***CONFORMED SLICE/BLOCK MASTER TEMPLATE   
(02.05.2019)***

**CONFORMED COPY**

This Conformed Copy of the Slice/Block Agreement incorporates Amendment No. 1 (Clean-up Amendment) and all non-customer specific exhibit revisions prior to December 2018.

**Disclaimer:** *This conformed copy of the Slice/Block Template is provided as a convenience and is not intended to replace the original agreement, amendments or exhibit revisions executed between BPA and its individual customers. While BPA has attempted to make this conformed copy as accurate as possible, it may not reflect all amendments and revisions. Customers are advised to review the terms of their own originally signed agreement, amendments and exhibit revisions.*

Contract No. «##PB»-«#####»

**DRAFT** 2/8/2019 7:14 AM

*{When finalized, delete date here and move it to the author information line at the bottom of signature page.}*

**POWER SALES AGREEMENT**

**executed by the**

**BONNEVILLE POWER ADMINISTRATION**

**and**

**«FULL NAME OF CUSTOMER»**

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*Drafter’s Note: Include only for cooperatives and tribal utilities*

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*Option 1: Include for customers not served by Transfer Service*

**Exhibit G This Exhibit Intentionally Left Blank**

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*Option 2: Include for customers served by Transfer Service*

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This POWER SALES AGREEMENT (Agreement) is executed by the UNITED STATES OF AMERICA, Department of Energy, acting by and through the BONNEVILLE POWER ADMINISTRATION (BPA), and «FULL NAME OF CUSTOMER» («Customer Name»), hereinafter individually referred to as “Party” and collectively referred to as the “Parties”. «Customer Name» is a «public utility district, people’s utility district, non-profit corporation, municipal corporation, public body formed under tribal law, federal agency», organized and authorized under the laws of the State of «State», to purchase and distribute electric power to serve retail consumers from its distribution system within its service area. *Drafter’s Note: modify the previous sentence for tribal utilities and federal agencies to reflect their legal status independent of the state.*

RECITALS***(08/15/08 Version)***

«Customer Name»’s current power sales agreement (Contract No. «##PB»‑«#####») continues through September 30, 2011, and will be replaced by this Agreement on October 1, 2011.

BPA has functionally separated its organization in order to separate the administration and decision-making activities of BPA’s power and transmission functions. References in this Agreement to Power Services or Transmission Services are solely for the purpose of clarifying which BPA function is responsible for administrative activities that are jointly performed.

BPA is authorized to market federal power to qualified entities that are eligible to purchase such power. Under section 5(b)(1) of the Northwest Power Act, BPA is obligated to offer a power sales agreement to eligible customers for the sale and purchase of federal power to serve their retail consumer load in the Region that is not met by the customer’s use of its non-federal resources.

BPA has proposed the adoption of a tiered rate pricing methodology for federal power sold to meet BPA’s obligations under section 5(b) of the Northwest Power Act to eligible customers, in order to provide more efficient pricing signals and encourage the timely development of regional power resource infrastructure to meet regional consumer loads under this Agreement.

To effect that purpose, in this Agreement BPA establishes a Contract High Water Mark for «Customer Name» that will define the amounts of power «Customer Name» may purchase from BPA at the Tier 1 Rate, as defined in BPA’s Tiered Rate Methodology.

The Parties agree:

*Option 1: Include the following for customers who do NOT need RUS approval.*

**1. TERM*(08/15/08 Version)***

This Agreement takes effect on the date signed by the Parties and expires on September 30, 2028. Performance by BPA and «Customer Name» shall commence on October 1, 2011, with the exception of those actions required prior to that date that are included in:

*END Option 1*

*Option 2: Include the following for customers who must obtain RUS approval to execute this Agreement.*

**1. TERM*(09/08/08 Version)***

This Agreement takes effect on the date signed by the Parties and expires on September 30, 2028, subject to approval of the United States Department of Agriculture Rural Utilities Service. Performance by BPA and «Customer Name» shall commence on October 1, 2011, with the exception of those actions required prior to that date that are included in:

*END Option 2*

(1) sections 3.3 through 3.6 of section 3, Power Purchase Obligation;

(2) section 4, Block Product;

(3) section 5, Slice Product;

(4) section 7, High Water Marks and Contract Demand Quantities;

(5) section 9, Elections to Purchase Power Priced at Tier 2 Rates;

(6) section 10, Tier 2 Remarketing and Resource Removal;

(7) section 11, Right to Change Purchase Obligation;

*Drafter’s Note: Include for customers served by Transfer Service*

(8) section 14, Delivery;

*END for customers served by Transfer Service*

*Drafter’s Note: Include for customers NOT served by Transfer Service*

(8) Intentionally Left Blank;

*END for customers NOT served by Transfer Service*

(9) section 17, Information Exchange and Confidentiality;

(10) section 18, Conservation and Renewables;

(11) section 19, Resource Adequacy;

(12) section 22, Governing Law and Dispute Resolution;

(13) section 25, Termination;

(14) Exhibit A, Net Requirements and Resources;

(15) Exhibit B, High Water Marks and Contract Demand Quantities;

(16) Exhibit C, Purchase Obligations;

(17) Exhibit D, Additional Products and Special Provisions;

*Drafter’s Note: Include for customers served by Transfer Service*

(18) Exhibit G, Principles of Non-Federal Transfer Service;

*END for customers served by Transfer Service*

*Drafter’s Note: Include for customers NOT served by Transfer Service*

(18) Intentionally Left Blank;

*END for customers NOT served by Transfer Service*

(19) Exhibit H, Renewable Energy Certificates and Carbon Attributes;

(20) Exhibit I, Critical Slice Amounts;

(21) Exhibit J, Preliminary Slice Percentage and Initial Slice Percentage;

(22) Exhibit K, Annual Determination of Slice Percentage;

(23) Exhibit L, RHWM Augmentation;

(24) Exhibit N, Slice Implementation Procedures;

(25) Exhibit O, Interim Slice Implementation Procedures;

(26) Exhibit P, Slice Computer Application Development Schedule; and

(27) Exhibit Q, Determination of Initial Slice Percentage.

Until October 1, 2011, section 22, Governing Law and Dispute Resolution will only apply to the extent there is a dispute regarding actions required in the above referenced sections and exhibits.

**2. DEFINITIONS*****(08/15/08 Version)***

Capitalized terms below shall have the meaning stated. Capitalized terms that are not listed below are either defined within the section or exhibit in which the term is used, or if not so defined, shall have the meaning stated in BPA’s applicable Wholesale Power Rate Schedules, including the General Rate Schedule Provisions (GRSPs). Definitions in **bold** indicate terms that are defined in the TRM and that the Parties agree should conform to the TRM as it may be revised. The Parties agree that if such definitions are revised pursuant to the TRM, they shall promptly amend this Agreement to incorporate such revised definitions from the TRM, to the extent they are applicable.

2.1 “5(b)/9(c) Policy”***(08/15/08 Version)*** means BPA’s Policy on Determining Net Requirements of Pacific Northwest Utility Customers Under sections 5(b)(1) and 9(c) of the Northwest Power Act issued May 23, 2000, and its revisions or successors.

2.2 “**7(i) Process**”***(07/21/09 Version)*** means a public process conducted, pursuant to section 7(i) of the Northwest Power Act or its successor, by BPA to establish rates for the sale of power and other products.

2.3 “**Above-RHWM Load**”***(07/21/09 Version)*** means the forecast annual Total Retail Load, less Existing Resources, NLSLs, and the customer’s RHWM, as determined in the RHWM Process. For the Transition Period (as defined in the TRM), Above-RHWM Load will be established as described in section 4.3.2.2 of the TRM.

2.4 “Absolute Operating Constraint”**(09/08/08 Version)** means an Operating Constraint that cannot be exceeded under any condition.

2.5 “Actual BOS Generation”**(09/08/08 Version)** means the actual generation produced by the BOS Complex, as adjusted for actual Tier 1 System Obligations and RHWM Augmentation.

2.6 “Actual Slice Output Energy” or “ASOE”***(09/08/08 Version)*** means the actual amount of «Customer Name»’s Slice Output Energy BPA makes available to «Customer Name» at the Scheduling Points of Receipt.

2.7 “Actual Tier 1 System Generation” or “ATSG”***(09/08/08 Version)*** means the actual generation produced by the Tier 1 System plus the RHWM Augmentation.

2.8“**Additional CHWM**”***(07/21/09 Version)*** means the sum of all CHWMs established for DOE-Richland, New Publics formed in whole or in part out of loads previously served by an entity other than an Existing Public, and load growth for New Tribal Utilities. Additional CHWM will not include CHWMs for New Publics formed out of Existing Publics or other Initial CHWMs.

2.9 “Additional Energy” shall have the meaning as defined in section 5.8.1.

2.10 “Additional Slice Amount” shall have the meaning as defined in section 1 of Exhibit Q.

2.11 “Adjusted Annual RHWM Tier 1 System Capability” or “AART1SC”***(09/08/08 Version)*** means the annual RHWM Tier 1 System Capability amount, as such amount may be adjusted by BPA pursuant to Exhibit I.

2.12 “Algorithm Tuning Parameters” shall have the meaning as defined in section 2 of Exhibit M.

2.13 “Annexed Load”***(09/08/08 Version)*** means existing load, distribution system, or service territory «Customer Name» acquires after the Effective Date from another utility, by means of annexation, merger, purchase, trade, or other acquisition of rights, the acquisition of which has been authorized by a final state, regulatory or court action. The Annexed Load must be served from distribution facilities that are owned or acquired by «Customer Name».

2.14 “Annual Net Requirement”***(09/08/08 Version)*** means BPA’s forecast of «Customer Name»’s Net Requirement for each Fiscal Year that results from the process established in section 1 of Exhibit A and is shown in the table in section 1.2 of Exhibit A.

2.15 “**Augmentation for Additional CHWM**”***(09/08/08 Version)*** means the amount of annual average firm energy BPA forecasts, calculated in accordance with sections 3.2.1.1 and 3.2.1.2 of the TRM during the RHWM Process, that is equal to the amount of Additional CHWMs used in the calculation of RHWM Augmentation.

2.16 “**Augmentation for Initial CHWM**”***(07/21/09 Version)*** means the amount of annual average firm energy BPA forecasts during the RHWM Process that will be needed (in addition to the Firm Critical Output of the Tier 1 System) to meet the Initial CHWM. The amount of energy is restricted by the Augmentation Limit.

2.17 “**Augmentation Limit**”***(09/08/08 Version)*** means the amount of augmentation calculated by BPA in accordance with section 3.2.1 of the TRM, which establishes the maximum level of Augmentation for Initial CHWM.

2.18 “Average Megawatts” or “aMW”***(09/08/08 Version)*** means the amount of electric energy in megawatt‑hours (MWh) during a specified period of time divided by the number of hours in such period.

2.19 “**Balancing Authority**”***(09/08/08 Version)*** 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.

2.20 “**Balancing Authority Area**”***(09/08/08 Version)***means the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority.

2.21 “Base Critical Slice Amount”***(09/08/08 Version)*** shall have the meaning as defined in section 1 of Exhibit Q.

2.22 “Base Slice Percentage”***(09/08/08 Version)*** shall have the meaning as defined in section 1 of Exhibit Q.

2.23 “Base Tier 1 System Capability”***(09/08/08 Version)*** shall have the meaning as defined in section 1 of Exhibit Q.

2.24 “Block Product”***(09/08/08 Version)*** means a planned amount of Firm Requirements Power sold to «Customer Name» to meet a portion of its regional consumer load pursuant to the terms set forth in section 4 of this Agreement.

