

# **Regional Dialogue Guidebook**

*Background on Products, Rates, and Resource Support Services available to  
BPA's Public Utilities*

**Updated June 4, 2010**



**This page intentionally left blank.**

# Table of Contents

## Introduction

## Defined Terms

## Conditions and Terms of Service Applicable to All PF Products

### Part 1: Products

1. Load-Following Product
2. Block Product
  - a. Block Product
  - b. Block with Shaping Capacity Product
3. Slice/Block Product
4. Renewable Energy Certificates (REC Program)

### Part 2: Tiered Rate Methodology (TRM)

#### A. Tier 1 Rate Design

#### B. Tier 2 Rate Alternatives

1. Load-Growth Service
2. Short-Term Service
3. Specific Resource Vintages

#### C. Shared Rate Plan

### Part 3: Resource Support Services

1. Diurnal Flattening Service (DFS)
2. Forced Outage Reserve Service (FORS)
3. Secondary Crediting Service (SCS)

#### Other Related Services

1. Resource Remarketing Service (RRS)
2. Transmission Curtailment Management Service (TCMS)

**This page intentionally left blank.**

## **Introduction**

This guide provides descriptions of power products for customers purchasing under Regional Dialogue contracts and is offered for informational purposes only about such products, including Tier 2 rate alternatives and Resource Support Services (RSS), available to the public body, cooperative, preference customers of BPA, and Federal agency customers (altogether labeled “public customers” in the Regional Dialogue Policy) who have signed a Contract High Water Mark (CHWM) contract with BPA. If a public customer decided to forgo the CHWM contract then other products and contract terms would apply to that power service. While the descriptions below may refer to rates and charges, all products and services described will be subject to the applicable wholesale power rates and charges to be established through future section 7(i) rate proceedings. This guide is for informational purposes only. It is not to be construed as an interpretation of or addition to terms contained in the Regional Dialogue contracts or Tiered Rate Methodology.

## **Defined Terms**

This section contains defined terms that are used in various parts of this document. The terms below themselves are those that were developed during the Regional Dialogue Policy process; however, the definitions may not be the final definitions adopted in the Regional Dialogue Policy or in final Regional Dialogue contracts. For final definitions, please refer to the specific term in the Tiered Rate Methodology and Regional Dialogue contracts as appropriate.

**Tiered Rate Methodology** – The long-term Tiered Rate Methodology (TRM) established by BPA to implement the dual tiering of BPA’s Priority Firm (PF) Power rates for serving customers’ firm requirements load under section 5 of the Northwest Power Act and the Regional Dialogue contracts. The TRM provides a predictable and durable means by which to tier BPA’s PF rate. One purpose of the two-tiered PF rate design is to differentiate between the costs of service associated with the existing Federal system (PF Tier 1 rates) and the cost associated with additional amounts of power needed to serve customer load in excess of that amount (PF Tier 2 rates). The TRM specifies how costs will be allocated to the PF Tier 1 rates and the PF Tier 2 rates.

**Contract High Water Mark** – A Contract High Water Mark (CHWM) sets a public customer’s eligibility to purchase an amount of power service at Tier 1 Rates. The CHWM is determined based on the methodology in the TRM. The CHWM will be specified in Exhibit B of each customer’s contract.

**Rate Period High Water Mark** – A Rate Period High Water Mark (RHWM) defines a public customer’s maximum eligibility to purchase an amount of power service at Tier 1 Rates for a Rate Period, subject to limitation by the customer’s Net Requirement. The RHWM will be calculated in a RHWM Process prior to each 7(i) rate proceeding.

**Existing Resources** – Those Specified Resources a customer is required to dedicate or has dedicated to serve a customer’s Total Retail Load prior to October 1, 2006, consistent with section 5(b) of the Northwest Power Act. Existing Resources are subtracted from the customer’s Total Retail Load when calculating the customer’s CHWM or the customer’s Net Requirement load. With some exceptions, a customer’s Existing Resources are listed in section 2 of Exhibit A of their RD contract.

**New Resources** – Specified Resources or Unspecified Resource Amounts dedicated to serve a customer’s Total Retail Load after September 30, 2006. A customer’s New Resources are listed in section 2 of Exhibit A and may be used to serve its Above-RHWM load as part of its Total Retail Load.

**Dedicated Resource** – A Specified Resource or an Unspecified Resource Amount listed in Exhibit A that a customer is required by statute to provide or obligates itself to provide under its Regional Dialogue contract for use to serve its Total Retail Load.

**Net Requirement** – The amount of Federal power that a customer is entitled to purchase from BPA to serve its Total Retail Load minus amounts of a customer’s Dedicated Resources as shown in the customer’s Exhibit A of its Regional Dialogue contract, and consistent with section 5(b)(1) of the Northwest Power Act.

**Total Retail Load** – Total Retail Load (TRL) means all retail electric power consumption within a customer’s electrical system, including electric system losses, except: (1) non-firm or interruptible loads; (2) transfer loads of other utilities served by the customer; and (3) any loads not on the customer’s electrical system or not within the customer’s service territory.

**Resource Support Services (RSS)** – Are the Diurnal Flattening Service, Forced Outage Reserve Service, Secondary Crediting Service, and Transmission Curtailment Management Service. A customer may purchase RSS from BPA to support a customer’s Specified Resource applied to its load. These services enable a customer to integrate specific resources used to meet its regional firm consumer requirements load after the resource has been firmed within the hour. A customer can also choose to acquire shaping and firming services from a non-BPA source.

### **Conditions and Terms of Service Applicable to All Priority Firm Requirements Products**

**Availability:** These products and services are available to Public Customers of BPA requesting firm power service for their Regional loads pursuant to section 5(b)(1) of the Northwest Power Act.

**Limitations:** A Public Customer or Joint Operating Entity (JOE) customer may hold only one PF Requirements Service contract (i.e., Load-Following, Block, and Slice/Block) at a time.

**Purchase Period:** The Regional Dialogue contracts are a 20-year contract (FY 2009 – FY 2028) providing load service for 17 years of power deliveries (FY 2012 – FY 2028).

**Payment Obligation:** Take-or-pay.

**Application of Consumer-Owned, Non-Federal Resources:** Customers with Existing consumer-owned resources (i.e. non-customer generating resources under subscription) were required to establish whether or how the resource will apply to load when signing their Regional Dialogue contract. “New” consumer-owned resources may be applied to meet Above-RHWM

load. To apply these resources, a consumer-owned resource will be identified by the public customer with the same notice and commitment periods applicable to the customer's other addition of a non-Federal resource to meet its Above-RHWM load.

**Changing Products:** A customer is generally not expected to change its requirements service product during the term of its Regional Dialogue contract. However, the Regional Dialogue contract provides a customer with a one-time right to change its product in FY 2020 (with notice provided by May 31, 2016). A customer that chooses to change products will be subject to charges specified in the contract to ensure that other customers are not materially harmed and are made financially whole. While the contract only establishes a one-time right to switch products, BPA will consider additional requests to change products and may consent to mutually agreeable product changes.

## **Part 1: Products**

### **1. Load-Following Product**

**Product Description Summary:** Under this product BPA will provide public customers firm power service to meet the customer's 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 or met with consumer-owned resources. The costs associated with the energy and capacity necessary to provide the Load-Following service will be recovered in Tier 1 charges for energy and capacity rates. If a customer wishes to have BPA provide power service for some part of, or the entire load above its High Water Mark (Above-HWM), the costs associated with the provision of this service will be recovered in the monthly Tier 2 energy charges associated with the Tier 2 option(s) selected.

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, RSS may be required to be purchased either from BPA or non-Federal sources for purposes of matching the resource to a planned shape and amount of load. When these resource services are supplied from sources other than BPA, a customer will have several options for shaping its resources to load, which are described below. If a customer selects BPA as their provider for these additional services, the services will be priced at the marginal costs of providing the service.

As described in greater detail below, 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 specified or unspecified resource amounts not taking RSS from BPA must apply those resource amounts to load as planned or they will face applicable penalties, such as the unauthorized increase charge (UAI).

## **Terms of Service**

**General Description:** The Load-Following product supplies the customer firm power to meet the customer's TRL, less the firm power from the customer's Dedicated Resources, that is its dedicated non-Federal resource generation amounts (whether from dedicated specified resource or unspecified resource amounts) and net of any declared metered "behind the meter" non-Federal resource amounts. The Load-Following product is not available to a customer that is operating its own balancing authority area (formerly known as control area).

**Applicable Rates and Billing Factors:** The Load-Following product will be provided and priced according to the rate design adopted in the TRM or future rate cases, if applicable. The applicable PF rates include: (1) Tier 1 customer rates, consisting of a composite customer rate and a non-Slice customer rate; (2) Tier 1 Demand rate; and (3) Tier 1 Load Shaping rate. For customers electing to have BPA serve their Above-RHWM load with Federal power priced through one of the Tier 2 rate alternatives, the costs of doing so will be allocated to the associated Tier 2 cost pools as provided for in the TRM. BPA will determine the associated rates in the applicable rate case proceeding and will be priced as if delivered in a flat annual average block of energy. Customers are not required to purchase power at a Tier 2 rate or apply non-Federal resources until they have reached 8760 MWh of Above-RHWM load.

### **Customer-Owned, Non-Federal, Dedicated Resources:**

*1. Threshold for Tracking Resources.* BPA recognizes that many customers have small resources located within their distribution system and "behind the customer's meter" where the administrative cost of tracking resource amounts would exceed any benefits derived from doing so. For this reason, BPA will not track individual resources with less than 200 kW in nameplate capacity. In addition, for new resources exceeding the 200 kW threshold, BPA will allow up to 1 MW in aggregate nameplate capacity to be considered as load variations and effectively "net metered" against load. RSS will not be required unless customer resources exceed these threshold amounts.

2. *Dedicated Amounts from Specific Resources – With BPA RSS.* For generating resource amounts dedicated to the customer’s firm load that are greater than 1 MW in nameplate capacity, a customer will be required to obtain RSS either from BPA or a non-Federal source. If BPA’s RSS is selected, the monthly resource shape will be based on either the expected or historical generation.

3. *Dedicated Amounts from Specific Resources – When BPA RSS is not purchased.*

Resource amounts from specified resources dedicated to the customer’s firm load that are greater than 1 MW in nameplate capacity and that are supported by non-BPA RSS can be declared in their historical or expected monthly shape, or reshaped by the customer to either the customer’s monthly shape (as described below) or a flat annual shape. The diurnal shape for Heavy Load Hours (HLH) and Light Load Hours (LLH) can be based on either the planned diurnal shape of the resource, reshaped to flat within-the-month, or reshaped into flat diurnal amounts where energy from LLH amounts are moved into HLH periods. *Super Peak hour application:* Prior to each rate case, a customer will have the option of further refining its HLH block amounts by reshaping the HLH energy to increase resource amounts in BPA-specified Super Peak hours during the rate period. BPA will credit those Super Peak amounts against the customer’s system peak for demand billing purposes.

