine its TOCA. If the customer's actual annual Tier 1 Load exceeds its RHWM, and its Forecast Net Requirement is greater than its RHWM, no true up is needed. Under this circumstance, the customer was not over-charged or under-charged by use of the Load Shaping Rates.

If the customer's actual annual Tier 1 Load is less than its RHWM, then BPA will true up the Load Shaping Charge payments. Under this circumstance, the customer may have been either over-charged or under-charged by use of the Load Shaping Rates for the portion of actual annual Tier 1 Load that was less than its RHWM, and BPA will adjust the customer's Load Shaping Charge payments using the Load Shaping Charge True-up rate.

If the customer's Forecast Net Requirement is less than its RHWM, but its actual annual Tier 1 Load is greater than the original forecast, then BPA will true up a portion of the Load Shaping Charge payments. Under this circumstance, the customer was over-charged by use of the Load Shaping Rates for the portion of actual annual Tier 1 Load that was less than the customer's

RHWM but above its Forecast Net Requirement, and BPA will adjust the Load Shaping Charge payments using the Load Shaping Charge True-up rate.

If the customer's actual annual Tier 1 Load is less than both the RHWM and the Forecast Net Requirement, BPA will true up a portion of the Load Shaping Charge payments. Under this circumstance, the customer will have received excessive credits through the Load Shaping rates unless the load was lower due to forecast above-RHWM load that did not materialize. BPA will adjust the Load Shaping Charge payments using the Load Shaping Charge True-up rate for amounts not accounted for by above-RHWM load that did not materialize.

5.2.4.2 Load Shaping Charge True-up Billing Determinant

BPA will use three equations to determine the Load Shaping Charge True-Up Billing Determinant. The first equation calculates *AnnualDeviation* and determines whether to use the *AboveForecast* equation or the *AboveRHWM* equation next. The equation that calculates *AboveForecast* applies only when *AnnualDeviation* is positive. The equation that calculates *AboveRHWM* applies only when *AnnualDeviation* is negative.

Using the first equation, BPA will calculate the difference between the energy used to determine the customer's annual TOCA and the actual annual Tier 1 Load during the year:

$$AnnualDeviation = ActualLoad - [TOCA \times T1SR]$$

where:

AnnualDeviation = amount of billed energy greater or less than the amount of energy that was used to develop the customer's annual TOCA, expressed in kilowatthours

ActualLoad = customer's actual annual Tier 1 Load

TOCA = customer's annual Tier 1 Cost Allocator

T1SR = annual Tier 1 System Resources used to calculate the customer's RHWM, expressed in kilowatthours

If *AnnualDeviation* is positive, then the customer was charged for this energy at the Load Shaping Rates. BPA will determine if the customer should be subject to the Load Shaping Charge True-up rate or was appropriately charged the Load Shaping Rates. If the customer's RHWM is larger than the amount of energy used to develop its TOCA, then a portion of the energy is subject to the Load Shaping Charge True-up rate. BPA will use the following formula to determine the amount of energy that is subject to the Load Shaping Charge True-up rate:

$$AboveForecast = [RHWM \times 1{,}000 \times hours] - [TOCA \times T1SR]$$

where:

AboveForecast = amount of RHWM energy that is greater than the amount of energy that was used to determine the customer's annual TOCA, expressed in kilowatthours

RHWM = customer's Rate Period High Water Mark

hours = total hours in the Fiscal Year (8,760 hours in a non-leap year and 8,784 hours in a leap year)

TOCA = customer's annual Tier 1 Cost Allocator

T1SR = annual Tier 1 System Resources used in calculation of the customer's RHWM

If *AboveForecast* equals zero, then no true up is needed, because all Load Shaping energy should be charged at the Load Shaping Rates. If *AboveForecast* is positive, then BPA will refund the customer the lesser of *AnnualDeviation* or *AboveForecast* multiplied by the Load Shaping Charge True-up rate. *AboveForecast* cannot, by definition, be negative.

If *AnnualDeviation* is negative, then the customer was credited for this energy at the Load Shaping Rates. BPA will determine if the customer should be credited at the Load Shaping Charge True-up rate. The following formula will be used to determine the amount of energy to be credited at the Load Shaping Charge True-up rate:

$$AboveRHWM = [TRL - ExistingResources] - [RHWM \times 1{,}000 \times hours]$$

where:

AboveRHWM = amount of above-RHWM energy for a customer, expressed in kilowatthours

TRL = RHWM Process forecast Total Retail Load

ExistingResources = Existing Resources as shown in Attachment B

RHWM = customer's Rate Period High Water Mark

hours = total hours in the Fiscal Year (8,760 hours in a non-leap year and 8,784 hours in a leap year)

If *AboveRHWM* is equal to or larger than the absolute value of *AnnualDeviation*, then no true up is needed. If *AboveRHWM* is positive but less than the absolute value of *AnnualDeviation*, then BPA will charge the customer the absolute value of *AnnualDeviation* minus *AboveRHWM* multiplied by the Load Shaping True-up rate. If *AboveRHWM* is negative, then BPA will charge the customer the absolute value of *AnnualDeviation* multiplied by the Load Shaping True-up rate.

5.2.4.3 Load Shaping Charge True-up Rate

BPA will determine the Load Shaping Charge True-up rate in each rate case as the difference between 1) the system weighted average of the Load Shaping Rates and 2) the Composite Customer Rate plus the Non-Slice Customer Rate, expressed in dollars per megawatthour.

In each rate case, BPA will forecast the total Tier 1 energy Billing Determinants (monthly Heavy Load Hours and Light Load Hours differentiated) for all Block (including the Block portion of the Slice/Block product) and Load Following customers for the Rate Period. BPA will then multiply the 24 monthly/diurnal Tier 1 energy Billing Determinants by the monthly/diurnal Load Shaping Rates and sum them, as shown in the equation below.

$$MktR = \sum \left(LoadShapingRate \times FT1EBD \right)$$

where:

MktR = Total Block and Load Following energy revenue that would be collected if BPA applied the Load Shaping Rates to its Tier 1 energy forecast, expressed in dollars

LoadShapingRate = Load Shaping Rate for each monthly/diurnal period, in $/MWh; see section 5.2.2

FT1EBD= forecast of Tier 1 energy Billing Determinants for the Rate Period, in monthly/diurnal megawatthour amounts

BPA also will calculate the Rate Period net allocated costs (total allocated costs reduced by revenues from net secondary sales, Demand Charges, and Load Shaping Charges) for Block and Load Following customers. This is the forecast Tier 1 revenue received from Block and Load Following customers through their Composite and Non-Slice Customer Charges.

$$BLFRnDLS = NonSliceCost + \left[CompositeRate \times \sum NonSliceTOCA\right]$$

where:

BLFRnDLS = Tier 1 net allocated costs for Load Following and Block purchasers (including Slice/Block purchasers) net of revenues from net secondary sales, Demand Charges, and Load Shaping Charges, expressed in dollars

NonSliceCost = BPA's Tier 1 Non-Slice Costs

CompositeRate = Composite Customer Rate, as described in section 5.1.4

$\sum NonSliceTOCA$ = sum of TOCAs for Load Following and Block customers plus NonSliceTOCAs for Slice customers

BPA will add the forecast Load Shaping Charge revenue to the forecast Tier 1 revenue received from Block and Load Following customers through their Composite and Non-Slice Customer Charges to create net allocated costs for Load Following and Block purchases. This is the portion of the total net allocated costs that would be collected through an energy charge.

$$BLFRnD = BLFRnDLS + LoadShaping$$

where:

BLFRnD = Tier 1 net allocated costs for Load Following and Block purchasers (including Slice/Block purchasers) net of revenues from net secondary sales and Demand Charges, expressed in dollars

BLFRnDLS = Tier 1 net allocated costs for Load Following and Block purchasers (including Slice/Block purchasers) net of revenues from net secondary sales, Demand Charges, and Load Shaping Charges

LoadShaping = forecast Load Shaping revenue

The amount of revenue calculated for the *BLFRnD* will be subtracted from the amount of revenue calculated for the *MktR*. This difference will be divided by the sum of the *FT1EBD*.

The quotient will equal the Load Shaping True-up rate BPA will charge for the entire Rate Period.

$$LSTU = \frac{[MktR - BLFRnD]}{\sum FT1EBD}$$

where:

LSTU = Load Shaping True-up rate, expressed in $/MWh

MktR = Total Block and Load Following energy revenue that would be collected if BPA applied the Load Shaping Rates to its Tier 1 energy forecast

BLFRnD = Tier 1 net allocated costs for Load Following and Block purchasers (including Slice/Block purchasers) net of revenues from net secondary sales and Demand Charges

FT1EBD= forecast of Tier 1 energy Billing Determinants for the Rate Period, in monthly/diurnal megawatthour amounts

5.3 Demand Charge

The Demand Charge is designed to send a price signal to a limited portion of a customer's overall demand on BPA. The Demand Charge is applicable to customers purchasing Load Following and Block with Shaping Capacity products. BPA will base the Billing Determinant on each utility's Customer System Peak (CSP), which is the customer's single highest Heavy Load Hour Tier 1 Load hourly energy purchase from BPA during each month. After the customer's CSP is identified for each month, BPA will make the adjustments identified below to the CSP to calculate the Demand Charge Billing Determinant. The adjustments include a reduction to the CSP for average Heavy Load Hour energy use for the month and a reduction based on historical peak use (referred to as Contract Demand Quantity or CDQ; see section 5.3.2.2).

A third reduction will be made to the CSP if a Load Following customer makes a firm resource commitment for the Rate Period that is shaped into the super peak period as defined by BPA. The super peak period will be either two three-hour periods each day or a single six-hour period, all as determined prior to each rate case. The reduction to the CSP for the Super Peak Resource Credit is equal to the amount of additional capacity the customer commits to provide during super peak hours compared to the amount of capacity that would be provided if the same amount of energy was provided flat within the monthly Heavy Load Hour period. This reduction will be applied regardless of when the customer's actual CSP occurs. The total Demand Charge Billing Determinant cannot be reduced below zero.

5.3.1 Demand Charge Billing Determinant

BPA will use four quantities in calculating a customer's Demand Charge Billing Determinant (or billing demand). These quantities are the Customer's System Peak on BPA (CSP), the average Heavy Load Hour energy use each month (aHLH), the customer-specific CDQ (see section 5.3.2), and the amount of Super Peak Resource Credit provided above the amount of capacity included in the same amount of energy provided flat across the monthly/diurnal Heavy Load Hour period. The following formula will be used to calculate a customer's monthly Demand Charge Billing Determinant:

$$BillingDemand = \max(0, CSP - aHLH - CDQ - SuperPeak)$$

where:

BillingDemand = Demand Billing Determinant, expressed in megawatts

CSP = Customer System Peak, which is the customer's maximum hourly Tier 1 Load placed on BPA during the Heavy Load Hours of each month (not including peak reduction from the Super Peak Resource Credit)

aHLH = actual hourly average Tier 1 energy purchased during the Heavy Load Hours of each month

CDQ = Contract Demand Quantity

SuperPeak = Super Peak Resource Credit—amount of additional capacity provided by a Non-Federal Resource over the amount of capacity provided by an equivalent amount of energy delivered flat across the monthly HLH period

5.3.2 Contract Demand Quantity

The CDQ is a grandfathered quantity of demand that is subtracted from a customer's CSP as part of the process of determining the Demand Charge Billing Determinant. For all customers, BPA will calculate 12 CDQs, one for each month, and identify those quantities in each customer's CHWM Contract. The calculation for determining the customer-specific CDQs will be based on each customer's historical FY 2005-2007 monthly load factors applied to the customer's monthly FY 2010 TRL in Heavy Load Hours (as adjusted in the calculation of CHWM) less Existing Resources used in the calculation of the customer's CHWM. The CDQ determinations will be performed concurrent with CHWM determinations and included in contracts at the same time. Because CDQs cannot be determined until late in FY 2011, BPA will use a forecast of CDQ for each customer for setting rates in the WP-12 rate case. The actual CDQ will be used for customer bills during FY 2012-2013.

5.3.2.1 Calculation of the Historical (FY 2005-2007) Load Factor

BPA will calculate a Heavy Load Hour load factor for each customer for each month of the year using FY 2005, 2006 and 2007 data. The Heavy Load Hour load factor will be calculated as the Contract aHLH energy (average Heavy Load Hour energy in a month) divided by the Contract CSP (the peak Heavy Load Hour energy in the month). The Contract aHLH energy for each

month in FY 2005, 2006, and 2007 will be the metered Heavy Load Hour Total Retail Load for the month, less the average annual amount of Existing Resources used to calculate the customer's CHWM. The Contract CSP for each month will be the highest hourly TRL amount in the month less the same Existing Resource amount.

The Contract CSP for each month will be calculated by averaging the same-month CSPs for FY 2005, 2006, and 2007 (e.g., [(Jan 05 CSP + Jan 06 CSP + Jan 07 CSP)/3]). The Contract aHLH energy for each month will be calculated by averaging the same-month aHLH energy for FY 2005, 2006, and 2007. To calculate the Heavy Load Hour load factor for each month, BPA will divide the Contract aHLH by the Contract CSP for each respective month. BPA will take into account anomalies such as recovery peaks when calculating a customer's Heavy Load Hour load factor (a recovery peak may occur after a significant interruption of electric service to a customer as an unusually large use of energy measured for the first hour immediately following return to service).

BPA will adjust the Heavy Load Hour load factor to assure that some portion of each customer's demand is on the margin. The adjustment will be accomplished by dividing the Heavy Load Hour load factor by 91 percent to produce an adjusted Heavy Load Hour load factor. The adjusted Heavy Load Hour load factor cannot exceed 100 percent.

A New Public that forms out of all or part of an existing public utility will receive a share of the existing public's CDQ. Such an assignment will reflect the new load profiles of the new and existing utility and will be proportionate to the New Public's annexed share of the existing utility's TRL, net of any Existing Resources that are either transferred to the New Public by virtue of the annexation or dedicated by the New Public to serve its load. New Publics that are formed from an Investor-Owned Utility load will receive monthly adjusted Heavy Load Hour

load factors that are calculated using the monthly average adjusted Heavy Load Hour load factor for all customers as described above.

5.3.2.2 Calculating CDQ

BPA will apply the adjusted Heavy Load Hour load factors to the customer's average hourly Heavy Load Hour energy purchase from BPA used in calculating CHWM for each month to calculate the customer's CDQ. Once calculated, the CDQ will be included in the CHWM Contract for use during the contract term. The following formula will be used for each month of the Fiscal Year.

$$CDQ = \frac{aHLH_{2010}}{adjLoadFac} - aHLH_{2010}$$

where:

CDQ = Contract Demand Quantity, a grandfathered quantity of demand that is subtracted from a customer's CSP as part of the process of determining the Demand Charge Billing Determinant, expressed in megawatts

$aHLH_{2010}$ = measured FY 2010 Contract aHLH energy used in calculating the CHWM

adjLoadFac = Adjusted HLH Load Factor for each month, as described in section 5.3.2.1

The CDQ for New Publics that are formed from an Investor-Owned Utility load will be calculated with the average monthly adjusted Heavy Load Hour load factors as described above and the monthly forecast average Heavy Load Hour energy as determined for calculating the New Public's CHWM. When New Publics are phased in as described in section 4.2.6.3, the CDQ will change each Rate Period until the CHWM phase-in process has concluded.

5.3.3 Demand Rate

BPA will base the Demand Rate on the annual fixed cost (capital and O&M) of the marginal capacity resource as determined in each rate case. BPA will identify the marginal capacity resource and the fixed costs associated with that resource for each Rate Period based on BPA's Resource Program and/or costs of BPA's recent capacity additions. If there are no recent capacity additions or Resource Program-identified capacity resources and costs, BPA will use a collection of third party sources to inform its determination. These third party sources may include the Energy Information Administration, EPRI Technical Assessment Guide, the Northwest Power and Conservation Council, and Integrated Resource Plans of Pacific Northwest electric utilities. Identification of the marginal capacity resource and the fixed costs associated with that resource will be proposed by BPA in each rate case. The Demand Rate will be proportionally shaped to the Heavy Load Hour energy prices set for the Load Shaping Rates. The shape of the Demand Rate may be subject to a dampening methodology proposed in each rate case if there proves to be significant Rate Period to Rate Period Demand Rate volatility.

5.4 Product Switching Rates and Charges

BPA may develop rates or charges for a customer that switches products during the term of its Regional Dialogue Contract. Such rates or charges will be designed to mitigate any cost shifts to other customers that may arise from the choice to switch products. These rates or charges will be developed in the applicable rate cases.

