

# LOAD FOLLOWING RESOURCE SUPPORT SERVICES TEMPLATE (FINAL 08/18/2016)

***Reviewer's Note:*** *The following provisions in gray are excerpts from the Regional Dialogue Load Following Master Template and are included for reference only.*

## RSS Definitions from section 2 of the body of the Agreement (Load Following only)

- 2.6 “**Balancing Authority**” means the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports interconnection frequency in real time.
- 2.7 “**Balancing Authority Area**” means the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority.  
*Reviewer's Note: The BA and BA Area definitions are from NERC's "Glossary of Terms Used in Reliability Standards".*
- 2.17 “**Diurnal Flattening Service**” or “DFS” means a service that makes a resource that is variable or intermittent, or that portion of such resource that is variable or intermittent, equivalent to a resource that is flat within each Monthly/Diurnal period, as defined in the TRM.
- 2.29 “**Forced Outage Reserve Service**” or “FORS” means a service that provides an agreed-to amount of capacity and energy to load during the forced outages of a qualifying resource.
- 2.59 “**Resource Support Services**” or “RSS” means the Diurnal Flattening Service, Forced Outage Reserve Service, Transmission Curtailment Management Service, and Secondary Crediting Service. BPA may in the future include other related services that are priced in the applicable 7(i) Process.
- 2.61 “**Secondary Crediting Service**” or “SCS” means the optional service offered by BPA that provides a monetary credit for the secondary output from an Existing Resource that has a firm critical energy component and a secondary energy component.
- 2.82 “**Transmission Curtailment Management Service**” or “TCMS” means the service Power Services may provide to back up a qualifying resource when a transmission curtailment occurs between such resource and the customer load.

## Exhibit D

### ADDITIONAL PRODUCTS AND SPECIAL PROVISIONS

#### 1. CF/CT AND NEW LARGE SINGLE LOADS

#### 2. RESOURCE SUPPORT SERVICES

- 2.1 BPA shall develop the RSS products to support applicable Specified Resource(s) listed in section 2 of Exhibit A for the FY 2012 through FY 2014 Purchase Period and offer such as a revision to this exhibit by August 1, 2009 and by August 1 prior to each Notice Deadline thereafter. Prior to that date, BPA shall provide «Customer Name» a reasonable opportunity to provide input into the development of the products and the related contract provisions. By the November 1, 2009 Notice Deadline and by each Notice Deadline thereafter, «Customer Name» shall notify BPA in writing of any RSS products it elects to buy from BPA under the terms of this Agreement and shall identify the applicable resource(s) for which it shall purchase the RSS product(s) for the upcoming Purchase Period. Such election shall be a binding commitment of both Parties. If «Customer Name» makes such election, the Parties shall revise this exhibit so that it incorporates the agreed changes to applicable provisions,

including the applicable resource amounts, if known, by March 31, 2010 or by March 31 of the year following the Notice Deadline for future years. By September 30 of the last Rate Case Year prior to the first Rate Period when service begins, and by each applicable September 30 thereafter in accordance with the applicable incorporated contract language, BPA shall update the relevant tables included in the incorporated contract language with the applicable charges and any necessary updates to resource amounts.

- 2.2 If «Customer Name» adds a new Specified Resource within a Purchase Period to meet its obligations to serve Above-RHWM Load with Dedicated Resource(s), consistent with section 3.5.1 of the body of this Agreement, «Customer Name» may purchase DFS or FORS to support such resource. «Customer Name» shall request a copy of the then-current DFS or FORS standard contract provisions from BPA and shall notify BPA in writing by October 31 of a Rate Case Year that it elects to purchase DFS or FORS for the new Specified Resource under the terms stated in the then-current contract provisions and the terms of this section 2.2. Such election shall be a binding commitment of both Parties. The elected DFS or FORS will be effective at the start of the upcoming Rate Period. The duration of such purchase shall be for the remainder of the Purchase Period and for the following Purchase Period. If «Customer Name» makes such election, the Parties shall revise this exhibit by March 31 of the calendar year after «Customer Name» has given notice of its election. Such revision shall incorporate the agreed changes to applicable provisions, including the applicable resource amounts, if known. By September 30 of the last Rate Case Year prior to the first Rate Period when service begins, and by each applicable September 30 thereafter, in accordance with the applicable incorporated contract language, BPA shall update the relevant tables included in the incorporated contract language with the applicable charges and any necessary updates to resource amounts.

*Include for **LOAD FOLLOWING** if customer purchases RSS:*

***Option 1:** Include the following version if customer purchases DFS.*

2.3 **Diurnal Flattening Service (DFS)**

From October 1, 20«XX» through September 30, 20«XX», BPA shall support «Customer Name»'s Specified Resource(s) listed in section 2.3.6.1 below with DFS in accordance with section 2.3.1 below. «Customer Name» shall apply such resource(s) to serve «Customer Name»'s Total Retail Load and provide BPA with any necessary information concerning such resource(s) in accordance with sections 2.3.2, 2.3.3, and 2.3.4 below. BPA shall charge for DFS in accordance with section 2.3.5 below and shall update the tables in section 2.3.6 below.

2.3.1 **BPA's Obligations**

On an hourly basis BPA shall make available power to «Customer Name» to serve «Customer Name»'s Total Retail Load to meet variations between the amounts generated by the Specified Resource(s) listed in section 2.3.6.1 below and the hourly average planned amounts listed in section 2.3.6.2 below. Generated amounts are the amounts measured by the meters on the resource(s) listed in section 2.3.6.1 below in accordance with section 2.3.2 below, unless a resource listed in section 2.3.6.1 below is scheduled to «Customer Name»'s Total Retail Load, in which case such generated amounts are the amounts scheduled pursuant to Exhibit F. BPA shall provide and «Customer Name» shall purchase Transmission Scheduling Service in accordance with Exhibit F.

In the event that BPA proposes to adopt a rate schedule for a portfolio application of DFS to multiple «Customer Name» resource(s) then BPA shall, upon establishing such rate schedule, propose amendments to subsections of this exhibit as necessary to implement the rate schedule.

**2.3.2 Operational Requirements**

For purposes of this section 2, “Operating Minimum” means the lowest level of power generation that is established in section 2.3.6.2 below as the minimum hourly power delivery amount when the resource is operating. Such Operating Minimum may be zero (0) pursuant to section 2.3.6.2.

*Drafter’s Note: List resource(s) customer purchases DFS for that do not qualify for the small resource exception. State “None at this time.” in the table below under the “Resource Name” column if this section does not apply. The resource(s) listed here must also be listed in section 2.3.6.1 below.*

**2.3.2.1 Operational Requirements for Resource(s) without Small Resource Exception**

This section 2.3.2.1 applies to the following Specified Resource(s):

Resource Name	Purchase Period

«Customer Name» shall apply the output from the Specified Resource(s) identified in section 2.3.6.1 and which are listed above, as such output is generated, to serve «Customer Name»’s Total Retail Load. If «Customer Name» does not apply at least each individual resource’s Operating Minimum as set forth in section 2.3.6.2 below for the applicable hour(s) from the Specified Resource(s) listed in the table above, then «Customer Name» shall provide replacement power from another source to serve its Total Retail Load in accordance with section 2.3.2.1.1 below. If «Customer Name» does not meet these conditions, then «Customer Name» shall pay an Unauthorized Increase Charge in accordance with BPA’s Wholesale Power Rate Schedules and GRSPs.

**2.3.2.1.1 Scheduling Replacement Power**

«Customer Name» shall provide replacement power for service to its Total Retail Load. Such replacement power amounts shall equal the difference between the amount being generated by the Specified Resource(s) listed above in section 2.3.2.1 and the hourly average planned amounts of power listed in section 2.3.6.2 below for

the applicable resource(s) and hour(s) rounded down and expressed as the nearest whole megawatt.

#### 2.3.2.1.2 Planned Outages

By October 31 of each Rate Case Year, «Customer Name» may notify BPA of daily amounts of planned outages during the upcoming Rate Period for each of the Specified Resource(s) listed in section 2.3.2.1 above. BPA will use such information when establishing the Operating Minimums, planned amounts, and hourly average planned amounts under section 2.3.6.2 below for the applicable resource(s), with differentiated amounts for days with and without planned outages. In accordance with BPA's Wholesale Power Rate Schedules and GRSPs, during days with planned outages «Customer Name» shall receive no value under the Resource Shaping Charge Adjustment when a resource provides output beyond the planned amounts in section 2.3.6.2 below for such resource.