4. *Dedicated Amounts from Unspecified Resources or Specified Contract Resources.*

Customers’ unspecified resource amounts and specified contract resources (other than annual shares of a generating resource’s output which are treated as established in 2 and 3 above) can be applied in a TRL monthly shape or a flat annual shape. The diurnal shape for HLHs and LLHs can be flat within-the-month or reshaped into flat diurnal amounts where energy from LLH amounts are moved into HLH periods. *Super Peak hour application:* Prior to each rate case, a customer will have the option of further refining its HLH block amounts by reshaping the HLH energy to increase resource amounts in BPA-specified Super Peak hours during the rate period. BPA will credit those Super Peak amounts against the customer’s system peak for demand billing purposes.

5. *Shaping Resources to Total Retail Load.* For customers who commit to provide a resource in the customer's TRL monthly shape, the TRL shape will be based on FY 2010 load for the FY 2012-2014 and FY 2015-2019 purchase periods, on FY 2015 load for the FY 2020-2024 purchase period, and on FY 2020 load for the FY 2025-28 purchase period. The shape will be calculated by dividing the customer's TRL for each month in FY 2010, 2015 and 2020 by the customer's TRL for the corresponding FY (e.g.; FY 2010, 2015 or 2020). A customer's election to provide a resource in the customer's TRL shape must be made when the customer provides its notice for a commitment period.

**Service to Load Above-RHWM:** A customer may choose to have its load above its RHWM served as Net Requirement by BPA at Tier 2 rates, consistent with the appropriate notice and commitment requirements. The Tier 2 rate alternatives currently available are the Tier 2 Load Growth rate and the Tier 2 Short-Term rate. The Tier 2 Vintage rate is a possible Tier 2 rate alternative in the future. See Part 2 for additional detail on these alternatives.

Alternatively (and subject to its Tier 2 rate election), a customer may add its own non-Federal resources to serve all or part of its TRL above its RHWM with non-Federal resources. The notice and commitment period for non-Federal resources or purchases are identical to those for purchases from BPA at the Tier 2 Short-Term rate. BPA will adjust the customer's Load Shaping charges by any Resource Shaping charges already applied in order to financially convert a customer resource to an annual flat block. Transmission losses for a customer's non-Federal resource(s) are not included in the adjustments and replacement for losses will have to be procured independently by the customer when using non-Federal resources to serve its Above-RHWM load.

**Resource Removal Rights for New Resources:** Specific annual resource removal rights for new resources will not generally be applicable for load loss of Load-Following customers since the rate design in the TRM automatically provides to a customer with load losses the projected monthly market value of those new resources not applied to load through the Load Shaping charge/credit. Consequently, the Load Shaping charge takes care of the economic consequences of a load loss that the annual resource removal rights are designed to cover.

The exception to this general rule is that Regional Dialogue contracts will allow for New Resource removal for a rate period in the instance that the forecasted Above-RHWM load amount for a customer in a Rate Period is less than the total of customer's committed Tier 2 rate purchases and its new non-Federal resources. A customer may elect to remove a non-Federal resource amount or have BPA remarket that portion of the take-or-pay Federal power they purchased at the Tier 2 rate for loads lost.

**Transmission Scheduling Service:** BPA's Transmission Scheduling Service (TSS) for both Federal and non-Federal resources will be provided to customers served by a transfer arrangement managed by BPA (in which BPA holds the transmission contract with the Third Party Transmission Provider). It will also be provided to customers with a BPA Network Transmission (NT) contract who either (1) purchase power from BPA at a Tier 2 rate, or (2) purchase the Diurnal Flattening Service or Secondary Crediting Service from BPA. Scheduling Service from BPA will be optional to BPA to provide to its Load-Following customers with a BPA NT contract serving their entire Above-RHWM load with unspecified resource amounts or resources supported with non-Federal support services. One component of TSS is Transmission Curtailment Management Service (TCMS), which ensures the customer will receive all of the power it needs for load served by a resource if its resource cannot be delivered to load due to a Transmission Event as defined in Exhibit F of the Regional Dialogue contract. BPA will establish the specific charges applicable to TSS in each 7(i) rate proceeding

**Scheduling Provisions:** Unless a customer is taking TSS from BPA, customers must schedule their load service in accordance with BPA's scheduling parameters/procedures.

**Meeting Energy and Capacity Resource Adequacy Standards:** BPA is responsible for meeting energy and capacity adequacy standards for the portion of a customer's TRL that is served by BPA. Customers are responsible for meeting energy and capacity standards for the portion of TRL not served by BPA.

**Transmission Losses:** Included for the customer's Net Requirement power purchased from BPA.

### **Interactions with Other Services**

**Tier 2 Load Growth Rate and Shared Rate Plan:** Customers that sign up to receive their firm power above HWM load service through the Tier 2 Load Growth Rate may also sign up for the Shared Rate Plan (SRP). The SRP provides that most BPA Net Requirement service to the customer's TRL will be at a melded rate, reflecting the individual amounts of Tier 1 power available to each customer in the SRP with all remaining load met by the Tier 2 Load Growth rate. See the TRM as supplemented at Section 7 for a full discussion of the SRP. This is discussed in more detail in Part 2 of this guidebook. For the first purchase period Above-RHWM election made on the November 1, 2009, 41 customers signed up for the Tier 2 Load Growth Tier 2 rate and none signed up for the SRP. Customers have one more opportunity to sign up for the Load Growth Rate during the Second Purchase Period election on September 30, 2011.

**REC Program (formerly Environmentally Preferred Power, or EPP):** See Part 1, Section 4 for explanation of the REC Sales Program.

**Transmission and Ancillary Services:** For the Load-Following product, BPA includes the Energy Imbalance service. No other Transmission and Ancillary Services are included, but can be acquired through a separate contract with BPA Transmission Services.

**Transfer Service:** A purchaser of a Load-Following product may use BPA transfer service when available to the customer.

**Resource Support Services and Related Services:** Available for resources of the customer that are dedicated to load. These services include: Diurnal Flattening Services (DFS), Forced Outage Reserve Service (FORS), Secondary Crediting Service (SCS), Resource Remarketing

Service (RRS), and Transmission Curtailment Management Service (TCMS). See Part 3, Resource Support Services, for descriptions and additional detail on these services.

**This page intentionally left blank.**

## 2. Block Product

### **Product Description Summary:**

The Block product provides a planned amount of firm power to meet a customer's planned annual Net Requirement load. The customer has dedicated non-Federal resources and is responsible for using those resources dedicated to its TRL to meet any load in excess of its planned monthly BPA Block purchase. The costs associated with the energy and capacity necessary to provide this service are established in Tier 1 charges for energy and capacity in each rate case. To the extent a customer wishes to have BPA provide service for all or a portion of its planned Above-RHWM load, the costs associated with BPA providing this portion of Net Requirement service will be reflected in the applicable monthly Tier 2 energy rate.

This section provides information on the stand-alone Block product. Although no customers signed-up for the stand-alone Block Product, it is available if a customer switches products in the future or if a new customer elects it. The stand-alone Block product is different from the Slice/Block product discussed in Section 3 of Part 1 of this guidebook.

**Block Product Shapes.** Customers may choose between two shapes for the Block product. The first is a Flat Block which delivers an equal amount of power in all hours of the year. The second is a Shaped Block, which shapes Federal power deliveries to the customer's forecasted monthly Net Requirement for a specified year. This shaping is available to customers for that portion of a customer's block service that is charged at Tier 1 rates.

**Alternatives for the Shaped Block.** The monthly shape of the Shaped Block for amounts of power priced at Tier 1 rates will be calculated based upon the monthly shape of the customer's FY 2010 TRL as measured for CHWM purposes, and adjusted by FY 2012 Existing Resource amounts. Once the shape for the Shaped Block is established it will not change during the contract term. The monthly block amounts may be established either in a flat monthly amount or in flat monthly diurnal amounts, where the block amount is shaped to the customer's Net Requirement load with up to 60 percent of the megawatt hours in its HLH period.

Customers choosing the Block product will also be able to add a Shaping Capacity product to it, if their Net Requirement load allows for it. Shaping Capacity allows the Block customer to pre-schedule a reshaped HLH block from its planned flat average HLH block.

### **Terms of Service**

**General Description:** The Block product provides firm power each month on a planned basis to meet a customer's planned annual Net Requirement load. It is not a Load-Following product and provides for no hourly changes in planned Federal power amounts, except for any allowable changes in conjunction with the Shaping Capacity product, if purchased by the customer. The customer is responsible for meeting all the remainder of its TRL consumer firm load with its own resources.

**Applicable Rates and Billing Factors:** The Block product will be priced according to the rate design in the TRM and future rate cases as applicable. The applicable PF rates will include: (1) Tier 1 customer rate, consisting of a composite customer rate and a non-Slice customer rate; (2) Tier 1 Demand rate (if taking Shaping Capacity); and (3) Tier 1 Load Shaping rate. For customers electing to have BPA serve load above their RHWMs in flat annual blocks of energy, Tier 2 energy rates will be applicable based on the Tier 2 rate alternative the customer elected.

### **Customer-Owned, Non-Federal, Dedicated Resources:**

1. *Existing and Dedicated Resources.* Must be dedicated as in the Subscription contract, except for specific resources for which BPA has made a section 5(b)(1) determination under BPA's revised 5(b)/9(c) Policy and supporting RODs, as noted in the RD Policy.
2. *New and Dedicated Resources.* Specific Generating resources and contracts for annual output of resources that the customer decides to use for its load must be dedicated consistent with section 5(b)(1) and according to BPA's section 5(b)/9(c) Policy as revised, the supporting RODs, and the applicable resource declaration parameters.
3. *Unspecified Resource Amounts.* Dedicated amounts of monthly HLH and LLH

non-Federal power that the customer obligates itself to supply from unspecified purchases or resources are to be included in Exhibit A of the Regional Dialogue contracts. The customer must provide this non-Federal power in the amounts stated for each hour and must also cover hourly variations in loads and its resource or purchase power deliveries.

**Service to Load Below-RHWM:** The annual Net Requirement load service charged at Tier 1 rates will be the smaller of the customer's Net Requirement or its RHWM. Such Federal power amounts will be provided in a shape that is either flat in all hours of the year, or in the monthly diurnal shape allowed under the Shaped Block. The shape of the Block amounts charged at Tier 1 rates is not subject to change during the contract term. Annual average megawatt changes may occur due to changes in the customer's RHWMs and/or its Net Requirements. If the annual average megawatt Block amount charged at Tier 1 rates changes, BPA will make this change by increasing or decreasing all of the HLH and LLH amounts by the *same percentage* to arrive at the new annual average megawatt amounts. Removal of resources discussed below will affect the annual Net Requirement for the customer, but will not result in a change in the shape of the Block.

**Service to Load Above-RHWM:** A customer may choose to have a portion of its planned Net Requirement load above its RHWM served by BPA at Tier 2 rates, in accordance with the applicable notice and commitment requirements. The only Tier 2 rates available to Block customers are the Tier 2 Short-Term or Tier 2 Vintage rates, if it is offered by BPA. Block power sold at the Tier 2 rate for Above-RHWM load is only available in a flat annual shape. Alternatively, a customer may choose to serve all or part of its TRL above its RHWM with dedicated non-Federal resources. The notice and commitment periods are identical to those for purchases from BPA at the Tier 2 Short-Term rate. Transmission losses for customers' non-Federal resources are not included in this product and will have to be procured by the customer when using non-Federal resources to serve its Above-RHWM load.