5.5 Other Tier 1 Charges

BPA will limit Tier 1 charges to those detailed in this section 5. If BPA wishes to institute a new charge in addition these charges, it shall propose a change to this TRM in accordance with the provisions set out in sections 12 and 13. This limitation does not include rate adjustments due to risk mitigation (e.g., application of a CRAC), new or modified risk mitigation tools, or mid-Rate Period rate adjustments for cost recovery purposes. This limitation pertains to the core charges

of the PF rate design and does not encompass other adjustments, charges, and special rate provisions (e.g., targeted adjustment charges, unauthorized increase charges, conservation credits or surcharges), or any other charges allowed under section 12.5.

6 TIER 2 RATE DESIGN

Consistent with the provisions below, the specific rate designs for BPA's Tier 2 Rate Alternatives will be determined in future section 7(i) rate proceedings. BPA's allocation of costs to the Tier 2 Cost Pools associated with the rate alternatives will be guided by this TRM. Tier 2 Cost allocation and rate design will ensure that the Tier 2 Rates will recover the full cost of serving above-RHWM load; the output of Tier 1 System Resources will not be used in a manner that subsidizes the costs of Tier 2 Rate service, as forecast in the applicable rate cases; and no Tier 2 Cost Pool will be responsible for the costs of other Cost Pools.

6.1 Overall Construct

Each customer's product choice will affect the Tier 2 Rate Alternatives available to that customer. In general, a customer electing BPA as its service provider for all or a portion of its above-RHWM load also will agree to pay the incremental costs of resource acquisitions and the purchase power costs BPA allocates to the Tier 2 Rate Alternative selected by the customer. BPA will establish Tier 2 Rates based on the cost of providing a flat annual amount of power. The Tier 2 Rate Alternatives that will be available for above-RHWM service beginning FY 2012 are a Load Growth rate and a Short-Term rate. BPA also expects to develop Vintage Rate Alternatives. Summary descriptions of BPA's proposed list of initial Tier 2 Rate Alternatives can be found in Attachment E. Over time, BPA may propose in power rate cases to update, modify, eliminate, or add to the Tier 2 Rate Alternatives summarized in Attachment E, subject to BPA's previous offerings and customer commitments.

6.1.1 Options for Load Following Customers

Each Load Following customer must elect how its above-RHWM load will be served during the applicable purchase obligation period. In general, these customers can choose Federal power priced at a Tier 2 Rate; Non-Federal Resources; or some pre-defined combination of the two

(e.g., the first 5 aMW of above-RHWM load served at the Short-Term rate, with Non-Federal Resources covering the remainder, or vice-versa). For BPA service to Load Following customers at Tier 2 Rates, the available rate choices are the Load Growth rate; the Short-Term rate; and the Vintage rate(s) (if available). Load Following customers also may establish some pre-defined combination of these Tier 2 Rates. A customer that elects to have its entire above-RHWM load served at the Tier 2 Load Growth Rate is also eligible to participate in the Shared Rate Plan (SRP), if it makes such election by November 1, 2009. See section 7.

6.1.2 Options for Block and Slice/Block Customers

Each Block and Slice/Block customer must elect how its above-RHWM load will be served during the applicable purchase obligation period. These customers can choose between all Non-Federal Resources or some pre-defined combination of available Tier 2 Rate service (with a defined take-or-pay commitment) and Non-Federal Resources (determined annually). For Tier 2 Rate service, the available rate choices for Block and Slice/Block customers are the Short-Term rate and the Vintage rate(s) (if available), or a pre-defined combination of these rates.

6.2 Setting Tier 2 Amounts

As described in section 4.3, in the RHWM Process prior to each rate case BPA will set customers' RHWMs and calculate each customer's above-RHWM load using the customer's Forecast Net Requirement for the next Rate Period. When a customer's annual above-RHWM load is forecast to be greater than 8,760 MWh, BPA will require service for the customer's entire above-RHWM load with Tier 2-priced power, with Non-Federal Resources, or with a combination. BPA service at Tier 2 Rates for this above-RHWM amount will be a fixed amount and will not change during the Rate Period. Block and Slice/Block customers will have already set their amounts of above-RHWM load served at a Tier 2 Rate at the time the fixed amount is set for Load Following customers.

Following is an example for illustrative purposes only. Assume a Load Following customer's TRL is forecast by BPA to be 100 aMW for both years of the Rate Period, and its RHWM is 80 aMW. The customer has no Non-Federal Resources. The customer committed to the Tier 2 Short-Term Rate for all of its above-RHWM load service; therefore, its Tier 2 Billing Determinant is 20 aMW for both years of the Rate Period. The customer will be billed the Tier 2 Short-Term Rate for 20 MW in each hour of the Rate Period.

6.3 Cost Basis

Once BPA has established Tier 2 Billing Determinants for the Rate Period (developed in the RHWM Process), BPA will establish Cost Pools for each rate alternative and allocate the following components to each Cost Pool: projected resource costs and/or projected market purchase costs, projected Resource Support Services (RSS) costs (if applicable), an Overhead Cost Adder, resource-specific actual operating costs (if applicable), risk mitigation (if determined necessary), and the net costs of remarketing excess Tier 2 energy (if determined necessary). Each Tier 2 Rate alternative will have its own separate Cost Pool. The cost components included in each Tier 2 Cost Pool will be dependent upon the type of resource costs included in the pool and will be decided in the appropriate rate case. Section 3.4 contains additional guidance regarding the allocation of specific resource costs.

6.3.1 Cost Component Construct

BPA's intent in determining the costs included in individual Tier 2 Cost Pools is that the costs and cost of risk that each customer that elects a particular Tier 2 Rate Alternative faces will reflect BPA's incremental cost of serving the customer and will be comparable to the types of costs and risks the customer would face if purchasing from a non-Federal source.

For Tier 2 Rate Alternatives based on block energy purchases from market sources, the costs allocated to the Cost Pool will include costs that BPA incurs to serve load at a set price with a combination of forward and spot purchases of block energy from the market. When this type of Tier 2 Rate is set, BPA may not have actually made all the market purchases to serve the load at this rate. Consequently, this type of rate may be comprised of both known and projected costs of the energy from a market purchase, a risk component to cover the expected risks of providing service at a set forward price (which would take the form of some combination of Planned Net Revenues for Risk and rate adjustments or true ups), and a BPA Overhead Cost Adder. See section 6.3.3 for the construct of the Overhead Cost Adder.

For non-dispatchable resource Tier 2 Rate Alternatives, the costs allocated to the particular Tier 2 Cost Pool will include costs BPA incurs to serve load with a purchase of a non-dispatchable resource. These types of costs include the cost of the resource purchase, any RSS charges, transaction costs, and a BPA Overhead Cost Adder. Transaction costs might include transmission and Balancing Authority Area charges for within-hour balancing and may be known or based on projections that are trued up after the fact. The RSS charges are the same that would be applied to a customer's purchase of a non-Federal non-dispatchable resource to result in the power being costed as if it were delivered as a flat annual block. See section 6.3.2 and section 8 regarding RSS charges. See Attachment F for an example of a Tier 2 Vintage rate based on a wind resource.

For dispatchable resource Tier 2 Rate Alternatives, the costs allocated to the particular Tier 2 Cost Pool will include costs and risks that BPA incurs to serve load with a purchase of a dispatchable resource, with the customer assuming the operational risks. These types of costs include projected annual fixed costs (debt service and fixed O&M) of the resource; the expected fuel and variable O&M costs of the resource, based on its expected operation; a mechanism to true up the expected fuel and variable O&M costs to actual costs; a mechanism to compensate

the customer for any savings from economic dispatch of the resource, including fuel remarketing proceeds; transaction costs; and a BPA Overhead Cost Adder.

A Tier 2 Rate Alternative Cost Pool can include combinations of market purchase and resource costs described above.

6.3.2 Resource Support Services and Environmental Attributes

Any resources acquired by BPA to serve above-RHWM loads served at a Tier 2 Rate will include appropriate RSS charges, Resource Shaping Charges (to account for the costs of converting resource output into flat annual delivery), and Resource Shaping Charge Adjustments (to recover the cost differential between planned and actual energy output) necessary to price the service as if the resource output is serving a flat annual load. The application of costs associated with RSS supplied from Tier 1 System Resources for resources serving loads at a Tier 2 Rate is to ensure energy neutrality and to compensate the Tier 1 Cost Pools for risk exposure incurred due to the provision of RSS. The planned costs allocated to the Tier 2 Rate associated with RSS will be set in each rate case, with a correlated revenue credit included in the Tier 1 Rates. A customer purchasing under these Tier 2 Rate Alternatives may face adjustments to its charge each year by the application of the Resource Shaping Charge Adjustment to account for changes due to actual resource output. These services and charges are discussed in section 8.

If a particular Tier 2 Cost Pool includes renewable generation and is not sold with environmental attributes, then BPA will market any environmental attributes associated with this renewable generation and credit the forecast revenues to the relevant Tier 2 Cost Pool.

6.3.3 Overhead Cost Adder

Each Tier 2 Cost Pool will include an Overhead Cost Adder. This adder is intended to compensate Tier 1 Cost Pools for the general and administrative (overhead) costs associated with BPA's provision of power at Tier 2 Rates. In each rate case, BPA will propose a per-kilowatthour adder to be applied to all power sold at Tier 2 Rates. The adder will be set at a level comparable to typical electricity broker fees rather than an accounting of BPA's actual overhead costs. The costs resulting from the application of the adder will be added to each Tier 2 Cost Pool. The revenues resulting from charging the adder to Tier 2 purchasers will be credited to the Composite Cost Pool.

6.3.4 Risk Mitigation

In each rate case, when there is more specificity about the resource and purchase costs allocated to the various Tier 2 Cost Pools, BPA will assess the risks of the resources associated with these costs (e.g., fuel price risk). BPA will propose risk mitigation tools for each Tier 2 Cost Pool, as appropriate, that will be in addition to the Resource Shaping Charge Adjustment (see section 8.2.1). BPA recognizes it may be limited in Tier 2 Rate offerings by the requirement in section 9.2 that Tier 2 risks not increase costs allocated to Tier 1 or require enhancement of Tier 1 risk protections.

6.4 Remarketing of Tier 2 Amounts

Depending on a customer's contract type and Tier 2 Rate service election, the customer may have made long-term purchase obligations for Tier 2 Rate service based on forecast load. These amounts of Tier 2-priced purchase obligations may turn out to be greater than the customer's above-RHWM load (not otherwise committed to be served by applying Non-Federal Resources) calculated for future Rate Periods. If so, BPA will remarket excess Tier 2 obligation amounts and credit the proceeds to the specific customer to allow it to receive its Tier 1 Rate service to the maximum extent of its eligibility.

Because the amount of power provided to Block and Slice/Block customers is subject to BPA's annual forecast of Net Requirement, BPA will annually assess the need for remarketing of Tier 2 obligation amounts when the annual Net Requirement amount is determined. These Block and Slice/Block customers' Tier 2 purchase obligation amounts will be established in advance for at least each purchase obligation period. In contrast, BPA will set Tier 2 purchase obligation amounts for most Load Following customers prior to each rate case. When amounts are pre-established, such as with Tier 2 Vintage rates, however, BPA will assess on a Rate Period basis the need for remarketing Load Following customers' Vintage rate purchase obligations. In the appropriate rate case, BPA will establish the transaction costs to be charged to the customer.

6.4.1 Calculating the Remarketed Tier 2 Rate Proceeds

If BPA remarkets any power acquired for Tier 2 Rate service but not taken by a customer, the proceeds (as established below) will be netted against the customer's monthly Tier 2 charges. The difference (which could be a credit or a charge) will be assigned to the specific customer. BPA will value the remarketed energy based on forecast market prices for a flat annual block of power for the next Fiscal Year according to procedures established in the relevant rate cases. The value of the remarketed energy will be adjusted for transaction costs, including broker or other marketing fees, transmission costs, transmission losses, and odd lot remarketing costs; transaction costs also could include a market price-based risk component.

The forecast value of the customer's remarketed amount will be divided by 12 and netted against each month's billed Tier 2 Rate amount. The customer will still be responsible for any Resource Shaping Charge Adjustments that apply to the Tier 2 rate purchase obligation amount that BPA is remarketing. For those customers selecting a Tier 2 Vintage rate sold with environmental attributes, the environmental attributes associated with the Tier 2 purchase obligation amount

(including the amount that is being remarketed) will still be transferred to the customer. An example of how to calculate remarketed Tier 2 Rate proceeds can be found in Attachment G. This procedure will be applied whether or not BPA actually remarkets the power or uses it for its own purposes. There will be no true up to actual revenue BPA receives for disposition of this power.

6.5 Provision for Additional Tier 2 Rate Alternatives

BPA expects to develop Tier 2 Vintage rates that will recover costs of specific resources or groups of resources acquired based on customer interest and resource availability. BPA will propose to allocate these specific resource costs to individual Tier 2 Vintage Cost Pools in the relevant rate case. In the rate case BPA will determine other cost components to be allocated to each Tier 2 Cost Pool, including costs for the services necessary to convert resource output into a flat block of power. In addition, BPA will determine in the applicable rate cases whether any rates or charges should be applied to the customer transferring service from the Tier 2 Short-Term rate service to the new Tier 2 Vintage rate service to mitigate cost shifts to other customers.

6.6 Rates for Unanticipated Above-RHWM Load

BPA will develop rates in the applicable rate cases for service to unanticipated above-RHWM loads. Such unanticipated loads could occur for various reasons, such as a delay in the startup of a new Non-Federal Resource that a customer was expecting to serve its above-RHWM load.

7 THE SHARED RATE PLAN (SRP)

BPA will provide Load Following customers with a one-time, limited opportunity to select the Shared Rate Plan (SRP) by November 1, 2009, if they have committed to purchase 100 percent of their above-RHWM load service at the Tier 2 Load Growth Rate. Access to the SRP is limited to a number of customers whose Forecast Contract High Water Mark (FHWM) does not exceed 500 aMW in aggregate total. If there are requests for more than 500 aMW of FHWM for the SRP before November 1, 2009, BPA will stack the requests from smallest (in average megawatts) to largest using FHWMs until the last customer selected has its entire FHWM fit within the 500 aMW limit. This stacking will exclude the largest customers from the SRP, accepting as many smaller customers as can be accommodated.

Under the SRP, each participant will pay the same SRP customer rate as all other SRP purchasers. An SRP purchaser's Billing Determinant will be its share of the total Forecast Net Requirement for all SRP purchasers, called the Shared Rate Cost Allocator (SRCA). BPA will ensure that this rate option does not shift costs to other customers outside of the SRP.

To calculate the rate, BPA will estimate revenues to be recovered from the SRP purchasers by combining the forecast Rate Period revenues associated with SRP participants under the Composite Customer Rate, the Non-Slice Customer Rate, and the Tier 2 Load Growth Rate. Dividing these forecast revenues by 100 yields the SRP customer rate in the form of a dollar per one percent of the SRP costs. Each SRP participant will pay this rate based on its SRCA, which is each SRP participant's Forecast Net Requirement averaged over the Rate Period divided by the sum of all SRP participants' Forecast Net Requirements averaged over the Rate Period. The SRCA will be expressed as a percent on the customer bill, similar to the TOCA.

Energy true-ups associated with the Resource Shaping Charge Adjustment for the resources whose costs are allocated to the Tier 2 Load Growth Rate pool will be shared by all participants in the SRP based on each participant's SRCA.

BPA will continue to calculate and apply the Load Shaping and Demand Charges on an individual customer basis and in the same manner as for all Load Following customers, i.e., using the individual customer's TOCA. The exception is that there will be a special true up for Load Shaping Charges for customers in the SRP. When a customer purchases less above-RHWM power annually than was projected in the rate case, that customer will not keep the extra Load Shaping credit and will retain only the equivalent to what it paid for the power through the SRCA. Any excess will be returned proportionally to all customers in the SRP.

As provided in the Tier 1 Rate design, BPA will, to the maximum extent possible, accommodate individual customer requests to reshape the SRP customer rate within the Fiscal Year to mitigate the adverse cash flow effects on the customer. See section 5.1.1.

The Low Density Discount (LDD; see section 10.1) and Irrigation Rate Mitigation (IRM; see section 10.2) may need to be applied differently for eligible customers that participate in the SRP to ensure that they receive comparable treatment to those LDD/IRM-eligible customers that are not SRP participants. These issues will be resolved in relevant rate cases.

In addition, PURPA may require a customer to take a Non-Federal Resource to load. A customer's participation in the SRP will allow for the application of Non-Federal Resources in this circumstance.