Six weeks prior to the start of a month with a planned outage, «Customer Name» may request that BPA shift the days for the planned outage by changing the outage's start date. BPA is not obligated to make such change but BPA will evaluate «Customer Name»'s request and shall notify «Customer Name» within five Business Days if it is acceptable to BPA for «Customer Name» to make the change requested.

***Drafter’s Note:*** List resource(s) customer purchases DFS for that qualify for the small resource exception. State “None at this time.” in the table below under the “Resource Name” column if this section does not apply. The DFS Small Resource Exception is applicable if BPA determines that the customer does not have the means or ability to provide non-federal reserves as replacement power during full or partial outages, or if BPA determines that providing such exception will not create opportunities for arbitrage. BPA may also use the following provision in other circumstances such as if BPA decides that the administrative cost savings outweigh the benefit of requiring replacement power and greater notice for planned outages. This section is for small resource(s) (less than 10 MW nameplate capability) that are also located within customer's distribution system and not required to have a transmission schedule. The Small Resource Exception is determined on a case-by-case basis by the Power Decision Team (PDT). The resource(s) listed in the section below must also be listed in section 2.3.6.1 below.

**2.3.2.2 Operational Requirements for Resource(s) with Small Resource Exception**

This section applies to the following Specified Resource(s) with the small resource exception:

Resource Name	Purchase Period

«Customer Name» shall apply the output from the Specified Resource(s) identified in section 2.3.6.1 and which are listed in the table above, as such output is generated, to serve «Customer Name»’s Total Retail Load. If «Customer Name» does not apply at least each individual resource’s Operating Minimum as set forth in section 2.3.6.2 below for the applicable hour(s) from the Specified Resource(s) listed in the table above, then «Customer Name» shall manage outages in accordance with section 2.3.2.2.1 below. If «Customer Name» complies with the requirements of this section 2.3.2.2 and applies all power from the resource(s) listed in the table above to «Customer Name»’s Total Retail Load, then the difference between the amounts provided by such resource(s) and the hourly average planned amounts in section 2.3.6.2 below for such resource(s) will not be subject to the Unauthorized Increase Charge in accordance with BPA’s Wholesale Power Rate Schedules and GRSPs.

**2.3.2.2.1 Outages and FORS for Resource(s) with Small Resource Exception**

For any Specified Resource(s) listed in section 2.3.2.2 above, «Customer Name» shall notify BPA of any full or partial planned outages

at least one month in advance of such outages, and shall provide BPA with the start/end dates of the outages and the expected generation amounts for each daily HLH and LLH period.

The following criteria outline when «Customer Name» is or is not required to purchase FORS:

- (1) If BPA agrees that an outage on «Customer Name»'s resource with a small resource exception could not be planned one month in advance, then «Customer Name» shall request FORS energy to cover for any such outages. «Customer Name» may request FORS energy in accordance with section 2.4.4.1 below. However:
  - (a) «Customer Name» shall not be required to purchase FORS for any monthly diurnal period during which a resource with the small resource exception has an Operating Minimum, as set forth in section 2.3.6.2 below, equal to zero.
  - (b) «Customer Name» shall purchase FORS for any monthly diurnal period during which a resource with the small resource exception has an Operating Minimum, as set forth in section 2.3.6.2 below, greater than zero.
- (2) If «Customer Name» is purchasing FORS and BPA was not notified of a planned outage, then «Customer Name» shall request FORS energy in accordance with section 2.4.4.1 below.

### 2.3.3 Information Requirements

«Customer Name» shall provide BPA with hourly meter data from the Specified Resource(s) listed in section 2.3.6.1 below in accordance with section 17.3 of the body of this Agreement. If «Customer Name» installs or upgrades a meter to meet such requirement, then «Customer Name» shall pay for any costs or related services attributable to the new or upgraded meters. If any of the resource(s) listed below in section 2.3.6.1 are scheduled to «Customer Name»'s Total Retail Load or BPA's Balancing Authority Area, then «Customer Name» shall provide hourly generation forecast data and schedule data to BPA for such resource(s) in accordance with Exhibit F.

By October 31 of each Rate Case Year, «Customer Name» shall also provide BPA (in a format determined by BPA) with the resource information, including planned outages and historical and forecast resource data and, that BPA determines is necessary to provide DFS.

***Sub-Option 1:** Include the following language if customer is NOT served by Transfer Service:*

**2.3.4 Delivery Requirements**

«Customer Name» shall deliver power associated with the Specified Resource(s) listed below in section 2.3.6.1 in accordance with sections 2.3.4.1 and 2.3.4.2 below. BPA shall have no obligation for any costs or related services attributable to «Customer Name»'s acquisition of such firm or non-firm transmission. For all subsections under this section, if «Customer Name»'s use of non-firm transmission results in an Unauthorized Increase Charge, then BPA shall assess «Customer Name» such Unauthorized Increase Charge.

**2.3.4.1 Resource(s) Located Inside BPA's Balancing Authority Area**

If any of the Specified Resources listed in section 2.3.6.1 are located inside of BPA's Balancing Authority Area, then «Customer Name» shall deliver power from such resource(s) to «Customer Name»'s Total Retail Load on non-firm or firm transmission.

**2.3.4.2 Resource(s) Located Outside BPA's Balancing Authority Area**

If any of the Specified Resources listed in section 2.3.6.1 are biogas, biomass, geothermal, small hydro (nameplate capability less than or equal to ten megawatts), landfill gas, ocean, solar, or wind resource(s), and if they are located outside of BPA's Balancing Authority Area, then «Customer Name» shall deliver power from such resource(s) to «Customer Name»'s Total Retail Load on non-firm or firm transmission. Power from other Specified Resource(s) listed in section 2.3.6.1 that are located outside of BPA's Balancing Authority Area shall be delivered to «Customer Name»'s Total Retail Load on firm transmission.

*End Sub-Option 1.*

***Sub-Option 2:** Include the following language if customer is served entirely by Transfer Service:*

***Reviewer's Note:** An agreed-upon plan of service is a required condition prior to March 31 of the year following the customer's election to purchase DFS.*

**2.3.4 Delivery Requirements**

For each Specified Resource listed in section 2.3.6.1 below, Power Services and «Customer Name» agree to develop by March 31 of the



year following «Customer Name»'s election to purchase DFS, a plan of service to enable delivery of power to load that best fits the challenges of each Specified Resource. Such challenges include but are not limited to the existing circumstances of transmission constraints. If the Parties do not develop a plan by the March 31 deadline, and cannot mutually agree to a revised deadline for completion of the plan of service, then BPA's obligation to sell and «Customer Name»'s obligation to purchase DFS will expire and «Customer Name» shall meet its Above-RHWM Load with power in both a Flat Annual Shape and Flat Within-Month Shape or an alternative approach mutually agreed to by the Parties. Once the plan of service is established, the Parties may periodically reevaluate what constitutes the best plan of service and revise it accordingly. In any such plan of service, the power from the Specified Resource(s) shall be delivered on firm transmission.

*End Sub-Option 2.*

***Sub-Option 3:** Include the following language if customer has load served by Transfer Service AND directly connected load.*

***Reviewer's Note:** An agreed-upon plan of service is a required condition prior to March 31 of the year following the customer's election to purchase DFS if that DFS is for a resource serving load served by Transfer Service.*

#### 2.3.4 **Delivery Requirements**

For purposes of this section, the delivery requirements for each Specified Resource listed in section 2.3.6.1 depend on whether or not the resource serves load for which BPA provides Transfer Service. The load that each resource serves is identified in the table in section «x.x» of this exhibit, Baseline Delivery Percentages and Amounts.

##### 2.3.4.1 **Delivery Requirements for Resource(s) Serving Directly Connected Load**

For each Specified Resource that will serve load that is directly connected to the BPA transmission system and for which Power Services does not provide Transfer Service, «Customer Name» shall deliver power associated with DFS for such resource(s) in accordance with sections 2.3.4.1.1 and 2.3.4.1.2 below. BPA shall have no obligation for any costs or related services attributable to «Customer Name»'s acquisition of such firm or non-firm transmission. For all subsections under this section, if «Customer Name»'s use of non-firm transmission results in an Unauthorized Increase Charge, then BPA shall assess «Customer Name» such Unauthorized Increase Charge.