**Resource Removal Rights for New and Existing Resources:**

1. *New Resources.* Under the Block product contract a customer will have an annual

right to temporarily remove all or a portion of its New Resources. New Resources may be removed for a fiscal year in an amount limited by the difference between the amount of New Resources the customer planned to use to serve Above-RHWM load for a fiscal year and the amount of Above-RHWM load forecasted in the Rate Case for that fiscal year for the customer. Any resource removed for the fiscal year must be made available in the next fiscal year to the extent that the Above-RHWM load is forecast to increase.

2. *Existing Resources.* Removal of resources other than New Resources dedicated to serve Above-RHWM load will be allowed in limited circumstances. A customer may remove existing resource amounts prior to the second year of a rate period when there is load loss that causes its Net Requirement in the second year of a rate period to dip below the Block amount purchased in the first year of the rate period. To the extent that Block customers have existing resources, this will allow them to maintain their Block amounts in the second year of the rate period

**Transmission Scheduling Service:** Not included.

**Scheduling Provisions:** Customers must schedule in accordance with BPA's scheduling parameters/procedures.

**Meeting Energy and Capacity Resource Adequacy Standards:** BPA is responsible for meeting energy and capacity adequacy standards for the portion of load that is served by BPA. Customers are responsible for meeting energy and capacity standards for the portion of TRL not served by BPA.

**Transmission Losses:** Included for the customer's purchase from BPA.

### **Interactions with Other Services**

**Shaping Capacity:** The Block product can be combined with Shaping Capacity, as specified below.

**REC Program (formerly Environmentally-Preferred Power, or EPP):** See Part 1, Section 4 for explanation of the REC Sales Program.

**Transmission and Ancillary Services:** Not included, but a customer can acquire services through a separate contract with BPA Transmission Services.

**Transfer Service:** The Block product may include Transfer Service when Transfer Service is available to the customer.

**Resource Support Services and Related Services:** Firming and Shaping Services are only available for renewable New Resources dedicated to customer load as a Specified Resource. RSS for Block customers will be sold by BPA under the Federal Power System (FPS) rate schedule.

### **Block with Shaping Capacity Product**

*Block with Shaping Capacity:* Customers purchasing the stand-alone Block product have an option to add Shaping Capacity to their Block purchase. This Shaping product establishes a daily range for each month within which a customer may reshape the daily HLH energy amount of its Block purchase. Any Shaping Capacity a customer contractually adds to its purchase will be priced and sold on a take-or-pay basis. This is because BPA must reserve capacity sufficient to meet a customer's shaping requests.

Monthly Shaping Capacity amounts will be based on the measured FY 2010 load variance between the customer's monthly system peak and average HLH load for the month, and cannot exceed the customer's Net Requirement load amount for the month. The Shaping Capacity amounts a customer buys under its Block product will be established by September 15, 2011, and will remain fixed for the contract term unless BPA establishes a peaking energy limitation at a later time during the contract. Also, BPA may establish hour-to-hour ramping limits for Shaping Capacity amounts when the total Shaping Capacity amount for all customers purchasing Shaping Capacity exceeds 200 aMW in any month. Pre-schedules for Shaping Capacity must be submitted by 11:00 a.m. 2 business days before delivery (e.g., on Friday for Tuesday). BPA

reserves the right to move this scheduling deadline back 2 hours if BPA believes it is necessary for its internal short-term hydro planning processes.

If Net Requirement load service at Tier 2 rates is purchased, the calculation that determines the purchased amount of Shaping Capacity will *not* be affected by the increased block quantity.

BPA will not provide LLH Shaping Capacity as a part of the standard product but may consider providing such Shaping Capacity through bilateral negotiations with a customer under the FPS rate schedule. Customers may negotiate such additional purchase amounts with BPA, subject to availability and under the then-applicable FPS rate schedule.

### **EXAMPLE**

The following example is provided as an illustration of information and calculations that are considered for the Shaping Capacity product, and steps through how to: (a) set a Shaped Block priced at Tier 1 rates (for just 1 month); (b) derive the Shaping Capacity purchase amount for this example month; and (c) use the Shaping Capacity purchase amount in a given day in that month.

a. Establishing a Block customer's block service involves several pieces of information: (1) how has the customer committed to serve its Above-RHWM load for FYs 2012-2014; (2) what is the customer's FY 2010 monthly load data and resource information (for CHWM purposes and to set the monthly shape of the Block charged at Tier 1 rates); and (3) what is the customer's FY 2012 Net Requirement load. In this example, for simplifying purposes, it is assumed that the loads and resources used to establish this customer's CHWM equal its Net Requirement load in FY 2012 and that this customer had no load growth. In addition, this customer elected to serve its entire Above-RHWM load with non-Federal resources for FY 2012-2014.

**Example month (November)**

	Monthly Load Amounts	Monthly Resource Amounts	Monthly Net Requirement
Total MWh	400,000	200,000	200,000
HLH (MWh)	300,000	150,000	150,000
LLH (MWh)	100,000	50,000	50,000
Peak (MW)	900	300	600

This customer’s monthly Net Requirement for November is 200,000 MWh or 278 aMW. It has 75 percent of its monthly MWhs in the HLH period. However, the Block product priced at Tier 1 rates only allows for up to 60 percent of the monthly MWhs to be in the HLH period. The table below shows this customer’s November Block amounts priced at Tier 1 rates, including the adjustment from 75 percent to 60 percent in the HLH period.

	Step 1		Step 2		
	Monthly Net Requirement (MWh)	% of Monthly MWh	November Block Amounts Priced at Tier 1 Rates (MWh)	% of Monthly MWh	MW
Total	200,000		200,000		278
HLH	150,000	75%	120,000	60%	300
LLH	50,000	25%	80,000	40%	250

b. Deriving the Shaping Capacity purchase amount for an example month (November): Determine the measured FY 2010 variance between the customer’s monthly HLH peak and average HLH load for the month, and then compare that to the customer’s Net Requirement amount (because that is its limit).

The customer’s peak load for that month was 900 MW, compared to its average November 2010 HLH load (in aMW) =  $300,000/400 = 750$  MW. The peak load is 1.2 times the average HLH load. Consequently, this customer can increase its HLH amounts purchased at Tier 1 rates by up to 1.2 times 300, or 360 (and  $300 + 60 = 360$  MW) on any given HLH in the month. Any given HLH can also be reduced by 60 MW, or to 240 MW.

c. Sample Day's Scheduled Tier 1-priced Block Amounts in November:

	With No Shaping Capacity Used	With 60 MW of Shaping Capacity Used	
Hour	Schedule	Schedule	Delta from Average
1	250	250	0
2	250	250	0
3	250	250	0
4	250	250	0
5	250	250	0
6	250	250	0
7	300	320	20
8	300	340	40
9	300	360	60
10	300	300	0
11	300	280	-20
12	300	240	-60
13	300	260	-40
14	300	290	-10
15	300	290	-10
16	300	300	0
17	300	300	0
18	300	340	40
19	300	330	30
20	300	300	0
21	300	280	-20
22	300	270	-30
23	250	250	0
24	250	250	0

### 3. Slice/Block Product

**Product Description Summary:** The Slice/Block product provides a combined sale of two distinct power products: firm requirements power under the Block product and firm power and other services as the Slice Output under the Slice Product based on a customer's planned Annual Net Requirement.

**Block Portion of the Slice/Block Product:** The Block product provides a planned amount of Firm Requirements power to serve a portion of the customer's Annual Net Requirement and will be provided in the same shapes (flat annual or flat-within the month) as described in Section 2 above with the following exceptions:

- **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 HLH and LLH periods. The annual amount of Tier 1-priced Block available to customers will be calculated each year by subtracting a customer's Critical Slice Amount from the lesser of the customer's Annual Net Requirement or its RHWM.
- **Shaping Capacity.** Shaping Capacity is not available for the Block service included in the Slice/Block product.

**Slice Portion of the Slice/Block Product:** The Slice product is a product that is a Federal system sale of power including firm requirements power, hourly scheduling rights, and surplus power, all of which are indexed to the customer's Slice Percentage and the variable output capability of the FCRPS resources that comprise the "Tier 1 System" under the TRM after BPA's System Obligations and Operating Constraints have been met (Slice Output). A customer's preliminary Slice Percentage was based on a forecast of the customer's FY 2012 Net Requirement load divided by an augmented Tier 1 system capability (up to 7400 aMWs). The Slice Percentage will be adjusted per the contract based upon the Annual Net Requirement and any amounts of Augmentation for Additional CHWM. The Slice product is a power sale subject to limitations and is not a sale of operational rights, Tier 1 system resources, resource capability, or transfer of control of any Federal resources. Federal operating agencies retain all operational control of all resources that comprise the FCRPS at all times.

The Slice Output is accessed by the customer using a computer simulation reasonably representing the variable output and system conditions, and applying the customer's Slice Percentage to them. In certain periods of the year the Slice product may deliver more power than in other periods due to water conditions and system operations. Thus the Slice product includes an advanced sale of surplus power (over-generation) in certain conditions and in certain periods, (e.g., the spring runoff period).

Slice Output is sold on a variable basis based on a planning percentage of firm power from the Tier 1 System. BPA does not guarantee any amount of power from the Slice Output. Nor does BPA guarantee that the amount of Slice Output combined with the Block product's firm power will be sufficient to meet the customer's loads or variations in those loads. The customer is responsible for meeting its TRL each hour and is obligated to supply any amount of power needed to meet such load that is not met by the Slice and Block products. No within-hour energy or capacity service is included in the Slice product. Slice Output is scheduled firm for the hour of delivery. Operating Constraints are applied proportionally to the Tier 1 System by BPA and are shown in the simulator.

There are inherent risks in the purchase of the Slice product:

- Slice power will be less during low water years, and may be less than the planned firm power based on critical water planning at the beginning of each contract year.
- Loss of Federal generation or changes in Federal generation will be reflected in the Slice system resources on both a planning basis year to year and an operational basis hourly. Such changes can increase or reduce Slice power availability.
- Additional non-power constraints, such as fish operations (i.e., increased flow or spill requirements, nitrogen saturation reductions, or other measures) may affect the amount of Slice power available.

#### **Availability of Slice Product.**

BPA determined in its Regional Dialogue Policy to make approximately 27 percent of the Tier 1 System Capability available for purchase as Slice in combination with the Block product at the

time of offering the Regional Dialogue contracts. Customers contracted for the full amount of Slice product that was made available at that time.

### **Terms of Service**

**General Description:** The Slice/Block product is based on a customer's Annual Net Requirement load. The Slice portion provides power in the shape of BPA's generation from the Tier 1 System resources over the year. It provides an amount of firm power on a planned monthly basis, in addition to an amount of energy based on over-generation in certain periods. Thus, Slice includes an advanced sale of some amount of surplus energy as available during a year. Block amounts are fixed amounts of power provided on a monthly basis for each hour of the month.