8 RESOURCE SUPPORT SERVICES

Resource Support Services (RSS) are provided for Federal or specific Non-Federal Resources that customers dedicate to serving their regional retail load. These services will be offered under the PF rate schedule to customers purchasing the Load Following product. For eligible Slice/Block and Block customer resources, these services will be offered under the Firm Power Products and Services (FPS) rate schedule. The three services in the RSS package—Diurnal Flattening Service, Forced Outage Reserves, and Secondary Crediting Service—are available only to customers with a CHWM Contract. BPA will develop or modify the design and pricing governing these products in each rate case.

8.1 Diurnal Flattening Service

Diurnal Flattening Service (DFS) is available to Federal resources and eligible dedicated Non-Federal Resources. Eligibility is described in the Policy. This service will be applied to Tier 2 System Resources, specific Augmentation resources, and eligible Non-Federal Resources used to serve both above- and below-RHWM load. This service, in conjunction with the Resource Shaping Charge, allows BPA and customers to shape resources into the financial equivalent of a flat annual block.

DFS makes a variable or intermittent resource, or that portion of the resource that is variable or intermittent, equivalent to a resource that is flat within the 24 monthly/diurnal periods of the year. This service allows resources to comport with the Tier 1 Rate design (through the Resource Shaping Charge), which establishes 24 Heavy Load Hour and Light Load Hour shaping rates. This service ensures that the resource has sufficient capacity to serve flat annual benchmark loads above-RHWM load. Because the DFS is applied to only the variable component of the resource(s), coverage of outages in the firm component is not provided through

the DFS. An additional service, Forced Outage Reserves (described in section 8.3), is available for the firm component of a resource.

Pricing of the DFS will consist of two charges, one for capacity and the other for energy. BPA will use the resource's historical scheduled generation and any applicable regional Integrated Resource Plans to price this service. When historical scheduled generation is not available, BPA will use historical scheduled generation from a similar resource until historical scheduled generation becomes available. Groups of resources (i.e., those whose costs are allocated to specific Tier 2 Cost Pools or Non-Federal Resources serving a single customer's above-RHWM load) may be aggregated for purposes of pricing the DFS.

8.2 Resource Shaping Charge

The customer-specific annual Resource Shaping Charge is a charge or credit that adjusts for the difference in value between a planned resource energy shape that is flat within each of the 24 individual Heavy Load Hour and Light Load Hour periods of the year versus an equivalently sized flat annual block. For resources provided the DFS, BPA will apply the Resource Shaping Charge to the 24 monthly/diurnal flat blocks. A customer applying a Non-Federal Resource to its above-RHWM load that is flat within each monthly/diurnal period of the year but is not flat between those periods will avoid the DFS charge but will be subject to the Resource Shaping Charge. A customer applying a Non-Federal Resource to its above-RHWM load that is flat annually will avoid both the DFS and the Resource Shaping Charge.

The Billing Determinant for the Resource Shaping Charge will be the difference between a flat annual block and the resource's expected monthly/diurnal firm output (flat annual block minus the resource's firm or expected output). This Billing Determinant may be a positive or a negative number:

1) A resource producing (or expected to produce, if DFS is purchased) less energy than the flat block during any of the 24 monthly/diurnal periods of the year will result in a positive Billing Determinant for that period. When the Billing Determinant is applied to the rate, the Resource Shaping Charge will be the forecast market cost of purchasing power to make up the difference between the diurnally flat energy amount and a flat annual block.
2) A resource producing more energy than the flat block during any of the 24 monthly/diurnal periods of the year will result in a negative Billing Determinant for that period. When the Billing Determinant is applied to the rate, the Resource Shaping Charge will be the forecast market value of selling power to reflect the difference between the diurnally flat energy amount and a flat annual block.

BPA will calculate the annual Resource Shaping Charge once for each Rate Period. The Resource Shaping Rate will be equal to the Load Shaping Rate (see section 5.2).

8.2.1 Resource Shaping Charge Adjustment

The Resource Shaping Charge Adjustment is applicable to customers that purchase the DFS and also may be applicable to customers taking Tier 2 service from BPA. The DFS is an energy-neutral service that requires an end-of-month adjustment when a resource produces more or less energy than what was expected when the service was priced. For each monthly/diurnal period, the Resource Shaping Charge Adjustment will compare the expected energy (as forecast in the rate case) to the actual monthly generation of the resource. If a resource produces more than its forecast energy, then a credit is due to account for the excess generation. Conversely, if a resource produces less than its forecast energy, then a charge is due to account for the under-performance. The rates applied to the difference between forecast generation and actual generation will be the forecast market prices BPA uses for the Resource Shaping Charge and the

Load Shaping Charge. BPA will compute the Resource Shaping Charge Adjustment and charge or credit it on the customer's monthly bill.

8.3 Forced Outage Reserves

Forced Outage Reserves (FOR) service supplements Operating Reserves Services provided under the Open Access Transmission Tariff (OATT). FOR may be arranged for when Operating Reserves expire. Contracts for FOR will establish notification requirements and limits on energy amounts that will be provided under the product. For outages that do not meet the contract criteria for FOR, BPA will make a good faith effort to meet a customer's request for power; prices and duration will be established by mutual agreement at that time.

For a resource that has a firm component in its expected output, the quantity of FOR capacity needed will be the monthly firm capacity multiplied by the resource forced outage rating, as determined in the contract providing FOR. The rate for the FOR will be developed in the relevant rate cases during the term of the contract.

Forced Outage Reserves Energy (FORE) is energy delivered when the FOR service is requested. There will be an annual energy limit in megawatthours and a commitment period energy limit. These limits will be resource-specific. If the limits are exceeded, the FOR service will be repriced to accommodate additional energy deliveries. The price of the power provided will be determined in the relevant rate cases.

8.4 Secondary Crediting Service

Secondary Crediting is available to Load Following customers only. With this service, Load Following customers that dedicate the entire output of an Existing Resource (metered or scheduled hydro) will receive a credit for the amount of energy produced by the resource in

excess of its critical firm output component (either dispatchable or non-dispatchable) as long as it has both a firm critical component and a secondary energy component. This service is currently intended to apply to hydro resources but could apply to other resources if secondary energy amounts are established for them. A customer that elects to take the Secondary Crediting Service will receive a credit against its PF rate charges for the amount of secondary energy applied to its load. The method for establishing this credit will be determined in the relevant rate cases and will account for transaction costs.

9 RISK MITIGATION

9.1 Overview of Risk in the TRM

In each rate case, BPA will define risk mitigation mechanisms and set rates to support BPA's then-current agency financial risk standard(s). The agency financial risk standard(s) is set in BPA's 10-Year Financial Plan, or its successor, subject to any required review in a section 7(i) rate proceeding. Notwithstanding the efficacy of risk mitigation measures individually included in Tier 1 and Tier 2 Rates as described below, BPA's risk assessment in conjunction with a particular section 7(i) rate proceeding may show that Power function risk has not been adequately mitigated pursuant to BPA's risk standards. In that situation, BPA will propose an allocation of the remaining risk and any additional mitigation between the tiers in the applicable rate case and decide the issue in that proceeding.

9.2 Risk in Tier 2

The CHWM Contract will include take-or-pay provisions, obligating customers to pay their monthly BPA power bills based on BPA's applicable Tier 1 and Tier 2 Rates. This will reduce the risk of not recovering the cost of power acquired to serve forecast above-RHWM load that does not materialize. Risks in Tier 2 will be assessed both for each Tier 2 Rate Alternative and collectively for all Tier 2 Rate Alternatives in each rate case to determine if the terms and conditions have mitigated risks sufficiently to meet BPA's risk standards. BPA will include in Tier 2 Rates any supplementary risk mitigation necessary to meet BPA's risk standards. Altogether, Tier 2 risk mitigation will be structured so that the risk associated with Tier 2 Rates should not increase the costs allocated to Tier 1 Cost Pools or require any enhancement of Tier 1 risk protection mechanisms beyond what would have been required absent sales at Tier 2 Rates. The costs of risk included in the Tier 2 Cost Pools and the mitigation of such risk are rate case matters and will be addressed in the relevant rate cases.

9.3 Risk in Tier 1

BPA will assess the risks related to the costs and revenues allocated to the Tier 1 Cost Pools and design risk mitigation measures and set rates for Tier 1 so that the Tier 1 Rates meet BPA's risk standard(s). BPA's current risk mitigation tools include Planned Net Revenues for Risk and cost recovery adjustment clauses (CRACs). BPA will continue the approach of using true-ups for Slice risk mitigation, although in modified form. If BPA believes this method causes cost shifts between Slice customers and non-Slice customers, BPA will address this issue in a section 7(i) rate proceeding. Risk mitigation for non-Slice products will be determined in each section 7(i) rate proceeding.

9.4 Slice True-Up

Slice customers (i.e., customers purchasing the Slice product under the Slice/Block contract; see Attachment A) will have an annual Slice True-Up for expenses and credits in the Composite Cost Pool (see Table 2.1, Composite section) that is the basis for the Composite Customer Rate. The expenses and credits in the Slice Cost Pool (see Table 2.1, Slice section) will also be subject to an annual true up process. The Slice Cost Pool is the basis for the Slice Customer Rate (see section 5.1.6). The annual Slice True-Up Adjustment will be calculated for each Fiscal Year as soon as BPA's audited financial data are available (usually in November).

The annual Slice True-Up Adjustment for the expenses and credits in the Composite Cost Pool will be calculated by subtracting the average Composite Cost Pool forecast costs for the applicable Rate Period, upon which the Composite Customer Rate is based, from the Composite Cost Pool actual costs for the applicable Fiscal Year and multiplying the difference by the customer's Slice Percentage. The annual Slice True-Up Adjustment for the expenses and credits in the Slice Cost Pool will be calculated by subtracting the average Slice Cost Pool forecast costs for the applicable Rate Period upon which the Slice Customer Rate is based from the Slice Cost Pool actual costs for the applicable Fiscal Year. This amount then will be allocated to each Slice

customer, as appropriate, based on the applicable Slice Percentages. The Slice costs are 100 percent allocated to Slice customers. For costs or credits in either Cost Pool that are not subject to the Slice True-Up, the actual cost will be set equal to the forecast cost or credits. The costs and credits not subject to Slice True-Up are so designated on the Cost Allocation Table, Table 2.1. In Table 2.1, the shaded cells under the column headings entitled "Actual Data" identify those costs and credits not subject to Slice True-Up.

9.4.1 New Costs or Credits in the Slice True-Up

In the annual Slice True-Up, BPA will allocate new costs or revenue credits that are not included in the cost or credit categories on Table 2.1 and that arise or become known after the rates are developed (i.e., during the Rate Period) to Cost Pools based on the TRM cost allocation principles and methodology (see section 2.1). Customer challenges to BPA decisions on assignment of new cost or revenue credits during the Rate Period will be addressed in the next scheduled rate case. If a different cost assignment than what was implemented by BPA through the Slice True-Up is adopted, the Slice customers will be compensated or charged based on their over-payment or under-payment.

9.4.2 Verification of Slice True-Up

Slice customers will be charged their allocated share of all actual costs and credits assigned to the Power function by BPA, except for specific excluded costs (see section 2.2.3). All customers will have the right to assess, through a verification process, whether BPA has correctly calculated the amount of each cost that the Slice True-Up calculation is based on. The verification process will focus strictly on calculation and allocation errors, and will not enable customers to question or dispute accounting, policy, management, and other similar issues. The verification process will be facilitated by BPA, following the Slice True-Up Adjustment

calculation for the previous Fiscal Year. BPA will work with customers to develop the verification process.

9.4.3 Composite Cost Pool True-Up

Actual Composite Cost Pool costs minus the forecast average Composite Cost Pool costs (for the applicable Rate Period upon which the Composite Customer Rate is based) will equal a dollar amount that may be positive or negative. If the amount is positive, then BPA will apply a charge to the Slice customer's bill; if the amount is negative, BPA will apply a credit to the Slice customer's bill. The difference calculated as stated above will be multiplied by the customer's Slice Percentage to determine the amount that is owed by or credited to that customer, the Slice True-Up Adjustment Charge for Composite Cost Pool costs.

The Composite Cost Pool actual costs will include expenses and revenues accounted for by BPA in the applicable Fiscal Year, in accordance with Generally Accepted Accounting Principles (GAAP) or its successor, and in accordance with any resulting changes in BPA's revenue requirement determination. Such expenses and revenues are those included in the Power Services' Statement of Revenues and Expenses.

The Composite Cost Pool actual costs will include a component (Minimum Required Net Revenue; MRNR) for the amount in a Fiscal Year by which BPA's actual cash requirements exceed the total actual non-cash expenses in the Composite Cost Pool. When BPA's actual cash requirements do not exceed the total actual non-cash expenses in the Composite Cost Pool, MRNR will equal zero. Any revisions to this MRNR treatment will be proposed by BPA in a power rate case.

9.4.4 Slice Cost Pool True-Up

Actual Slice Cost Pool costs minus the forecast average Slice Cost Pool costs (for the applicable Rate Period upon which the Slice Customer Rate is based) will equal a dollar amount that may be positive or negative. If positive, then a charge will be applied to the Slice customer's bill; if negative, then a credit will be applied to the Slice customer's bill. The difference calculated as stated above will be multiplied by the customer's Slice Percentage divided by the sum of all the Slice Percentages to determine the amount that is owed by or credited to that customer, the Slice True-Up Adjustment Charge for Slice Cost Pool costs.

9.4.5 Slice True-Up Adjustment Charge

The Slice True-Up Adjustment Charge for each customer will be a sum of the Slice True-Up Adjustment Charge for Composite costs and the Slice True-Up Adjustment Charge for Slice costs. If the Slice True-Up Adjustment Charge for Composite costs is a charge (adjustment is positive) and the Slice True-Up Adjustment Charge for Slice costs is a credit (adjustment is negative), the two amounts would net against each other to result in a net charge or a net credit as the final Slice True-Up Adjustment Charge.

The final Slice True-Up Adjustment Charge for each customer shall be applied either as a one-month credit (if the adjustment is negative) or as a three-month charge (if the adjustment is positive) spread equally across the three months following the month the Slice True-Up Adjustment Charge is calculated. Slice customers have the option to pay the entire charge in one month.

BPA will provide Slice customers a preliminary estimate of the Slice True-Up Adjustment Charge prior to providing them the Slice True-Up Adjustment Charge based on audited financial data.

Interest shall be computed and added to the Slice True-Up Adjustment Charge. The interest period is defined as follows:

1) If the Slice True-Up Adjustment Charge is a credit to the Slice customer, the period for interest computation shall begin with the first day of the Fiscal Year in which the Slice True-Up Adjustment Charge is calculated and end at the due date of the bill that contains such credit.

2) If the Slice True-Up Adjustment Charge is a charge payable to BPA, the period for interest computation shall begin with the first day of the Fiscal Year in which the Slice True-Up Adjustment Charge is calculated and end at the due date for each of the three bills in which the Slice True-Up Adjustment Charge appears. For Slice customers who opt to pay the charge in one month, the period for interest computation shall begin with the first day of the Fiscal Year in which the Slice True-Up Adjustment Charge is calculated and end at the due date for the one bill.

10 OTHER RATE DESIGN

10.1 Low Density Discount

In the relevant rate cases, BPA will propose the establishment of long-term Low Density Discount (LDD) stability over multiple Rate Periods (or the contract period) to the extent permitted by section 7(d)(1) of the Northwest Power Act. Section 7(d)(1) requires the Administrator to provide a discount, to the extent appropriate, to customers whose retail rates have been adversely affected by low system densities.

No LDD will be paid on above-RHWM load. This reduces the likelihood of a price preference for BPA service compared to self-supply. However, the Tier 1 LDD will be adjusted based on the customer's TRL such that the customer receives approximately the same benefit it would have received under Melded Rates.

For the post-2011 period BPA will 1) modify the definition of Consumers in the LDD section of the General Rate Schedule Provisions (GRSPs); 2) adapt the LDD to tiered rates; and 3) modify the calculation of LDD for Slice.

10.1.1 Modified Definition of Consumers

Effective October 1, 2011, the definition for Consumers in the LDD section of the FY 2012 GRSPs will be as follows:

> Consumers will be the number of consumers, by classification, having a current service connection in December of each year. Residential consumers (seasonal and non-seasonal) should be counted on the basis of the number of residences served. If one meter serves two residences, then two consumers should be counted. If a water heater is metered separately from other appliances on the same premises, the water heater load will not count as a separate consumer.
>
> Security or safety lights, billed to a residential customer, will not be counted as an additional consumer.

Seasonal consumers expected to resume service during the next seasonal period will be counted during off-season periods as well.