2.25 “BOS Base”***(09/08/08 Version)*** means the forecast generation amounts available from the BOS Complex, as adjusted by BPA for forecast Tier 1 System Obligations and RHWM Augmentation.

2.26 “BOS Complex” or “Balance of System Complex”***(09/08/08 Version)*** means the Tier 1 System Resources, except those resources that comprise the Coulee-Chief Complex and Lower Columbia Complex.

2.27 “BOS Deviation Account”***(09/08/08 Version)*** means the account BPA maintains that quantifies the cumulative amount, expressed in MWd, by which «Customer Name»’s hourly BOS Base schedules deviate from the amount determined by multiplying «Customer Name»’s Slice Percentage by the hourly Actual BOS Generation.

2.28 “BOS Deviation Return”***(09/08/08 Version)*** means the energy amounts associated with the reduction of «Customer Name»’s BOS Deviation Account balance.

2.29 “BOS Flex”***(09/08/08 Version)*** means the amount by which the BOS Base can reasonably be reshaped within a given calendar day by utilizing the flexibility available from the Lower Snake Complex.

2.30 “BOS Module”***(09/08/08 Version)*** means the Slice Computer Application module that is used to determine «Customer Name»’s Slice Output Energy and Delivery Limits available from the BOS Complex.

2.31 “**Business Day(s)**”***(07/21/09 Version)*** means every Monday through Friday except Federal holidays.

2.32 “Bypass Spill”***(09/08/08 Version)*** shall have the meaning as defined in section 2 of Exhibit M.

2.33 This section intentionally left blank

2.34 “Carbon Credit”***(09/08/08 Version)*** shall have the meaning as defined in section 1 of Exhibit H.

2.35 “Columbia Generating Station” or “CGS” shall have the meaning as defined in section 5.8.1.

2.36 “CGS Displacement”***(09/08/08 Version)*** shall have the meaning as defined in section 5.8.1.

2.37 “**CHWM Contract**”***(09/08/08 Version)*** means the power sales contract between a customer and BPA that contains a Contract High Water Mark (CHWM), and under which the customer purchases power from BPA at rates established by BPA in accordance with the TRM.

2.38“**CHWM Process**”***(09/08/08 Version)*** means the FY 2011 process, as set forth in section 4.1 of the TRM, through which BPA establishes CHWMs for Existing Customers.

2.39 “Combined Maximum Additional Slice Amount” shall have the meaning as defined in section 1 of Exhibit Q.

2.40 “Consumer-Owned Resource”***(09/08/08 Version)*** means a Generating Resource connected to «Customer Name»’s distribution system that is owned by a retail consumer, has a nameplate capability greater than 200 kilowatts, is operated or applied to load, and is not operated occasionally or intermittently as a back-up energy source at times of maintenance or forced outage. Consumer-Owned Resource does not include a resource where the owner of the resource is a retail consumer that exists solely for the purpose of selling wholesale power and for which «Customer Name» only provides incidental service to provide energy for local use at the retail consumer’s generating plant for lighting, heat and the operation of auxiliary equipment.

2.41 “Contract Demand Quantity” or “CDQ”***(09/08/08 Version)*** shall have the meaning as defined in the TRM, the definition of which is recited in section 6.6.1.

2.42 “Contract High Water Mark” or “CHWM”***(09/08/08 Version)*** shall have the meaning as defined in the TRM, the definition of which is recited in section 6.6.1.

2.43 “Contract Resource”***(09/08/08 Version)*** means any source or amount of electric power that «Customer Name» acquires from an identified or unidentified electricity-producing unit or units by contract purchase, and for which the amount received by «Customer Name» does not depend on the actual production from an identified Generating Resource.

2.44 “Coulee-Chief Complex”***(09/08/08 Version)*** means the two hydroelectric projects located in the middle reach of the Columbia River, consisting of Grand Coulee and Chief Joseph.

*Drafter’s Note: Enter Creditworthiness Contract No.*

2.45 “Creditworthiness Agreement”***(09/08/08 Version)*** means Contract No. 09PB‑«####» between BPA and «Customer Name».

2.46 “Critical Slice Amount”***(09/08/08 Version)*** means the forecasted amount of Slice Output Energy that «Customer Name» is expected to receive in a Fiscal Year, and is equal to the product of «Customer Name»’s Slice Percentage and the Adjusted Annual RHWM Tier 1 System Capability. The annual Critical Slice Amount and associated monthly Critical Slice Amounts for each FY are as set forth in Exhibit I.

2.47 “Customer Inputs”***(09/08/08 Version)*** means the Simulator Project discharge, elevation, or generation requests «Customer Name» develops as inputs to the Simulator pursuant to section 3.3 of Exhibit M.

2.48 “Dedicated Resource”***(09/08/08 Version)*** means a Specified Resource or an Unspecified Resource Amount listed in Exhibit A that «Customer Name» is required by statute to provide or obligates itself to provide under this Agreement for use to serve its Total Retail Load.

2.49 “Default User Interface” or “DUI”***(09/08/08 Version)*** shall have the meaning as defined in section 5.10.1.

2.50 “Delivery Limits”***(09/08/08 Version)*** means the limits that govern the availability of Slice Output and the scheduling of Slice Output Energy by «Customer Name» as determined by BPA, and implemented through the Slice Computer Application.

2.51 “Delivery Request”***(09/08/08 Version)*** means the amount of Slice Output Energy «Customer Name» requests that BPA make available for delivery for any given hour as established per section 7 of Exhibit M.

2.52 “**Designated BPA System Obligations**”***(09/08/08 Version)*** means the set of obligations specified in Table 3.4 of the TRM, imposed on BPA by statutes, regulations, court order, treaties, executive orders, memoranda of agreement, and contracts that require the generation or delivery of power, forbearance from generating power, or receipt of power, in order to support the operation of the FCRPS, including any obligations to the BPA Balancing Authority (Transmission Services).

2.53 “Diurnal”***(09/08/08 Version)*** means the division of hours within a month between Heavy Load Hours (HLH) and Light Load Hours (LLH).

2.54 “**Diurnal Flattening Service**” or “DFS”***(07/21/09 Version)*** 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.

2.55 “Due Date”***(09/08/08 Version)*** shall have the meaning as described in section 16.2.

2.56 “Effective Date”***(09/08/08 Version)*** means the date on which this Agreement has been signed by «Customer Name» and BPA.

2.57 “Election Year”***(09/08/08 Version)*** shall have the meaning as defined in section 5.8.1.

2.58 “Elective Spill”***(09/08/08 Version)*** means Spill other than Bypass Spill or Fish Spill that occurs at a hydroelectric project and is within such project’s available turbine capacity such that the Spill may otherwise be utilized to produce energy.

2.59 “Eligible Slice Customers”***(09/08/08 Version)*** shall have the meaning as defined in section 1 of Exhibit Q.

2.60 “Environmental Attributes”***(09/08/08 Version)*** shall have the meaning as defined in section 1 of Exhibit H.

2.61 “Environmentally Preferred Power RECS” or “EPP RECs”***(09/08/08 Version)*** shall have the meaning as defined in section 1 of Exhibit H.

2.62 “Existing Customer”***(09/08/08 Version)*** means a municipal, tribal, public or cooperative utility that is entitled to preference and priority under the Bonneville Project Act, P.L. 75-329 and that was eligible on December 1, 2008, to purchase requirements power at a PF rate or that would be eligible on December 1, 2008, to purchase requirements power at a PF rate.

2.63 “Existing Resource”***(09/08/08 Version)*** means a Specified Resource listed in section 2 of Exhibit A that «Customer Name» was obligated by contract or statute to use to serve «Customer Name»’s Total Retail Load prior to October 1, 2006.

2.64 “**Federal Columbia River Power System**” or “FCRPS”***(07/21/09 Version)*** means the integrated power system that includes, but is not limited to, the transmission system constructed and operated by BPA and the hydroelectric dams in the Pacific Northwest constructed and operated by the U.S. Army Corps of Engineers and the Bureau of Reclamation.

2.65 “Federal Operating Decision”***(09/08/08 Version)*** means a decision made by the Corps, Reclamation, BPA, or the United States Entity of the Columbia River Treaty, in accordance with the authority of each such entity, and as needed to meet Tier 1 System Obligations not already reflected in the Simulator or BOS Module, that establishes the permissible range of operations for any project or projects that comprise the FCRPS.

2.66 “FERC”***(09/08/08 Version)*** means the Federal Energy Regulatory Commission, or its successor.

2.67 “**Firm Critical Output**”***(09/08/08 Version)*** means the forecast output from Tier 1 System Resources that is determined in accordance with sections 3.1.3.1, 3.1.3.3, and 3.1.3.4 of the TRM.

2.68 “Firm Requirements Power”***(09/08/08 Version)*** means federal power that BPA sells under this Agreement and makes continuously available to «Customer Name» to meet BPA’s obligations to «Customer Name» under section 5(b) of the Northwest Power Act.

2.69 “**Fiscal Year**” or “FY”***(09/08/08 Version)*** means the period beginning each October 1 and ending the following September 30.

2.70 “Fish Spill”***(09/08/08 Version)*** means Spill that occurs at a hydroelectric project in order to maintain compliance with established fish passage criteria, such as those criteria set forth in biological opinions.

2.71 “Flat Annual Shape”***(09/08/08 Version)*** means a distribution of energy having the same value of energy in all hours of the year.

2.72 “Flat Within-Month Shape”***(09/08/08 Version)*** means a distribution of energy having the same average megawatt value of energy in each hour of the month.

2.73 “**Forced Outage Reserve Service**” or “FORS”***(09/08/08 Version)*** means a service that provides an agreed-to amount of capacity and energy to load during the forced outages of a qualifying resource.

2.74 “**Forecast Net Requirement**”***(09/08/08 Version)*** means a forecast of «Customer Name»’s Annual Net Requirement that BPA performs in each RHWM Process.

*Reviewer’s Note: In December 2018, BPA discovered that “Forecast Year” is bolded in the Slice/Block template, but it is not bolded in the Load Following or Block templates.*

2.75 “**Forecast Year**”***(09/08/08 Version)*** means the Fiscal Year ending one full year prior to the commencement of a Rate Period.

2.76 “Forced Spill”***(09/08/08 Version)*** shall have the meaning as defined in section 2 of Exhibit M.

2.77 “Generating Resource”***(09/08/08 Version)*** means any source or amount of electric power from an identified electricity-producing unit, and for which the amount of power received by «Customer Name» or «Customer Name»’s retail consumer is determined by the power produced from such identified electricity-producing unit. Such unit may be owned by «Customer Name» or «Customer Name»’s retail consumer in whole or in part, or all or any part of the output from such unit may be owned for a defined period by contract.

2.78 “Generation Benchmark”***(09/08/08 Version)*** shall have the meaning as defined in section 5.8.1.

2.79 “H/K”***(09/08/08 Version)*** means, prospectively, a hydroelectric project’s water-to-energy conversion factor used to forecast such project’s potential energy production per unit of turbine discharge, expressed as MW per kcfs, or retrospectively, for any given period of time, the value equal to a hydroelectric project’s average Net Generation divided by such project’s average turbine discharge, expressed as MW per kcfs.

2.80 “Hard Operating Constraint”***(09/08/08 Version)*** means an Operating Constraint that may not be exceeded without express consent from project operators, owners, or other federal agencies responsible for establishing such Operating Constraints.

2.81 “Heavy Load Hours (HLH)”***(09/08/08 Version)*** means hours ending 0700 through 2200 hours Pacific Prevailing Time (PPT), Monday through Saturday, excluding holidays as designated by the North American Electric Reliability Corporation (NERC). BPA may update this definition as necessary to conform to standards of the Western Electricity Coordinating Council (WECC), North American Energy Standards Board (NAESB), or NERC.