###### 2.3.4.1.1 **Resource(s) Located Inside BPA's Balancing Authority Area**

If any of the Specified Resources listed in section 2.3.6.1 are located inside of BPA's



Balancing Authority Area and will serve load that is directly connected to the BPA transmission system and for which Power Services does not provide Transfer Service, then «Customer Name» shall deliver power from such resource(s) to «Customer Name»'s Total Retail Load on non-firm or firm transmission.

**2.3.4.1.2 Resource(s) Located Outside BPA's Balancing Authority Area**

If any of the Specified Resources listed in section 2.3.6.1 are biogas, biomass, geothermal, small hydro (nameplate capability less than or equal to ten megawatts), landfill gas, ocean, solar, or wind resource(s), and if they are located outside of BPA's Balancing Authority Area and will serve load that is directly connected to the BPA transmission system and for which Power Services does not provide Transfer Service, then «Customer Name» shall deliver power from such resource(s) to «Customer Name»'s Total Retail Load on non-firm or firm transmission. Power from other Specified Resource(s) listed in section 2.3.6.1 that are located outside of BPA's Balancing Authority Area and will serve load that is directly connected to the BPA transmission system and for which Power Services does not provide Transfer Service shall be delivered to «Customer Name»'s Total Retail Load on firm transmission.

**2.3.4.2 Delivery Requirements for Resource(s) Serving Transfer Service Load**

For each Specified Resource listed in section 2.3.6.1 that will serve load for which Power Services provides Transfer Service, Power Services and «Customer Name» agree to develop, by March 31 of the year following «Customer Name»'s election to purchase DFS, a plan of service to enable delivery of power to load that best fits the challenges of each Specified Resource. Such challenges include but are not limited to the existing circumstances of transmission constraints. If the Parties do not develop a plan by the March 31 deadline, and cannot mutually agree to a revised deadline for completion of the plan of service, then BPA's obligation to sell and «Customer Name»'s obligation to purchase DFS will expire and «Customer Name» shall meet its Above-RHWM Load with power in both a Flat Annual Shape and Flat Within-Month Shape or an alternative approach mutually agreed to by the Parties. Once the plan of service is established, the Parties may periodically reevaluate

what constitutes the best plan of service and revise it accordingly. Any such plan of service shall address the following obligation: the power from the Specified Resource(s) listed in section 2.3.6.1 that serves load for which Power Services provides Transfer Service shall be delivered on firm transmission.

*End Sub-Option 3.*

### **2.3.5 DFS Rates and Charges**

BPA shall charge «Customer Name» for DFS on «Customer Name»'s monthly bill sent in accordance with section 16 of this Agreement, as follows:

#### **2.3.5.1 DFS Capacity Charge**

Each month «Customer Name» shall be assessed a charge for the capacity associated with DFS. BPA shall calculate such monthly charge by: (1) using hourly data from each of the resources listed in section 2.3.6.1 below, and (2) BPA's Demand Rate as established in BPA's Wholesale Power Rate Schedules and GRSPs, and the associated methodology established in the 7(i) Process. Such monthly capacity charge shall be listed in section 2.3.6.3 below.

#### **2.3.5.2 DFS Energy Rate**

Each month «Customer Name» shall be assessed a charge for the energy associated with DFS as established in BPA's Wholesale Power Rate Schedules and GRSPs. Such DFS energy rate shall be listed in section 2.3.6.3 below.

#### **2.3.5.3 Resource Shaping Charge and Adjustment**

Each month «Customer Name» shall be charged the Resource Shaping Charge and the Resource Shaping Charge Adjustment as established in BPA's Wholesale Power Rate Schedules and GRSPs. Such Resource Shaping Charge shall be listed in section 2.3.6.3 below.

#### **2.3.5.4 Exception for Small Amounts of Resource(s) in Excess of Above-RHWM Load**

The Resource Shaping Charge and related DFS rates and charges shall also apply to the amount of resource(s) if, at the time «Customer Name» elects DFS for such resource(s), the sum of such resource(s) and «Customer Name»'s other Dedicated Resources serving Above-RHWM Load and power purchased at Tier 2 Rates is forecasted to be less than 1 average megawatt greater than «Customer Name»'s Above-RHWM Load for the first year «Customer Name» applies the resource(s) to serve Above-RHWM Load.

***Reviewer’s Note:** See applicable GRSPs for information on possible DFS pricing methodology.*

**2.3.6 Applicable Resource(s), Amounts, and Charges**

**2.3.6.1 List of Specified Resource(s)**

***Drafter’s Note:** Add a row to the table below for each resource.*

<b>Resource Name</b>	<b>Resource Balancing Authority Area Location</b>	<b>Resource Transmission</b>

**2.3.6.2 Monthly Operating Minimums, Planned Amounts, and Hourly Average Planned Amounts by Resource**

In consultation with «Customer Name» BPA shall determine the monthly and Diurnal Operating Minimums, planned amounts, and hourly average planned amounts for each of the resources listed above in section 2.3.6.1, using resource specific information including equipment specifications, fuel type, fuel availability, resource location, and age of equipment. By September 30 of each Rate Case Year, BPA shall update such resource(s) amounts in the tables below.

(1) Operating Minimums Table(s)

***Drafter’s Note:** Include the Operating Minimum, planned amounts, and hourly average planned amounts in tables below for each resource listed in section 2.3.6.1 above.*

<b>«RESOURCE NAME»’S OPERATING MINIMUMS</b>												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Rate Period Year 1												
HLH MW												
LLH MW												
Rate Period Year 2												
HLH MW												
LLH MW												
Note: For this table only, the amounts in the table above shall be rounded down to the nearest whole megawatt.												

(2) Planned Amounts Table(s)

<b>«RESOURCE NAME»’S PLANNED AMOUNTS</b>													
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	annual aMW
Rate Period Year 1													
HLH MWh													
LLH MWh													
Total MWh													
Rate Period Year 2													
HLH MWh													
LLH MWh													
Total MWh													
Notes: Fill in the table above with megawatt-hours rounded to whole megawatt-hours and annual Average Megawatts rounded to three decimal places.													

(3) Hourly Average Planned Amounts Table(s)

<b>«RESOURCE NAME»’S HOURLY AVERAGE PLANNED AMOUNTS</b>													
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Rate Period Year 1													
HLH MW/h													
LLH MW/h													
Rate Period Year 2													
HLH MW/h													
LLH MW/h													
Note: For this table only, the amounts in the table above shall be rounded down to the nearest whole megawatt.													

**2.3.6.3 DFS Charges and Rates**

By September 30 of each Rate Case Year, BPA shall update the tables below with the DFS capacity charge, DFS energy rate, and Resource Shaping Charge as established in each rate case and in accordance with sections 2.3.5.1, 2.3.5.2, and 2.3.5.3 above, for the upcoming Rate Period.

***Drafter’s Note:** Include one DFS Capacity Charge table and one DFS Energy Rate table if the resources are priced together in a portfolio. Otherwise include a DFS Capacity Charge table and DFS Energy Rate table for each resource listed in section 2.3.6.1 above. If listing tables by resource, then also add the name of the resource(s) to the title of the table (use the tables in section 2.3.6.2 as an example.)*

<b>DFS CAPACITY CHARGE</b>	
<b>Rate Period</b>	<b>\$/month</b>
2012 – 2013	
2014 – 2015	
2016 – 2017	
2018 – 2019	
2020 – 2021	
2022 – 2023	
2024 – 2025	
2026 – 2027	
2028	

<b>DFS ENERGY RATE</b>	
<b>Rate Period</b>	<b>\$/MWh</b>
2012 – 2013	
2014 – 2015	
2016 – 2017	
2018 – 2019	
2020 – 2021	
2022 – 2023	
2024 – 2025	
2026 – 2027	
2028	

<b>RESOURCE SHAPING CHARGE</b>	
<b>Rate Period</b>	<b>\$/month</b>
2012 – 2013	
2014 – 2015	
2016 – 2017	
2018 – 2019	
2020 – 2021	
2022 – 2023	
2024 – 2025	
2026 – 2027	
2028	

*End Option 1.*

***Option 2:** Include the following version if customer does NOT purchase DFS but DOES purchase FORS or SCS.*

2.3 **Diurnal Flattening Service (DFS)**

«Customer Name» has chosen not to purchase DFS.