A residence and commercial establishment on the same premises, receiving service through the same meter and being billed under the same rate schedule, would be classified as one consumer based on the rate schedule. If the same rate schedule applies to both the residential and the commercial class, the consumer should be classified according to the principal use.

Consumers for Public Street and Highway Lighting should be counted by the number of billings, regardless of the number of lights per billing.

10.1.2 Adapting the LDD to Tiered Rates

Under tiered rates, the Tier 1 LDD for customers experiencing load growth will be adjusted in order to provide an LDD benefit equivalent to what it would have been under Melded Rates. The LDD will be based on a customer's TRL minus Existing Resources. The base discount will be determined using the adjusted TRL and the LDD Percentage Discount Table, as published in the applicable GRSPs. To reflect an increase or decrease in a customer's adjusted TRL, the percentage discount will be adjusted for application to the customer's bill. For example, if a customer is eligible for an LDD of 5 percent on its adjusted TRL, and its RHWM is 10 aMW and its Net Requirement load 11 aMW, then the customer would have its LDD percentage adjusted upward to 5.5 percent. The 7 percent cap would also be adjusted upward by the same amount for affected customers. All other GRSP criteria to qualify for the LDD would be retained, as modified in section 10.1. The formula used to calculate the LDD percentage to be applied to the customer's bill during the Rate Period is:

$$applicableLDD = eligibleLDD \times \frac{adjTRL}{RHWM}$$

where:

applicableLDD = LDD percentage to be applied to a customer's bill

eligibleLDD = LDD percentage indicated by the customer's eligibility factors

adjTRL = customer's Total Retail Load, adjusted by Existing Resources

RHWM = customer's Rate Period High Water Mark

This applicable LDD percentage will apply to all charges for purchases under the Tier 1 Rates (Customer Charge, Load Shaping Charge, and Demand Charge) of the customer receiving the LDD. The costs of the Low Density Discount will be allocated to all PF purchasers, including PF Exchange purchasers through the Composite Cost Pool. The LDD adjustment for customers experiencing load growth will apply to LDD-eligible Slice customers in a similar manner. The eligibility requirements of C/M (consumers per mile of line) and K/I (kilowatthour to investment ratio) will be calculated as in the past and may result in customers formerly or currently eligible for the discount being disqualified in the future.

10.1.3 Calculation of LDD for Slice

As a result of changes in rate design under tiered rates, BPA will modify the method for calculating the LDD for Slice/Block customers. A Slice/Block customer will have its LDD dollar benefit calculated by BPA as though it is a Load Following customer. Using the previous Fiscal Year's load data, an annual LDD dollar benefit amount will be calculated. This amount will be divided by 12 to derive a monthly LDD credit, which will be applied to the customer's monthly power bills. There will be no separate Slice and Block LDD benefits calculated. The LDD percentage will be adjusted for load growth as described in section 10.1.2.

10.2 Irrigation Rate Mitigation

Beginning with the FY 2012 Rate Period and continuing through the term of the Regional Dialogue contract, BPA will propose inclusion of Irrigation Rate Mitigation (IRM) in BPA's wholesale power initial rate proposals in the form of a fixed percentage discount on the Tier 1 Rates. Eligible irrigation loads will be identified in a customer's CHWM Contract and will not

increase during the term of the contract. The discount will not apply to loads served at Tier 2 Rates.

In the relevant rate cases, BPA will propose that the fixed IRM percentage will be the effective reduction in the melded, weighted average of the spring and summer rates caused by the Irrigation Rate Mitigation Product in the average FY 2007-2009 PF rates (it is estimated to be in the 30-34 percent range). This discount will be seasonally available to qualifying loads during May, June, July, August, and September.

The CHWM Contract will include a provision acknowledging the IRM as a rate adjustment, the terms of which will be determined in rate proceedings and subject to BPA's GRSPs. The contracts also will specify qualifying irrigation loads. A section 7(i) rate proceeding will establish the amount of the IRM discount to be applied to qualifying irrigation loads for the relevant Rate Period. Any discount, if adopted by the Administrator, will be included in the applicable GRSPs. All costs of IRM will be allocated to all PF purchasers, including PF Exchange purchasers, through the Composite Cost Pool.

BPA will include in the FY 2012 proposed GRSPs the following basis for IRM eligibility. To qualify for the IRM discount, the customer must meet one of the following criteria:

1) The customer must have participated in BPA's FY 1997-2001 Summer Seasonal Product.
2) The customer must have participated in BPA's FY 2007-2011 Irrigation Rate Mitigation Product.
3) At least 75 percent of the customer's Total Retail Load must be placed on BPA starting October 1, 2011; the customer's irrigation rate schedule sales, May through September in FY 2002-2004, divided by its TRL for FY 2002-2004, is at least 5 percent, or if less

than 5 percent, the average megawatthour use for May through September in FY 2002-2004 (15 months/3 years) is 7,500 megawatthours or more.

Eligibility will be determined twice. The first time will be at the time of signing of the CHWM Contract in calendar year 2008 and will be for existing Irrigation Rate Mitigation Product customers and qualifying Summer Seasonal Product customers. The second eligibility determination will be made 90 days after the issuance of the TRM ROD, for new eligible customers. Their CHWM Contracts will be amended to reflect the eligible kilowatthour amounts.

For a Slice/Block customer, BPA will apply the percentage reduction to the lesser of the customer's monthly Block purchase at Tier 1 Rates or the qualifying irrigation kilowatthours specified in its CHWM Contract. If a Slice/Block customer's RHWM is less than its CHWM and the reduction reduces the customer's Block amount, the Regional Dialogue Contract Block amount will be used for applying the "lesser of" test. No other charges or billing determinants will be affected.

There will be a true up process at the end of the irrigation season to ensure that the customer experienced the full amount of irrigation load stated in the CHWM Contract. If a customer's May to September measured irrigation load is less than the amount of load eligible for mitigation, a true-up will be owed to BPA at end of the irrigation season. The details and requirements of the true up will be developed in the applicable rate cases and included in the GRSPs for each applicable Rate Period.

BPA will require participating customers to implement cost-effective conservation measures on eligible irrigation systems in their service territories, as described in the GRSPs. The conservation measures may be eligible for future BPA conservation programs, although the

eligibility of particular measures and the amount of BPA support will be determined in applicable rate cases.

10.3 Direct-Service Industry Service

BPA is exploring a number of approaches intended to provide service benefits to the DSIs after FY 2011, including a financial mechanism similar to the existing FY 2007-2011 DSI contract that would provide the region with known, capped costs. Costs of such a financial mechanism will be allocated as BPA program costs (i.e., section 7(g) costs).

BPA reserves the option to provide some level of physical power to the DSIs under a Regional Dialogue contract. If BPA were to make such a sale, it might be necessary for BPA to purchase Augmentation as described in section 3.2.1.4. These system Augmentation costs will be allocated to Tier 1 as FBS costs. This power sale would be priced at the Industrial Firm Power (IP) rate determined in accordance with section 7(c). BPA does not intend to tier the IP rate, but it is not prohibited by this TRM.

10.4 7(b)(2) Rate Test

No changes are proposed to the section 7(b)(2) rate test to accommodate tiered rates. The 7(b)(2) rate test will use all PF loads and all Tier 1 and Tier 2 Costs allocated to PF loads in the conduct of the test. The 7(b)(2) rate test will be performed in accordance with the then-current Section 7(b)(2) Legal Interpretation and Section 7(b)(2) Implementation Methodology; this TRM does not preclude future changes or corrections to these two documents. Under tiered rates, the 7(b)(2) rate test will use aggregate rates that combine all forecast costs and loads of Tier 1 and Tier 2.

11 APPROVAL AND DURATION OF THE TRM

Except as it is subject to changes pursuant to sections 12 and 13, this TRM shall be effective October 1, 2008, through September 30, 2028, and shall apply to power sales specified in herein for the period October 1, 2012, through September 30, 2028.

In the event that the Federal Energy Regulatory Commission (FERC) approves this TRM for a period less than through September 30, 2028, then BPA will, prior to the expiration of the then-effective TRM effective period, 1) propose continuation of the TRM in a hearing conducted pursuant to section 7(i) of the Northwest Power Act or its successor, and thereafter 2) resubmit the TRM to FERC for approval through September 30, 2028. References in sections 12 and 13 to the TRM are to the TRM as approved by FERC.

12 CRITERIA AND CONDITIONS FOR TRM CHANGE OR RE-OPENING

It will be BPA's policy to revise the TRM as little as possible. BPA reserves the right to change the TRM, but only in accordance with the criteria and conditions set forth in this section 12 and the applicable process set forth in section 13. Reference here and elsewhere to a "change" to the TRM means a change in the actual language of the TRM or a patent disregard or omission of something that is unambiguously required by the TRM; it does not refer to questions of interpretation or implementation of the TRM. In addition, when a matter is not specifically addressed in the TRM, i.e., there is a gap or ambiguity in the TRM, BPA may take actions if necessary to address the matter and implement the TRM between rate cases, subject to the requirement that the matter be addressed during the next scheduled power rate case. BPA's rate case proposal to address that gap or ambiguity does not constitute a change in the TRM for purposes of section 12 and 13.

While it is BPA's intent to structure a durable commercial relationship through this TRM and customer contracts based on existing statutory requirements, BPA does not warrant or represent that the TRM or contracts are immune from subsequently enacted legislation, or that the TRM or contracts are immune from costs imposed by court order or agency regulations of a general and public nature.

BPA will propose only those changes under sections 12.1 and 12.2 (timely and reasonable cost recovery and compliance with a court ruling) that are necessary to comply with a court ruling or ensure cost recovery, and shall seek to limit both the number and scope of such changes. Before proposing any change in the TRM to ensure timely and reasonable cost recovery, to the extent practicable BPA will take the following steps in addition to adhering to the applicable process set forth in section 13:

1) BPA will make reasonable efforts to recover the cost from the party(s) that would otherwise be responsible for it, including making demand on any available credit support.
2) BPA will make good faith efforts to reduce BPA power costs so as to offset the cost that would otherwise occasion the need for a change in the TRM.
3) If the cost recovery problem is occasioned by the design of the TRM, BPA will convene a public meeting with customers and interested third parties to discuss alternatives to change of the TRM.
4) After taking such steps, BPA will issue a report to customers and third parties regarding the efforts, including those listed (1-3) above, that the Administrator has taken before resorting to a change in the TRM and why the set of safeguards BPA followed when entering identified transactions (e.g., service at a Tier 2 Rate) were not sufficient to avoid the cost recovery problem.

These criteria or disputes over whether the Administrator has satisfied them do not override, and will not be allowed to frustrate, the Administrator's responsibility to recover costs and timely repay the U.S. Treasury.

12.1 Changes to TRM to Ensure Cost Recovery or Comply with Court Ruling

BPA reserves the right to change any part of this TRM if the Administrator has determined in accordance with the applicable procedures set forth in section 13 that 1) BPA cannot timely and reasonably recover its costs without changing the TRM or 2) a change to the TRM is necessary to effectively comply with a court ruling. For purposes of this TRM, reference to a court ruling shall be deemed to include a ruling of the Federal Energy Regulatory Commission that disapproves or remands a BPA rate based on the TRM.

12.2 Provisions of the TRM that may be Changed Only to Ensure Cost Recovery or Comply with Court Ruling

The provisions of the TRM identified below cannot be changed except and unless the Administrator determines in accordance with the applicable procedures set forth in section 13 that BPA cannot otherwise timely and reasonably recover its costs or that the change is necessary to effectively comply with a court ruling.

1) The methodology used to determine CHWMs and RHWMs as defined in sections 4.2 and 4.3 except in those instances the TRM specifically provides for in sections 4.2 and 4.3.
2) The basic Tier 1 Rate design described in section 5, consisting of: a) the concept of three Tier 1 Cost Allocator (TOCA) Customer Charges: Composite, Slice, and Non-Slice; b) the development of a Load-Shaping Charge for customers purchasing Block or Load-Following products; and c) Demand Charge Billing Determinants that include a Contract Demand Quantity (i.e., "grandfathered" demand) as set forth in section 5.3.
3) The establishment of Tier 2 Rates, as set forth in section 6, that reflect the incremental costs of resource acquisitions and purchases BPA must make to serve its load obligation above the customers' RHWMs.
4) Cost allocation criteria for allocating costs between Tier 1 and Tier 2 Rates, and among Tier 2 Rates, as set forth in section 2.

12.3 Change for Unintended Consequences

With the exception of TRM changes that are constrained by section 12.2 or implementation of the TRM reserved by section 12.5, BPA retains the discretion to, in accordance with the applicable procedures of section 13, propose changes in the TRM to address or avoid unintended consequences that put at risk the policy goals underlying the TRM.

12.4 Improvements and Enhancements

In the event of a change or revision not covered by section 12.1, 12.2, or 12.3, changes to improve and enhance the TRM may be made only in accordance with the applicable procedures of section 13.

12.5 Actions Not Considered to be a Change to the TRM

The Administrator reserves the discretion he or she otherwise possesses under law to establish, undertake, or otherwise address the following, including through implementation of the TRM in appropriate cases:

1) Calculation of actual rate levels.
2) Any rate issues not addressed in this TRM.
3) Any rate issues specifically identified in this TRM that are specifically reserved for determination in a future 7(i) proceeding. These include, but are not limited to:
    a) Rate treatment for customers that execute non-CHWM contracts (see section 1)
    b) Forecast of the output of Tier 1 System Resources (see section 3.1); forecasts of Augmentation of Tier 1 System Resources (see section 3.2); forecasts of Balancing Power Purchases (see section 3.3)
    c) Allocation of costs consistent with sections 2.1 and 2.2 and the Cost Allocation Table, Table 2.1
    d) Risk mitigation (consistent with section 9)
    e) Development of System Shaped Load for each customer (see section 5.2.1)
    f) Determination of the Overhead Cost Adder to Tier 2 Cost Pools (see section 6.3.3)
    g) Design, pricing, and application of the RSS rate (see section 8)
    h) Irrigation Rate Mitigation true up (see section 10.2)
    i) Application of section 7(c) of the Northwest Power Act (see section 10.3)

j) Application of section 7(b)(2) of the Northwest Power Act (see section 10.4)

k) Rates for New Publics (see section 4.2.6)

l) Rates for unanticipated above-RHWM load (see section 6.6)

m) Rates for product switching (see section 5.4)

n) Rates for transfer of Tier 2 service to a vintage service (see section 6.5)

4) TRM Exhibits will be filled in and thereby revised consistent with the terms of the TRM.

Revisions pursuant to this section 12.5 do not constitute a "change" to the TRM.

13 PROCESSES FOR TRM CHANGE OR RE-OPENING

13.1 Process Generally Applicable to Any TRM Change or Revision

No change to the TRM may be made without complying with the procedural requirements of section 7(i) of the Northwest Power Act or its successor.

In the event that this TRM provides that an input to establishment, administration, or implementation of the TRM (e.g., CHWM determination process and results, RHWM Process and results) shall be as determined pursuant to contract or process outside of the rate case, then any dispute concerning determination of that input shall not be subject to any of the procedures of this section 13. Similarly, no billing disputes shall be subject to any of the procedures of this section 13 except as specifically provided for.

13.2 Process for Section 12.3 Change to TRM ("Unintended Consequences Change")

BPA, upon its own or a customer's initiative, may make a change as provided for in section 12.3 (unintended consequences that put at risk the policy goals underlying the TRM) only if the Administrator determines based upon the entire rate case record that 1) the change will avoid significant harm due to consequences not anticipated when the TRM was put in place; and 2) the value of the proposed change outweighs any harm created by the change. Upon written petition by Tier 1 preference purchasers totaling both 1) at least 70 percent of such purchasers (utility count), and 2) at least 50 percent of the sum of the CHWMs of all Tier 1 preference purchasers filed within twenty (20) working days after submission of BPA's initial rate proposal, the rate case Hearing Officer is empowered and required to determine, consistent with the rate case schedule, whether BPA's proposal to change the TRM pursuant to section 12.3 is necessary to avoid significant harm due to consequences not anticipated when the TRM was put in place and whether the value of the proposed change outweighs any harm created by the change. The process specified in section 13.6 for a mini-trial before the Administrator shall then apply for the purpose of contesting those determinations.