2.82 “Hydraulic Link Adjustment”***(09/08/08 Version)*** means the adjustment to «Customer Name»’s simulated McNary inflow that is equal to the difference between «Customer Name»’s Calibrated Simulator Discharge for Chief Joseph and the measured Chief Joseph discharge, pursuant to section 3.7 of Exhibit M.

2.83 “Incremental Cost”***(09/08/08 Version)*** shall have the meaning as defined in section 5.8.1.

2.84 “Incremental Side Flows”***(09/08/08 Version)*** shall have the meaning as defined in section 2 of Exhibit M

2.85 “Initial Slice Customers” shall have the meaning as defined in section 1 of Exhibit Q.

2.86 “Initial Slice Percentage” or “ISP”***(09/08/08 Version)*** means the percentage that is determined pursuant to section 5.3.2 after January 1, 2009, and prior to May 1, 2011, and is the basis for determining «Customer Name»’s Slice Percentage for each Fiscal Year pursuant to section 5.3.3.

2.87 “**Initial CHWM**”***(09/08/08 Version)*** means the sum of all Existing Customers’ CHWMs determined in the CHWM Process pursuant to section 4.1 of the TRM.

2.88 “Integrated Network Segment”***(09/08/08 Version)*** shall have the meaning as defined in section 14.1.

2.89 “Interchange Points”***(09/08/08 Version)*** means the points where Balancing Authority Areas interconnect and at which the interchange of energy between Balancing Authority Areas is monitored and measured.

2.90 “Interim Slice Implementation Procedures”***(09/08/08 Version)*** shall have the meaning as defined in section 5.10.1.

2.91 “Issue Date”***(09/08/08 Version)*** shall have the meaning as described in section 16.1.

2.92 “Light Load Hours (LLH)”***(09/08/08 Version)*** means: (1) hours ending 0100 through 0600 and 2300 through 2400 hours PPT, Monday through Saturday, and (2) all hours on Sundays and holidays as designated by NERC. BPA may update this definition as necessary to conform to standards of the WECC, NAESB, or NERC.

2.93 “Logic Control Parameters”***(09/08/08 Version)*** shall have the meaning as defined in section 2 of Exhibit M.

2.94 “Lower Columbia Complex” or “LCOL Complex”***(09/08/08 Version)*** means the four hydroelectric projects located on the lower reach of the Columbia River, consisting of McNary, John Day, The Dalles, and Bonneville.

2.95 “Lower Snake Complex” or “LSN Complex”***(09/08/08 Version)*** means the four hydroelectric projects located on the lower reach of the Snake River, consisting of Lower Granite, Little Goose, Lower Monumental, and Ice Harbor.

2.96 “Majority”***(09/08/08 Version)*** shall have the meaning as defined in section 5.12.1.

2.97 “Maximum Additional Slice Amount”***(09/08/08 Version)*** shall have the meaning as defined in section 1 of Exhibit Q.

2.98 “Maximum Slice Amount”***(09/08/08 Version)*** shall have the meaning as defined in section 1 of Exhibit Q.

2.99 “Megawatt-day” or “MWd”***(09/08/08 Version)*** means a unit of electrical energy equal to 24 megawatt-hours.

2.100 “Monthly Reimbursement Value”***(09/08/08 Version)*** means the value determined by dividing the amount «Customer Name» is billed for a month under the applicable Customer Charges, as described pursuant to section 5.1 of the TRM, by the sum of: (1) «Customer Name»’s ASOE for such month and (2) the amount of «Customer Name»’s Surplus Slice Output energy that is curtailed during such month.

*Drafter’s Note: If customer does not choose Within Month Shape, delete the following definition and type: Intentionally Left Blank.*

2.101 “Monthly Shaping Factors”***(09/08/08 Version)*** means the monthly factors, as specified in section 1.2 of Exhibit C, that are multiplied by «Customer Name»’s annual Tier 1 Block Amount in order to determine «Customer Name»’s monthly Tier 1 Block Amounts for each month of a Fiscal Year.

*End Option*

2.102 “Multiyear Hydroregulation Study”***(09/08/08 Version)*** shall have the meaning as defined in section 2 of Exhibit N.

2.103 “Net Generation”***(09/08/08 Version)*** means the total electric energy produced at a hydroelectric project as reduced by the electric energy consumed by such project for station service purposes.

2.104 “Net Requirement”***(09/08/08 Version)*** means the amount of federal power that «Customer Name» is entitled to purchase from BPA to serve its Total Retail Load minus amounts of «Customer Name»’s Dedicated Resources shown in Exhibit A, as determined consistent with section 5(b)(1) of the Northwest Power Act.

2.105 “New Large Single Load” or “NLSL”***(09/08/08 Version)*** has the meaning specified in section 3(13) of the Northwest Power Act and in BPA’s NLSL policy.

2.106 “New Resource”***(09/08/08 Version)*** means: (1) a Specified Resource listed in section 2 of Exhibit A that «Customer Name» was or is first obligated by contract, or was or is obligated by statute, to use to serve «Customer Name»’s Total Retail Load after September 30, 2006, and (2) any Unspecified Resource Amounts listed in Exhibit A.

*Reviewer’s Note: In December 2018, BPA discovered that “Northwest Power Act” is bolded in the Slice/Block template, but it is not bolded in the Load Following or Block templates.*

2.107 “**Northwest Power Act**”***(09/08/08 Version)*** means the Pacific Northwest Electric Power Planning and Conservation Act, 16 U.S.C. §839, Public Law No. 96‑501, as amended.

2.108 “Notice Deadlines”***(09/08/08 Version)*** means the dates established in section 9.1.1.

2.109 “Onsite Consumer Load”***(09/08/08 Version)*** means the electric load of an identified retail consumer of «Customer Name» that is directly interconnected or electrically interconnected on the same portion of «Customer Name»’s distribution system with a Consumer-Owned Resource of that same identified retail consumer such that no transmission schedule is needed to deliver the generation from the Consumer-Owned Resource to the consumer load.

2.110 “Operating Constraints”***(09/08/08 Version)*** means the operating limits, project operating requirements, and non-power constraints that are the result of implementing Federal Operating Decisions or Prudent Operating Decisions.

2.111 “Operating Plan”***(09/08/08 Version)*** shall have the meaning as defined in section 5.8.1.

2.112 “Operating Rule Curves” or “ORC”***(09/08/08 Version)*** means the forebay operating limits established for a reservoir pursuant to operating agreements in effect, and as modified to reflect Operating Constraints, that are used to determine such reservoir’s upper forebay operating limit (upper ORC) or lower forebay operating limit (lower ORC).

2.113 “Operating Year”***(09/08/08 Version)*** means the period, beginning each August 1 and ending the following July 31, that is designated under the Pacific Northwest Coordination Agreement (PNCA) for resource planning and operational purposes.

2.114 “Pacific Northwest Coordination Agreement” or “PNCA”***(09/08/08 Version)*** means Contract No. 97PB-10130, as such agreement may be amended or replaced, among BPA, the U.S. Army Corps of Engineers, the Bureau of Reclamation, and certain generating utilities in the Region that sets forth the terms and conditions for the coordinated operation of generating resources in the Region.

2.115 “Point of Delivery” or “POD”***(09/08/08 Version)*** means the point where power is transferred from a transmission provider to «Customer Name».

2.116 “Point of Metering” or “POM”***(09/08/08 Version)*** means the point at which power is measured.

2.117 “Power Services”***(09/08/08 Version)*** means the organization, or its successor organization, within BPA that is responsible for the management and sale of Federal power.

2.118 “Preliminary Net Requirement”***(09/08/08 Version)*** shall have the meaning as defined in section 10.1.

2.119 “Preliminary Slice Amount”***(09/08/08 Version)*** shall have the meaning as defined in section 1 of Exhibit Q.

2.120 “Preliminary Slice Percentage”***(09/08/08 Version)*** means a preliminary Slice Percentage that is established and set forth in Exhibit J as of the Effective Date.

2.121 “Primary Points of Receipt”***(09/08/08 Version)*** shall have the meaning as defined in section 14.1.

2.122 “Project Storage Bounds” or “PSB”***(09/08/08 Version)*** means the Storage Content amounts associated with the upper ORC and lower ORC in effect at a project.

2.123 “Prudent Operating Decision”***(09/08/08 Version)*** means a decision made by Power Services operations staff, in their exercise of reasonable judgment, that modifies the operating range applied to any project or projects that comprise the FCRPS for the purpose of meeting any BPA obligation, including but not limited to Federal Operating Decisions, except actions taken by Power Services solely to sell surplus power to loads BPA is not contractually obligated to serve under section 5 of the Northwest Power Act. Prudent Operating Decisions are applied for a finite period of time and in a manner that proportionally affects the amount of power from such project or projects that is available to BPA, to «Customer Name» under this Agreement, and to other Slice Customers under their respective Slice/Block Power Sales Agreements.

2.124 “Purchase Periods”***(09/08/08 Version)*** means the time periods established in section 9.1.1.

2.125 “Quorum”***(09/08/08 Version)*** shall have the meaning as defined in section 5.12.1.

2.126 “Rate Case Year”***(09/08/08 Version)*** means the Fiscal Year ending prior to the commencement of a Rate Period. The Rate Case Year immediately follows the Forecast Year and is the year in which the 7(i) Process for the next Rate Period is conducted.

2.127 “**Rate Period**”***(09/08/08 Version)*** means the period of time during which a specific set of rates established by BPA pursuant to the TRM is intended to remain in effect.

2.128 “Rate Period High Water Mark” or “RHWM”***(09/08/08 Version)*** shall have the meaning as defined in the TRM, the definition of which is recited in section 6.6.1.

2.129 “Region”***(09/08/08 Version)*** means the Pacific Northwest as defined in section 3(14) of the Northwest Power Act.

2.130 “Renewable Energy Certificates” or “RECs”***(09/08/08 Version)*** shall have the meaning as defined in section 1 of Exhibit H.

2.131 “Requirements Slice Output” or “RSO”***(07/21/09 Version)*** means, for each month, the portion of «Customer Name»’s Slice Output Energythat is equal to the lesser of: (1) «Customer Name»’s Critical Slice Amount for such month; (2) «Customer Name»’s Annual Net Requirement for such month, less monthly amounts purchased under the Block Product, as specified in Exhibit C; or (3) «Customer Name»’s Total Retail Load metered for such month, less «Customer Name»’s Dedicated Resources shown in Exhibit A for such month and less monthly amounts purchased under the Block Product, as specified in Exhibit C.

2.132 “Resource Support Services” or “RSS”***(09/08/08 Version)*** means the Diurnal Flattening Service and Forced Outage Reserve Service BPA provides to support resources that are renewable resources and are Specified Resources used to serve Total Retail Load after September 30, 2006, and may in the future include other related services that are priced in the applicable 7(i) Process consistent with the TRM.

2.133 “**RHWM Augmentation**”***(07/21/09 Version)*** means the amount of augmentation to the Tier 1 System Firm Critical Output BPA calculates in each RHWM Process that is needed to meet the total of all RHWMs. This calculation assumes that every customer is able to purchase at Tier 1 Rates up to its full RHWM and is determined by adding Augmentation for Initial CHWM and Augmentation for Additional CHWM.