***Option 1:** Include the following version if customer purchases FORS.*

2.4 **Forced Outage Reserve Service (FORS)**

From October 1, 20«XX» through September 30, 20«XX», BPA shall provide power to serve «Customer Name»'s Total Retail Load during a Forced Outage of «Customer Name»'s Specified Resource(s), listed in section 2.4.5.1 below, in amounts in accordance with section 2.4.2 below. «Customer Name» shall deliver such resource(s) in accordance with section 2.4.1 below and pay BPA for FORS in accordance with section 2.4.3. «Customer Name»'s request for FORS shall meet the conditions in section 2.4.4.

***Reviewer's Note:** Customers may have further refinements to their Forced Outage definition below based on their resource's particular characteristics, the transmission arrangements to their points of integration, potential non-transmission assets, and whether the resource is within the customer's distribution system or scheduled to load.*

For purposes of this section 2.4, "Forced Outage" means loss of generation as a result of: (1) unit tripping, due to a failure to start or unplanned tripping; (2) failure on the generation integration facilities between the generator and the transmission system into which the generator is integrated; or (3) internal plant equipment problems.

***Sub-Option 1:** Include the following language if customer is NOT served by Transfer Service:*

2.4.1 **Delivery Requirements**

«Customer Name» shall deliver power from the Specified Resource(s) listed below in section 2.4.5.1 in accordance with sections 2.4.1.1 and 2.4.1.2 below. BPA shall have no obligation for any costs or related services attributable to «Customer Name»'s acquisition of firm or non-firm transmission. For all subsections under this section, if «Customer Name»'s use of non-firm transmission results in an Unauthorized Increase Charge, then BPA shall assess «Customer Name» such Unauthorized Increase Charge.

2.4.1.1 **Resource(s) Located Inside BPA's Balancing Authority Area**

If any of the Specified Resources listed in section 2.4.5.1 are located inside of BPA's Balancing Authority Area, then «Customer Name» shall deliver power from such resource(s) to «Customer Name»'s Total Retail Load on non-firm or firm transmission.

**2.4.1.2 Resource(s) Located Outside BPA’s Balancing Authority Area**

If any of the Specified Resources listed in section 2.4.5.1 below are biogas, biomass, geothermal, small hydro (nameplate capability less than or equal to ten megawatts), landfill gas, ocean, solar, or wind resource(s), and if they are located outside of BPA’s Balancing Authority Area, then «Customer Name» shall deliver power from such resource(s) to «Customer Name»’s Total Retail Load on non-firm or firm transmission. Other Specified Resources listed in section 2.4.5.1 that are located outside of BPA’s Balancing Authority Area shall be delivered to «Customer Name»’s Total Retail Load on firm transmission.

*End Sub-Option 1.*

***Sub-Option 2:** Include the following language if customer is served entirely by Transfer Service:*

***Reviewer’s Note:** An agreed-upon plan of service is a required condition prior to March 31 of the year following the customer’s election to purchase FORS.*

**2.4.1 Delivery Requirements**

For each Specified Resource listed in section 2.4.5.1 below, Power Services and «Customer Name» agree to develop by March 31 of the year following «Customer Name»’s election to purchase FORS, a plan of service to enable delivery of power to load that best fits the challenges of each Specified Resource. Such challenges include but are not limited to the existing circumstances of transmission constraints. If the Parties do not develop a plan by the March 31 deadline, and cannot mutually agree to a revised deadline for completion of the plan of service, then BPA’s obligation to sell and «Customer Name»’s obligation to purchase FORS will expire and «Customer Name» shall meet its Above-RHWM Load with power in both a Flat Annual Shape and Flat Within-Month Shape or an alternative approach mutually agreed to by the Parties. Once the plan of service is established, the Parties may periodically reevaluate what constitutes the best plan of service and revise it accordingly. In any such plan of service, the power from the Specified Resource(s) shall be delivered on firm transmission.

*End Sub-Option 2.*

***Sub-Option 3:** Include the following language if customer is served by Transfer Service AND with directly connected load.*

***Reviewer’s Note:** An agreed-upon plan of service is a required condition prior to March 31 of the year following the customer’s election to purchase FORS if that FORS is for a resource serving load served by Transfer Service.*



## 2.4.1 Delivery Requirements

For purposes of this section, the delivery requirements for each Specified Resource depend on whether or not the resource serves load for which BPA provides Transfer Service. The load that each resource serves is identified in the table in section «x.x» of this exhibit, Baseline Delivery Percentages and Amounts.

### 2.4.1.1 Delivery Requirements for Resource(s) Serving Directly Connected Load

For each Specified Resource listed in section 2.4.5.1 that will serve load that is directly connected to the BPA transmission system and for which Power Services does not provide Transfer Service, «Customer Name» shall deliver power associated with the FORS for such resource(s) in accordance with sections 2.4.1.1.2 and 2.4.1.1.2 below. BPA shall have no obligation for any costs or related services attributable to «Customer Name»'s acquisition of such firm or non-firm transmission. For all subsections under this section, if «Customer Name»'s use of non-firm transmission results in an Unauthorized Increase Charge, then BPA shall assess «Customer Name» such Unauthorized Increase Charge.

#### 2.4.1.1.2 Resource(s) Located Inside BPA's Balancing Authority Area

If any of the Specified Resources listed in section 2.4.5.1 are located inside of BPA's Balancing Authority Area and will serve load that is directly connected to the BPA transmission system and for which Power Services does not provide Transfer Service, then «Customer Name» shall deliver power from such resource(s) to «Customer Name»'s Total Retail Load on non-firm or firm transmission.

#### 2.4.1.1.2 Resource(s) Located Outside BPA's Balancing Authority Area

If any of the Specified Resources listed in section 2.4.5.1 are biogas, biomass, geothermal, small hydro (nameplate capability less than or equal to ten megawatts), landfill gas, ocean, solar, or wind resource(s), and if they are located outside of BPA's Balancing Authority Area and will serve load that is directly connected to the BPA transmission system and for which Power Services does not provide Transfer Service, then «Customer Name» shall deliver power from such resource(s) to «Customer Name»'s Total Retail Load on non-firm or firm transmission. Power from other Specified Resources listed in section 2.4.5.1 that are located

outside of BPA's Balancing Authority Area and will serve load that is directly connected to the BPA transmission system and for which Power Services does not provide Transfer Service shall be delivered to «Customer Name's Total Retail Load on firm transmission.

#### **2.4.1.2 Delivery Requirements for Resources Serving Transfer Load**

For each Specified Resource that will serve load for which Power Services provides Transfer Service and that is listed in section 2.4.5.1 below, Power Services and «Customer Name» agree to develop by March 31 of the year following «Customer Name's election to purchase FORS, a plan of service to enable delivery of power to load that best fits the challenges of each Specified Resource. Such challenges include but are not limited to the existing circumstances of transmission constraints. If the Parties do not develop a plan by the March 31 deadline, and cannot mutually agree to a revised deadline for completion of the plan of service, then BPA's obligation to sell and «Customer Name's obligation to purchase FORS will expire and «Customer Name» shall meet its Above-RHWM Load with power in both a Flat Annual Shape and Flat Within-Month Shape or an alternative approach mutually agreed to by the Parties. Once the plan of service is established, the Parties may periodically reevaluate what constitutes the best plan of service and revise it accordingly. Any such plan of service shall address the following obligation: the power from the Specified Resource(s) listed in section 2.4.5.1 that serves load for which Power Services provides Transfer Service shall be delivered on firm transmission.

*End Sub-Option 3.*

### **2.4.2 Limits of Power Provided Under FORS**

#### **2.4.2.1 Hourly Limits**

Subject to the limits in section 2.4.2.2, BPA shall provide power to «Customer Name's Total Retail Load during a Forced Outage of a Specified Resource listed below in section 2.4.5.1 equal to the lesser of: (1) the megawatt amounts «Customer Name» requests from BPA in accordance with section 2.4.4 below, or (2) the megawatt amounts listed in either: (A) section 2 of Exhibit A for the applicable resource and the applicable Diurnal period if the resource is not being supported with DFS from BPA, or (B) the hourly average planned amounts listed in section 2.3.6.2 of this Exhibit for the applicable resource and the applicable Diurnal period if the resource is being supported with DFS from BPA.