13.3 Process for Section 12.4 Improvements and Enhancements

BPA, upon its own or a customer's initiative, may make a change as provided for in section 12.4 (improvements or enhancements) only if the Administrator determines based upon the entire rate case record that 1) the change will improve or enhance implementation of the TRM in a way that will continue to effectuate its purposes but be more cost-effective and efficient, customer responsive, readily implementable, or capable of fulfilling the TRM's purposes; and 2) the value of the proposed change outweighs any detriment created by the change. Upon written petition by Tier 1 preference purchasers totaling both 1) at least 70 percent of such purchasers (utility count), and 2) at least 50 percent of the sum of the CHWMs of all Tier 1 preference purchasers filed within twenty (20) working days after submission of BPA's initial rate proposal, the rate case Hearing Officer is empowered and required to determine, consistent with the rate case schedule, whether BPA's proposal to change the TRM pursuant to section 12.4 is appropriate because 1) the change will improve or enhance implementation of the TRM in a way that will continue to effectuate its purposes but be more cost-effective and efficient, customer responsive, readily implementable, or capable of fulfilling the TRM's purposes; and 2) the value of the proposed change outweighs any detriment created by the change. The process specified in section 13.6 for a mini-trial before the Administrator shall then apply for the purpose of contesting those determinations.

13.4 Process for TRM Changes to Assure Cost Recovery or Respond to Court Ruling (pursuant to sections 12.1 and 12.2)

This section applies when BPA proposes to change the TRM to assure cost recovery or respond to court ruling pursuant to section 12.1 or 12.2 and some customers believe that BPA's proposal to change the TRM is not necessary to assure cost recovery or respond to court ruling pursuant to section 12.1, and/or that the proposed change is unreasonably disproportionate to what is needed to comply with the court ruling or to ensure cost recovery, compared to the alternative proposal(s), if any, offered by the Tier 1 preference purchasers.

a. In this event, upon written petition by Tier 1 preference purchasers totaling both 1) at least 70 percent of such purchasers (utility count), and 2) at least 50 percent of the sum of the CHWMs of all Tier 1 preference purchasers filed within twenty (20) working days after submission of BPA's initial rate proposal, the rate case Hearing Officer is empowered and required to determine, consistent with the rate case schedule, whether BPA's proposal to change the TRM is necessary to assure cost recovery or respond to court ruling pursuant to section 12.1 or 12.2, and/or whether the proposed change is unreasonably disproportionate to what is needed to comply with the court ruling or to ensure cost recovery, compared to the alternative proposal(s), if any, offered by the Tier 1 preference purchasers.

b. If BPA disagrees with the conclusion of the Hearing Officer, BPA may within five (5) working days of the Hearing Officer's decision petition the Hearing Officer for a mini-trial before the Administrator. If such a petition is timely made, the Hearing Officer shall expeditiously schedule, consistent with the rate case schedule, a mini-trial before the Administrator over whether BPA's proposed TRM change is in fact required to assure cost recovery or respond to a court ruling and/or whether the proposed change is unreasonably disproportionate to what is needed to comply with the court order or to ensure cost recovery, compared to the alternative proposal(s), if any, offered by the Tier 1 preference purchasers. The process specified in section 13.6 for a mini-trial before the Administrator shall then apply for the purpose of contesting those determinations.

13.5 Process for Disputes Over Whether BPA Has Proposed a TRM Change

This subsection applies when both of the following conditions are met: 1) a party to a BPA rate proceeding alleges that a BPA proposal constitutes or includes a change to the TRM as defined in section 12, and 2) BPA believes that its proposal is not such a change.

If Tier 1 preference purchasers totaling both 1) at least 70 percent of Tier 1 preference purchasers (utility count), and 2) at least 50 percent of the sum of the CHWMs of all such purchasers file a petition with the Hearing Officer within ten (10) working days after submission of BPA's initial rate proposal alleging that a BPA proposal constitutes or includes a change to the TRM that has not been acknowledged and proposed by BPA as a change pursuant to section 12 and that the customers oppose the change, the rate case Hearing Officer is empowered and required to determine whether the matter proposed by BPA is a change in the TRM as defined in TRM section 12. If the Hearing Officer concludes that the matter proposed by BPA is not a change in the TRM as defined in section 12, that conclusion is binding on all parties for purposes of this section 13.5, and the Hearing Officer shall take no further action pursuant to this section.

If the Hearing Officer concludes that the matter proposed by BPA is a change to the TRM that has not been proposed by BPA as a change pursuant to section 12, but BPA subsequently alleges, no later than five (5) working days after the Hearing Officer announces his or her conclusion, that the proposed change is necessary to assure cost recovery or respond to a court ruling pursuant to section 12.1 or 12.2, then the Hearing Officer shall make the determinations called for in paragraph a and otherwise proceed as provided pursuant to paragraph b and section 13.6.

If the Hearing Officer concludes that the matter proposed by BPA is a TRM change that has not been proposed by BPA as a change pursuant to section 12, and BPA does not timely allege that the proposed change is necessary to assure cost recovery or respond to a court ruling, then the Hearing Officer shall strike all matter concerning the proposed change from the record, and that shall be conclusive on BPA and the parties for purposes of that case.

13.6 Mini-Trial Regarding Proposed TRM Change

If the Hearing Officer schedules a mini-trial before the Administrator, as described in sections 13.2, 13.3, 13.4, and 13.5, the following procedures will apply. A mini-trial before the Administrator shall be a part of the rate case, shall be presided over by the Hearing Officer, and shall consist of the following:

1) Parties shall file statements of position that summarize their arguments as to why the Hearing Officer's decision should be upheld or reversed, whether in whole or in part. The Hearing Officer shall encourage parties with like positions to consolidate their submissions.
2) Oral presentations, not to exceed two days in total, shall be scheduled before the Administrator. The order of presentation shall be the Hearing Officer, parties in opposition to the Hearing Officer's decision, and parties in support of the Hearing Officer's decision. Parties' presentations may consist of testimony, oral argument, or a combination of both. The Administrator may ask any questions, or engage in any discussion, with any of the presenters that he or she deems appropriate.
3) Within five (5) working days of the oral presentations, the Administrator shall provide the Hearing Officer a written statement that the Administrator either adopts or does not adopt the Hearing Officer's decision. If the Administrator adopts the Hearing Officer's decision, that shall be conclusive on BPA for remaining purposes of the rate case hearing. If the Administrator does not adopt the Hearing Officer's decision, the Administrator shall summarize the basis for the decision, but may elect to change the decision at the conclusion of the rate case hearing in the Administrator's Record of Decision.

The Hearing Officer is further empowered to establish and employ such procedures as deemed necessary or appropriate, consistent with the rate case schedule, to efficiently, fairly, and impartially make the determinations under this section and under section 13.2, 13.3, 13.4, or 13.5. The decision of the Hearing Officer shall be based upon a consideration of the record on the issues, and it shall include findings of fact and conclusions of law, with reasons and bases therefore, upon each material issue of fact, law, or discretion presented on the record. The Hearing Officer may at any time render an

accelerated decision in favor of a party as to any or all parts of the issues, without further hearing or upon such limited additional evidence, such as affidavits, or briefing as he or she may require, if no genuine issue of material fact exists and a party is entitled to judgment as a matter of law.

13.7 Process Applicable to Alleged BPA TRM Change Outside a Rate Case

In the event a preference customer believes that a BPA action changes or constitutes an attempt to change the TRM outside a rate case held pursuant to section 7(i) of the Northwest Power Act or its successor, it shall promptly, but no later than five (5) working days after it learns of BPA's action, notify BPA in writing of its belief and the general basis for its belief. If BPA agrees with the customer, it shall not make the change except pursuant to section 13.1. If BPA disagrees with the customer, BPA will notify customers and interested parties of the notice within five (5) working days of its receipt, and shall, if possible, provide a summary of its position why the action is not a change or attempted change, and shall promptly convene a public meeting with customers and interested third parties to discuss the notice and BPA's action.

If, within five (5) working days after the conclusion of the public meeting provided for in the preceding paragraph, 1) at least 70 percent of Tier 1 preference purchasers (utility count), and 2) Tier 1 preference purchasers representing at least 50 percent of the sum of the CHWMs of all such purchasers do not indicate that BPA's action changes or constitutes an attempt to change the TRM, then BPA shall proceed in the ordinary course. In determining the total, BPA shall count each abstention and absence of a vote as a vote that the customer does not object to the proposed change.

If, within five (5) working days after the conclusion of the public meeting held as described above in this section, 1) at least 70 percent of Tier 1 preference purchasers (utility count), and 2) Tier 1 preference purchasers representing at least 50 percent of the sum of the CHWMs of all such purchasers

indicate that BPA's action changes or constitutes an attempt to change the TRM, then BPA shall refer the matter to a third-party neutral for a binding decision on the matter.

The third-party neutral shall be selected at random from a roster of neutrals maintained by BPA, and selected by BPA in consultation with Public Power Council representatives, for the purpose of settling disputes regarding whether a BPA action is a change or attempted change in the TRM.

Within five (5) working days of announcement of the neutral's appointment, any customer may submit a written submission to the neutral, BPA, and other customers in support of its position that BPA's action constitutes a change or attempted change in the TRM. BPA, and any customer that so elects, shall within ten (10) working days thereafter submit a written submission to the neutral, BPA, and other customers in support of its position that BPA's action does not constitute a change or attempted change in the TRM. No written submission shall exceed fifty (50) double-spaced pages (12 point font; 26 lines per page, except for single-spaced quotes), together with exhibits not in excess of one hundred (100) pages.

Within five (5) working days of receipt of the last of the written submissions made pursuant to the paragraph immediately above, the neutral shall notify the parties whether the neutral wishes to hear argument or otherwise discuss the parties' submissions and, if so, the date for the hearing, provided it shall occur within ten (10) working days. In the event the neutral has not set a hearing pursuant to the paragraph immediately above, the neutral shall, within ten (10) working days of the last of the written submissions, issue a written determination as to whether BPA's action constitutes a change or attempted change in the TRM. In so doing, the neutral shall accord substantial deference to the Administrator's determination that the action does not constitute a change or attempted change in the TRM.

In the event the neutral has set a hearing, the neutral shall, within ten (10) working days after the hearing, issue a written determination as to whether BPA's action constitutes a change or attempted

change in the TRM. In so doing, the neutral shall accord substantial deference to the Administrator's determination that the action does not constitute a change or attempted change in the TRM.

The decision of the neutral shall be binding on and accepted by the Administrator. If the neutral determines that BPA's action constitutes a change or attempted change in the TRM, the change may not be made by BPA without complying with the procedural requirements of section 7(i) of the Northwest Power Act or its successor, and the procedural requirements of section 13.

If prior to or during the process set forth in this section BPA has taken the action that the neutral subsequently determined constitutes a change or attempted change in the TRM, BPA shall take all actions necessary to revoke the action. In no event shall this be construed to provide for damages or liability for loss of profits, or special, incidental, or consequential damages.

Tables

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Table 2.1
Cost Allocation Table

A. Allocation Between Composite and Non-Slice Cost Pools

	A	B	C	D	E	F
	COST ITEM	**Year 1 Composite Cost Pool**	**Year 1 Non-Slice Cost Pool**	**Year 2 Composite Cost Pool**	**Year 2 Non-Slice Cost Pool**	**Resultant allocation shown on Lines:**
1	Transmission & Ancillary Services					47 and 164
2	Bad Debt Expense					84 and 165
3	Depreciation					102 and 166
4	Interest Earned on BPA Fund for Power					111 and 167

B. Cost Pools

- ***Grayed shading in "Actual Data" columns indicates that item is not subject to Slice True-Up.***
- ***Blackened row indicates that item is wholly assigned to another Cost Pool.***

	A	B	C	D	E	F
	COSTS AND RATE ADJUSTMENTS	**Year 1 Forecast**	**Actual Data**	**Year 2 Forecast**	**Actual Data**	**Total Rate Period**
5	**COMPOSITE COST**					
6	**Expenses:**					
7	**Power System Generation:**					
8	**Operating Generation**					
9	Columbia Generating Station (WNP-2)					
10	Bureau of Reclamation					
11	Corps of Engineers					
12	Long-Term Contract Gen Projects (FBS)					
13	Long-Term Contract Gen Projects (NR)					
14	**Operating Generation Settlement Payment**					
15	Colville Generation Settlement					
16	Spokane Generation Settlement					
17	**Non-Operating Generation**					
18	Trojan Decommissioning					
19	WNP-1&3 Decommissioning					
20	**Contracted Power Purchases**					
21	DSI Monetized Power Sale					
22	PNCA Headwater Benefit					
23	Hedging/Mitigation (Non-Slice cost)					
24	Other Power Purchases (Non-Slice cost)					
25	Bookout Adjustments to Contracted Power Purchases					

Table 2.1 (continued)

	A	B	C	D	E	F
	COSTS AND RATE ADJUSTMENTS	**Year 1 Forecast**	**Actual Data**	**Year 2 Forecast**	**Actual Data**	**Total Rate Period**
26	**Augmentation Power Purchases**					
27	Tier 1 Augmentation Power Purchases					
28	Augmentation RSS Adder					
29	**Exchanges & Settlements**					
30	IOU Residential Exchange (gross costs)					
31	Less IOU Residential Exchange revenue					
32	Public Residential Exchange (gross costs)					
33	Less Public Residential Exchange revenue					
34	Other Settlements					
35	**Renewable Generation**					
36	**Generation Conservation**					
37	DSM Technologies					
38	Low Income Weatherization & Tribal					
39	Energy Efficiency Development					
40	Legacy Conservation					
41	Market Transformation					
42	**Power System Generation Subtotal**					
43						
44	**Transmission Acquisition and Ancillary Services:**					
45	Transmission & Ancillary Services					
46	Third Party GTA Wheeling					
47	Third Party Trans & Ancillary Services (Non-Slice cost)					
48	Generation Integration					
49	Telemetering/Equip Replacement					
50	Extra-regional Transmission Acquisitions					
51	**Transmission Acquisition and Ancillary Services Subtotal**					
52						
53	**Power Non-Generation Operations:**					
54	**PS System Operations**					
55	Efficiencies Program					
56	Information Technology					
57	Generation Project Coordination					
58	Slice Implementation (Slice cost)					
59	**PS Scheduling**					
60	Operations Scheduling					
61	Operations Planning					
62	**PS Marketing and Business Support**					
63	Sales & Support					
64	Public Communication &Tribal Liaison					
65	Strategy, Finance & Risk Mgmt					
66	Executive and Administrative Services					
67	Conservation Support (EE staff costs)					
68	**Power Non-Generation Operations Subtotal**					
69						

Table 2.1 (continued)

70	**Fish and Wildlife/USF&W/Planning Council:**					
71	BPA Fish and Wildlife (includes F&W Shared Services)					
72	USF&W Lower Snake Hatcheries					
73	Planning Council					
74	Environmental Requirements					
75	**Fish and Wildlife/ USF&W/Planning Council/Env. Reqt. Subtotal**					
76						
77	**General & Administrative/Shared Services**					
78	CSRS/FERS Post-Retirement Contribution					
79	Agency Services G&A (excludes Direct Project Support)					
80	Corporate Support – Shared Services (excludes Direct Project Support)					
81	TBL Supply Chain – Shared Services					
82	**General and Administrative/Shared Services Subtotal**					
83						
84	**Bad Debt Expense**					
85	**Other Income, Expenses, Adjustments**					
86						
87	**Non-Federal Debt Service**					
88	**Operating Generation Debt Service**					
89	Columbia Generating Station Debt Service					
90	Cowlitz Falls Debt Service					
91	Northern Wasco Debt Service					
92	**Non-Operating Generation Debt Service**					
93	WNP-1 Debt Service					
94	WNP-3 Debt Service					
95	Trojan Debt Service					
96	Conservation Debt Service					
97	ENW Retired Debt					
98	ENW LIBOR Interest Rate Swap					
99	**Non-Federal Debt Service Subtotal**					
100						
101	**Other Expenses:**					
102	Depreciation					
103	Amortization (FBS)					
104	Amortization (Conservation)					
105	Interest Expense					
106	Appropriated Interest					
107	Capitalization Adjustment					
108	Gross Bonds Interest Expense					
109	Amortization of Cap Bond Premium					
110	AFUDC					
111	Interest Earned on BPA Fund for Power					
112	**Interest Expense Sub-Total**					
113	**Total Expenses**					

Table 2.1 (continued)