**Applicable Rates and Billing Factors:** The Slice/Block product will be provided and priced according to the rate design in the TRM or future rates cases, if applicable. The applicable PF rates include: (1) Tier 1 customer rates, consisting of a composite customer rate, a non-Slice customer rate and a Slice customer rate; and (2) Tier 1 Load Shaping rate. For customers electing to have BPA serve load above their RHWMs in flat annual blocks of energy, Tier 2 energy rates will be applied.

### **Customer-Owned, Non-Federal, Dedicated Resources:**

1. *Existing and Dedicated Resources.* Must be dedicated as in the Subscription contract, except for specific resources for which BPA has made a section 5(b)(1) determination, under BPA's revised 5(b)/9(c) Policy and supporting RODs as noted in the RD Policy.
2. *New and Dedicated Resources.* Specific generating resources and contracts for annual output from resources which the customer decides to use for its load must be dedicated consistent with section 5(b)(1) and according to BPA's section 5(b)/9(c) Policy as revised, the supporting RODs, and the applicable resource declaration parameters.
3. *Unspecified Resource Amounts.* Declared amounts of monthly HLH and LLH non-Federal power that the customer obligates itself to supply from unspecified

purchases or resources are to be included in Exhibit A of the Regional Dialogue contracts. The customer must provide this non-Federal power in the amounts stated for each hour and must also cover hourly variations in its loads and its resources or purchase power deliveries.

**Block Service to Requirements Load:** At least 30 percent of the Slice/Block customer's forecast Net Requirement in FY 2008 for FY 2012 must be served by the Block product of the Slice/Block product that is charged at Tier 1 and Tier 2 rates. The actual value will be determined each year after the customer's Annual Net Requirements are calculated. However, BPA expects Block service to account for about 50 percent of a customer's Net Requirement load for FY 2012.

**Service to Load Below-RHWM:** The Annual Net Requirement load service charged at Tier 1 rates will be the smaller of the customer's Net Requirement or its RHWM. The annual average megawatt purchase amounts for each year may change due to changes in the RHWM or a change in a customer's Net Requirement, and may be affected by resource removal rights. If a customer's Slice/Block purchase amounts at Tier 1 rates changes, any such changes will be made first to the Block product purchase amounts to the extent the Block amounts can absorb such changes. BPA will make such changes by increasing or decreasing all of the HLH and LLH Block amounts by the *same proportional* amount to arrive at the new average megawatt amount. If there is not a sufficient amount of Block product purchases to reduce, then BPA will reduce the customer's Slice Percentage down so that the firm power purchased will equal the customer's Annual Net Requirement. BPA will make such changes annually by September 15.

**Service to Load Above-RHWM:** A customer may choose to have a *portion* of its TRL above its RHWM served by BPA in a flat annual block of energy at Tier 2 rates. The only Tier 2 rates available to Slice/Block customers are the Tier 2 Short-Term rate and the Tier 2 Vintage rate, if it is offered by BPA. Block power sold at the Tier 2 rate for Above-RHWM load is only available in a flat annual shape. Alternatively, a customer may choose to serve all or part of its load above its RHWM by adding its own non-Federal resources or purchases. A customer's choice of how it will serve load above its RHWM must be made in accordance with the

applicable notice and commitment requirements. Transmission losses for customers' non-Federal resources are not provided for by BPA and will have to be procured by the customer when using non-Federal resources to serve load above its RHWL.

**Resource Removal Rights for New and Existing Resources:**

*1. New Resources.* Under the Slice/Block product contract a customer will have an annual right to remove all or a portion of its New Resources that have been dedicated to serve the customer's Above-RHWL load. The amount of New Resources that may be removed on an annual basis will be limited to the amount of planned load loss that is above the customer's RHWL, and that the customer planned to serve with New Resources but which is not forecast to materialize in the upcoming contract year. Any New Resource removed for the contract year must be made available in the next contract year if the planned load forecast increases.

*2. Existing Resources.* Removal of resources other than New Resources will be allowed in limited circumstances. A customer may remove Existing Resource amounts prior to the second year of a rate period, when a planned amount of load loss will cause its Annual Net Requirement in the second year of a rate period to fall below the Annual Net Requirement purchased in the first year of the rate period. To the extent that Slice/Block customers have Existing Resources, this will allow them to maintain their Slice and/or Block amounts in the second year of the rate period. A customer may only exercise this right if it has removed all New Resources and remarketed all Tier 2-priced Block amounts.

**Transmission Scheduling Service:** Not included.

**Scheduling Provisions:** Customers must schedule in accordance with BPA's scheduling parameters/procedures.

**Meeting Energy and Capacity Resource Adequacy Standards:** BPA is responsible for meeting energy and capacity adequacy standards for only that portion of a customer's planned

load that is served by BPA. Customers are responsible for meeting energy and capacity standards for all the remaining portions of TRL not served by BPA.

**Transmission Losses:** Are included Block portion of the Slice/Block product.

### **Interactions with Other Services**

**REC Program (formerly Environmentally Preferred Power, or EPP):** See Part 1, Section 4 for explanation of the REC Sales Program.

**Transmission and Ancillary Services:** Not included, but can be acquired through a separate contract with BPA Transmission Services.

**Transfer Service:** The Slice/Block product may include Transfer Service when Transfer Service is available to the customer.

**Resource Support Services and Related Services:** Firming and Shaping Services are only available for renewable New Resources dedicated to customer load as a specific resource.

#### **4. Renewable Energy Certificates (REC Program)**

**Background:** BPA's Renewable Energy Certificates (RECs) are the renewable, non-power attributes associated with electricity generated by certain renewable resources marketed by BPA. RECs are not physical energy; they are a derivative of energy and are sometimes traded as a commodity. BPA offers RECs in 1 MWh amounts that can be used by customers to meet renewable portfolio requirements or other renewable resource purposes. BPA's REC inventory is expected to be limited.

**Tier 1 RECs:** BPA will annually transfer a pro rata share of RECs associated with the Tier 1 rate pool resources to customers signing Regional Dialogue contracts with an individual customer CHWM. Such RECs will be transferred to customers at no extra charge or premium beyond the Tier 1 rate. Due to renewable generation variability, BPA will transfer RECs to customers holding these contracts after the fact on an annual calendar year basis. Although BPA expects to provide the RECs for the term of the Regional Dialogue contracts, BPA has the right upon notice to terminate the transfer of such RECs to help manage BPA compliance costs for future legislation concerning carbon or some other form of renewable portfolio. The amount of RECs transferred to individual customers will be based on the amount of RECs associated with Tier 1 resources less the amount of RECs associated with pre-existing Environmentally Preferred Power (EPP) obligations under the Subscription power sales contracts. A customer's pro rata share will be based on the ratio of the individual customer's RHWM and the total RHWM of all customers with an individual customer CHWM.

BPA will manage such RECs for customers via a commercial tracking service (currently WREGIS). A customer may decide prior to each Rate Period whether they would like BPA to (1) transfer RECs into the customer's own WREGIS account; (2) transfer RECs into the customer's WREGIS subaccount, as established by BPA on the customer's behalf; or (3) market RECs on the customer's behalf and credit the customer on their power bill. BPA has the right to

For Regional Dialogue Discussion Purposes Only

Pre-Decisional

Page 27 of 59

select another commercial tracking system if BPA determines WREGIS is not an adequate tracking system.

**Tier 2 RECs:** BPA will annually transfer to customers purchasing at Tier 2 rates a pro rata share of any RECs associated with resources used to establish the particular Tier 2 rate. Due to renewable generation variability, BPA will transfer RECs to customers purchasing power at a Tier 2 rate after the fact on an annual calendar year basis. Although BPA expects to provide the RECs for the term of the Regional Dialogue contracts, BPA has the right upon notice to terminate the transfer of such RECs to help manage BPA compliance costs for future legislation concerning Environmental Attributes.

A customer's pro rata share will be based on the ratio of the individual customer's amount of power being purchased at the applicable Tier 2 rate and the total amount of power being purchased at that Tier 2 rate and will be managed under the same approach the customer establishes for its Tier 1 RECs.

**Carbon Credits/Attributes:** Due to uncertainty regarding green house gas and carbon-free value at this time, specific details addressing carbon attributes are not known. However, BPA intends to pass on the value of carbon attributes or credits associated with resources associated with Tier 1 or Tier 2 cost pools to customers in much the same manner as described above for Tier 1 and Tier 2 RECs. Values for carbon credits may be conveyed as (1) the carbon credit itself; (2) a revenue credit after BPA markets the carbon credit; or (3) a customer's ability to claim that its applicable power purchases are derived from certain resources including a carbon credit.

**Resale Rights:** Customers will have the right to resell the RECs described above and other green attributes provided to them by BPA.

## **Part 2: Tiered Rate Methodology (TRM)**

The following description is a summary of certain TRM provisions and is provided for convenience only. It is not intended as a replacement for, full description of, or an interpretation of the TRM. Any difference or conflict with the terms of the final TRM as supplemented are unintentional and the final TRM as supplemented shall control. A full text of the TRM is available from the Public Information Center and is posted on the BPA website.

**Background:** The TRM is the methodology for establishing a two-tiered PF rate design that applies to firm requirements power service under the Regional Dialogue contracts. Tier 1 rates reflect the costs associated with the existing FCRPS resources as of FY 2012-2013. A customer with a CHWM contract may purchase power at the lowest-cost Tier 1 rate up to the lesser of its Net Requirement or RHWM. For any load above a customer's RHWM, a customer may elect to purchase power at Tier 2 rates, serve such load with non-Federal resources, or some combination of the two. Under the TRM, rates will be set for a 2-year rate period.

### **A. Tier 1 Rate Design**

The Tier 1 rate design applies to all customers with a CHWM contract. Under the contracts and the TRM, each public utility gets a Rate Period High Water Mark (RHWM) that defines its right to buy an amount of power at BPA's lowest cost-based Tier 1 rate for each rate period. The Tier 1 rate includes three elements: Customer Charges, a Load Shaping Charge, and a Demand Charge.

**Customer Charges:** The foundation of the new rate design is individual customer charges that recover the majority of Tier 1 costs. Tier 1 Customer Charge billing amounts are designed to cover the costs of providing power as the current FBS resources actually generate power over the year. Most of BPA's Tier 1 costs will be common to all customers and will be allocated to each

customer based on its rights to access Tier 1 energy. This will be the Composite Customer Charge. In addition to the Composite Customer Charge, customers' individual charges will be adjusted by costs and credits assigned to the specific BPA products they choose (Slice and non-Slice Customer Charges). For example, the non-Slice Customer Charge will include secondary revenue credits and the Slice Customer Charge will include costs such as those unique to the computer systems developed solely to implement the Slice product.