#### 2.4.2.2 Annual and Purchase Period Limits

During any Fiscal Year, «Customer Name» shall be limited to a maximum of the megawatt-hour amounts of FORS listed in section 2.4.5.2 below for the applicable resource(s) and Fiscal Year. During any Purchase Period, «Customer Name» shall be limited to the megawatt-hour amounts of FORS listed in section 2.4.5.2 for the applicable resource(s) and Purchase Period.

#### 2.4.2.3 Increasing Annual and Purchase Period Limits

«Customer Name» may request that BPA increase the amount of megawatt-hours of FORS provided during any given Fiscal Year or Purchase Period. BPA is not obligated to increase such amounts but shall evaluate «Customer Name»'s request and propose an adjustment to the fees in section 2.4.5.3 for the request. If the proposed request is acceptable to BPA, and «Customer Name» agrees to the proposed fees, then the Parties shall revise the megawatt-hour limits and fees in section 2.4.5.2 within 15 Business Days of «Customer Name»'s request.

#### 2.4.3 FORS Charges

«Customer Name» shall pay a capacity charge each month to BPA as established in BPA's Wholesale Power Rate Schedules and GRSPs for each Rate Period for such service. By September 30 of each Rate Case Year, BPA shall calculate the applicable FORS charges and update the table in section 2.4.5.3 below with the monthly capacity charge. «Customer Name» shall also pay for any energy provided under FORS in accordance with BPA's Wholesale Power Rate Schedules and GRSPs.

***Reviewer's Note:** See applicable GRSPs for information on possible FORS pricing methodology.*

#### 2.4.4 Additional «Customer Name» Obligations

The following section 2.4.4.1 does not apply if «Customer Name»'s resource(s) meets the criteria for an exception in section 2.4.4.2 below.

***Sub-Option 1:** Include the following language if Customer is NOT purchasing Transmission Scheduling Service (TSS).*

##### 2.4.4.1 Requesting FORS

«Customer Name» shall use the Integrated Scheduling, Allocation, and After-the-fact Calculation (ISAAC) Portal, or other method BPA provides to «Customer Name» in writing, for the following FORS-related transactions:

- (1) «Customer Name» shall notify BPA of «Customer Name»'s request to take FORS, the amounts of FORS «Customer Name» is requesting, and the expected duration of the Forced Outage, no later than 30 minutes prior to the hour of delivery;
- (2) «Customer Name» shall notify BPA of any changes to the information provided pursuant to section 2.4.4.1(1) above no later than 30 minutes prior to the hour of delivery; and

*End Sub-Option 1.*

*Sub-Option 2: Include the following language if Customer is purchasing TSS.*

*Reviewer's Note: Only the highlighted portions of Sub-Option 2 are different from Option 1.*

#### 2.4.4.1 Requesting FORS

«Customer Name» shall use the Integrated Scheduling, Allocation, and After-the-fact Calculation (ISAAC) Portal, or other method BPA provides to «Customer Name» in writing, for the following FORS-related transactions:

- (1) «Customer Name» shall notify BPA of «Customer Name»'s request to take FORS, the amounts of FORS «Customer Name» is requesting, and the expected duration of the Forced Outage, no later than 45 minutes prior to the hour of delivery;
- (2) «Customer Name» shall notify BPA of any changes to the information provided pursuant to section 2.4.4.1(1) above no later than 45 minutes prior to the hour of delivery; and

*End Sub-Option 2.*

- (3) «Customer Name» shall notify and report the following information to BPA within four Business Days after the end of the month in which «Customer Name» requested FORS for one or more Forced Outages: the monthly amounts of FORS taken; the duration of each Forced Outage; and the cause of each Forced Outage.

*Sub-Option 1: Include the following language if customer is NOT served by Transfer Service:*

#### 2.4.4.2 Exception to Requesting FORS

If the Operating Minimum for a resource listed in section 2.3.6.2 is zero for any given monthly diurnal period, then «Customer Name» shall not be required to notify BPA of

a Forced Outage for that resource for such monthly diurnal period.

If the Operating Minimum for a resource listed in section 2.3.6.2 is greater than zero for any given monthly diurnal period, and if the same resource listed in section 2.4.5.1 below has all of the following attributes: (1) a nameplate capability less than ten megawatts, (2) is not required to have schedules with e-tags, (3) is located inside BPA's Balancing Authority Area, and (4) is located within «Customer Name's distribution system; then «Customer Name» is not required to immediately notify the Power Services (PS) duty scheduler of «Customer Name's request to take FORS for such resource in accordance with section 2.4.4.1 above. Instead, for any such resource, «Customer Name» shall:

- (A) call the PS after-the-fact scheduler at 503-230-3949 (or such other number or method BPA provides to «Customer Name» in writing) to notify the after-the fact scheduler that a Forced Outage has occurred, state the day and hour the Forced Outage began and ended (or the expected duration of such outage if it has not yet ended), and state the amounts of FORS taken during such outage (or the expected amounts of such FORS that may be taken if it has not yet ended), prior to the end of the first full Business Day that follows the start of such Forced Outage;
- (B) call the PS after-the-fact scheduler at 503-230-3949 (or such other number or method BPA provides to «Customer Name» in writing) to notify the after-the-fact scheduler of any changes to the information provided to the PS after-the-fact scheduler pursuant to section 2.4.4.2(A) prior to the end of the first full Business Day that follows the start of any such changes; and
- (C) notify and report Forced Outages to BPA in accordance with section 2.4.4.1(3) above.

*End Sub-Option 1.*

*Sub-Option 2: Include the following language if customer is served by Transfer Service:*

#### 2.4.4.2 **Exception to Requesting FORS**

If the Operating Minimum for a resource listed in section 2.3.6.2 is zero for any given monthly diurnal period, then «Customer Name» shall not be required to notify BPA of

a Forced Outage for that resource for such monthly diurnal period.

If the Operating Minimum for a resource listed in section 2.3.6.2 is greater than zero for any given monthly diurnal period, then the following applies:

If «Customer Name» chooses to follow the after-the-fact notification procedures in this section, then BPA shall bill «Customer Name» for any incurred energy imbalance charges or costs that result from «Customer Name»'s Forced Outage.

If any of the Specified Resources listed in section 2.4.5.1 below have all of the following attributes: (1) a nameplate capability less than ten megawatts, (2) is not required to have schedules with e-tags, and (3) is located within «Customer Name»'s distribution system; then «Customer Name» shall either immediately notify the PS duty scheduler of «Customer Name»'s request to take FORS for such resource in accordance with section 2.4.4.1 above or «Customer Name» may meet the following after-the-fact notification procedures:

- (A) call the PS after-the-fact scheduler at 503-230-3949 (or such other number or method BPA provides to «Customer Name» in writing) to notify the after-the-fact scheduler that a Forced Outage has occurred, state the day and hour the Forced Outage began and ended (or the expected duration of such outage if it has not yet ended), and state the amounts of FORS taken during such outage, prior to the end of the first full Business Day that follows the start of such Forced Outage;
- (B) call the PS after-the-fact scheduler at 503-230-3949 (or such other number or method BPA provides to «Customer Name» in writing) to notify the after-the-fact scheduler of any changes to the information provided to the PS after-the-fact scheduler pursuant to section 2.4.4.2(A) prior to the end of the first full Business Day that follows the start of any such changes; and
- (C) notify and report Forced Outages to BPA in accordance with section 2.4.4.1(3) above.

*End Sub-Option 2.*

**2.4.4.3 Information Requirements**

«Customer Name» shall provide BPA with hourly meter data from the Specified Resource(s) listed in section 2.4.5.1 below in accordance with section 17.3 of the body of this Agreement. If «Customer Name» installs or upgrades a meter to meet such requirement, then «Customer Name» shall pay for any costs or related services attributable to the new or upgraded meters. If any of the Specified Resources listed below in section 2.4.5.1 are scheduled to «Customer Name»'s Total Retail Load, then «Customer Name» shall provide hourly generation forecast data and schedule data to BPA for such resource in accordance with Exhibit F.

By October 31 of each Rate Case Year, «Customer Name» shall also provide BPA (in a format determined by BPA) with the resource information, including historical and forecast resource data and planned outages, that BPA determines is necessary to provide FORS.