114	**Revenue Credits:**					
115	Firm Surplus Credit (Excess HWM)					
116	Hungry Horse Reservation Credit					
117	WNP-3 Revenue Credit					
118	Other Revenues from BPA Contract Obligations					
119	RSS Revenues					
120	Ancillary Products Revenue					
121	4(h)(10)(C) Credit					
122	Colville and Spokane Settlements					
123	Downstream Benefits and Pumping Power					
124	Energy Efficiency Revenues					
125	Miscellaneous Revenues					
126	Green Tag Revenue					
127	Tier 2 Overhead Credit					
128	Tier 2 Risk Adder					
129	Remarketed RHWM Amounts					
130						
131	**Total Revenue Credits**					
132						
133	**Minimum Required Net Revenue Calculation:**					
134	Principal Payment of Federal Debt for Power					
135	Irrigation Assistance					
136	Depreciation					
137	Amortization					
138	Capitalization Adjustment					
139	Bond Premium Amortization					
140	Principal Payment of Federal Debt exceeding Non Cash Expenses					
141	**Minimum Required Net Revenues Sub-Total**					
142						
143	**Rate Design Adjustments:**					
144	Low Density Discount					
145	Irrigation Rate Mitigation Costs					
146	FPS (Surplus)/Shortfall					
147	7(c)(2) Delta Allocation					
148	7(b)(3) Protection Amount Allocation					
149	7(b)(2) Industrial Adjustment					
150	Conservation Rate Credit					
151	**Rate Design Adjustments Sub-Total**					
152	**Total Composite Cost**					
153						

Table 2.1 (continued)

154	**SLICE COST:**					
155	Slice Implementation Expenses (100 percent allocated to Slice customers)					
156	**Total Slice Cost for 100 percent allocated expense**					
157	**Total Slice Cost for allocation according to Slice Percentage**					
158						

159	**NON-SLICE COST:**					
160	Other Power Purchases (Balancing)					
161	Other Power Purchases (Capacity)					
162	Hedging/Mitigation					
163	Transmission & Ancillary Services					
164	Third Party Trans & Ancillary Services					
165	Bad Debt Expense					
166	Depreciation					
167	Interest Earned on BPA Fund for Power					
168	Planned Net Revenues for Risk					
169	Accrual revenues (MRNR adjustment, if applicable)					
170	Less Revenue Credits:					
171	Reserve Services					
172	Secondary Revenue					
173	Demand Revenue					
174	Load Shaping Revenue					
175	**Total Non-Slice Cost**					
176						
177	**TIER 2 COST (calculated for each T2 Rate):**					
178	Acquisition Costs					
179	BPA Overhead Costs					
180	RSS Adder					
181	Other costs, including risk-related, if appropriate					
182	**Total Tier 2 Cost**					

C. Customer Charge Rate Calculations

	A	B	C	D
		Customer Charge Rates		
	RATE CALCULATION	**Composite**	**Slice**	**Non-Slice**
183	Annual Revenue Requirement (2-year total)	(Line 154, Col F)	(Line 159, Col F)	(Line, 182, Col F)
184	Monthly Revenue Requirement (2-year total divided by 24 months)			
185	Sum of Billing Determinants			
186	One Percent of Monthly Requirement (Rate Per Percent = Monthly Revenue Requirement divided by Line 192)			

Table 3.1
Tier 1 System Resources

1	**FEDERAL SYSTEM HYDRO GENERATION**
2	**Regulated Hydro Projects**
3	Albeni Falls
4	Bonneville
5	Chief Joseph
6	Dworshak
7	Grand Coulee
8	Hungry Horse
9	Ice Harbor
10	John Day
11	Libby
12	Little Goose
13	Lower Granite
14	Lower Monumental
15	McNary
16	The Dalles
17	**Independent Hydro Projects**
18	Anderson Ranch
19	Big Cliff
20	Black Canyon
21	Boise River Diversion
22	Chandler
23	Cougar
24	Cowlitz Falls
25	Detroit
26	Dexter
27	Foster
28	Green Peter
29	Green Springs - USBR
30	Hills Creek
31	Lookout Point
32	Lost Creek
33	Minidoka
34	Palisades
35	Roza

Table 3.1 (continued)

36	**DESIGNATED NON- FEDERALLY OWNED RESOURCES**
37	Ashland Solar Project
38	Columbia Generating Station
39	Condon Wind Project
40	Dworshak/Clearwater Small Hydropower
41	Elwha Hydro
42	Foote Creek 1 (37% share)
43	Foote Creek 2
44	Foote Creek 4
45	Fourmile Hill Geothermal
46	Georgia-Pacific Paper (Wauna)
47	Glines Canyon Hydro
48	Klondike I Wind Project
49	Stateline Wind Project (30% share)

Table 3.1 (continued)

		Contract Number	Expiration Date
50	**DESIGNATED BPA CONTRACT PURCHASES**		
51	**Non-Fed Canadian Entitlement Extension Agreement Returns for Canada**		
52	Priest Rapids CER for Canada	97PB-10099	9/15/2024
53	Rock Island #1 CER for Canada	97PB-10102	9/15/2024
54	Rock Island #2 CER for Canada	97PB-10102	9/15/2024
55	Rock Reach CER for Canada	97PB-10103	9/15/2024
56	Wanapum CER for Canada	97PB-10100	9/15/2024
57	Wells CER for Canada	97PB-10101	9/15/2024
58	**Contract Purchases**		
59	BCHP to BPA Power Sale	99PB-22685	9/15/2024
60	PASA to BPA Peak Replacement	94BP-93658	4/30/2015
61	PASA to BPA Seasonal/Energy/Exchange	94BP-93658	4/30/2015
62	PASA to BPA Exchange Energy	94BP-93658	4/30/2015
63	PPL to BPA Southern Idaho	89BP-92524	Mutually agreed/contract expected to be replaced
64	RVSD to BPA Peak Replacement	94BP-93958	5/1/2016
65	RVSD to BPA Seasonal Exchange	94BP-93958	5/1/2016
66	RVSD to BPA Exchange Energy	94BP-93958	5/1/2016
67	SPP to BPA Harney Wells	88BP-92436	2/25/2018 (Contract expected to be replaced)
68	PPL to BPA Seasonal Power Exchange	94BP-94332	6/1/2014
69	PPL to BPA Seasonal Energy Exchange	94BP-94332	6/1/2014

Table 3.1 (continued)

		Contract Number	Expiration Date
70	**DESIGNATED BPA CONTRACT OBLIGATIONS**		
71	**USBR Load**		
72	BPA to BRCJ	14-03-49151	8/23/2024
73	BPA to BRCJ	14-03-17506	12/31/2023
74	BPA to BRCR	14-03-73152	Mutually Agreed
75	BPA to BREG	14-03-49151	8/23/2024
76	BPA to BRGC	14-03-001-12160	6/30/2017
77	BPA to BROP	14-03-79239	Mutually Agreed
78	BPA to BRSI	14-03-49151	8/23/2024
79	BPA to BRSID	14-03-99106	Mutually Agreed
80	BPA to BRSV	14-03-63656	Mutually Agreed
81	BPA to BRTD	14-03-32210	Mutually Agreed
82	BPA to BRTV	14-03-49151	8/23/2024
83	BPA to BRYK	00PB-12132	9/30/2011 (year to year)
84	**Contract Loads**		
85	BPA to BCHA Canadian Entitlement	99EO-40003	9/15/2024 (Contract expected to be replaced)
86	BPA to BHEC Power Sale	97PB-10051	12/3/2017
87	BPA to CMEC Power Sales	97PB-10055	6/22/2020 (Deliveries expected to end 9/30/2011)
88	BPA to PASA Capacity Energy Exchange	94BP-93658	4/30/2015
89	BPA to PASA Seasonal Energy Exchange	94BP-93658	4/30/2015
90	BPA to RVSD C/N/X	94BP-93958	5/1/2016
91	BPA to RVSD Seasonal Exchange	94BP-93958	5/1/2016
92	BPA to SMGT Power Sale	04PB-11446	6/30/2017 (Deliveries expected to end 9/30/2011)
93	BPA to SPP Harney Wells	88BP-92436	2/25/2018 (Contract expected to be replaced)
94	Federal System Intertie Tx Losses	n/a	(year to year)
95	BPA to AVWP WP3 Settlement	85BP-92186	6/30/2017
96	BPA to PPL Capacity Sale	88BP-92497	8/31/2011
97	BPA to PPL Seasonal Energy Exchange	94BP-94332	6/1/2014
98	BPA to PPL Seasonal Power Exchange	94BP-94332	6/1/2014
99	BPA to PPL Southern Idaho	89BP-92524	Mutually agreed/contract expected to be replaced
100	BPA to PSE WP3 Settlement	85BP-92185	6/30/2019

Table 3.1 (continued)

		Contract Number	Expiration Date
101	**DESIGNATED BPA CONTRACT OBLIGATIONS (continued)**		
102	**Other Obligations**		
103	1997 Pacific Northwest Coordination Agreement and associated provisions	97PB-10130	9/15/2024 (Contract expected to be replaced)
104	PNCA MOU (COE, Bureau, BPA)	97PB-10129	(year to year)
105	Hourly Coordination	98BP-10389	6/30/2017 (Contract expected to be replaced)
106	Non-Treaty Storage Agreement w/BC Hydro	DE-MS79-90BP92754	6/30/2004 (year to year)
107	Non-Treaty Storage Agreement w/Mid-C	DE-MS79-91BP92785	6/30/2004 (year to year)
108	Non-Power Uses Agreement	n/a	(year-to-year)
109	Summer Storage Agreement	n/a	(year-to-year)
110	Disposal Agreement Entity Agreement dated March 29, 1999	00PB-23197	(year-to-year)
111	Libby Coordination Agreement (LCA), Libby-Arrow Swap, and subsequent updates	99BP-22685	9/15/2024 (Contract expected to be replaced)
112	Arrow Local	n/a	(year-to-year)
113	Upper Baker	05PB-11542	(year-to-year)
114	Whitefish Operations	n/a	(year-to-year)
115	AOP's/Entity Agreements	n/a	(year-to-year)
116	DOP's/Entity Agreements	n/a	(year-to-year)
117	Power/Transmission Services MOA for generation inputs for ancillary, control, and other services	07PB-11856	9/30/2009 (Contract expected to be replaced)
118	Federal system Tx losses for power deliveries	n/a	(year-to-year)
119	Interchange	n/a	(year-to-year)
120	Loop flow support	n/a	(year-to-year)
121	Voltage support (VAR)	n/a	(year-to-year)
122	Project use loads not included in USBR	n/a	(year-to-year)
123	Resource Support Services	n/a	(year-to-year)
124	Other reserve obligation	n/a	(year-to-year)

Table 3.1 (continued)

125	**AUGMENTATION**
126	**for Existing Publics**
127	Klondike III (22.62% BPA share)
128	**for DOE Richland**
129	
130	**for New Publics & Federal Agencies**
131	
132	**for DSI Loads**
133	

Table 4.1 Timeline for HWM and Rate Determinations

Year	Date	Event or Action	Comments
2008	Before 12/08	Forecast CHWM determination.	See section II.B.2 of RD Policy.
	12/1/2008	Contract package signed; Product selection.	Resource amounts for customer-owned resources are set. See II.B.10 of RD Policy.
2009	5/1/2009	Forecast of above-HWM loads for first 2 yr of Transition Period for full-service Load Following customers.	2009 forecast TRL minus Existing Resources minus THWM.
	5/1/2009	Forecast of above-HWM loads for 3-yr Transition Period for Block and Slice/Block purchasers and customers buying set amount of Tier 2-priced power.	2009 forecast TRL minus Existing Resources minus THWM.
	11/1/2009	Commitment to buy set amounts of power for FY 2012 and FY 2013 at Tier 2 pricing for Load Following customers.	
	11/1/2009	Commitment to buy set amounts of power for FY 2012-2014 at Tier 2 pricing for Block, Slice/Block, and Load Following customers choosing service at longer-term Tier 2 Rates.	Certain BPA resource acquisitions for Tier 2-priced power available to Load Following customers may require customer commitment periods in excess of a single Rate Period.
2010	7/1/2010	Rate case load forecasts for FY 2012-2013.	
	10/1/2010	Forecast of Tier 1 System Resources for CHWM calculation and FY 2012-2013 rate case.	Forecast of 2012 Tier 1 System Resources for CHWM: FY 2012-2013 average.
	12/1/2010	Federal Register Notice of FY 2012-2013 rate case.	

Table 4.1 (continued)

Year	Date	Event or Action	Comments
2011	5/1/2011	Tier 1 System Resources finalized through 7(i) process.	Used for rate case and CHWM calculation.
	6/1/2011	CHWMs calculated.	Date is approximate and is intended to include public process/finalization.
	8/1/2011	Rates to FERC for FY 2012-2013.	
	8/1/2011	Annual Net Requirement calculation.	This calculation will be governed by the Regional Dialogue-modified 5(b)9(c) Policy and the resource declarations in the RD contract.
	10/1/2011	Power delivery begins.	
	Before end of FY 2011	3-year notice and 5-year commitment for non-vintage power at Tier 2 Rates for FY 2015-2019.	Certain Tier 2 Rate Alternatives may require longer than a 5-year commitment.
	7/1/2012	Tier 1 System Resources forecast for FY 2014-2015 rate case and RHWM calculation.	
	7/1/2012	Rate case load forecasts for FY 2014-2015.	
	7/1/2012	RHWMs calculated for FY 2014-2015.	
	8/1/2012	Annual Net Requirement calculation.	
	12/1/2012	Federal Register Notice of FY 2014-2015 rate case.	

Table 4.1 (continued)

Year	Date	Event or Action	Comments
2013	8/1/2013	Annual Net Requirement calculation.	
	8/1/2013	Rates to FERC for FY 2014-2015.	
2014	7/1/2014	Tier 1 System Resources forecast for FY 2016-2017 rate case and RHWM calculation.	
	7/1/2014	Rate case load forecasts for FY 2016-2017.	
	7/1/2014	RHWMs calculated for FY 2016-2017.	
	8/1/2014	Annual Net Requirement calculation.	
	12/1/2014	Federal Register Notice of FY 2016-2017 rate case.	
2015	8/1/2015	Annual Net Requirement calculation.	
	8/1/2015	Rates to FERC for FY 2016-2017.	

Figures

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Figure 4.1 CHWM Determination Process