In each general power rate case BPA will establish the costs and credits applicable to each of the three Customer Charge cost pools (Composite, non-Slice, and Slice). The rate case will also lock down each customer's share of these costs based on its product(s) (e.g., percentage of Composite Costs, percentage of non-Slice Costs, percentage of Slice Costs) and the amount of Tier 1 power available to the customer based on its RHW (technically this amount is the lower of the customer's RHW or Net Requirement). This ratio (a customer's RHW divided by the total RHW for all customers with a CHW contract) is the customer's Customer Charge billing determinant, called the customer's Tier 1 Cost Allocator (TOCA). Each customer's TOCA is used to establish the dollar amounts that will be recovered from the customer through applicable Customer Charges. Once rates are set and the record of decision issued, customers will know what their Customer Charge bill will be for each month of the 2-year rate period.

**Load Shaping Charge (for Load-Following and Block Products):** In each rate case BPA will forecast the amount of energy produced by Tier 1 resources under critical water for each HLH and LLH period in each month of each fiscal year for the rate period. These amounts will be multiplied by the customer's TOCA, summed, and then averaged to provide a single 24 HLH/LLH shape for the rate period for each customer. These amounts establish the amount of power and the shape of power paid for through the customer charges (the base amount). The Load Shaping charge is used to charge for the difference in value between the customer's base amount and the amount the customer actually takes to serve its load in that period. (One

technicality: For Load-Following customers this amount is adjusted by any Resource Shaping charges already applied to financially convert a customer resource to an annual flat block. See Part 1, Section 1, Load-Following Product and Part 3, RSS).

The Load Shaping Rate for each monthly/diurnal period during the rate period will be established each rate case and will be based on forecast market prices for the specific HLH or LLH period. On each month's bill, BPA will charge the customer the Load Shaping Rate for amounts the customer takes in excess of the base amounts and credit the customer the Load Shaping Rate for base amounts not taken.

- Block Product Load Shaping Specifics. Since Block amounts are known prior to each year, a Block customer can calculate its Load Shaping charges prior to each year by applying the Load Shaping Rate to the differences between its monthly/diurnal block amount and its corresponding base amount as established in the rate case.
- Load Shaping Annual True-Up for Load-Following Customers. BPA will calculate an annual True-Up for Load-Following customers so as to not charge or credit a customer a forecast market rate for energy that was or should have been purchased from BPA at its Tier 1 rate. At the end of the year, BPA will compare the total actual annual average megawatt amount the customer takes at Tier 1 rates to the annual average megawatts of power available to the customer under its base amount. If the actual amount taken exceeds the base amount, then the customer will be credited at the Load Shaping True-Up Rate for the amount (if any) that its RHWMM exceeds its base amount. This ensures the customer does not pay market prices for power that is eligible to be purchased at BPA's Tier 1 rate as per its RHWMM. No true-up is needed for any amount that the actual

amount taken exceeds the customer's RHWL since the customer paid Load Shaping Rates designed to mimic the market prices for the excess power. If the actual amount taken is lower than the base amount, then the customer will be charged at the Load Shaping True-Up Rate for the amount (if any) that the difference between the customer's actual amount and base amount exceed its Above-RHWL. This ensures that the customer does not receive credits at market prices for power purchased from BPA at its Tier 1 rate.

The Load Shaping Charge applies to customers purchasing the Load-Following and Block products only. It does not apply to the Slice portion of the Slice/Block product because the Slice product provides power in the "raw" shape of the FBS and therefore does not require additional Load Shaping Charges from BPA to cover the costs of changing the shape from the "raw" output of the FBS to Load-Following customers' load and to Block customer's planned Net Requirements. This is also true for the Demand Charge, discussed below.

**Demand Charge (for Load-Following and Block with Shaping Capacity Products):** The Tier 1 Demand charge sends a price signal based on the comparison between a customer's highest hourly Tier 1 load during HLH of a month and its average HLH Tier 1 load. The rate design for the Demand Charge is structured so that customers will receive about 90 percent of their historical demand at no additional charge and be subject to the marginal cost pricing for amounts the customers place on BPA beyond that level. To accomplish this, each customer will receive a Contract Demand Quantity (CDQ) that reflects a proxy for the customer's historical use. The CDQs will be calculated and included in Exhibit B of the Regional Dialogue contracts, with the exception that the CDQs do not apply to the Slice/Block product.

## **B. Tier 2 Rate Alternatives**

For public utilities whose load is above their RHW, power to serve that load must be provided from non-Federal resources; from BPA at rates reflecting BPA's marginal cost of acquiring the additional power (Tier 2-priced power); or through a mix of BPA Tier 2-priced power and non-Federal resources. BPA will not include costs of Tier 2 power priced in Tier 1 rates. BPA will offer a number of alternative Tier 2 rate options for customers who choose not to develop their own resources for some or all of their Above-RHW load.

The following describes the various attributes of the Tier 2 rate alternatives BPA plans to make available to its public customers:

### **1. The Tier 2 Load Growth Rate**

BPA will have a Tier 2 Load Growth rate alternative available for customers electing the Load-Following product. Customers that desire to have Tier 2 Load Growth service from BPA for all or a portion of their Above-RHW load must make that election by November 1, 2009, for the FY 2012-2028 period. A second opportunity is available to elect the Tier 2 Load Growth rate for the FY 2015-2028 period. Notice for the second opportunity must be given by September 30, 2011. BPA has reserved the right to charge a different Load Growth Rate for customers opting for the Tier 2 Load Growth rate at the second opportunity. A customer choosing the Load Growth rate 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 Tier 2 Load Growth Rate for the duration of the contract. BPA manages resource acquisitions to meet the Above-RHW loads of customers in this cost pool and melds the costs of these resource acquisitions into the cost pool over time.

**Availability:** Only available to customers electing the Load-Following product.

**Notice and Commitment Terms:** Customers must have committed to this rate alternative by November 1, 2009, to purchase during FYs 2012-2028, or by September 30, 2011, to purchase during FYs 2015-2028.

**Diversification Rights:** A customer may elect to reduce their future obligation to purchase at the Load Growth rate with appropriate notice, payment to BPA of any costs of modifying its original purchase selection, and limitations on additional purchases at Tier 2 rates. Existing load served at the Load Growth Rate up to the point of diversification will continue to be served at the Load Growth rate through FY 2028.

**Costs Included:** All applicable costs of power from resources and purchases will be allocated to this rate pool, including the cost of any Resource Support Services BPA needs to apply to convert the resource output into the flat-block benchmark shape. These costs will be determined in rate cases according to the procedures established in the TRM.

**Greenness:** RECs may be included with the power purchased at this rate if the rate is based on the costs of resources with retained environmental attributes.

**Combinable with Non-Federal Resources or other Tier 2 Alternatives:** Yes. When the customer chooses the Tier 2 Load Growth Rate it may elect energy amounts above its RHWMM that will not be purchased at the Tier 2 Load Growth rate for all years of power deliveries under the Regional Dialogue contract. Commitments for the elected amounts not receiving the Tier 2 Load Growth Rate will be provided the same alternatives and subject to the standard notice and commitment periods applicable to other Above-RHWMM amounts (i.e., comparable to the Tier 2 Short-Term rate).

**Interaction with Shared Rate Plan (SRP):** Load-Following customers electing to serve 100 percent of their Above-RHWMM load amounts with power purchased from BPA at the Tier 2 Load Growth are the only customers eligible to elect the SRP, as discussed later in this document.

**Need to Specify Quantities:** No. Customers are not required to specify quantities of Above-RHWMM load they elect to be served at the Tier 2 Load Growth rate. BPA will set these amounts prior to each rate case with the establishment of the RHWMM.

## **2. The Tier 2 Short-Term Rate**

Customers have already made the selection for FY 2012-2014. After this first 3-year transitional commitment term, service at the Tier 2 Short-Term rate will require 3-year notice and a 5-year commitment (except for the last commitment term, 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.

**Availability:** This Tier 2 rate alternative is available to all customers with a CHWM contract (Load-Following, Block or Slice/Block) for Above-RHWM load amounts not otherwise specified as being met with another Tier 2 rate alternative or supplied by non-Federal resources. If a Load-Following customer does not commit to how it will serve its Above-RHWM load by the appropriate notice deadline, the Tier 2 Short-Term rate will apply as a default. If a Block or Slice/Block customer does not commit to how it will serve its Above-RHWM load, the default is that the customer will apply Unspecified Resource Amounts to serve that load.

**Notice and Commitment Term:** Customers have already made the selection for FY 2012-2014. To purchase power at the Tier 2 Short Term Rate in subsequent years, customers must give notice as follows:

- by September 30, 2011, to purchase during FY 2015-2019,
- by September 30, 2016, to purchase during FY 2020-2024, and
- by September 30, 2021, to purchase during FY 2025-2028.

**Diversification Rights:** With appropriate notice and the possibility of paying any costs of making the change, a customer may elect to reduce its obligation to purchase at the Short-Term rate and replace those amounts with non-Federal resources or purchase amounts at a Tier 2 Vintage rate, if available.

**Costs Included:** All applicable costs of power from resources and purchases will be allocated to this rate pool, including the cost of any RSS products needed to convert the resource output into the flat-block benchmark shape. These costs will be determined in rate cases according to the procedures established in the TRM.

**Greenness:** RECs may be included with the power purchased at this rate if the rate is based on the costs of resources with environmental attributes.

**Combinable with Non-Federal Resources or other Tier 2 Alternatives:** Yes. Customers may combine Tier 2 Short-Term rate with other Federal Tier 2 alternatives or non-Federal resources.

*For Load-Following Customers:* When Load-Following customers give notice to purchase at this Tier 2 rate, they can elect either Alternative A or Alternative B. Alternative A provides the ability to specify an “up to” average megawatt amount of Above-RHWM load to be served by non-Federal resources, with any additional projected Above-RHWM load served at the Tier 2 Short-Term rate. Alternative B provides the ability to specify an “up to” average megawatt amount served first at the Tier 2 Short-Term rate, and then any other uncommitted Above-RHWM load served by non-Federal resources. Take-or-pay average megawatt amounts served at the Short-Term rate and Above-RHWM amounts served with non-Federal resources will be established prior to each rate case.

*For Block and Slice/Block Customers:* When Block and Slice/Block customers give notice to purchase at a Tier 2 rate, they must establish take-or-pay amounts of Above-RHWM load that they commit to have served at the Tier 2 Short-Term rate. Because the amounts of the Tier 2 purchases are set by forecast several years in advance, the actual Above-RHWM load may be higher or lower than the committed Tier 2 purchase amounts at the time BPA actually establishes the customer’s Net Requirement (generally a couple of months before each Fiscal Year). Each year following the Net Requirement calculation, the following adjustments will be made:

- **When Tier 2 Amounts are too Low.** If the Above-RHWM amount exceeds the amounts committed at Tier 2, Block and Slice/Block customers must meet the additional load with non-Federal resources.
- **When Tier 2 Amounts are too High.** If the Above-RHWM amount is lower than the committed Tier 2 purchase amounts, the Block and Slice/Block customers will determine, in accordance with such rights as defined in the contract, whether Tier 2 remarketing or resource removal will apply. If the customer elects Tier 2 remarketing, BPA will

remarket the power on behalf of the customer and provide the proceeds to the customer as a credit on its bill.