2.134 “**RHWM Process**”***(07/21/09 Version)*** means the public process conducted during the Forecast Year prior to each 7(i) Process (beginning with the WP‑14 7(i) Process), in which BPA will calculate, as described in section 4.2 of the TRM, the following values for the upcoming Rate Period:

1) RHWM Tier 1 System Capability, including RHWM Augmentation

2) each customer’s RHWM

3) each customer’s Forecast Net Requirement

4) each customer’s Above-RHWM Load

2.135 “**RHWM Tier 1 System Capability**”***(09/08/08 Version)*** means the Tier 1 System Firm Critical Output plus RHWM Augmentation.

2.136 “**RP Augmentation**”***(09/08/08 Version)*** means the 7(i) Process forecast of the amount of power BPA needs on an annual basis to purchase for each Rate Period to meet all customers’ Forecast Tier 1 Load.

2.137 “SCA” or “Slice Computer Application”***(09/08/08 Version)*** means BPA’s proprietary computer hardware, software and related processes, developed, updated, and maintained by BPA and consisting of: (1) the Simulator; (2) the BOS Module; (3) the Default User Interface; and (4) other related processes, including but not limited to communications, scheduling, electronic tagging and accounting for Slice Output Energy, all as described in Exhibit M.

2.138 “SCA Functionality Test”***(09/08/08 Version)*** shall have the meaning as defined in section 5.10.1.

2.139 “SCA Implementation Date”***(09/08/08 Version)*** shall have the meaning as defined in section 5.10.1.

2.140 “SCA Pass Date”***(09/08/08 Version)*** shall have the meaning as defined in section 5.10.1.

2.141 “Scheduling Hour XX”***(09/08/08 Version)*** means the 60‑minute period ending at XX:00. For example, Scheduling Hour 04 means the 60‑minute period ending at 4:00 a.m.

2.142 “Scheduling Points of Receipt”***(09/08/08 Version)*** shall have the meaning as defined in section 14.1.

2.143 “Simulated Operating Scenario”***(09/08/08 Version)*** means the simulated operation of the Simulator Projects, including the discharge amounts, generation amounts, and forebay elevations, as determined by the Simulator.

2.144 “Simulated Output Energy Schedule(s)”***(09/08/08 Version)*** means the amount of energy that is calculated by the Simulator as «Customer Name»’s simulated generation amount associated with each Simulator Project.

2.145 “Simulator” or “Slice Water Routing Simulator”***(09/08/08 Version)*** means the Slice Computer Application (SCA) module used to determine «Customer Name»’s Slice Output and Delivery Limits available from the Simulator Projects.

2.146 “Simulator Initialization Time”***(09/08/08 Version)*** shall have the meaning as defined in section 2 of Exhibit M.

2.147 “Simulator Modeling Period”***(09/08/08 Version)*** shall have the meaning as defined in section 2 of Exhibit M.

2.148 “Simulator Parameters”***(09/08/08 Version)*** means the operating parameters applicable to the Simulator Projects and which BPA develops as inputs to the Simulator to reflect Operating Constraints, pursuant to section 3.2 of Exhibit M.

2.149 “Simulator Pass Date”***(09/08/08 Version)*** shall have the meaning as defined in section 5.10.1.

2.150 “Simulator Performance Test” shall have the meaning as defined in section 5.10.1.

2.151 “Simulator Project(s)”***(09/08/08 Version)*** means any of the hydroelectric projects represented in the Simulator, including those projects that comprise the Coulee-Chief Complex and the Lower Columbia Complex.

2.152 “Slice/Block Power Sales Agreement”***(09/08/08 Version)*** means this Agreement and all other agreements with Slice Customers that provide for the sale of the Slice/Block Product.

2.153 “Slice/Block Product”***(09/08/08 Version)*** means «Customer Name»’s purchase obligation under the Slice Product and the Block Product to meet its regional consumer load obligation as described in section 3.1.

2.154 “Slice Customers”***(09/08/08 Version)*** means all BPA customers that have executed a Slice/Block Power Sales Agreement.

2.155 “Slice Implementation Group” or “SIG”***(09/08/08 Version)*** means the group that includes representatives from BPA, «Customer Name», and all other Slice Customers established pursuant to section 5.12.

2.156 “Slice Output”***(09/08/08 Version)*** means the quantities ofenergy, peaking energy, storage, and ramping capabilities available from the Tier 1 System Resources, as adjusted for Tier 1 System Obligations and established pursuant to the SCA or an alternate procedure under section 5.10 or Exhibit O, that «Customer Name» is entitled to purchase under the Slice Product, as determined by applying «Customer Name»’s Slice Percentage to such quantities.

2.157 “Slice Output Energy”***(09/08/08 Version)*** means the energy made available to «Customer Name» under the Slice Product.

2.158 “Slice Percentage”***(09/08/08 Version)*** means the percentage set forth in section 2 of Exhibit K applicable during each Fiscal Year that is used to determine the Slice Output that is made available to «Customer Name».

2.159 “Slice Percentage Adjustment Ratio” or “SPAR”***(09/08/08 Version)*** shall have the meaning as defined in section 1.1 of Exhibit K.

2.160 “Slice Percentage Determination Requirements Load”***(09/08/08 Version)*** shall have the meaning as defined in section 1 of Exhibit Q

2.161 “Slice Product”***(09/08/08 Version)*** means BPA’s power product under which Slice Output as defined herein is sold to «Customer Name» pursuant to the terms and conditions set forth in section 5 of this Agreement.

2.162 “Slice Storage Account” or “SSA”***(09/14/12 Version)*** shall have the meaning as defined in section 1 of Exhibit O.

2.163 “**Slice True-Up Adjustment Charge**”***(07/21/09 Version)*** means the amount charged to each Slice Product customer determined in accordance with section 2.7.4 of the TRM.

2.164 “Soft Operating Constraint”***(09/08/08 Version)*** means an Operating Constraint, other than a Hard or Absolute Operating Constraint, that is to be achieved on a day-ahead planning basis, but may be exceeded in real-time after coordinating with project operators, owners, or other federal agencies responsible for establishing such Operating Constraints.

2.165 “Specified Resource”***(09/08/08 Version)*** means a Generating Resource or Contract Resource that has a nameplate capability or maximum hourly purchase amount greater than 200 kilowatts, that «Customer Name» is required by statute or has agreed to use to serve its Total Retail Load. Each such resource is identified as a specific Generating Resource or as a specific Contract Resource with identified parties and is listed in sections 2 and 4 of Exhibit A.

2.166 “Spill”***(09/08/08 Version)*** means water that passes a hydroelectric project without producing energy, including Bypass Spill, Elective Spill, Fish Spill, and Forced Spill.

2.167 “Statement of Intent”***(09/08/08 Version)*** shall have the meaning as defined in section 2.3 of Exhibit C.

2.168 “Storage”***(09/08/08 Version)*** means the ability of the Tier 1 System Resources to alter energy production among hours, days, and months by impounding water or releasing impounded water.

2.169 “Storage Content”***(09/08/08 Version)*** means the amount of water stored in a project’s reservoir, expressed in thousands of second-foot-days (ksfd). The Storage Content is typically calculated based on a conversion of such reservoir’s measured forebay elevation, expressed in feet, to ksfd through the use of an established elevation-to-content conversion table.

2.170 “Storage Energy”***(09/08/08 Version)*** means the amount of energy that would be produced if a project released a specified amount of Storage Content, and is determined by multiplying such Storage Content by a specified H/K, such as the project’s at-site H/K or the combined H/K of the project and specified downstream projects.

2.171 “Storage Offset Adjustment” or “SOA” shall have the meaning as defined in section 2 of Exhibit N.***(09/14/12 Version)***

2.172 “Super Majority”***(09/08/08 Version)*** shall have the meaning as defined in section 5.12.1.

2.173 “Surplus Firm Power”***(09/08/08 Version)*** means firm power that is in excess of BPA’s obligations, including those incurred under sections 5(b), 5(c), and 5(d) of the Northwest Power Act, as available.

2.174 “Surplus Slice Output”***(09/08/08 Version)*** means, for any month, the amount of Slice Output Energy (and associated capacity) that is available to «Customer Name» under section 5 of this Agreement that exceeds «Customer Name»’s Requirements Slice Output for any such month.

2.175 “Third Party Transmission Provider”***(09/08/08 Version)*** means a transmission provider other than BPA that delivers power to «Customer Name».

2.176 “Tier 1 Block Amount”***(09/08/08 Version)*** means the amount of Firm Requirements Power made available to «Customer Name» under the Block Product that is sold at Tier 1 Rates.

2.177 “Tier 1 Rate”***(09/08/08 Version)*** means the Tier 1 Rate as defined in the TRM.

2.178 “Tier 1 RECs”***(09/08/08 Version)*** shall have the meaning as defined in section 1 of Exhibit H.

2.179 “**Tier 1 System**”***(09/08/08 Version)*** means the collection of resources and contract purchases that comprise the Tier 1 System Resources and the collection of contract loads and obligations that comprise the Designated BPA System Obligations.

2.180 “**Tier 1 System Capability**”***(09/08/08 Version)*** means the Tier 1 System Firm Critical Output plus RP Augmentation.

2.181 “**Tier 1 System Firm Critical Output**”***(09/08/08 Version)*** means the Firm Critical Output of Tier 1 System Resources less Tier 1 System Obligations.

2.182 “**Tier 1 System Obligations**”***(09/08/08 Version)*** means the amount of energy and capacity that BPA forecasts for the Designated BPA System Obligations over a specific time period.

2.183 “**Tier 1 System Resources**”***(09/08/08 Version)*** means the Federal System Hydro Generation Resources listed in Table 3.1 of the TRM; the Designated Non-Federally Owned Resources listed in Table 3.2 of the TRM; and the Designated BPA Contract Purchases listed in Table 3.3 of the TRM.

2.184 “Tier 2 Block Amount”***(09/08/08 Version)*** means the amount of Firm Requirements Power made available to «Customer Name» under the Block Product that is sold at Tier 2 Rates.

2.185 “**Tier 2 Cost Pools**”***(09/08/08 Version)*** means all of the Cost Pools to which Tier 2 Costs will be allocated by BPA.

2.186 “Tier 2 Load Growth Rate”***(09/08/08 Version)*** means a Tier 2 Rate at which Load Following customers may elect to purchase Firm Requirements Power in accordance with section 2.2 of Exhibit C.

2.187 “Tier 2 Rate”***(09/08/08 Version)*** means the Tier 2 Rate as defined in the TRM.

2.188 “Tier 2 RECs”***(09/08/08 Version)*** shall have the meaning as defined in section 1 of Exhibit H.

2.189 “Tier 2 Short-Term Rate”***(09/08/08 Version)*** means a Tier 2 Rate at which customers may elect to purchase Firm Requirements Power in accordance with section 2.4 of Exhibit C.

2.190 “Tier 2 Vintage Rate”***(09/08/08 Version)*** means a Tier 2 Rate at which customers may elect to purchase Firm Requirements Power in accordance with section 2.3 of Exhibit C.

2.191 “Tiered Rate Methodology” or “TRM”***(09/08/08 Version)*** means the long-term methodology established by BPA in a Northwest Power Act section 7(i) hearing as the Tiered Rate Methodology to implement the Policy (as defined in the TRM) construct of tiering BPA’s Priority Firm Power rates for serving load under CHWM Contracts.

*Reviewer’s Note: In December 2018, it was discovered that punctuation was missing at the end of the numbered lines in the definition of “Total Retail Load”. Punctuation was added to align the Slice/Block version with the punctuation used in the Load Following and Block versions of the definition of Total Retail Load. The prior version date of the definition was 09/08/08.*

2.192 “Total Retail Load”***(12/06/18 Version)*** means all retail electric power consumption, including electric system losses, within «Customer Name»’s electrical system excluding:

(1) those loads BPA and «Customer Name» have agreed are nonfirm or interruptible loads,

(2) transfer loads of other utilities served by «Customer Name», and

(3) any loads not on «Customer Name»’s electrical system or not within «Customer Name»’s service territory, unless specifically agreed to by BPA.