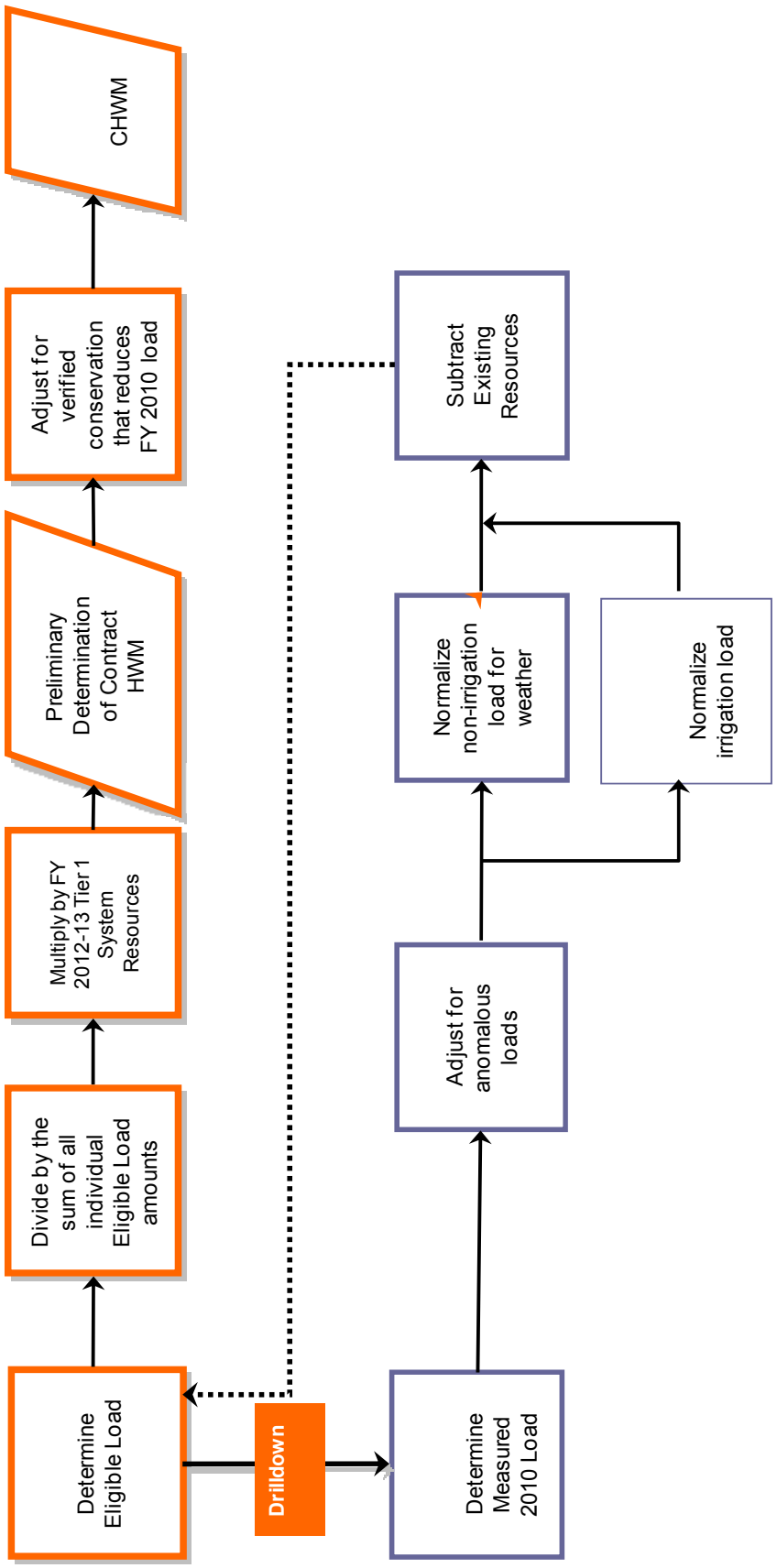
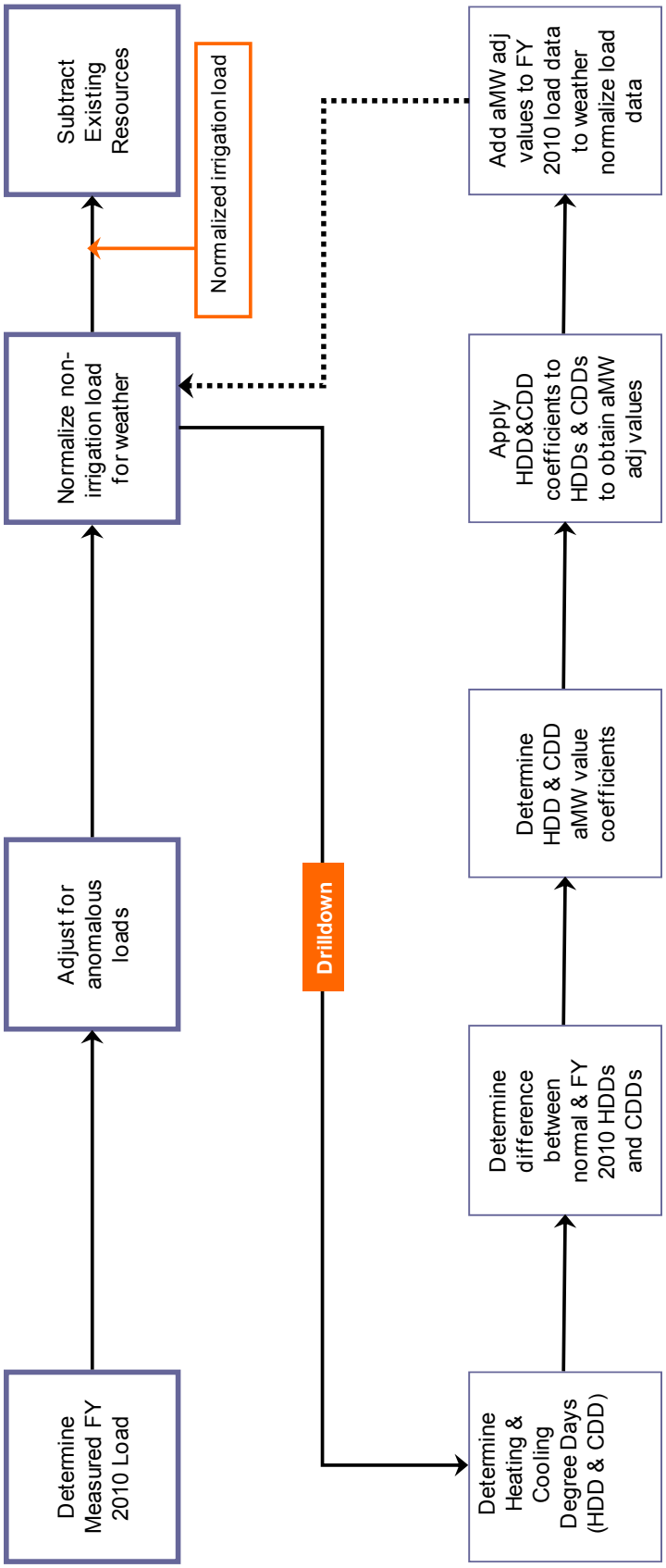


Figure 4.2 Non-Irrigation Load Weather Normalization



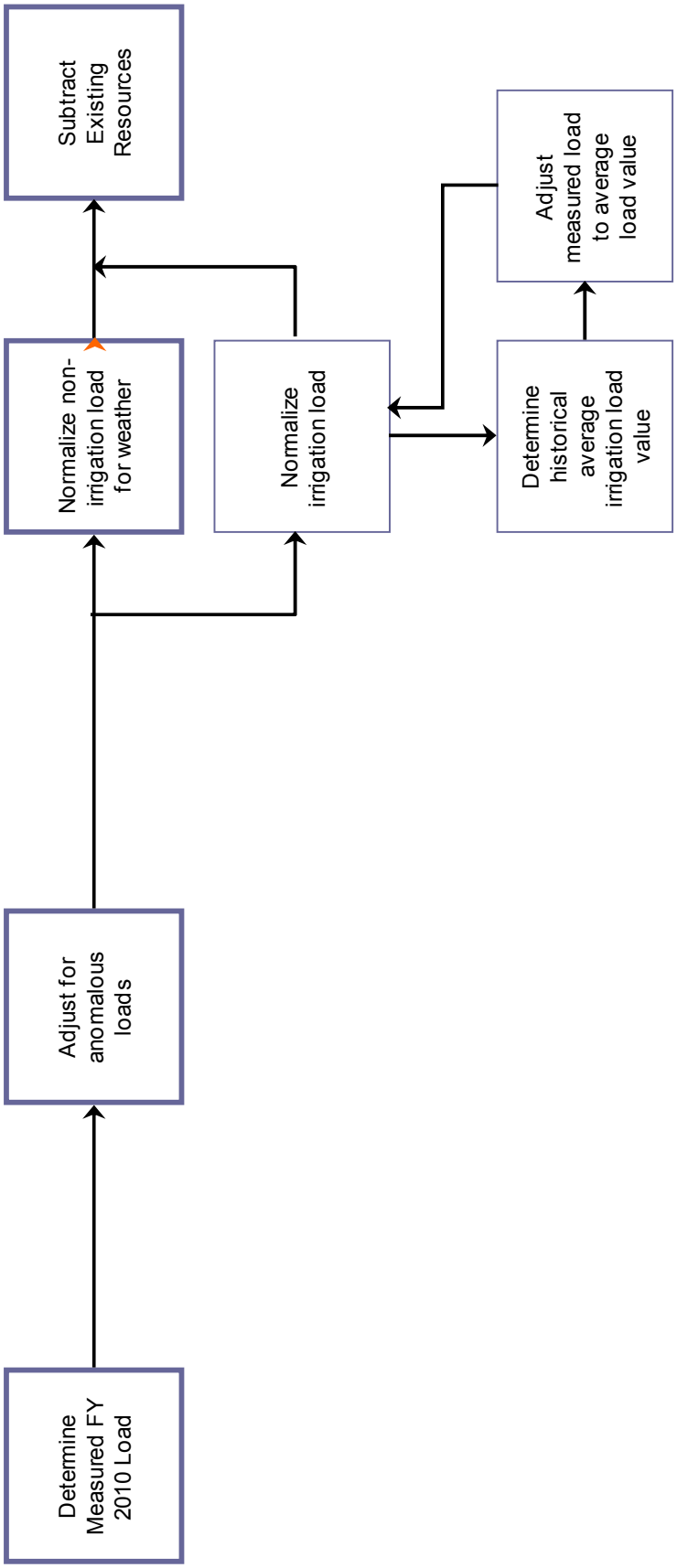


Figure 4.3 Irrigation Load Weather Normalization

Figure 4.4

Formation of New Publics – Phasing in of HWM Amounts

As described in section 4.2.6.5, when competing requests from New Publics exceed the 50 aMW Rate Period limit, New Publics larger than 10 aMW will have the amount of their CHWM requests over 10 aMW phased in over subsequent Rate Periods. The phase-in will be 33.3 percent for the first 24 aMW above the initial 10 aMW and 20 percent for any remaining amounts.

The example below is for a New Public seeking to purchase 64 aMW.

	A	B	C	D	E	F
1		**First Rate Period**	**Second Rate Period**	**Third Rate Period**	**Fourth Rate Period**	**Fifth Rate Period**
2	**Initial Amount**	10 aMW				
3	**33.3% for next 24 aMW**	8 aMW	8 aMW	8 aMW		
4	**20% for all else**	6 aMW	6 aMW	6 aMW	6 aMW	6 aMW
5	**Annual HWM Addition**	24 aMW	14 aMW	14 aMW	6 aMW	6 aMW
6	**Cumulative HWM**	24 aMW	38 aMW	52 aMW	58 aMW	64 aMW

Attachments

Attachment A - Product Summary

Attachment B - FY 2010 Non-Federal Resource Amounts for CHWM Calculations

Attachment C - CHWM Calculation Summary

Attachment D - Conservation Adjustment

Attachment E - Tier 2 Rate Alternatives

Attachment F - Tier 2 Vintage Rate Example

Attachment G - Example of Calculating the Remarketed Tier 2 Proceeds

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Attachment A

Product Summary

This summary is included to facilitate understanding of the products that are being priced in this TRM. Product attributes may be revised prior to offering CHWM Contracts.

1. Load Following Product

The Load Following product provides firm power service that meets the customer's Total Retail Load (TRL) less its non-Federal firm resources used to serve its load. For metered customers, BPA will offer Load Following service for any amount of firm load that is not served by the utility's own resources.

Under the Load Following product, when a customer elects to use its Non-Federal Resources to serve a portion of its load, it must do so consistent with section 5(b)(1) of the Northwest Power Act. Depending on the type of resource and its output, Resource Support Services (RSS) may be required to be purchased either from BPA or non-Federal sources for purposes of integrating the resource. When these resource services are supplied from sources other than BPA, a customer will have several options for shaping its resources that are applied to load.

Customers taking RSS from BPA for their Non-Federal Resources are allowed to have actual resource amounts applied to load different from planned amounts. Customers serving their load with declared and non-BPA supported specified or unspecified resource amounts must apply those resource amounts as planned; otherwise they will face applicable penalties, such as the unauthorized increase charge.

2. Block Product

The Block product provides a planned amount of firm power to meet a customer's forecast annual Net Requirement load. The customer is responsible for using its own Non-Federal Resources or Unspecified Resources dedicated to its TRL to meet any load in excess of its planned monthly BPA purchase. This

section provides information on the stand-alone Block product and not the Block product portion of the Slice/Block product, which is discussed below.

Customers may choose between two shapes for the Block product. The first, Flat Block, delivers an equal amount of power in all hours of the year. The second, Shaped Block, is available for that portion of a customer's block service that is charged Tier 1 Rates, shaped to the customer's forecast monthly Net Requirement.

The customer may choose to establish the monthly Shaped Block amounts as either a flat monthly amount or as flat monthly diurnal amounts with up to 60 percent of the megawatthours in the monthly Heavy Load Hour period, not to exceed the HLH Net Requirement amount. Once the shape for the Shaped Block is established, it will not change during the contract term.

Customers that purchase the stand-alone Block product may add Shaping Capacity to their Block purchase, if their Net Requirement allows for it. The Shaping Capacity product will establish a daily range for each month within which a customer may reshape the daily Heavy Load Hour energy amount established for each month. Any Shaping Capacity a customer contractually adds to its purchase will be a take-or-pay obligation. Also, BPA will establish hour-to-hour ramping limits under certain circumstances and require pre-schedules to be submitted earlier than standard pre-schedule requirements.

If the customer purchases its Net Requirement at Tier 2 Rates, the calculation that determines the purchased amount of shaping capacity will *not* be affected by the increased block quantity.

3. Slice/Block Product

The Slice/Block product provides for the combined sale of two distinct power services to serve a customer's planned Net Requirement, Block service and Slice service.

a. Block Service

The Block service provided under the Slice/Block product will be provided in the same shapes (flat and shaped to forecast monthly Net Requirement) as described above for the Block-only product, with the following exceptions:

1) Shaped Block Limitations. The Shaped Block is the same as described above, except that all monthly amounts are required to be flat in all hours of the month. No variance is allowed between Heavy Load Hour and Light Load Hour periods.
2) Shaping Capacity. Shaping Capacity is not available for the Block service included in the Slice/Block product.

b. Slice Service

Slice service provides power in the shape of generation from Tier 1 System Resources over the year. The Slice power purchase amount is based on a calculated Slice Percentage applied to actual power from the Tier 1 System Resources. The Slice Percentage is calculated such that on a planned annual basis Slice power does not exceed the customer's Net Requirement when combined with the Block power. In certain periods of the year Slice will deliver more power than in other periods, based on water conditions and system operations. Slice includes an advance sale of surplus power (over-generation) in certain periods (e.g., the spring runoff period) and under certain conditions.

The Slice portion of the Slice/Block product provides for the sale of firm power and surplus power that is indexed to the variable energy output of the Tier 1 System Resources. The Slice product is a power sale subject to limitations and is not a sale of operational rights or resource capability, or a transfer of control of any Federal resources.

The amount of firm power available to a customer under the Slice product is dependent on system operations, hydro conditions, and designated BPA contract obligations. The energy available from the

Slice portion of the Slice/Block product may or may not be equal to the difference between a customer's RHWM and the amount of Block service charged at Tier 1 Rates. The Slice product's advance sale of surplus power also varies with hydro conditions, system obligations, and operating constraints.

There is no guarantee that power made available under the Slice product will meet a customer's load need during any particular timeframe, be it hourly, daily, weekly, monthly, or annually. Customers who buy the Slice/Block product are obligated to provide their own Non-Federal Power on all hours in which their TRL is in excess of the amount of Slice power available for load and their planned purchase amounts of Block power.

Attachment B
FY 2010 Non-Federal Resource Amounts For CHWM Calculations

	A Customer	B Total Resource Amount	C Consumer-Owned or PURPA
1	Albion		
2	Alder		
3	Ashland		
4	Asotin		
5	Bandon		
6	Benton PUD		
7	Benton REA		
8	Big Bend		
9	Big Horn		
10	Blachly-Lane		
11	Blaine		
12	Bonners Ferry		
13	Burley		
14	Canby		
15	Cascade Locks		
16	Central Electric		
17	Central Lincoln		
18	Central MT		
19	Centralia		
20	Cheney		
21	Chewelah		
22	Clallam PUD		
23	Clark PUD		
24	Clatskanie		
25	Clearwater		
26	Columbia Basin		
27	Columbia Power		
28	Columbia REA		
29	Columbia River PUD		
30	Consolidated		
31	Consumers		

Attachment B Table, cont.

	A Customer	B Total Resource Amount	C Consumer-Owned or PURPA
32	Coos-Curry		
33	Coulee Dam		
34	Cowlitz		
35	Declo		
36	Douglas Coop		
37	Douglas PUD		
38	Drain		
39	East End		
40	Eatonville		
41	Ellensburg		
42	Elmhurst		
43	Emerald		
44	Energy Northwest		
45	EWEB		
46	Fairchild AFB		
47	Fall River		
48	Farmers		
49	Ferry		
50	Flathead		
51	Forest Grove		
52	Franklin		
53	Glacier Electric		
54	Grant		
55	Grays Harbor		
56	Harney Electric		
57	Hermiston		
58	Heyburn		
59	Hood River		
60	Idaho Falls		
61	Idaho Light & Power		
62	Inland		
63	Kittitas		
64	Klickitat		
65	Kootenai		

Attachment B Table, cont.

	A	B	C
	Customer	**Total Resource Amount**	**Consumer-Owned or PURPA**
66	Lakeview		
67	Lane		
68	Lewis		
69	Lincoln MT		
70	Lost River		
71	Lower Valley		
72	Mason PUD1		
73	Mason PUD3		
74	McCleary		
75	McMinnville		
76	Milton		
77	Milton-Freewater		
78	Minidoka		
79	Missoula		
80	Modern		
81	Monmouth		
82	Nespelem		
83	Northern Wasco		
84	Northern Lights		
85	Ohop		
86	Okanogan Coop		
87	Okanogan PUD		
88	Orcas		
89	Oregon Trail		
90	Pacific PUD		
91	Parkland		
92	Pend Oreille		
93	Peninsula		
94	Plummer		
95	PNGC		
96	Port of Seattle		
97	Port Angeles		
98	Raft River		
99	Ravalli		
100	Richland		
101	Riverside		

Attachment B Table, cont.