**Eligibility for Tier 2 Vintage Rates:** One of the advantages of the Tier 2 Short-Term Rate is that the purchase makes the customer eligible for purchases at Tier 2 Vintage Rates, if and when offered. When BPA offers a resource-specific Vintage rate alternative, customers will have an ability to transfer load amounts from service at the Tier 2 Short-Term rate to service at the Tier 2 Vintage rate.

**Combinable with Shared Rate Plan:** No. The Tier 2 Short-Term rate alternative cannot be combined with the Shared Rate Plan.

**Need for Specifying Quantities:** Depends on contract type, as discussed above.

### **3. Tier 2 Vintage Rates**

BPA may periodically offer Tier 2 Vintage Rates. These are intended to be based on specific resource costs 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 to BPA.

**Availability:** All customers purchasing power under the Tier 2 Short-Term rate are eligible for Tier 2 Vintage rate alternatives. Customers will have an ability to transfer load amounts from service at the Tier 2 Short-Term rate to service at the Tier 2 Vintage rate, although charges may apply to ensure there are not stranded costs in the Tier 2 Short-Term rate pool. BPA may offer a Vintage rate to the Tier 2 rate pool beyond the customers and amounts in the Tier 2 Short-Term rate pool if BPA believes there are benefits to offering greater megawatt amounts.

**Notice and Commitment Terms:** BPA will provide notice to customers that service at a Tier 2 Vintage rate is available for eligible customers. The required commitment term will be dependent on the specific resource acquired. The term of a given Tier 2 Vintage rate will not

generally exceed the term of the contract, although BPA may to explore arrangements that could allow for longer-term purchases.

**Costs Included:** Customers commit to purchase power for a specified duration at a Tier 2 Vintage rate. This cost is based on the costs of the long-term resources BPA acquires based on the requests and commitments for that specific Tier 2 Vintage rate pool. All applicable costs of power from resources and purchases allocated to the specific Tier 2 Vintage rate will remain in the specific Tier 2 Vintage rate cost pool. These will include the cost of any resource support services BPA needs to apply to convert the resource output into the flat-block benchmark shape. These costs will be determined in rate cases according to the procedures established in the TRM.

**Greenness:** RECs will be included with the power purchased at Tier 2 Vintage rates that are based on the cost of resources with environmental attributes. The amount of RECs will not be guaranteed on a forward basis, but instead will be provided as generated. If BPA must remarket an amount of take-or-pay power that would have been charged at the Tier 2 Renewable Vintage rate, the RECs would continue to go to the utility and the remarketed power will be sold without its RECs.

**Combinable with non-Federal Resources or other Tier 2 Alternatives:** Yes. Customers may combine a Tier 2 Vintage rate alternative with other Tier 2 alternatives or non-Federal resources. Customers will need to specify average megawatt Above-RHWM load amounts they wish to have served at the Tier 2 Vintage rates.

**Combinable with Shared Rate Plan:** No. The Tier 2 Vintage rate cannot be combined with the Shared Rate Plan.

**Need for Specifying Quantities:** Yes. Regardless of contract type, customers requesting this rate alternative are signing up for a take-or-pay average megawatt amount for the duration of the commitment term specific to that Tier 2 Vintage Rate.

**Timeline:** No specific dates have been set for when BPA will offer a Vintage Rate. The timing will coincide with need identified in BPA’s resource program and the needs of BPA’s customers. BPA intends to monitor the market and consult with customers about Vintage rate opportunities throughout the contract period.

A key reason that BPA plans to offer customers the opportunity to purchase at Tier 2 Vintage rates is to meet customer needs to have more information about the price and source of resources whose costs they will be paying in their Tier 2 rates. This creates a classic “which comes first?” dilemma since BPA needs to have customer commitments before it purchases these resources and customers want to know the characteristics and expected costs of the resources before they are willing to commit. BPA will continue to work on details surrounding this dilemma, but below are six steps BPA currently expects to follow:

- (1) **Information Gathering.** BPA will talk to interested customers about resource needs;
- (2) **Preliminary Resource Acquisition Process Steps.** BPA will take necessary steps to pursue resources (e.g. BPA Resource Plan, section 6(c), NEPA, etc);
- (3) **Indicative BPA Offer:** BPA will offer a Statement of Intent (SOI) for a Tier 2 Vintage rate or rates well before a potential acquisition. The SOI will specify components such as:
  - (a) Purchase duration;
  - (b) Type of resource(s);
  - (c) Range of initial costs and cost cap of raw resource output;
  - (d) Minimum quantity of interest necessary.
- (4) **Customer Commitment.** Customers must sign the SOI which will commit them to purchase under the Tier 2 Vintage rate for the specified term as long as BPA can purchase resources within the parameters established in the SOI. As part of this process, customers will have a defined amount of time to commit to shift a portion of their requirements power service from the Tier 2 Short-Term rate to the vintage formula rate(s) described in the SOI. To the

extent BPA has already sourced for the load transferred from the Tier 2 Short-Term rate, the customer could face charges to hold the departed cost pool harmless.

(5) **BPA Acquisition.** BPA acquires the resource amounts committed by customers only if BPA can meet the conditions stated in the SOI. This includes making the purchase within the range established for the cost of the raw resource output, where raw means the output prior to any Resource Support Services necessary to convert the resource into the flat-block benchmark shape.

(6) **Setting the Rate.** Each rate period the Tier 2 Vintage rates will be reset based on the costs of the resources included in the pool and the projected costs of firming and reshaping the resource output into the flat-block benchmark shape.

The time and speed in which this process can be completed for a particular Vintage rate will depend greatly on how quickly BPA and customers can complete these six steps.

## C. Shared Rate Plan

**Background:** The Shared Rate Plan (SRP) is a construct that allows customers to share their individual load growth risks and pay the same energy rate as all other SRP customers.

**Availability:** The SRP is available to customers that have signed a Load-Following contract and have elected to serve all of their Above-RHWM load at the Tier 2 Load Growth rate. While no customers chose this alternative in the first purchase period, customers may opt into the SRP by following the notice and commitment requirements for the Load Growth rate's second purchase period.

**Customer Charges:** BPA has limited the SRP by placing a total megawatt limit on the load in the SRP, as described in further detail below.

**Tier 1 Amounts:** BPA will group the individual forecast load amounts that customers that choose the SRP are eligible to purchase under their RHWM. The sum of these individual amounts will establish the total forecast amount of Tier 1 power that will be used in setting the energy rate for this group of customers. Consistent with BPA's RD Policy decision regarding pooling, if an individual customer's RHWM exceeded its net requirement then the value of any unused RHWM amount would be credited broadly to all Tier 1 customers.

**Tier 2 Amounts:** The combined amount of these customers' net requirements beyond what is met with forecast Tier 1 amounts will come from the applicable Tier 2 Load Growth rate.

**The Result:** BPA will meld the Tier 1 (including customer charges and load shaping charges) and Tier 2 costs to establish a single energy rate for the SRP. Each participating customer will have a billing determinant based on its share of total forecast Net Requirements for all participating customers. The melded Tier 1 and Tier 2 energy rate is then multiplied by the individual customer's billing determinant to create a flat monthly rate for each individual customer. A customer may request that this flat monthly rate be reshaped through a Fiscal Year. The Demand charge will be calculated and applied to individual customers.

**Exiting the Shared Rate Plan:** Customers in the SRP have a one-time right to leave the SRP by providing notice by March 31 of a Forecast Year. The change will be effective the next Rate Period and the customer will purchase Tier 1 energy as any other Load Following customer not in the SRP and Tier 2 energy at the Load Growth Rate. Once a customer exits the SRP they cannot return.

**Impact on Customers not in the Shared Rate Plan:** BPA has designed the SRP so that there is no economic impact on customers not in the plan. The aggregate amount of Tier 1 and Tier 2 power purchases is exactly the same as if each customer in the SRP had been treated individually. Customers in the SRP would see some cost differences, however, since they have pooled the cost obligations of their load service. Since the overall cost is the same, some customers ultimately will pay higher rates and some lower rates than if they hadn't purchased power under the SRP. There is also not an impact on customers outside of the SRP when a customer leaves the SRP because the same costs that would have been contained in the plan for that utility become that individual customer's responsibility.

**Why a customer would choose this plan?** Melding the impacts of Tier 1 and Tier 2 rates acts as an insurance policy that spreads the costs of load growth experienced by any individual participant in the plan over all of the utilities in the rate pool. This may be particularly important for small customers where a 1 or 2 aMW increase in load would be a large proportion of their load. In addition, from the customer perspective the single rate may be simpler and reduce administration costs.

**Why is this approach consistent with the intent of Regional Dialogue?** This approach retains the cost delineation between the undiluted costs of the existing Tier 1 system and marginal costs of serving load growth at Tier 2 rates. It also makes it clear that BPA is responsible for infrastructure development for these customers. The rate for the SRP includes the marginal cost for all load beyond the customers' RHWM.

**Megawatt Limit in FY 2012 for the Shared Rate Plan:** BPA has limited the amount of load in the SRP in order to not undo the general concept of tiered rates and put at risk the important

price signals that encourage regional infrastructure, particularly conservation. Participation in the SRP is limited to 700 aMW of forecasted Transition Period High Water Mark load. If interest in the SRP exceeds 700 aMW, BPA intends to order the requests from smallest to largest and work up the stack until the 700 aMW limit is met. Practically speaking, this ensures that the smallest customers will be included in the SRP.

**Illustrative Examples of the How the Shared Rate Plan Would Work:**

**Assumptions applicable to scenarios 1-3:**

	Customer A	Customer B	Customer C
RHWM (aMW)	10	10	10
Net Requirement (aMW)	15	10	5
Service if not in SRP	10@T1 and 5@T2	10@T1	5@T1
FY 2012 – FY 2013	Customer A	Customer B	Customer C
RHWM (aMW)	10	10	10
Net Requirement (aMW)	15	10	5
Service if not in SRP	10@T1 and 5@T2	10@T1	5@T1

T1 rate = \$30/MWh

T2 rate = \$60/MWh

**Scenario 1:** Customers A, B, and C are all in the SRP (and therefore are all Load-Following customers and electing the Tier 2 Load Growth rate alternative).

**Establishing the Customer Billing Determinants.** The first step is to establish the customer Billing Determinant for each customer. This is the ratio of the individual customer requirement to the total customer requirement (the lower of its RHWM or its net requirement). This results in “A” providing 15 aMW, “B” providing 10 aMW, and “C” providing 5 aMW for a total of 30 aMW. Therefore, each customer’s billing determinant is as follows:

$$\text{Customer A} = 15/30 = 50\%$$

$$\text{Customer B} = 10/30 = 33.3\%$$

$$\text{Customer C} = 5/30 = 16.7\%$$

Note that the requirements here are calculated annually; however, the customer’s billing determinant is the same whether the requirements are calculated annually or for the rate period.