**2.4.5 Applicable Resources, Limits, and Charges**

**2.4.5.1 List of Specified Resource(s)**

*Drafter's Note: Add a row to the table below for each resource.*

Resource Name	Resource Balancing Authority Area Location	Resource Transmission

**2.4.5.2 Annual and Purchase Period Limits by Resource**

By September 30 of each Rate Case Year, BPA shall update the tables below with the annual limits for each resource listed above in section 2.4.5.1 for the upcoming Rate Period. By September 30 prior to the beginning of the first Rate Period in a Purchase Period, BPA shall update the tables below with the Purchase Period limits for each resource listed above in section 2.4.5.1 for the upcoming Purchase Period.

(1) Annual MWh Limits Table(s)

*Drafter's Note: Include the Annual MWh Limit and Purchase Period Limit tables below for each resource listed in section 2.4.5.1 above. If the resource has Operating Minimums of zero for the entire year, use "N/A" for the annual limit only.*



<b>«RESOURCE NAME»'S ANNUAL MWH LIMITS</b>			
<b>FY</b>	<b>MWh</b>	<b>FY</b>	<b>MWh</b>
2012		2021	
2013		2022	
2014		2023	
2015		2024	
2016		2025	
2017		2026	
2018		2027	
2019		2028	
2020			

Note: The amounts in the table above should be rounded to whole megawatt-hours.

(2) Purchase Period MWh Limits Table(s)

<b>«RESOURCE NAME»'S PURCHASE PERIOD MWH LIMITS</b>	
<b>Purchase Period</b>	<b>MWh</b>
FY 2012 - FY 2014	
FY 2015 - FY 2019	
FY 2020 - FY 2024	
FY 2025 - FY 2028	

Note: The amounts in the table above should be rounded to whole megawatt-hours.

2.4.5.3 **FORS Capacity Charge**

BPA shall update the table below pursuant to section 2.4.3 above.

<b>FORS CAPACITY CHARGE</b>	
<b>Rate Period</b>	<b>\$/month</b>
2012 – 2013	
2014 – 2015	
2016 – 2017	
2018 – 2019	
2020 – 2021	
2022 – 2023	
2024 – 2025	
2026 – 2027	
2028	

*End Option 1.*

***Option 2:** Include the following version if customer does NOT purchase FORS but DOES purchase SCS.*

2.4 **Forced Outage Reserve Service (FORS)**

«Customer Name» has chosen not to purchase FORS.

***Option 1:** Include the following if customer purchases SCS for its shares of Priest Rapids and Wanapum (only eligible customers are McMinnville, Forest Grove, Milton-Freewater, and Kittitas). If such customers purchase SCS option 1, then SCS option 1 must support both Priest Rapids and Wanapum resources.*

2.5 **Secondary Crediting Service (SCS)**

From October 1, 20«XX» through September 30, 20«XX», «Customer Name» shall assign its shares of Priest Rapids and Wanapum to BPA as provided in section 2.5.2 below. In exchange for such assignment, BPA shall manage actual scheduled output from «Customer Name»'s shares of Priest Rapids and Wanapum and provide «Customer Name» credits and charges for generation amounts that differ from the planned amounts listed in section 2 of Exhibit A for such resources. Such credits and charges shall be provided in accordance with section 2.5.3 below. BPA shall provide and «Customer Name» shall purchase Transmission Scheduling Service in accordance with Exhibit F.

2.5.1 **Definitions**

2.5.1.1 “Priest Rapids Project” (PRP) means «Customer Name»'s share of the Priest Rapids and the Wanapum hydro resources. Both are Specified Resources listed in section 2 of «Customer Name»'s Exhibit A.

2.5.1.2 “PRP Points of Receipt” means the points where the 230 kV facilities of Grant PUD and BPA interconnect: BPA's Midway Substation for Priest Rapids and BPA's Vantage Substation for Wanapum.

2.5.1.3 “Secondary Energy” means energy generated by a hydro resource in excess of the amount of planned firm energy generation from that resource. For Pacific Northwest hydro resources, planned firm energy generation is the amount a resource could produce if a very low streamflow condition identified as a critical period were to reoccur. Planned firm energy amounts are the amounts listed in section 2 of Exhibit A for Specified Resources.

2.5.1.4 “Shortfall Energy” means an amount calculated as the difference between the planned firm energy amounts from a resource in an identified period and a smaller amount of energy actually produced by that resource in the same identified period. Planned firm energy amounts are the amounts listed in section 2 of Exhibit A for Specified Resources.

## 2.5.2 Assignment of Priest Rapids Project to BPA

«Customer Name» assigns PRP to BPA as follows:

- 2.5.2.1 In consideration of the credits and charges provided to «Customer Name» pursuant to section 2.5.3 below, «Customer Name» assigns to BPA its rights, benefits, and obligations to (1) schedule the power from PRP by hour, and (2) transmit such power from PRP to the PRP Point of Receipt.
- 2.5.2.2 «Customer Name» shall retain its right to participate in any committees associated with PRP. «Customer Name» agrees that BPA may participate on any committees associated with PRP regarding matters of scheduling, operation, and planning of maintenance of the PRP. «Customer Name» shall notify BPA in advance of any committee meetings when such issues are being discussed so as to permit BPA's attendance and participation.
- 2.5.2.3 No obligations other than those pertaining to the scheduling of energy by «Customer Name» under its PRP contracts are delegated to BPA under section 2.5.2.1 of this Exhibit. BPA shall have no obligation for any costs or related services attributable to PRP. As such, «Customer Name» shall be responsible for payment of (1) all costs attributable to PRP, and (2) all costs of transmission and ancillary services required for delivery of the power from PRP to the PRP Points of Receipt, unless BPA and «Customer Name» otherwise agree.

## 2.5.3 Credits and Charges

In exchange for the assignment of the energy from PRP to BPA, BPA shall credit or charge «Customer Name», on «Customer Name»'s monthly bill provided pursuant to section 16 of this Agreement, for SCS as follows:

- 2.5.3.1 **Secondary Energy Credit and Shortfall Energy Charge**  
BPA shall include a credit to «Customer Name» for Secondary Energy from PRP delivered to BPA from Grant PUD during Diurnal periods of each month that Secondary Energy is available. BPA shall charge «Customer Name» for any Shortfall Energy that occurs during Diurnal periods of each month. BPA shall use the rates (including power market indices) published in BPA's Wholesale Power Rate Schedules and GRSPs to calculate such credits and charges. BPA may adjust the planned firm energy amounts and actual generated energy amounts used to calculate such Secondary Energy and Shortfall energy to account for treaty or other obligations of PRP, and losses.

***Reviewer’s Note:** See applicable GRSPs for information on possible SCS pricing methodology.*

**2.5.3.2 SCS Administrative Charge**

«Customer Name» shall pay an administrative charge each month to BPA for SCS in accordance with BPA’s Wholesale Power Rate Schedules and GRSPs. By September 30 of each Rate Case Year, BPA shall update the table below with such charge.

<b>SCS ADMINISTRATIVE CHARGE</b>	
<b>Rate Period</b>	<b>\$/month</b>
2012 – 2013	
2014 – 2015	
2016 – 2017	
2018 – 2019	
2020 – 2021	
2022 – 2023	
2024 – 2025	
2026 – 2027	
2028	

*Sub-Option: Add the following language ONLY if Customer decides to use the PNCA Update shape.*

**2.5.4 Reshaping Dedicated Resource Amounts**

Notwithstanding the restriction in section 3.4.2 of the body of this Agreement to reshape resource amounts for «Customer Name»’s resource being supported by SCS from BPA, BPA shall reshape the PRP Dedicated Resource amounts listed in section 2 of Exhibit A using the PNCA Update Shape. BPA shall not reshape PRP Dedicated Resource amounts listed in section 2 of Exhibit A using any other monthly shape listed in section 3.4.3 of the body of this Agreement or any Diurnal shape listed in section 3.4.3 of the body of this Agreement. BPA shall update the PRP Dedicated Resource Amounts in section 2 of Exhibit A annually, to be completed no later than September 15 preceding the start of the applicable Fiscal Year.