2.193 “Transfer Service”***(09/08/08 Version)*** means the transmission, distribution and other services provided by a Third Party Transmission Provider to deliver electric energy and capacity over its transmission system.

2.194 “Transmission Services”***(09/08/08 Version)*** means the organization, or its successor organization, within BPA that is responsible for the management and sale of transmission service on the Federal Columbia River Transmission System.

2.195 “Uncontrollable Force”***(09/08/08 Version)*** shall have the meaning as defined in section 21.

2.196 “Unsold Slice Amount”***(09/08/08 Version)*** shall have the meaning as defined in section 1 of Exhibit Q.

2.197 “Unsold Slice Percentage”***(09/08/08 Version)*** shall have the meaning as defined in section 1 of Exhibit Q.

2.198 “Unspecified Resource Amount”***(09/08/08 Version)*** means an amount of firm energy, listed in sections 3 and 4 of Exhibit A, that «Customer Name» has agreed to supply and use to serve its Total Retail Load. Such amount is not attributed to a Specified Resource.

**3. SLICE/BLOCK POWER PURCHASE OBLIGATION*(09/08/08 Version)***

3.1 **Slice/Block Product Purchase Obligation**

Commencing on October 1, 2011, and continuing for the duration of this Agreement, BPA shall sell to «Customer Name», and «Customer Name» shall purchase from BPA, the Slice/Block Product, which includes: (1) a planned amount of Firm Requirements Power under the Block Product as set forth in sections 1 and 2 of Exhibit C; and (2) Slice Output under the Slice Product pursuant to section 5 and Exhibit K.

3.2 **Take or Pay**

«Customer Name» shall pay rates established by BPA in a 7(i) Process, for: (1) the amounts of Firm Requirements Power that BPA makes available under the Block Product that «Customer Name» is obligated to purchase pursuant to section 3.1(1), and (2) the Slice Output, including the amounts of Slice Output Energy that BPA makes available under the Slice Product that «Customer Name» is obligated to purchase pursuant to section 3.1(2). «Customer Name» shall pay such rates regardless of whether or not «Customer Name» takes delivery of such amounts of Firm Requirements Power and Slice Output Energy.

3.3 **Application of** **Dedicated Resources**

«Customer Name» agrees to serve a portion of its Total Retail Load with the Dedicated Resources listed in Exhibit A as follows:

(1) Specified Resources that are Generating Resources shall be listed in section 2.1 of Exhibit A,

(2) Specified Resources that are Contract Resources shall be listed in section 2.2 of Exhibit A, and

(3) Unspecified Resource Amounts shall be listed in section 3.1 of Exhibit A.

«Customer Name» shall use its Dedicated Resources to serve its Total Retail Load, and specify amounts of its Dedicated Resources in the tables shown in Exhibit A, as stated below for each specific resource and type.

3.3.1 **Specified Resources**

3.3.1.1 **Application of Specified Resources**

«Customer Name» shall use the output of all Specified Resources, listed in section 2 of Exhibit A, to serve «Customer Name»’s Total Retail Load. BPA shall determine «Customer Name»’s Net Requirement, using the amounts listed in the then current Exhibit A for each Fiscal Year. The amounts listed are not intended to interfere with «Customer Name»’s operation of its Specified Resources.

3.3.1.2 **Determining Specified Resource Amounts*(07/21/09 Version)***

«Customer Name» shall state, for each Specified Resource listed in section 2 of Exhibit A, firm energy amounts for each Diurnal period for each month beginning with the later of the date the resource was dedicated to load or October 1, 2011, through the earlier of the date the resource will be permanently removed or September 30, 2028. BPA in consultation with «Customer Name» shall determine the firm energy amounts for each Diurnal period for each month for each Specified Resource consistent with the 5(b)/9(c) Policy. BPA shall incorporate the peak amounts for each month for each Specified Resource listed in section 2 of Exhibit A consistent with section 3.4.

3.3.2 **Unspecified Resource Amounts**

3.3.2.1 **Application of Unspecified Resource Amounts**

To serve Above-RHWM Load that «Customer Name» commits to meet with Dedicated Resources in Exhibit C, «Customer Name» shall provide and use Unspecified Resource Amounts to meet any amounts not met with its Specified Resources, listed in section 2 of Exhibit A.

3.3.2.2 **Determining Unspecified Resource Amounts**

By September 15, 2011, and by each September 15 thereafter, the Parties shall calculate, and BPA shall fill in the tables in section 3.1 of Exhibit A with, «Customer Name»’s Unspecified Resource Amounts for the upcoming Fiscal Year. Upon termination or expiration of this Agreement any Unspecified Resource Amounts listed in Exhibit A shall expire, and «Customer Name» shall have no further obligation to apply Unspecified Resource Amounts.

3.4 **Peak Amount Methodologies*(10/17/08 Version)***

3.4.1 **Standard for Calculating Resource Peak Amounts**

The peak amounts for «Customer Name»’s Specified Resources will be stated at a future time in Exhibit A. Such resource peak amounts will be developed contemporaneously and consistent with the determination of peak energy amounts pursuant to Section 3.4.2. If BPA determines it is necessary to update such resource peak amounts in order to incorporate different resource peaking capability determination standards, then BPA may, consistent with BPA’s 5(b)/9(c) Policy and in accordance with section 3.4.3, develop and apply such revised resource peaking capability determination standards.

3.4.2 **Method for Determining Peak Energy Amounts**

The amounts of peaking energy «Customer Name» has purchased to meet its firm power load will be stated at a future time in Exhibit A. Until such time that peak energy amounts are stated in Exhibit A, the amounts of peaking energy available to «Customer Name» are as provided under the Block Product and as calculated by the Slice Computer Application. BPA may adopt a methodology for calculating the amounts of peaking energy available to «Customer Name» under this Agreement. Before peak energy amounts may be applied in Exhibit A, BPA shall: (1) complete a process to adopt a methodology, pursuant to section 3.4.3, which shall include a calculation of «Customer Name»’s total peak load, «Customer Name»’s peaking energy capability from its resources, and BPA’s peaking energy capability for the Federal system, and (2) upon completion of such process, in consultation with «Customer Name», calculate the peak energy amounts in accordance with the methodology adopted and enter such amounts into Exhibit A. The application of any such methodology shall not by itself reduce BPA’s obligation to provide peaking energy otherwise available under this Agreement to less than «Customer Name»’s net requirement peak stated in Exhibit A. BPA and «Customer Name» shall take such actions and make such modifications, including to the Slice Computer Application, needed to timely implement any such methodology.

3.4.3 **Process for Modifying Peak Amounts**

Any methodology for determining the peak energy capability of Specified Resources as described in section 3.4.1, or «Customer Name»’s peak energy amounts available from BPA under this Agreement, as described in section 3.4.2, will be developed by BPA in a public process, including consultation with «Customer Name» and other interested parties, a formal public comment process, and a record of decision. Except as otherwise agreed by «Customer Name» and BPA, any such methodology shall not require modification of the peak amount of any Specified Resource, or the peak energy amounts listed in Exhibit A, until the first Fiscal Year of the Rate Period following BPA’s written notice to implement the revised peaking capability standard, which shall be given to «Customer Name» at least 180 days before the start of such Fiscal Year.

3.5 **Changes to Dedicated Resources**

3.5.1 **Specified Resource Additions to Meet Above-RHWM Load**

By written notice to BPA, «Customer Name» may elect to add Specified Resources to section 2 of Exhibit A to meet any obligations «Customer Name» may have in Exhibit C to serve its Above-RHWM Load with Dedicated Resources. «Customer Name» shall determine amounts for such Specified Resources in accordance with section 3.3.1.2 by June 30, 2011, and by June 30 of each Fiscal Year thereafter. BPA shall revise Exhibit A consistent with «Customer Name»’s elections.

3.5.2 **Resource Additions for a BPA Insufficiency Notice**

If BPA provides «Customer Name» a notice of insufficiency and reduces its purchase obligation, in accordance with section 23.2, then «Customer Name» may add Dedicated Resources to replace amounts of Firm Requirements Power BPA will not be providing due to insufficiency. The Parties shall revise Exhibit A to reflect such additions.

3.5.3 **Decrements for 9(c) Export**

If BPA determines, in accordance with section 23.6, that an export of a Specified Resource listed in section 2 of Exhibit A requires a reduction in the amount of Firm Requirements Power BPA sells «Customer Name» then BPA shall notify «Customer Name» of the amount and duration of the reduction in «Customer Name»’s Firm Requirements Power purchases from BPA. Within 20 days of such notification «Customer Name» may add a Specified Resource to section 2 of Exhibit A in the amount of such decrement. If «Customer Name» does not add a Specified Resource to meet such decrement, then within 30 days of such notification BPA shall add Unspecified Resource Amounts to section 3.2 of Exhibit A in the amount and for the duration of such decrement.

3.5.4 **Temporary Resource Removal**

By September 15, 2011, and by September 15 of each Fiscal Year thereafter, BPA shall revise «Customer Name»’s Dedicated Resource amounts listed in the tables of Exhibit A consistent with «Customer Name»’s resource removal elections made in accordance with section 10.

3.5.5 **Permanent Discontinuance of Resources**

«Customer Name» may permanently remove a Specified Resource listed in section 2 of Exhibit A, consistent with the 5(b)/9(c) Policy on statutory discontinuance for permanent removal. If BPA makes a determination that «Customer Name»’s Specified Resource has met BPA’s standards for a permanent removal, then BPA shall revise Exhibit A accordingly. If «Customer Name» does not replace such resource with another Dedicated Resource, then «Customer Name»’s additional Firm Requirements Power purchases under this Agreement, as a result of such a resource removal, may be subject to additional rates or charges as established in the Wholesale Power Rate Schedules and GRSPs.

3.5.6 **Resource Additions for Annexed Loads*(12/13/13 Version)***

If «Customer Name» acquires an Annexed Load after the Effective Date, «Customer Name» shall add Dedicated Resources to Exhibit A to serve amounts of such load for which «Customer Name» did not receive a CHWM addition pursuant to section 1.2.2 of Exhibit B. «Customer Name» shall serve such load with Dedicated Resources for the remainder of the Purchase Period during which «Customer Name» acquires such load. «Customer Name» may only purchase Firm Requirements Power at Tier 2 Rates to serve such Annexed Load amounts, if «Customer Name» has provided BPA with its election by a Notice Deadline for such power purchase at Tier 2 during the corresponding Purchase Period.

3.5.7 **Resource Additions/Removals for NLSLs**

3.5.7.1 To serve an NLSL listed in Exhibit D that is added after the Effective Date, «Customer Name» may add Dedicated Resources to section 4 of Exhibit A. «Customer Name» may discontinue serving its NLSL with the Dedicated Resources listed in section 4 of Exhibit A if BPA determines that «Customer Name»’s NLSL is no longer an NLSL in «Customer Name»’s service territory.

3.5.7.2 If «Customer Name» elects to serve an NLSL with Dedicated Resources, then «Customer Name» shall specify in section 4 of Exhibit A the maximum monthly and Diurnal Dedicated Resource amounts that «Customer Name» plans to use to serve the NLSL. «Customer Name» shall establish such firm energy amounts for each month beginning with the date the resource was dedicated to load through the earlier of the date the resource will be removed or September 30, 2028. «Customer Name» shall serve the actual load of the NLSL up to such maximum amounts with such Dedicated Resource amounts. To the extent that the NLSL load is less than the maximum amount in any monthly or Diurnal period, «Customer Name» shall have no right or obligation to use such amounts to serve the non-NLSL portion of its Total Retail Load. Specific arrangements to match such resources to the NLSL on an hourly basis shall be established in Exhibit D.