**Establishing the Melded Rate.** The second step is to establish the melded rate (or SRP customer rate), which is the sum of each individual customer’s forecasted rate period revenues for Tier 1 and Tier 2 purchases.

$$\text{Customer A} = [(10\text{aMW} \times 30\text{MWh}) + (5\text{aMW} \times 60\text{MWh})] \times (8760 \times 2) = \$10.512 \text{ M}$$

$$\text{Customer B} = (10\text{aMW} \times 30\text{MWh}) \times (8760 \times 2) = \$5.256 \text{ M}$$

$$\text{Customer C} = (5\text{aMW} \times 30\text{MWh}) \times (8760 \times 2) = \$2.628 \text{ M}$$

The sum of the customer’s forecasted rate period revenue is \$18.396 M (\$10.512 M + \$5.256 M + 2.628 M). Divided by 100, this makes the SRP customer rate \$183,960 per one percent.

**Establishing a Flat Monthly Rate for the Rate Period.** Each customer’s billing determinant as expressed as a percentage point equates into the following flat monthly rate when combined with the SRP customer rate of \$183,396 per one percent.

Customer A pays \$183,960 per 1%, or  $\$183,960 \times 50 = \$9.198 \text{ M}$  per rate period, or \$383,250 per month

Customer B pays \$183,960 per 1%, or  $\$183,960 \times 33.3 = \$6.126 \text{ M}$  per rate period, or \$255,250 per month

Customer C pays \$183,960 per 1%, or  $\$183,960 * 16.7 = \$3.072 \text{ M}$  per rate period, or \$128,000 per month

In addition to the flat monthly rate, each customer would pay for its individual demand charge.

---

**Scenario 2:** If Customer C drops out of the SRP, but Customers A and B remain, then:

**Establishing the Customer Billing Determinants.** The first step is to establish the customer Billing Determinant for each customer. This is the ratio of the individual customer requirement to the total customer requirement (the lower of its RHW or its net requirement). This results in “A” providing 15 aMW and “B” providing 10 aMW for a total of 25 aMW. Therefore, each customer’s billing determinant is as follows:

$$\text{Customer A} = 15/25 = 60\%$$

$$\text{Customer B} = 10/25 = 40\%$$

Note that the requirements here are calculated annually; however, the customer’s billing determinant is the same whether the requirements are calculated annually or for the rate period.

**Establishing the Melded Rate.** The second step is to establish melded rate (or SRP customer rate), which is the sum of each individual customer’s forecasted rate period revenues for Tier 1 and Tier 2 purchases.

$$\text{Customer A} = [(10\text{aMW} * 30\text{MWh}) + (5\text{aMW} * 60\text{MWh})] * (8760 * 2) = \$10.512 \text{ M}$$

$$\text{Customer B} = (10\text{aMW} * 30\text{MWh}) * (8760 * 2) = \$5.256 \text{ M}$$

The sum of the customer A and B’s forecasted rate period revenue is \$15.768 M (\$10.512 M + \$5.256 M). Divided by 100, this makes the SRP customer rate \$157,680 per one percent.

**Establishing a Flat Monthly Rate for the Rate Period.** Each customer's billing determinant as expressed as a percentage point equates into the following flat monthly rate when combined with the SRP customer rate of \$157,680 per one percent.

Customer A pays \$157,680 per 1%, or  $\$157,680 \times 60 = \$9.461$  M per rate period, or \$394,200 per month

Customer B pays \$157,680 per 1%, or  $\$157,680 \times 40 = \$6.307$  M per rate period, or \$262,800 per month

In addition to the flat monthly rate, each customer would pay for its individual demand charge.

Customer C pays for Tier 1 and Tier 2 power individually (see the sum of Customer C's forecasted rate period revenues for Tier 1 and Tier 2 purchases above).

### **Part 3: Resource Support Services (RSS)**

**Background:** Under the Regional Dialogue contracts customers have a CHWM that defines the amount of load service from BPA that is charged at Tier 1 rates (recovering the costs of the “existing” Federal system). Customers may elect to have BPA serve their load growth beyond their CHWM at a Tier 2 rate (at the marginal cost of serving such load). The RD Policy provides for Tier 2 service from BPA in a flat annual block of energy.

Alternatively, a customer may meet its Above-RHWM load with its own non-Federal resources. In general, the shape of the new non-Federal resources a Block or Slice/Block customer uses to serve its Above-RHWM load does not impact the shape of its Net Requirement load service from BPA at Tier 1 rates (beyond what the Slice portion of the Slice/Block product allows for). The shape of the new non-Federal resources a Load-Following customer applies to serve its Above-RHWM load does have the potential to impact its service at Tier 1 rates, and therefore could impact the rates paid by other Tier 1 customers unless a Resource Shaping Charge (may be a credit) is applied. If a Load-Following customer applies non-Federal resources (on a planning basis) in the benchmark shape, a flat annual block, BPA will propose no additional Resource Shaping Charges (or credits).

Load-Following customers will have the option of committing non-Federal resource amounts in shapes other than a flat block, but additional Resource Shaping charges or credits associated with doing so may apply to ensure that BPA’s other customers are not harmed or benefited by those resource decisions. Such charges or credits also provide incentives for resource additions in the most beneficial shapes. The rates used for the Resource Shaping Charges (and credits) will be exactly the same as those used for the Load Shaping Charges (and credits).

In addition, the RD Policy states that to avoid biasing customers’ choices, BPA’s charges for non-transmission service-based integration services for non-Federal resources will be the same as those included in Tier 2 rates based on similar resources. BPA has also committed to offer services necessary to integrate renewable resources to meet a customer’s regional firm consumer

requirements load. To implement the RD Policy, BPA has developed a suite of Resource Support Services and related services (detailed below) for customers' non-Federal resources and for pricing service from BPA at Tier 2 rates. These services include a Diurnal Flattening Service (DFS), Forced Outage Reserve Service (FORS), Secondary Crediting Service (SCS), Resource Remarketing Service (RRS), and Transmission Curtailment Management Service (TCMS). These services enable BPA to cover the costs of following the variation between planned and actual customer resource amounts and to account for the impact that resource shapes and fluctuations have on BPA's cost to meet its customer's Net Requirement load.

### **Conditions and Terms of Service Applicable to All Resource Support Services**

**Notice and Commitment Term:** The provision of all the RSS described below will require notice and commitment terms consistent with the timelines required for the purchase of BPA's Tier 2 Short-Term rate alternative. An exception to this is if a customer acquires a new specified resource after the notice deadline. Once a purchase period has begun, a customer can still request DFS or FORS for a newly specified resource if it does so at least 11 months before the rate period begins and commits to its purchase for the remainder of that purchase period and the next.

BPA will review what it learns during the implementation of the RSS products made available prior to the November 1, 2009 notice deadline and will make adjustments to the RSS products it offers in the future as necessary based on its implementation experience. It is possible that this will result in changes to the contract terms on a purchase period by purchase period basis. Pricing will be established and updated for each Rate Period in a 7(i) rate proceeding.

**Limitations:** These services do not include within-hour firming services that can be purchased from the applicable balancing authorities or self-provided. The RSS products described below are only available to Specified Resources dedicated to serve load.

## **Resource Location Considerations**

*Customers located within BPA's balancing authority (BA).* Non-Federal resources located either within or outside BPA's balancing authority will need to be scheduled to the customer's load. If, on a given hour, the non-Federal resource produces more energy than needed to serve the customer's load (after reducing the customer's PF load service to zero), then BPA will manage the excess generation to the extent the customer takes TSS. The resource may be scheduled on either firm or non-firm transmission. Not having firm transmission across the transmission path between the resource and load may result in additional charges or penalties due to the inability to deliver the resource to load associated with transmission constraints and curtailments.

*Customers located outside of BPA's BA.* For customers served by Transfer, BPA will work with the transfer customer to develop a plan of service for the delivery of a resource taking RSS that fits the customer's resource choice and the existing circumstances of transmission constraints. The resource must be scheduled on firm transmission.

**Transmission Scheduling Service:** Load-Following customers with a BPA NT contract who 1) take either DFS or SCS from BPA for any non-Federal resource, 2) serve any amount of Above-RHWM load with power at a Tier 2 rate, or 3) are served by Transfer, are required to take transmission scheduling services from BPA. Load-Following customers with a BPA NT contract that do not fall within these categories may voluntarily elect to take TSS and are encouraged to do so because it provides some additional scheduling rights to BPA's power business that will result in potentially lower costs of meeting Tier 1 power needs. There will be rates or fees developed in future rate cases to recover the cost of this service as applied to non-Federal resources and service from BPA at a Tier 2 rate.

**Scheduling Provisions:** Customers must schedule in accordance with BPA's scheduling parameters/procedures.

**Metering:** All resources (including those that are scheduled) taking RSS from BPA will need to be metered at the customer's expense.

## 1. Diurnal Flattening Service (DFS)

**Product Description Summary:** This service allows a customer's load service from BPA to change for purposes of offsetting the output variation in the customer's specified non-Federal resource(s). The charges (including the Resource Shaping Charge and its Adjustment) applied to the non-Federal resource amounts recover the forecast costs of firming and shaping these variable resources into a flat annual average block of energy. Although BPA plans to detail the rate design used to accomplish this in a future rate case, the current thinking is that diurnal flattening energy and capacity charges will apply to customers' resources taking the flattening service to arrive at resource amounts equivalent to a resource that is flat within each monthly diurnal period. In addition, BPA will employ a Resource Shaping Charge (or credit) to compare the monthly diurnal amounts to the value of a flat annual average block of energy. This will be coupled with a Resource Shaping Charge Adjustment that will account for differences between projected and actual resource performance.

### **Availability:**

*For Load-Following Customers with New Resources Greater than 1 MW in Nameplate Capability (either individually or possibly in Aggregate MW Nameplate Capability).* This service is available for Load-Following customers' non-Federal, New Resources specified to serve load (whether from a renewable source or otherwise). This service will, in essence, allow for modifications to the customer's PF load service amounts in real-time to accommodate the hourly variations (due to weather variations, for example) in the specified resource in question. The amount delivered from BPA through DFS, the Resource Shaping Charges, Resource Shaping Charge Adjustments, and the resource generation (either metered amounts or scheduled amounts) equal, on an annual average basis, the planned amount of Above-RHWM load the customer committed to serve with BPA-supported non-Federal resources in its Regional Dialogue contract. DFS is not available to customers to shape their resource for market sales or marketing fluctuations.

*For Load-Following Customers with Existing Resources Less than, equal to, or more than 3 MW in Nameplate Capability.* Load-Following customers under Regional Dialogue contracts with

Existing generating resources less than 3 MW of nameplate capability are exempt from all RSS. Load-Following customers with Existing generating resources greater than or equal to 3 MW may purchase DFS or FORS, as applicable, and, if a hydro-electric generating resource, SCS (these services are described below in Sections 2 and 3). While the RSS will generally not apply to all of the resources described in the broad category of Existing Resources, it is worth noting that the shape of the resources will impact the Load Shaping Charges applicable to a customer's load because a Resource Shaping charge is only applied to New Resource amounts.

*For Block and Slice/Block Customers' New Resources.* DFS and FORS are available for Block and Slice/Block customers' specified, renewable, New Resources dedicated to serve load. The provision of this service will require the customer to adjust its pre-scheduled PF Block load service amounts to accommodate the hourly variations in the specified renewable resource.