*End Sub-Option.*

*End Option 1.*

*Option 2: Include the following if customer purchases SCS option 2. If customer purchases SCS option 2 to support the Priest Rapids or Wanapum resources, then SCS option 2 must support both Priest Rapids and Wanapum.*

## 2.5 Secondary Crediting Service (SCS)

«Customer Name» shall apply all of «Customer Name»'s share of ownership of the output as it is generated from «Resource Name(s)» to «Customer Name»'s Total Retail Load. BPA shall provide energy to «Customer Name»'s Total Retail Load to meet any variations between the amounts generated and the amounts listed in section 2 of Exhibit A for «Resource Name(s)».

### 2.5.1 Definitions

2.5.1.1 “Secondary Energy” means energy generated by a hydro resource in excess of the amount of planned firm energy generation from that resource. For Pacific Northwest hydro resources, planned firm energy generation is the amount a resource could produce if a very low streamflow condition identified as a critical period were to reoccur. Planned firm energy amounts are the amounts listed in section 2 of Exhibit A for Specified Resources.

2.5.1.2 “Shortfall Energy” means an amount calculated as the difference between the planned firm energy amounts from a resource in an identified period and a smaller amount of energy actually produced by that resource in the same identified period. Planned firm energy amounts are the amounts listed in section 2 of Exhibit A for Specified Resources.

### 2.5.2 Information Requirements

«Customer Name» shall provide BPA with hourly meter or schedule data from «Resource Name(s)» in accordance with section 17.3 of the body of this Agreement. If «Customer Name» installs or upgrades a meter to meet such requirement, then «Customer Name» shall pay for any costs or related services attributable to the new or upgraded meters. If «Resource Name(s)» «is or are» scheduled to «Customer Name»'s Total Retail Load, then «Customer Name» shall provide hourly generation forecast data and schedule data to BPA for such resource«s» in accordance with Exhibit F.

By October 31 of each Rate Case Year, «Customer Name» shall also provide BPA (in a format determined by BPA) with the resource information, including historical and forecast resource data, that BPA determines is necessary to provide SCS.

### 2.5.3 Charges and Credits

If on a monthly basis «Resource Name(s)» generate«s» more or less energy than is listed in section 2 of Exhibit A for such resource«s», then BPA shall provide «Customer Name» with a credit for any

Secondary Energy or a charge for any Shortfall Energy, in accordance with section 2.5.3.1 below. «Customer Name» shall pay a charge to BPA on a monthly basis in accordance with section 2.5.3.2 below.

***Sub-Option 1:** Include the following provision if the resource is NOT scheduled to load.*

- 2.5.3.1 Secondary Energy Credit and Shortfall Energy Charge**  
BPA shall credit «Customer Name» for any Secondary Energy from «Resource Name(s)» that occurs during Diurnal periods of each month. BPA shall charge «Customer Name» for any Shortfall Energy attributable to «Resource Name(s)» that occurs during Diurnal periods of each month. BPA shall use the rates (potentially including power market indices) established in BPA's Wholesale Power Rate Schedules and GRSPs applicable to SCS to calculate such credits and charges. BPA shall use amounts measured by the meters, as listed in Exhibit E, for «Resource Name(s)» to determine Secondary Energy and Shortfall Energy amounts. BPA may adjust the planned firm energy amounts and actual generated energy amounts used to calculate such Secondary Energy and Shortfall Energy to account for treaty or other obligations of «Resource Name(s)», and losses, if any.  
*END Sub-Option 1.*

***Sub-Option 2:** Include the following provision if the resource is scheduled to load.*

***Reviewer's Note:** Only the shaded portions below differ from Sub-Option 1.*

- 2.5.3.1 Secondary Energy Credit and Shortfall Energy Charge**  
BPA shall credit «Customer Name» for any Secondary Energy from «Resource Name(s)» that occurs during Diurnal periods of each month. BPA shall charge «Customer Name» for any Shortfall Energy attributable to «Resource Name(s)» that occurs during Diurnal periods of each month. BPA shall use the rates (potentially including power market indices) established in BPA's Wholesale Power Rate Schedules and GRSPs applicable to SCS to calculate such credits and charges. BPA shall use amounts scheduled for «Resource Name(s)», pursuant to Exhibit F, to calculate such credits or charges. BPA may adjust the planned firm energy amounts and actual generated energy amounts used to calculate such Secondary Energy and Shortfall Energy to account for treaty or other obligations of «Resource Name(s)», and losses, if any.  
*END Sub-Option 2.*

***Reviewer's Note:** See applicable GRSPs for information on possible SCS pricing methodology.*

**2.5.3.2 SCS Administrative Charge**

«Customer Name» shall pay an administrative charge each month to BPA for SCS in accordance with BPA’s Wholesale Power Rate Schedules and GRSPs. By September 30 of each Rate Case Year, BPA shall update the table below with such charge.

SCS ADMINISTRATIVE CHARGE	
Rate Period	\$/month
2012 – 2013	
2014 – 2015	
2016 – 2017	
2018 – 2019	
2020 – 2021	
2022 – 2023	
2024 – 2025	
2026 – 2027	
2028	

*Sub-Option 1: Include the following language if customer is NOT served by Transfer Service:*

**2.5.4 Delivery Requirements**

«Customer Name» shall deliver the power associated with «Resource Name(s)» in accordance with section 2.5.4.1 and 2.5.4.2 below. BPA shall have no obligation for any costs or related services attributable to «Customer Name»’s acquisition of such firm or non-firm transmission. For all subsections under this section, if «Customer Name»’s use of non-firm transmission results in an Unauthorized Increase Charge, then BPA shall assess «Customer Name» such Unauthorized Increase Charge.

**2.5.4.1 Resources Located Inside BPA’s Balancing Authority Area**

If «Resource Name(s)» «is or are» located inside of BPA’s Balancing Authority Area, then «Customer Name» shall deliver the power associated with such resource(s) to «Customer Name»’s Total Retail Load on non-firm or firm transmission.

**2.5.4.2 Resources Located Outside BPA’s Balancing Authority Area**

If «Resource Name(s)» «is or are», small hydro (nameplate capability less than or equal to 10 megawatts), and if it «is or are» located outside of BPA’s Balancing Authority Area, then «Customer Name» shall deliver such resource(s) to «Customer



**Name**’s Total Retail Load on non-firm or firm transmission. If **«Resource Name(s)» «is or are»** located outside of BPA’s Balancing Authority Area, then **«Customer Name»** shall deliver the power associated with such resource(s) to **«Customer Name»**’s Total Retail Load on firm transmission.

*End Sub-Option 1.*

***Sub-Option 2:** Include the following language if customer is served entirely by Transfer Service:*

***Reviewer’s Note:** An agreed-upon plan of service is a required condition prior to March 31 of the year following the customer’s election to purchase SCS.*

**2.5.4 Delivery Requirements**

Power Services and **«Customer Name»** agree to develop by March 31 of the year following **«Customer Name»**’s election to purchase SCS, a plan of service to enable delivery of power to load that best fits the challenges of **«Resource Name(s)»**. Such challenges include but are not limited to the existing circumstances of transmission constraints. If the Parties do not develop a plan by the March 31 deadline, and cannot mutually agree to a revised deadline for completion of the plan of service, then BPA’s obligation to sell and **«Customer Name»**’s obligation to purchase SCS will expire and **«Customer Name»** shall meet its Above-RHWM Load with power in both a Flat Annual Shape and Flat Within-Month Shape or an alternative approach mutually agreed to by the Parties. Once the plan of service is established, the Parties may periodically reevaluate what constitutes the best plan of service and revise it accordingly. In any such plan of service, the power from **«Resource Name(s)»** shall be delivered on firm transmission.

*End Sub-Option 2.*

***Sub-Option 3:** Include the following language if customer is served by Transfer Service AND with directly connected load.*

**2.5.4 Delivery Requirements**

For purposes of this section, the delivery requirements for **«Resource Name(s)»** depend on whether or not the resource serves load for which BPA provides Transfer Service. The load that each resource serves is identified in the table in section **«x.x»** of this exhibit, Baseline Delivery Percentages and Amounts.