3.5.8 **PURPA Resources*(07/21/09 Version)***

If «Customer Name» is required by the Public Utility Regulatory Policies Act (PURPA) to acquire output from a Generating Resource and plans to use that output to serve its Total Retail Load, then such output shall be added as a Specified Resource pursuant to Exhibit A.

3.6 **Consumer-Owned Resources*(07/21/09 Version)***

Except for any Consumer-Owned Resources serving an NLSL, which «Customer Name» has applied to load consistent with section 23.3.7, «Customer Name» shall apply the output of the Consumer-Owned Resources as follows:

3.6.1 **Existing Consumer-Owned Resources**

«Customer Name» has designated, in sections 7.1, 7.2, or 7.3 of Exhibit A, the extent that each existing Consumer-Owned Resource as of the Effective Date will or will not serve Onsite Consumer Load. Such designation shall apply for the term of this Agreement.

3.6.2 **New Consumer-Owned Resources**

«Customer Name» shall designate the extent that each Consumer-Owned Resource commencing commercial operation after the Effective Date will or will not serve Onsite Consumer Load. «Customer Name» shall make such designation to BPA in writing within 120 days of the first production of energy by such resource. Such designation shall apply for the term of this Agreement.

Consistent with «Customer Name»’s designations, BPA shall list Consumer-Owned Resources serving Onsite Consumer Load in section 7.1 of Exhibit A, Consumer-Owned Resources not serving Onsite Consumer Load in section 7.2 of Exhibit A, and Consumer-Owned Resources serving both Onsite Consumer Load and load other than Onsite Consumer Load in section 7.3 of Exhibit A.

3.6.3 **Application of Consumer-Owned Resources Serving Onsite Consumer Load*(07/21/09 Version)***

Power generated from Consumer-Owned Resources listed in section 7.1 of Exhibit A shall serve the Onsite Consumer Load. «Customer Name» shall receive no compensation from BPA for excess power generated on any hour from such resources.

3.6.4 **Application of Consumer-Owned Resources Serving Load Other than Onsite Consumer Load**

«Customer Name» shall ensure that power generated from Consumer-Owned Resources listed in section 7.2 of Exhibit A is scheduled for delivery and either: (1) sold to another utility in the Region to serve its Total Retail Load, (2) purchased by «Customer Name» to serve its Total Retail Load (consistent with section 3.3), (3) marketed as an export, or (4) any combination of (1), (2), and (3) above.

3.6.5 **Application of Consumer-Owned Resources Serving Both Onsite Consumer Load and Load Other than Onsite Consumer Load**

If «Customer Name» designates a Consumer-Owned Resource to serve both Onsite Consumer Load and load other than Onsite Consumer Load then «Customer Name» shall select either Option A or Option B below.

3.6.5.1 **Option A: Maximum Amounts Serving Onsite Consumer Load**

If «Customer Name» selects this Option A, then «Customer Name» shall specify, in section 7.3 of Exhibit A, the maximum hourly amounts of an identified Onsite Consumer Load that are to be served with power generated by an identified Consumer-Owned Resource. Such amounts shall be specified as Diurnal megawatt amounts, by month, and shall apply in all years for the term of this Agreement. Such amounts are not subject to change in accordance with section 3.6.6.

On any hour that the Onsite Consumer Load is less than the specified maximum hourly amounts, all such Onsite Consumer Load shall be served by «Customer Name» with the identified Consumer-Owned Resource or with power other than Firm Requirements Power. Any hourly amounts of the identified Onsite Consumer Load in excess of the specified maximum hourly amounts shall be served with Firm Requirements Power. Any power generated from the identified Consumer-Owned Resource in excess of the specified maximum hourly amounts shall be applied to load other than Onsite Consumer Load in accordance with section 3.6.4.

3.6.5.2 **Option B: Maximum BPA-Served Onsite Consumer Load**

If «Customer Name» selects this Option B, then «Customer Name» shall specify, in section 7.3 of Exhibit A, the maximum hourly amounts of an identified Onsite Consumer Load that are to be served with Firm Requirements Power. Such amounts shall be specified as Diurnal megawatt amounts, by month, and shall apply in all years for the term of this Agreement. Such amounts are not subject to change in accordance with section 3.6.6.

On any hour that Onsite Consumer Load is less than the specified maximum hourly amounts, all such Onsite Consumer Load shall be served with Firm Requirements Power. «Customer Name» shall serve any hourly amounts of the identified Onsite Consumer Load in excess of the specified maximum hourly amounts with power generated by the identified Consumer-Owned Resource or with power other than Firm Requirements Power. Any power generated from the identified Consumer-Owned Resource in excess of the amounts required to be used to serve the Onsite Consumer Load shall be applied to load other than Onsite Consumer Load in accordance with section 3.6.4.

3.6.6 **Changes to Consumer-Owned Resources**

Prior to each Fiscal Year «Customer Name» shall notify BPA in writing of any changes in ownership, expected resource output, or other characteristic of Consumer-Owned Resources identified in section 7 of Exhibit A. If a Consumer-Owned Resource has permanently ceased operation and «Customer Name» notifies BPA of such cessation, then BPA shall revise section 7 of Exhibit A to reflect such change as long as BPA agrees the determination is reasonable.

**4. BLOCK PRODUCT *(09/08/08 Version)***

4.1 **Block Product General Description**

The Block Product is sold to provide a planned amount of Firm Requirements Power to serve a portion of «Customer Name»’s Annual Net Requirement.

4.2 **Block Amount Shapes**

4.2.1 **Tier 1 Block Amount Shapes**

Upon the execution of this Agreement, «Customer Name» shall select one of the following shapes for Tier 1 Block Amounts: (1) a Flat Annual Shape, or (2) a Flat Within-Month Shape. The shape selected by «Customer Name» shall be specified in section 1.2 of Exhibit C and shall remain fixed during the term of this Agreement.

4.2.2 **Tier 2 Block Amount Shape**

Tier 2 Block Amounts, sold to and purchased by «Customer Name» for its load, shall only be made available by BPA to «Customer Name» in a Flat Annual Shape.

4.2.3 **Shaping Restrictions**

No shaping options for Tier 1 Block Amounts and Tier 2 Block Amounts are permitted other than those described in sections 4.2.1 and 4.2.2.

*Option 1: Include if customer chooses a Flat Annual Shape for its Tier 1 Block Amount.*

4.3 **Annual and Hourly Tier 1 Block Amounts**

By September 15, 2011, and by each September 15 thereafter, BPA shall determine «Customer Name»’s annual Tier 1 Block Amount for the next Fiscal Year by subtracting the Critical Slice Amount for such Fiscal Year from the lesser of «Customer Name»’s Annual Net Requirement or its RHWM. «Customer Name»’s annual Tier 1 Block Amounts, as determined pursuant to this section 4.3 for each Fiscal Year, shall be specified in section 1.1 of Exhibit C. «Customer Name»’s hourly Tier 1 Block Amounts shall be as established in section 1.2 of Exhibit C.

*End Option 1.*

*Option 2: Include if customer chooses a Flat Within-Month Shape for its Tier 1 Block Amount.*

4.3 **Annual and Monthly Tier 1 Block Amounts**

The annual and monthly Tier 1 Block Amounts shall be determined as follows:

4.3.1 **Determination of Annual Tier 1 Block Amount**

By September 15, 2011, and by each September 15 thereafter, BPA shall determine «Customer Name»’s annual Tier 1 Block Amount for the next Fiscal Year by subtracting the Critical Slice Amount for such Fiscal Year from the lesser of «Customer Name»’s Annual Net Requirement or its RHWM.

4.3.2 **Determination of Monthly Tier 1 Block Amounts**

«Customer Name»’s Tier 1 Block Amounts for each month of the Fiscal Year shall be determined by multiplying the annual Tier 1 Block Amount, as determined pursuant to section 4.3.1, by the Monthly Shaping Factors specified in section 1.2 of Exhibit C.

4.3.3 **Annual and Monthly Tier 1 Block Amounts Specified in Exhibit C**

«Customer Name»’s annual and monthly Tier 1 Block Amounts, as determined pursuant to this section 4.3 for each Fiscal Year, shall be specified in section 1 of Exhibit C.

*End Option 2.*

4.4 **Annual Tier 2 Block Amounts**

The annual Tier 2 Block Amounts, if any, sold to and purchased by «Customer Name», shall be specified in section 2 of Exhibit C.

*Drafter’s Note: Include the following language if customer purchases Diurnal Flatting Service (DFS).*

4.5 **Displacement of Block Product Amounts for Diurnal Flattening Service*(06/02/09 Version)***

For each hour when the total scheduled generation from «Customer Name»’s Specified Resources listed in section 2.3.6.1 of Exhibit D, is greater than (up to the resource’s combined Operating Maximum amount) the total Planned Resource Amount for such Specified Resources, BPA’s obligation to make available the total planned Block Product amount (Tier 1 Block Amounts plus Tier 2 Block Amounts) specified in Exhibit C shall be reduced by the amount that the sum of the generation of such Specified Resources (that is equal to or less than the sum of the Operating Maximum of such resources) exceeds the sum of Planned Resource Amounts of such resources for each hour. «Customer Name» shall schedule its reduced Block Product deliveries as required for Diurnal Flattening Service pursuant to section 2.3 of Exhibit D and section 6 of Exhibit F. The total amount of DFS service provided to «Customer Name» for the month shall not exceed the total Block Product amount for that month.

*End DFS Option*

**5. SLICE PRODUCT *(09/08/08 Version)***

5.1 **Slice Product General Description*(10/17/08 Version)***

The Slice Product is a system sale of power that includes requirements power, surplus power, and hourly scheduling rights, all of which are indexed to the variable output capability of the FCRPS resources that comprise the Tier 1 System, and to the extent such capability is available to Power Services after Tier 1 System Obligations and Operating Constraints are met. These capabilities are accessed by «Customer Name» through the Slice Computer Application, which shall reasonably represent and calculate the capabilities available to Power Services from such resources after Tier 1 System Obligations and Operating Constraints are met, including energy production, peaking, storage and ramping capability. The Slice Computer Application applies «Customer Name»’s Slice Percentage to such capabilities.

The Slice Product sold by BPA and purchased by «Customer Name» is a power sale, and is not under any circumstances to be construed as a sale of the Tier 1 System Resources, Tier 1 System Resource capability, or a transfer of control of such Tier 1 System Resources.

BPA does not guarantee that the amount of Slice Output Energy made available under the Slice Product, combined with Firm Requirements Power made available under the Block Product, will be sufficient to meet «Customer Name»’s regional consumer load, on an hourly, daily, weekly, monthly, or annual basis. «Customer Name» agrees that it has the obligation to supply nonfederal power to meet its Total Retail Load not met by its purchase of Slice Output and power from the Block Product.

Changes in the output of the Tier 1 System shall affect the amount of Slice Output made available to «Customer Name» under this Agreement. Accordingly, «Customer Name» understands and agrees it is exposed to Tier 1 System performance risk and water supply risk.

The Slice Product does not provide «Customer Name» any rights to utilize Tier 1 System Resources for within-hour energy or capacity services, including but not limited to dynamic scheduling, self-supply of operating reserves, and self-supply of energy imbalance. Slice Output Energy is scheduled firm for the hour of delivery.

Notwithstanding any provision of this Agreement to the contrary, or «Customer Name»’s rights under this Agreement, BPA and Federal operating agencies at all times shall retain operational control of all resources comprising the FCRPS, including without limitation all such resources that comprise the Tier 1 System.