**Interaction with FORS:** A resource with no capacity value is already getting the necessary firm capacity for its resource through the DFS from BPA to make up for lost generation during a forced outage, and thus has no need to purchase FORS. All other resources will need to purchase FORS separately from BPA or a non-BPA source. FORS is described in more detail below.

**Replacement Power Required:** If the customer elects to shut down its resource taking DFS, the customer is responsible for acquiring replacement power from other sources in an amount equal to the expected hourly schedule. Similarly, if the resource is not performing at its minimum operating level the customer must procure replacement power up to the expected hourly schedule, unless forced outage is occurring and FORS is being called upon. An exception to this rule may be provided by BPA on a case by case basis for certain small resources, as described below.

**Exception for Small New Resources:** The contract allows for an alternate treatment for Load-Following customers with small resources. Small resources are resources that are less than 10 MW nameplate, located within the customer's service territory, and not required to have a transmission schedule. BPA will determine what resources qualify for this treatment on a case-

by case basis. A key criterion will be a BPA determination that the customer does not have the infrastructure to procure such replacement power. BPA does not expect to provide this exception to resources that are greater than 10 MW.

The exception recognizes that customers are likely to develop small resources that are behind their meters and are not actively managed in the market, and are simply providing all the power the resource can produce for service to the customer load. Under the exception BPA would provide a simpler treatment that does not require replacement power when a resource is not producing at its operating minimum. In such instances outages would be considered a forced outage and the FORS provided would include charges for the additional service provided. Accordingly, a resource under the DFS small resource exception must also purchase FORS from BPA.

**Proposed Pricing:** DFS will be considered a requirements service from BPA for Load-Following customers and will be provided under a PF-RSS rate schedule. The limited DFS available to Block and Slice/Block customers described above will also be considered a requirements service from BPA and will therefore be provided under the PF-RSS rate schedule. BPA anticipates that the methodology for calculating the applicable rates will be equivalent.

## **2. Forced Outage Reserve Service (FORS)**

**Product Description Summary:** Through FORS, BPA provides reserves at the start of an hour that can be called upon by the customer, with proper notice given to BPA Power Services, in the event of a resource outage for resources dedicated and specified to serve the customer's load. A resource with no capacity value taking the DFS from BPA, as described above, is already getting the service equivalent to FORS for the resource.

**Availability:** This service is provided for under section 9(i) of the Northwest Power Act for Load-Following customers, Block, and Slice/Block customers. The provision of this service to Load-Following customers is for any specified resource that has demonstrated capacity value.

The provision of this service to Block and Slice/Block customers is only for a specified, renewable New Resource that has demonstrated capacity value.

**Limitations:** Subject to future rate case decisions, the quantity of FORS capacity needed to be reserved and therefore purchased will be the calculated firm capacity for the resource multiplied by the machine forced outage rating. There will be an annual energy limit, subject to future rate case decisions, calculated by summing for all monthly diurnal periods, (1) the product of the machine forced outage rating; (2) the monthly/diurnal planned generation level; and (3) the number of hours in the monthly/diurnal period. The resulting value is then multiplied by a lifetime outage allowance factor, (i.e., the number two). There will also be a purchase period energy limit, subject to future rate case decisions, calculated in the same manner as described for the annual limit except instead of multiplying by the lifetime outage allowance factor the number of years in the purchase period is used.

**Interactions with other RSS:** For Load-Following, Block and Slice/Block customers, FORS can be taken as a stand-alone service but may also be combined with the DFS described above.

**Transmission Scheduling Service:** Load-Following customers with a BPA NT contract taking FORS without any other RSS, and who are not served by transfer or taking service at a Tier 2 rate, are not required to take BPA transmission scheduling services as a condition of taking FORS, but will have the option to do so.

**Proposed Pricing:** Pricing will be determined and described in greater detail in future rate cases. However, currently BPA is proposing to charge for energy taken during the first 24 hours of a forced outage at the Daily Dow Jones Mid-C prices in effect during those 24 hours. For energy taken after the first 24 hours of a forced outage, BPA is proposing to charge the applicable monthly diurnal Dow Jones Mid-C prices. The FORS capacity charge is proposed to be the product of the reserved capacity and the Tier 1 demand rate (expressed in \$/MW-month).

**Small Resource Exception for Requesting FORS:** For resources 10 MW or less that are within the customer's service territory and BPA's BA and are not required to have schedules

with e-tags, customers may not have to notify BPA of an outage as soon as it occurs but are provided more time. The exception, like the exception provided under DFS, is designed to recognize that most customers with small resources will not have the infrastructure to provide replacement power on a real-time basis.

### **3. Secondary Crediting Service (SCS)**

**Product Description Summary:** The first option of SCS takes the place of the Service and Exchange and Complex Partial with Dedicated Resource Services products from Subscription contracts. Customers previously taking the Service and Exchange product may continue to assign their shares of Priest Rapids and Wanapum to BPA in exchange for BPA providing credits and charges for amounts of generation that differ from planned amounts. Customers may continue to deliver their resource to a point of delivery other than their load, as they do today. The second option of SCS gives a customer the ability to apply the secondary energy generated by a dedicated and specified hydro-electric resource to its load, and by doing so account for the value of the secondary energy applied to load beyond the amount established as firm energy.

**Availability:** This is a requirements service for Load-Following customers and is not available to Block and Slice/Block customers.

**Limitations:** The first option of SCS is only available to those customers with Service and Exchange and Complex Partial with Dedicated Resource Services products from Subscription contracts for their shares of Priest Rapids and Wanapum. The second option of this product is available for Load-Following customers dedicating their entire hydro resource (either dispatchable or non-dispatchable) to load (both critical firm and secondary energy). The product is only available to existing resources greater than 3 MW in nameplate capability.

**Interactions with other RSS:** For Load-Following customers, this service can be taken as a stand-alone service. It can also be combined with DFS and FORS for other resources, as described above.

**Resource Declaration Parameters:** The resource must be declared based on the critical firm shape derived from either its historical generation or its planned critical study if it is part of a coordinated system in at least monthly diurnal amounts, with an option to apply a peak amount. If part of the PNCA, the shape of these amounts may be updated annually with the issuance of a new critical hydro output studies.

**Replacement Power Required:** No. The customer is not responsible for providing replacement power. Instead, BPA will apply a market-based charge for the additional amounts of Federal power BPA provides to fill in for the critical amounts of the resource, subject to future rate case decisions.

**Proposed Pricing:** Customers will receive a credit against their PF charges for the secondary energy applied to their load and a charge against their PF if the resource generates less than the planned amount. Customers will also be charged a monthly administrative fee. The method for establishing these credits, charges and administrative fees will be determined in the applicable 7(i) Process.

**This page intentionally left blank.**

## Other Related Services

### 1. Resource Remarketing Service (RRS)

**Product Description Summary:** With RRS, BPA will remarket amounts of power from a customer resource that is in excess of the customer's Above-RHWM load needs during the commitment term this service has been requested.

**Availability:** RRS is not a requirements service and will be provided on an availability basis. RRS will only be available to Load-Following customers that have: (1) acquired an amount of power ahead of their anticipated Above-RHWM load; (2) dedicated the resource to serve their Above-RHWM load; and, (3) purchased DFS for the amount of resource needed to meet their Above-RHWM load. This service may take differing forms depending on the amount of surplus capacity BPA expects to have during the commitment term. If the resource provides no capacity contribution (i.e., a wind resource), then BPA envisions only crediting the additional generation (beyond what is specified as serving load) as an LLH block.

**Limitations:** BPA intends to limit the availability of this service to an amount of resource that is at least one average megawatt greater than or equal to the amount of forecast Above-RHWM load the customer is expected to have by the end of the purchase period that is not already planned to be served by BPA at a Tier 2 rate or by another non-Federal resource (for 3, 5, or 4 years depending on the purchase period). For an amount of resource that is less than one average megawatt of forecast Above-RHWM load, BPA intends to use the Resource Shaping Charge Adjustment to account for the difference between the Above-RHWM load and actual generation of the resource.

BPA encourages customers to request RRS using the same notice deadlines and purchase periods applicable to Tier 2 and RSS; however, because RRS is offered through the FPS rate schedule and negotiated on a case-by-case basis, alternative timelines may be considered.

**Interactions with other RSS:** For Load-Following customers, this service can be combined with all of the support services described above, but DFS must be requested for the resource the customer requests RRS for.

**Proposed Pricing:** BPA would credit the customer the amount of remarketed power times a percentage of the actual Mid-C index monthly average or HLH and LLH average price less any flattening and outage reserve services needed to market the power. For customers' resources that do not provide capacity, BPA would charge the customer a capacity and energy amount to turn the HLH energy into a flat HLH block that is marketed and exchanged for an LLH block. This LLH block is added to the LLH energy that the resource generated. The specific rate design approach will be the subject of a future 7(i) Process.

## **2. Transmission Curtailment Management Service (TCMS)**

**Product Description Summary:** This service is included as an additional feature of the TSS available to Load-Following customers. BPA will provide replacement power or replacement transmission scheduling when there is a transmission event (in the form of a transmission curtailment or planned outage) between a customer's qualifying resource and its load. This service will provide replacement power or transmission scheduling for the entire curtailment or planned outage.

**Availability:** This service is available for a customer's dedicated Network Resources with firm NT transmission and those resources in process of obtaining firm NT transmission. This is not a requirements service for Load-Following customers. This service is not available for Block and Slice/Block customers.

**Limitations:** This feature is available during transmission events for resources that are Network Resources (to the extent they are not redispached for by the transmission provider) for both directly-connected customers and those served by Transfer. It is also be available to those resources that are actively in the process of being designated as a Network Resource. For Transfer Service customers, the contract Policy ROD explicitly states that BPA shall only obtain

Transfer Service for non-Federal resources that have been designated Network Resources (see Contract Policy ROD at 74-75). However, BPA may allow for possible exceptions to the Transfer Service policy on a case-by-case basis.

For customers using the TCMS feature of the TSS for resources that are in the process of being designated as Network Resources, BPA shall assess periodically how frequently TCMS is called upon during each Fiscal Year. If it has been called upon more than ten separate occurrences, each due to a separate transmission event occurring on different days, for a cumulative total of at least 168 hours, then BPA may give the customer 30 days notice that it is withdrawing the TCMS feature of TSS for that resource. After TCMS has been terminated due to frequency of use, curtailments that occur and for which the customer does not provide replacement power will result in an Unauthorized Increase Charge (UAI). TCMS will only be available for that resource again if it has been successfully added as a Network Resource. In order to encourage development of non-Federal resources, this limitation does not apply if certain criteria are met for the first five years for a newly dedicated resource from a market purchase first used to serve a customer's Above-RHWM load in FY 2012 or 2013.

**Interactions with other RSS:** This service is only available in conjunction with TSS. TSS can also be combined with the DFS, FORS and SCS, described above.

**Transmission Scheduling Service:** Load-Following customers with a BPA NT contract taking TSS without any other RSS are automatically provided TCMS for their qualifying resources.

**Proposed Pricing:** Pricing will be described in greater detail in a future rate case.