***Drafter’s Note:** Include only resources that serve directly connected load in section 2.5.5.1.*

**2.5.4.1 Delivery Requirements for Resources Serving Directly Connected Load**

**«Customer Name»** shall deliver the power associated with the SCS for **«Resource Name(s)»** in accordance with section 2.5.4.1 and 2.5.4.2 below. BPA shall have no obligation for any costs or related services attributable to

«Customer Name»'s acquisition of such firm or non-firm transmission. For all subsections under this section, if «Customer Name»'s use of non-firm transmission results in an Unauthorized Increase Charge, then BPA shall assess «Customer Name» such Unauthorized Increase Charge.

***Reviewer's Note:*** *An agreed-upon plan of service is a required condition prior to March 31 of the year following the customer's election to purchase SCS for Specified Resources added to serve Above-RHWM Load.*

***Drafter's Note:*** *Include only resource(s) in section 2.5.5.2 that serve Transfer Service load; see section below: Baseline Delivery Percentages and Amounts.*

#### 2.5.4.2 **Delivery Requirements**

Power Services and «Customer Name» agree to develop by March 31 of the year following «Customer Name»'s election to purchase SCS, a plan of service to enable delivery of power to load that best fits the challenges of «Resource Name(s)». Such challenges include but are not limited to the existing circumstances of transmission constraints. If the Parties do not develop a plan by the March 31 deadline, and cannot mutually agree to a revised deadline for completion of the plan of service, then BPA's obligation to sell and «Customer Name»'s obligation to purchase SCS will expire and «Customer Name» shall meet its Above-RHWM Load with power in both a Flat Annual Shape and Flat Within-Month Shape or an alternative approach mutually agreed to by the Parties. Once the plan of service is established, the Parties may periodically reevaluate what constitutes the best plan of service and revise it accordingly. In any such plan of service, the power from «Resource Name(s)» shall be delivered on firm transmission.

*End Sub-Option 3.*

*End Option 2.*

***Reviewer's Note:*** *Resource Remarketing Service (RRS) is a service that will be offered through the Firm Power Products and Services (FPS) rate schedule and will be considered and negotiated on a case-by-case basis. Additionally, BPA will limit the availability of RRS to an amount of Specified Resource that is less 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. In rare circumstances BPA may consider a longer time period of load growth for small resources located within a customer's distribution system.*

*BPA will also limit the availability of this service to an amount of resource that is at least 1 aMW greater than or equal to the amount of forecast Above-RHWM Load the customer is expected to have for the first year the customer is applying the resource to serve Above-RHWM Load that the customer is not already planning to serve by BPA*

at a Tier 2 Rate and by another Dedicated resource. For resource amounts that are forecasted to less than 1 aMW greater than the customer's Above-RHWM Load, BPA will apply the Resource Shaping Charge (see section 2.3.5.4 of this exhibit, DFS Rates and Charges).

Since, RRS is being offered through the FPS rate schedule RRS is NOT considered a Resource Support Service. However, BPA encourages customers to request RRS using the same Notice Deadlines and Purchase Periods applicable to Tier 2 and RSS. Customers may request RRS on a different timeline and BPA will consider such requests on a case-by-case basis. Customer may not purchase RRS without also purchasing DFS.

***Drafter's Note:*** Customer may not purchase RRS without also purchasing DFS; ensure both provisions are included in Exhibit D. Note that RRS is a special provision in Exhibit D and is not included in section 2, Resource Support Services.

«X». **Resource Remarketing Service (RRS)**

From October 1, 20«XX» through September 30, 20«XX», BPA shall credit «Customer Name» for energy generated by the Specified Resources listed below in section «X».3 that is greater than the amounts listed in section 2 of Exhibit A for such resource(s), the forecast of which shall be included in the table in section «X».4 below. BPA shall determine such credits in accordance with the amounts specified in section «X».1 below. As a condition of taking RRS «Customer Name» shall also purchase Diurnal Flattening Service from BPA for the Specified Resource, including the BPA remarketed portions of such resource(s), listed below in section «X».3.

«X».1 **Remarketing Credits**

BPA shall include a credit on «Customer Name»'s monthly bill for actual generation produced by the resource(s) listed below in section «X».3 that is greater than the amounts listed in section 2 of Exhibit A for such resource(s). If the resource(s) listed below in section «X».3 are scheduled to «Customer Name»'s Total Retail Load, then such actual generation shall equal the amounts scheduled for the resource(s), with such schedules submitted to BPA pursuant to section «X».2 below. If the resource(s) listed below in section «X».3 are not scheduled, then such actual generation shall equal the amounts metered for the resource(s), and such meter data shall be submitted to BPA pursuant to section «X».2 below.

BPA shall use the rates (which may include power market indices) established in BPA's Wholesale Power Rate Schedules and GRSPs to calculate any remarketing credits. BPA may establish separate rates for remarketing credits for wind resource(s) and non-wind resource(s).

***Reviewer's Notes:*** BPA plans on calculating remarketing credits as follows (subject to each 7(i) process): BPA shall calculate the remarketing credit equal to the applicable forecast or actual diurnal Mid-C Day Ahead Power Price for a standard block of power (based on 25 MW flat block HLH and LLH sales) multiplied by the forecast annual average generation the resource is expected to produce (the resource(s) listed below in section X.3) that is greater than the amounts listed in section 2 of Exhibit A for such resource(s). Additionally,

*BPA may reduce all remarketing credits for all resources by a percentage or fixed cost developed in the applicable 7(i) Process to account for any transaction and transmission costs applicable to such remarketing.*

**«#».2 Information Requirements**

«Customer Name» shall provide BPA with hourly meter data from the Specified Resource(s) listed in section «X».3 below in accordance with section 17.3 of the body of this Agreement. If «Customer Name» installs or upgrades a meter to meet this requirement, then «Customer Name» shall pay for any costs or related services attributable to the new or upgraded meters. If any of the resources listed below in section «X».3 are scheduled to «Customer Name»'s Total Retail Load, then «Customer Name» shall provide hourly generation forecast data and schedule data to BPA for such resource(s) in accordance with Exhibit F.

By October 31 of each Rate Case Year, «Customer Name» shall also provide BPA (in a format determined by BPA) with the resource information, including historical and forecast resource data, that BPA determines is necessary to provide RRS.

**«#».3 Specified Resource(s)**

«Resource Name»  
«Resource Name»

**«#».4 Resource Remarketed Amounts for Resource(s)**

By March 31 of a Rate Case Year, for each of the Specified Resources listed above in section «X».3, BPA shall update the table below to reflect the amounts of such resource(s) that shall be remarketed. The remarketed amounts reflected in the table below shall be the difference between the forecasted amounts of such resource(s) that are in excess of the amounts of such resource(s) that «Customer Name» has listed in section 2 of Exhibit A that will be serving «Customer Name»'s Above-RHWM Load.

*Drafter's Note: Include FY rows for each year of the Purchase Period.*

Resource Remarketed Amounts for «Resource Name»													
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	annual aMW
Fiscal Year 2020													
HLH (MWh)													
LLH (MWh)													
Total (MWh)													
Fiscal Year 2021													
HLH (MWh)													
LLH (MWh)													
Total (MWh)													
Fiscal Year 2022													
HLH (MWh)													
LLH (MWh)													
Total (MWh)													
Fiscal Year 2023													
HLH (MWh)													
LLH (MWh)													
Total (MWh)													
Fiscal Year 2024													
HLH (MWh)													
LLH (MWh)													
Total (MWh)													

Notes: Fill in the table above with megawatt-hours rounded to whole megawatt-hours and annual Average Megawatts rounded to three decimal places.

*Drafter's Note: If customer purchases DFS, FORS, SCS, and/or RRS, then replace the Revisions section in Exhibit D with the following revisions section.*

«X». **Revisions**

«X».1 **General Exhibit Revisions**

Except for those provisions in this exhibit for Diurnal Flattening Service (DFS), Forced Outage Reserve Service (FORS), Secondary Crediting Service (SCS), and Resource Remarketing Service (RRS), if any, this exhibit shall be revised by mutual agreement of the Parties to add products «Customer Name» purchases during the term of this Agreement.

«X».2 **Revisions to DFS, FORS, SCS, and RRS**

If «Customer Name» purchases DFS, FORS, SCS, or RRS, then BPA may unilaterally revise the provisions in this exhibit related to such products to implement:

- (1) an established BPA rate for such products or services, or
- (2) changes that BPA determines are necessary to allow it to meet its power and scheduling obligations under this Agreement.

BPA shall specify the effective date of unilateral revisions.