5.2 **Determination of Amounts of Slice Output Made Available to «Customer Name»**

Slice Output made available to «Customer Name» shall be adjusted by Operating Constraints in effect on the Tier 1 System. Such Operating Constraints shall be applied proportionately to the Tier 1 System output available to Power Services, «Customer Name», and all other Slice Customers.

The amount of Slice Output Energy made available to «Customer Name» is based on a simulation of stream flows routed through the Simulator Projects, plus the BOS Base, using the Slice Computer Application, and as adjusted for Operating Constraints. Accordingly, «Customer Name» understands and agrees that the amount of Slice Output Energy made available to «Customer Name» may not precisely equal the result of its Slice Percentage multiplied by the Actual Tier 1 System Generation.

5.3 **Preliminary Slice Percentage, Initial Slice Percentage, Slice Percentage, and Adjustments to Slice Percentage**

5.3.1 **Preliminary Slice Percentage**

«Customer Name»’s Preliminary Slice Percentage shall be the percentage as specified in section 1 of Exhibit J as of the Effective Date.

5.3.2 **Initial Slice Percentage**

«Customer Name»’s Initial Slice Percentage shall be determined pursuant to section 4 of Exhibit Q. No later than May 1, 2011, BPA shall revise section 2 of Exhibit J to state «Customer Name»’s Initial Slice Percentage.

5.3.3 **Slice Percentage**

No later than 15 days prior to the beginning of each Fiscal Year, beginning with Fiscal Year 2012, BPA shall revise the table in section 2 of Exhibit K to include «Customer Name»’s Slice Percentage for each such Fiscal Year, as may be adjusted pursuant to section 1 of Exhibit K.

5.3.4. **Slice Percentage Not to Exceed Initial Slice Percentage**

«Customer Name» understands and agrees that in no event shall its Slice Percentage exceed its Initial Slice Percentage during the term of this Agreement.

5.3.5 **Adjustments to Slice Percentage(10/17/08 Version)**

As set forth in section 1.3 of Exhibit K for each Fiscal Year, «Customer Name»’s Slice Percentage shall be adjusted: (1) when the amount of Additional CHWM for such Fiscal Year is greater than zero, or (2) such that «Customer Name»’s purchase obligation under this Agreement does not exceed «Customer Name»’s Annual Net Requirement for such Fiscal Year.

5.4 **Critical Slice Amount**

BPA shall determine «Customer Name»’s Critical Slice Amount for Fiscal Year 2012 no later than 15 days prior to the first day of Fiscal Year 2012, and for each subsequent Fiscal Year no later than 15 days prior to the first day of each such Fiscal Year, using the procedure described in section 2 of Exhibit I.

5.5 **Disposition of Surplus Slice Output**

5.5.1 All sales, exchanges, or other dispositions of federal power are subject to and governed by federal law including, but not limited to, the Bonneville Project Act, P.L. 75‑329 as amended, the Pacific Northwest Consumer Power Preference Act, P.L. 88‑552, the Federal Columbia River Transmission System Act, P.L. 93‑454, and the Northwest Power Act, P.L. No. 96‑501, as amended.

5.5.2 All sales of Surplus Slice Output by «Customer Name» for use outside the Region, or to parties not serving firm retail load in the Region, are subject to the provisions of the Pacific Northwest Consumer Power Preference Act and section 9(c) of the Northwest Power Act, and BPA and «Customer Name» acknowledge their respective responsibilities thereunder.

5.5.3 The following uses of Surplus Slice Output shall not constitute a sale of Surplus Slice Output outside the Region:

5.5.3.1 Leaving the Surplus Slice Output in Storage or placing it in «Customer Name»’s Storage;

5.5.3.2 Exchanging Surplus Slice Output with another utility customer in the Region, or a statutorily enumerated type of exchange with a utility outside the Region;

5.5.3.3 Using Surplus Slice Output to displace «Customer Name»’s non-federal resources identified in Exhibit A, or «Customer Name»’s market purchases that would have been made for serving its Total Retail Load; and

5.5.3.4 A sale of Surplus Slice Output to a BPA utility customer for service to that utility’s Total Retail Load in the Region, consistent with sections 3(14) and 9(c) of the Northwest Power Act.

«Customer Name» may demonstrate such uses of Surplus Slice Output by means of a storage account, executed contracts for binding sales or exchanges, or another form of offer and acceptance.

5.5.4 Pursuant to the Pacific Northwest Consumer Power Preference Act and section 9(c) of the Northwest Power Act, BPA shall have the right to curtail all or a portion of «Customer Name»’s: (1) Surplus Slice Output capacity upon 60 months written notice to «Customer Name», and (2) Surplus Slice Output energy upon 60 days written notice to «Customer Name». Any such notice shall specify the amounts and duration of the curtailment, and whether such capacity or energy is needed to meet BPA’s capacity and energy requirements in the Region. Prior to issuing any such curtailment notice, BPA and «Customer Name» shall consult in order to determine the quantity, if any, of Surplus Slice Output energy and capacity that may be subject to such curtailment. Such curtailments shall be limited to «Customer Name»’s proportional share of the amount needed, and for the duration necessary, to cover BPA’s projection of its needs within the Region. Such curtailments are subject to sections 5.5.5 and 5.5.6.

5.5.5 If BPA issues a notice of curtailment pursuant to section 5.5.4, then it shall concurrently issue notices of curtailment, recall, or termination to all other extra regional and non-preference purchasers to whom BPA has sold Surplus Firm Power, or surplus capacity, for durations longer than specified in the notice, provided that such sales agreements contain provisions that allow for recall, curtailment or termination.

5.5.6 Following each month that Surplus Slice Output is curtailed pursuant to section 5.5.5 above, Power Services shall include a line item credit on «Customer Name»’s monthly customer bill issued equal to the amount of Surplus Slice Output energy curtailed during the preceding month, multiplied by the Monthly Reimbursement Value for the month during which the curtailment was in effect.

5.6 **Disposition of Requirements Slice Output and Requirements Slice Output Test**

5.6.1 **Disposition of Requirements Slice Output*(10/17/08 Version)***

Requirements Slice Output (RSO) purchased by «Customer Name» under this Agreement and made available by BPA shall be used solely for the purpose of serving «Customer Name»’s Total Retail Load. «Customer Name» shall maintain monthly documentation establishing the delivery of RSO to serve its Total Retail Load, such as by schedule or by electronic tag, for each such month. «Customer Name» shall make such documentation available to BPA upon request.

5.6.2 **Requirements Slice Output Test**

5.6.2.1 **Submission of Monthly Actual Total Retail Load Data**

On or before the 10th Business Day of each calendar month, «Customer Name» shall submit to BPA its actual Total Retail Load for the preceding calendar month, expressed in MWh.

5.6.2.2 **RSO Test**

BPA shall compare: (1) «Customer Name»’s Slice Output Energy delivered to its actual Total Retail Load plus loss return schedules to Transmission Services (Slice-to-Load Delivery) during each month with (2) «Customer Name»’s RSO for each such month. Such comparison is the monthly RSO Test.

5.6.2.3 **Notification of Results of RSO Test**

On or before the 20th Business Day of each calendar month, BPA shall notify «Customer Name» in writing of the results of the RSO Test conducted pursuant to section 5.6.2.2.

5.6.2.4 **Conditions that Result in Passage of RSO Test*(10/17/08 Version)***

(1) If «Customer Name»’s Slice-to-Load Delivery in a month is greater than or equal to its RSO for such month, then «Customer Name» shall have satisfied the requirements of the RSO Test for such month; or,

(2) If «Customer Name»’s Slice-to-Load Delivery in a month is less than its RSO for such month, but «Customer Name»’s Actual Slice Output Energy (ASOE) for the month is less than 107.5 percent of its RSO, and «Customer Name»’s monthly Slice-to-Load Delivery is greater than 92.5 percent of its ASOE for such month, then «Customer Name» shall have satisfied the RSO Test for such month.

5.6.2.5 **Conditions Under Which BPA May Deem «Customer Name» to Have Satisfied the RSO Test**

(1) If «Customer Name» has not satisfied the requirements of the RSO Test pursuant to section 5.6.2.4, then «Customer Name» may, within 14 calendar days after BPA provides «Customer Name» with written notice of the RSO Test results pursuant to section 5.6.2.3, provide BPA with data that demonstrates «Customer Name» took reasonable and prudent actions to otherwise satisfy the RSO Test for such month. Such data may include analysis indicating «Customer Name» satisfied the RSO Test in each of two distinct periods of ten or more consecutive days within the month. If Power Services determines such data and/or analysis demonstrates such compliance, then BPA shall deem «Customer Name» to have satisfied the RSO Test for such month. BPA shall have the sole discretion to determine whether «Customer Name» shall be deemed to have satisfied the RSO Test pursuant to this section 5.6.2.5(1). BPA shall, no later than 14 calendar days following the day «Customer Name» provides such supporting data and/or analysis, notify «Customer Name», in writing, of its decision as to whether or not «Customer Name» shall be deemed to have satisfied the RSO Test, and the basis for such decision.

(2) If recurring conditions exist that result in BPA repeatedly deeming «Customer Name» to have satisfied the RSO Test, BPA and «Customer Name» shall collaboratively develop documentation, through a separate letter agreement, that establishes for a specified prospective time period the conditions under which BPA shall deem «Customer Name» to have satisfied the RSO Test.

5.6.2.6 **Conditions that Result in Failure of RSO Test and Associated Penalty*(07/21/09 Version)***

If «Customer Name» fails to satisfy the RSO Test per section 5.6.2.4, and is not deemed by BPA to have satisfied the RSO Test pursuant to section 5.6.2.5 for any month, then a penalty charge shall be assessed as follows for that month:

(1) The penalty charge shall be equal to «Customer Name»’s under-delivered amount for such month multiplied by the UAI Charge for energy for each such month.

(2) The under-delivered amount for such month is equal to the lesser of the amount «Customer Name»’s monthly Slice-to-Load Delivery is less than: (1) «Customer Name»’s RSO for the month, or (2) if section 5.6.2.4(2) is applicable, then 92.5 percent of «Customer Name»’s ASOE for the month.

5.7 **Northwest Power Act Section 6(m) Resource Acquisitions**

«Customer Name» retains all rights to participate in any BPA major resource acquisitions pursuant to section 6(m) of the Northwest Power Act.

5.8 **Displacement of Columbia Generating Station (CGS)**

5.8.1 **Definitions**

5.8.1.1 “Additional Energy” means the amount of energy «Customer Name» is entitled to receive if it elects not to participate in CGS Displacements during an Election Year, and is equal to «Customer Name»’s Slice Percentage multiplied by the difference between the Generation Benchmark and the expected level of CGS generation while displacement is in effect.

5.8.1.2 “Columbia Generating Station” or “CGS” means the nuclear powered generating facility located near Richland, Washington, and operated by Energy Northwest, or its successor.

5.8.1.3 “CGS Displacement” means a decision by Power Services to shut-down all or a portion of the power production at CGS due to market conditions.

5.8.1.4 “Election Year” means the 12‑month period beginning each February 1 and ending the following January 31.

5.8.1.5 “Generation Benchmark” means the generation level at which Power Services reasonably expects CGS to operate, absent any CGS Displacement, which is typically about 1,130 MWh per hour.

5.8.1.6 “Incremental Cost” means the additional costs that Power Services would have incurred if CGS had been operated at full capability, and CGS Displacements had not been instituted, including the costs of nuclear fuel and variable operations and maintenance costs, expressed in dollars per MWh.