	A	B	C
	Customer	**Total Resource Amount**	**Consumer-Owned or PURPA**
102	Rupert		
103	Salem		
104	Salmon River		
105	Seattle		
106	Skamania		
107	Snohomish		
108	Soda Springs		
109	South Side		
110	Southern MT		
111	Springfield		
112	Steilacoom		
113	Sumas		
114	Surprise Valley		
115	Tacoma		
116	Tanner		
117	Tillamook		
118	Troy		
119	Umatilla		
120	Umpqua		
121	United		
122	USBIA Wapato		
123	USDOE Albany (ARC)		
124	USDOE Richland		
125	USN Bangor		
126	USN Jim Creek		
127	USN Puget		
128	Vera		
129	Vigilante		
130	Wahkiakum		
131	Wasco		
132	Weiser		
133	Wells		
134	West Oregon		
135	Whatcom		
136	Yakama		

Attachment C

CHWM Calculation Summary

1. BPA will determine customer load eligible for BPA's preliminary calculation of CHWM (Eligible Load) by subtracting the customer's Existing Resources from the customer's adjusted Measured FY 2010 Load, as defined below.

   $$EligibleLoad = 2010AdjustedLoad - ExistingResources$$

   where:

   2010AdjustedLoad = Measured FY 2010 Load adjusted for load and data anomalies (see section 4.2.1.1) and Weather Normalization (see section 4.2.1.2)

   ExistingResources = customer's Existing Resources as shown in Attachment B

2. If the sum of all utilities' Eligible Load is greater than the forecast firm critical output of Tier 1 System Resources, BPA will augment Tier 1 System Resources, subject to the limits described in section 3.2.1. The forecast firm critical output of Tier 1 System Resources for this calculation will be the average of the FY 2012 and FY 2013 forecast firm critical output of Tier 1 System Resources (the average value will be used due to substantial differences in Columbia Generating Station (CGS) capability in alternate years). The forecasts of firm critical output of Tier 1 System Resources for the RHWM Process will be calculated similarly (i.e., an average of the two years of the Rate Period) for subsequent Rate Periods.

The following paragraphs provide a sequential overview of the CHWM calculation process. The sections referenced below and TRM section 4 must be consulted for a full description and necessary related information.

3. BPA will perform the preliminary calculation of each customer's CHWM by scaling each customer's Eligible Load to the forecast firm critical output of Tier 1 System Resources:

$$CHWM_{prelim} = \frac{EligibleLoad}{\sum EligibleLoad} \times T1SR_{2012}$$

where:

$T1SR_{2012}$ = the average of forecast firm critical output of Tier 1 System Resources for FY 2012 and FY 2013, including Augmentation as necessary

4. BPA will adjust its preliminary calculation of CHWM for the customer's credited FY 2007-2010 conservation. Then BPA will rescale the adjusted preliminary CWHM to the same average forecast firm critical output of Tier 1 System Resources used above (see section 4.2.4):

$$CHWM_{final} = \frac{ConsAdjCHWM}{\sum ConsAdjCHWM} \times T1SR_{2012}$$

where:

ConsAdjCHWM = BPA's preliminary calculation of the customer's CHWM adjusted for the amount of credited conservation the customer achieved from FY 2007-2010

Attachment D

Conservation Adjustment

Example of Conservation Adjustment Calculation

The following table shows a simplified example of how the Conservation Adjustment works for a single utility doing varying amounts of conservation.

1) Row 2 shows the credit for the conservation the utility achieved. In this example it is assumed that all conservation is utility self-funded, and 100 percent credit is given for achieved conservation.
2) Row 3 accounts for the amount of conservation achieved in the preliminary calculation of CHWM (load with no conservation (100) minus the conservation achieved).
3) Row 4 shows the conservation credit being added back to arrive at the conservation-adjusted CHWM (row 2 + row 3).
4) Row 5 shows the calculation of the rebalancing factor by taking the individual conservation-adjusted CHWM (row 4) and dividing it by the sum of the conservation-adjusted CHWMs for all utilities (7,470 aMW; the sum of the preliminary calculation of all the utilities' CHWMs plus the total conservation by all utilities).
5) Row 6 shows the CHWM—calculated by multiplying the rebalancing factor by the Tier 1 System Resources (row 5 × 7,300 aMW).

Note that as the amount of conservation achieved increases, the amount of Augmentation decreases, assuming that the Augmentation cap of 300 aMW has not been reached.

Single Utility Conservation Adjustment Scenarios

Assumptions: Tier 1 System Resource amount = 7300 aMW, including 100 aMW Augmentation; total conservation by all other utilities = 170 a MW

		Scenario		
		A	**B**	**C**
1	Base case = FY 2010 load with no conservation (aMW)	100	100	100
2	Credited conservation FY 2007-2010 (aMW)	0	1	3
3	CHWM preliminary calculation	100	99	97
4	Conservation-adjusted CHWM	100	100	100
5	Rebalancing factor[1]	100/7470[2]	100/7470[2]	100/7470[2]
6	**CHWM (aMW)[3]**	**97.72**	**97.72**	**97.72**
	Net change due to conservation adjustment (aMW)	-2.28	-1.28	0.72
	Remaining amount eligible to purchase at Tier 1 Rates (aMW)	0	0	0.72

[1] Rebalancing factor = this utility's conservation-adjusted CHWM divided by the sum of all utilities' conservation-adjusted CHWMs

[2] The increase in the sum of the conservation adjusted CHWMs would be offset by an equal reduction in Augmentation; thus the 7470 aMW total would not change

[3] CHWM = rebalancing factor (row 5) times the amount of Tier 1 System Resources (7300 aMW)

Counting the Conservation Credit toward the Adjustment

The figure below shows how the process of counting conservation savings for the Conservation Adjustment will take place. The process for verifying savings is described in BPA's Conservation Rate Credit and Conservation Acquisition Agreement Implementation Manual

(Implementation Manual). The Implementation Manual must be followed for BPA-funded as well as utility self-funded conservation measures, projects, and programs.

BPA will conduct oversight of all utilities' conservation savings that have been submitted in biannual and annual reports through the PTR system. To count toward the Conservation Adjustment, conservation measures and projects eligible for reimbursement according to the Implementation Manual must be started after October 1, 2006, and completed no later than September 30, 2010. Measures must also be effective on load in FY 2010 (i.e., measures where the measure life does not extend through FY 2010 or a major plant closing where measures were implemented will not count toward the Conservation Adjustment, as they do not reduce FY 2010 load).

Cost-Effective Measures

All savings that are claimed for credit toward the Conservation Adjustment must be considered cost-effective in accordance with the Implementation Manual in effect when the conservation is reported to BPA. BPA acquires cost-effective conservation as defined by the Council's Power Plan. In determining cost-effectiveness, the Council looks to section 3(4) of the Northwest Power Act.

Deemed measures in the PTR for which BPA provides a reimbursement are considered cost-effective. Deemed measures are those measures with a predetermined amount of savings.

Custom projects are considered measures or projects for which BPA has not deemed a reimbursement level or for which cost effectiveness has not been pre-determined. These projects must be submitted as Custom Project Proposals (CPPs) and meet all of the Custom Project requirements, outlined in the Implementation Manual.

Savings Entry into the PTR System

For savings to be counted toward the Conservation Adjustment, they must be entered into and reported through the PTR annually, pursuant to the schedule required in the then-current BPA Implementation Manual. Annual reports in the PTR for FY 2010 must be submitted in suitable form no later than October 31, 2010. Credit will not be given toward the Conservation Adjustment for any savings contained in reports that are not submitted on time.

Deemed measures must be reported through the PTR and accepted by BPA's Contracting Officer's Technical Representative (COTR). The acceptance phase is when reports have been reviewed by the COTR and a determination has been sent by BPA accepting the report. Through the oversight process the amount of savings may change by 1) a utility notifying BPA that they made an error, or 2) BPA making an adjustment as a result of findings from an oversight review.

For custom projects, the Completion Report must be submitted and accepted no later than September 30, 2010, and be included in the Conservation Rate Credit (CRC) FY 2010 annual report and/or CAA invoice. All required measurement and verification must take place and be final before the Completion Report is submitted to BPA for acceptance. Oversight applies to custom projects as well.

Transparency of the Annual Conservation Savings Amount

BPA will make public the pre- and post-conservation-adjusted CHWM amounts for each customer, along with the credited conservation amounts used for the adjustment process. BPA

will also release the conservation achievements for each customer on an annual basis for achievements in FY 2007 through FY 2010. This will allow all customers to see the amount of conservation being achieved by other utilities and entities. The release will include BPA-funded and utility self-funded conservation achievements. Note that the oversight process takes place throughout the year, and the released numbers may be subsequently adjusted to reflect findings from the oversight process.

Verification and Oversight

Verification and oversight will be conducted in a similar manner for both BPA-funded and utility self-funded claimed conservation. BPA or BPA's agent will review and conduct oversight inspections of report records; monitor or review the customer's procedures and records; conduct site visits; and verify energy savings methods and results. The number, timing, and extent of such inspections shall be at the discretion of BPA and will be coordinated with the customer. These reviews and inspections will occur at BPA's expense.

Oversight may result in a change (increase or decrease) to the energy savings achieved by a utility after the savings in the reports have been accepted. Therefore, depending on the timing of the oversight, the published conservation achievements may be adjusted to account for findings from the oversight process. For FY 2010, the numbers will be finalized by early 2011 and will not be modified after that.

Non-Standard Cases and Exceptions

While the standard process as defined above will be followed for the vast majority of measures and projects, there are some situations that will require exceptions, as described below.

Federal Conservation Projects

Federal conservation projects will not be required to input measure and project savings into the PTR system. These projects will be imported directly into BPA's Energy Efficiency database. These savings are not put into the PTR because the Federal entities that would claim the savings are not standard utility customers and do not necessarily utilize CRC or CAA funding. If a utility wishes to claim savings for projects completed in its service territory at Federal facilities for which CRC or CAA funds were used, the utility will need to report the savings through the PTR as required by the Implementation Manual.

Irrigation Rate Mitigation Product

The Irrigation Rate Mitigation Product (IRMP) provides participants a one-quarter mill credit ($0.00025) for irrigation load to be utilized for the installation of cost-effective conservation measures. Energy savings from the IRMP have not been reported through the PTR system as of FY 2007. The PTR system will be modified in FY 2008 to accept IRMP reports for deemed measured and custom projects. There will be a procedure developed to inform customers of the updated reporting requirements. Additionally, there will be a process developed for adding to the PTR IRMP measures installed in FY 2007. Oversight for energy savings claimed under the IRMP conservation incentive will be conducted in a manner similar to other savings attributable to the Conservation Adjustment.

For savings to be reviewed and credited toward the CHWM Conservation Adjustment, measures and/or projects must be reported through the PTR on the timeline required in the Implementation Manual. PTR system reports for IRMP in the PTR for FY 2010 must be submitted in suitable form no later than October 31, 2010. Credit will not be given toward the Conservation Adjustment for any savings contained in reports that are not submitted on time.

Scientific Irrigation Scheduling

Scientific Irrigation Schedule (SIS) is designed as having a three-year measure life, so any SIS measure/program initiated prior to FY 2007 will not be eligible for credit toward the Conservation Adjustment. Savings over the life of the SIS program are measured and collected; however, only those savings realized in FY 2010 will be credited toward the Conservation Adjustment. Therefore, irrigation savings will be counted from two different irrigation seasons (i.e., October 2009 and June-September 2010). Utilities must report all conservation savings attributable to SIS in the annual report for FY 2010 or a previous report.

Transformer De-energization

Transformer de-energization is designed as having a three-year measure life. Only those savings actually realized in FY 2010 from transformer de-energization will be credited toward the Conservation Adjustment.

Attachment E

Tier 2 Rate Alternatives

BPA plans to offer above-RHWM service at the Tier 2 Load Growth and Short-Term rates for service beginning October 1, 2011. Service at a Tier 2 Vintage rate(s) may also be available at that time.

1. Rate Alternatives

a. Tier 2 Load Growth Rate

The Tier 2 Load Growth rate is available to customers electing the Load Following product. Customers that elect to pay the Load Growth rate for all or a portion of their above-RHWM load must make that election by November 1, 2009. A customer choosing this alternative is electing BPA as its primary service provider for most, if not all, of its future load service and is committed to purchase at the Load Growth rate for the duration of the contract. BPA manages resource acquisitions to meet the above-RHWM loads of these customers and melds into the Load Growth rate the costs of such acquisitions over time.

b. Tier 2 Short-Term Rate

The Tier 2 Short-Term rate is available to all customers. Customers that elect to pay the Short-Term rate for all or a portion of their above-RHWM load for the Transition Period must make that election by November 1, 2009. Thereafter, service at the Short-Term rate will require 3-year notice and a 5-year commitment (except for the last purchase period, which is 4 years in duration). Due to the short-term nature of these commitments from customers, BPA does not intend to assign the costs of longer-term resources to this Cost Pool. It may be the case that some longer-term resource costs will be allocated temporarily (i.e., for a Rate Period or two) to this Cost Pool, until those costs are allocated to a longer purchase period rate pool.

c. Tier 2 Vintage Rates

Tier 2 Vintage rates are intended to be based on costs of specific resources or groups of resources for customers that need power to be based on specific resource types (e.g., renewable) or that want to know more about resource costs before they make a long-term commitment. If BPA has been able to secure a resource in accordance with a prospectus offered to eligible customers, and if those customers agree to transfer load service from the Short-Term rate to the Vintage rate, then that Vintage rate will be developed (based on the specific resource and other costs, as appropriate) and proposed in the next general power rate case.

2. Provision for Conservation Mechanisms in Lieu of Tier 2 Rate Alternatives

A customer may elect to have BPA serve its above-RHWM load at a Tier 2 Rate. Depending on the circumstances, BPA could develop programs that encourage a utility to develop conservation in amounts that reduce the customer's above-RHWM load and thus its Tier 2 purchase obligation. BPA would fully recover the cost of such conservation from the customer through a bilateral arrangement.

Attachment F

Tier 2 Vintage Rate Example

Assume for purposes of this example only that customers have committed to purchase 20 aMW of renewable Tier 2 Vintage rate service. In this example, the basis for the Vintage rate is a 70 MW wind farm that BPA acquires at a cost of $70/MWh. The forecast generation of the wind farm is 20 aMW. In addition to the cost of the power, the rate will include Resource Support Services (RSS) components, including the Diurnal Flattening Service (assume a rate of $7/MWh) and the Resource Shaping Charge (assume a rate of $5/MWh) to price it equivalent to an annual flat block of power. The Overhead Cost Adder is also included (assume $0.25/MWh). Also assume that BPA has determined that no risk mitigation or transaction costs are required.

The calculation of the Vintage rate for the specified 70 MW wind farm looks like this:

	A	B	C
1	**Cost Component**	**Annual Cost**	**$/MWh**
2	Resource Cost	$12,264,000	70.00
3	Diurnal Flattening Service	1,226,400	7.00
4	Resource Shaping Charge	876,000	5.00
5	Overhead Cost Adder	43,800	0.25
6	Total	$14,410,200	
7			
8	**Vintage Rate**		**$82.25/MWh**

A customer that has subscribed to 3 aMW (26,280 MWh) of power at this Tier 2 Vintage rate would be charged $2,161,530 for the year. This customer is also subject to any energy true-ups (through the Resource Shaping Charge Adjustment) and possible remarketing credits/charges.

Attachment G

Example of Calculating the Remarketed Tier 2 Proceeds

Assume that in FY 2014 BPA must remarket 1 aMW of a Load Following customer's 3 aMW purchase of renewable power that is priced at a Tier 2 Vintage rate of $82.25/MWh. The summer before the Fiscal Year that BPA had planned to charge this customer for that 1 aMW, BPA will calculate the average market price used for valuing Tier 2 remarketed amounts. Assume the average price for a flat block of power is $60/MWh. Assume that a 10% discount ($6/MW) off this market price is the appropriate amount to compensate BPA for costs such as broker or other marketing fees, transmission costs, transmission losses, and odd-lot sizes. A sample customer bill is shown below.

POWER BILL

Purchaser: Public Utility #1 Billing Period: October 2013

Invoice Number: Oct14-EXAMPLE Period Ending: October 31, 2013

Issue Date: November 12, 2013

Sched	Service Desc	Amount	Unit	Rate	Revenue
Tier 1	…	…	…	…	…
Sub-Total					…
Tier 2	Flat Block	3*1,000*744	kWh @	0.08225	$183,582
Tier 2	Remarketed Amount	1*1,000*744	kWh @	0.05400	($40,176)
Tier 2	RSC Adjustment	…	kWh@	0.04500	…
Sub-Total					$143,406
Total					…