5.8.1.7 “Operating Plan” means the forecasted CGS monthly generation adopted in BPA’s firm planning for a Fiscal Year.

5.8.2 **CGS Displacement Election**

No later than January 31, 2012, and no later than January 31 of each calendar year thereafter during the term of this Agreement, «Customer Name» shall provide Power Services written notice stating whether or not it elects to participate in CGS Displacements for the Election Year that begins on the following day. Such election shall be irrevocable for each such Election Year, and shall apply to all CGS Displacements implemented by Power Services during such Election Year.

5.8.3 **Election to Participate in CGS Displacement**

If «Customer Name» elects to participate in CGS Displacements, then «Customer Name» shall not be entitled to Additional Energy.

5.8.4 **Election Not to Participate in CGS Displacements**

If «Customer Name» elects to not participate in CGS Displacements, then «Customer Name» shall be entitled to amounts of Additional Energy as described in this section 5.8.4.

5.8.4.1 «Customer Name» shall take delivery of Additional Energy associated with each CGS Displacement as described in section 5.8.6. Power Services shall make such Additional Energy available to «Customer Name» at the Scheduling Points of Receipt.

5.8.4.2 Power Services shall maintain for «Customer Name» an account that will indicate the accumulated amount of Additional Energy that was made available to «Customer Name» during each CGS Displacement and for each Fiscal Year.

5.8.4.3 Following the end of each Fiscal Year, «Customer Name» shall pay an amount equal to «Customer Name»’s balance in the accumulated Additional Energy account multiplied by the Incremental Cost associated with each such Fiscal Year, and such account balance shall be set to zero. Such amount shall be included on «Customer Name»’s next power bill immediately after determination of the Incremental Cost pursuant to section 5.8.5.

5.8.5 **Operating Plan and Incremental Cost*(09/14/12 Version)***By September 15 of each year, Power Services shall provide «Customer Name» with the adopted Operating Plan for the upcoming Fiscal Year and the actual Incremental Cost associated with the immediately preceding Energy Northwest fiscal year (July 1 through June 30).

5.8.6 **Implementation of CGS Displacement**

5.8.6.1 BPA shall notify «Customer Name» of any potential CGS Displacement as soon as BPA determines such CGS Displacement is likely to occur.

5.8.6.2 If a CGS Displacement occurs during a period when «Customer Name» has elected not to participate in such CGS Displacement, BPA shall develop and submit to «Customer Name» hourly schedules of Additional Energy as described in section 5.8.1.1.

5.8.6.3 Such Additional Energy amounts shall be computed by the BOS Module as a component of «Customer Name»’s BOS schedule, as described in section 4 of Exhibit M.

5.9 **Treatment of RHWM Augmentation**

«Customer Name» shall purchase and receive a share of RHWM Augmentation in an amount equal to «Customer Name»’s Slice Percentage multiplied by the RHWM Augmentation for each Fiscal Year, as set forth in Exhibit L.

5.10 **SCA** **Functionality Test, Simulator Performance Test, and Implementation of the SCA**

This section sets out the SCA Functionality and Simulator Performance Tests. BPA shall promptly notify «Customer Name» of the results of the SCA Functionality and Simulator Performance Tests.

5.10.1 **Definitions**

5.10.1.1 “Default User Interface,” or “DUI,” means the basic user interface that is developed by BPA and made available to «Customer Name» for access to the SCA.

5.10.1.2 “Interim Slice Implementation Procedures” means the procedures set forth in Exhibit O that will be used on an interim basis to determine «Customer Name»’s available Slice Output and Delivery Limits in the event the SCA Implementation Date occurs after October 1, 2011, pursuant to section 5.10.3.

5.10.1.3 “SCA Functionality Test” means the test set forth in section 5.10.2 that is conducted to determine whether the SCA is complete, functional, and ready for daily implementation and use.

5.10.1.4 “SCA Implementation Date” means the latest of: (1) October 1, 2011, (2) 90 days after the SCA Pass Date, or (3) 90 days after the Simulator Pass Date.

5.10.1.5 “SCA Pass Date” means the date on which the SCA passes the SCA Functionality Test.

5.10.1.6 “Simulator Pass Date” means the date on which the Simulator passes the Simulator Performance Test.

5.10.1.7 “Simulator Performance Test” means the test conducted by BPA and consisting of four separate tests: a Storage Content test, an energy test, a peaking test, and a ramp down test, each as separately described in section 3.5.3 of Exhibit M.

5.10.2 **SCA Functionality Test**

5.10.2.1 **SCA** **Functionality Test Conducted No Later Than July 1, 2011**

The initial SCA Functionality Test shall be conducted by BPA no later than July 1, 2011.

5.10.2.2 **Determination of SCA Functionality Test Procedures**

BPA, in consultation with «Customer Name» and other members of the SIG, shall, by April 15, 2011, establish a detailed written description of the validation procedures that will comprise the SCA Functionality Test. Such validation procedures shall include a comprehensive series of objective tests that establish if the SCA, including the Simulator, DUI and BOS module, are wholly functional and ready for daily implementation and use.

5.10.3 **SCA Implementation Date**

5.10.3.1 **SCA Implementation Date Established as October 1, 2011**

If the SCA Implementation Date is established as October 1, 2011, then BPA and «Customer Name» shall commence implementation of the SCA beginning on October 1, 2011.

5.10.3.2 **SCA Implementation Date Occurs After October 1, 2011**

If the SCA Implementation Date is established later than October 1, 2011, then, beginning on October 1, 2011, and continuing until the SCA Implementation Date, BPA and «Customer Name» shall implement the Interim Slice Implementation Procedures, pursuant to Exhibit O.

5.10.4 **Simulator Performance Test**

5.10.4.1 **Simulator Performance Test Date**

No later than August 1, 2010, BPA shall provide «Customer Name» access to the Simulator that will be used by BPA to conduct the Simulator Performance Test. The Simulator Performance Test shall be conducted by BPA no later than October 31, 2010.

5.10.4.2 **Simulator Fails Simulator Performance Test**

If, as of October 31, 2010, the Simulator has failed one or more of the four tests that comprise the Simulator Performance Test, then «Customer Name» may elect to change its purchase obligation pursuant to section 11.2.

5.10.5 **«Customer Name» Unable to Utilize DUI*(09/14/12 Version)***

If, as of the SCA Implementation Date, «Customer Name» is not functionally ready to access and utilize the DUI, then beginning on the SCA Implementation Date and continuing until 30 days after «Customer Name» provides BPA with written notice that it is functionally ready to utilize the DUI, BPA shall use the SCA to determine «Customer Name»’s hourly Delivery Requestsin accordance with the following procedures:

5.10.5.1 **Establishment of Preschedules*(09/14/12 Version)***

(1) BPA shall set «Customer Name»’s Customer Inputs (generation requests) for Grand Coulee and Chief Joseph equal to Power Services planned Grand Coulee and Chief Joseph’s respective generation;

(2) BPA shall set «Customer Name»’s Customer Inputs (elevation requests) for the LCOL Complex projects such that those projects pass inflow on an hourly basis; and

(3) BPA shall set «Customer Name»’s hourly BOS amount equal to «Customer Name»’s Slice Percentage multiplied by the BOS Base amount (no BOS Flex allowed).

(4) BPA shall communicate «Customer Name»’s Delivery Requests to «Customer Name» via facsimile.

5.10.5.2 **Updates to Preschedule Values**

Using the same criteria as set forth in section 5.10.5.1, BPA shall revise «Customer Name»’s Customer Inputs, and submit to «Customer Name» its revised Delivery Requests, as needed to reflect BPA’s latest estimated generation, inflow and BOS Base values: (1) by 1800 hours on the day prior to delivery, and (2) by 60 minutes prior to the beginning of each hour of delivery.

5.10.5.3 **Submission of Electronic Tags**

«Customer Name» shall submit electronic tags to Power Services on preschedule and real time, pursuant to Exhibit F, which shall indicate energy amounts equal to «Customer Name»’s hourly Delivery Requests established under this section 5.10.5.

(1) If energy amounts indicated on «Customer Name»’s electronic tags are greater than its hourly Delivery Requests, then «Customer Name» shall receive the electronic tag amounts and shall be charged at theUAICharge for the energy that is in excess of the Slice Output Energy amount.

(2) If energy amounts indicated on «Customer Name»’s electronic tags are less than its hourly Delivery Requests, then «Customer Name» shall receive the electronic tag amounts and shallforfeit the remaining Slice Output Energy amount.

5.10.5.4 **Delivery Limit Penalties**

Except as described in section 5.10.5.3, Delivery Limit penalties established in Exhibit N shall not be assessed for the first 90 days that the provisions described in this section 5.10.5 are in effect.

5.11 **Slice Computer Application Development Schedule**

The schedule attached hereto as Exhibit P represents timelines under which specific tasks associated with the development of the SCA shall be completed. «Customer Name» and BPA understand and agree that: (1) the timelines specified in Exhibit P are not binding and are for information purposes only, and (2) the timelines set forth in this section 5 are binding. BPA, «Customer Name», and other members of the SIG shall discuss the status of the various tasks identified in Exhibit P and their associated timelines.

5.12 **Slice Implementation Group**

5.12.1 **Definitions**

5.12.1.1 “Majority” means at least 51 percent of the Slice Implementation Group (SIG) members (or their alternates) present at a meeting of the SIG at which a Quorum has been established (counting only one representative for each Slice Customer and for BPA, even if both the SIG member and the alternate SIG member are present).

5.12.1.2 “Quorum” means the BPA SIG member and at least 60 percent of all Slice Customer SIG members (provided that if an alternate SIG member is present at a SIG meeting and the corresponding SIG member is not, the alternate SIG member shall be counted for purposes of determining a Quorum).

5.12.1.3 “Super Majority” means at least 66 percent of the Slice Customer SIG members (or their alternates) present at a meeting of the SIG at which a Quorum has been established (counting only one representative for each Slice Customer, even if both the SIG member and the alternate SIG member are present).

5.12.2 **Slice Implementation Group**

5.12.2.1 The Parties anticipate that implementation issues will arise regarding the Slice Product or the Slice Computer Application, and that a forum is needed for discussing alternatives and taking actions that may affect BPA and the Slice Customers. The SIG is hereby established for the purposes of: (1) considering, establishing and documenting modifications to the Slice Computer Application necessary to maintain its reasonable representation of Tier 1 System energy, peaking, storage, and ramping capability; (2) considering, establishing and documenting modifications to the Slice Computer Application necessary for «Customer Name» and other Slice Customers to schedule Slice Output Energyunder this Agreement; (3) establishing a clearinghouse for information regarding the Slice Product and the Slice Computer Application; and (4) establishing a forum for discussing any other issues regarding the Slice Product, the Slice Computer Application and associated procedures.

5.12.2.2 BPA and «Customer Name» shall each appoint a SIG member and an alternate SIG member to attend SIG meetings. Appointment of a SIG member and an alternate SIG member shall initially be made in writing submitted to BPA and all other Slice Customers, and thereafter to the SIG chairperson. The Slice Customer SIG members shall elect a SIG chairperson each year who shall conduct SIG meetings. Any SIG meeting may be conducted by telephone conference call. Any action of the SIG, except as otherwise provided herein, shall be made by Majority vote of the SIG members (or any alternates acting in the absence of SIG members) attending the SIG meeting in person or by telephone. The SIG may adopt rules and procedures, including dates, times, and locations of meetings, as it deems necessary or desirable. A meeting may be called by any SIG member or alternate by providing all other SIG members and alternates with written notice at least seven calendar days in advance of such meeting, setting forth the date, location, and subject matter of such meeting. The SIG shall meet at least once during each Fiscal Year.

5.12.2.3 BPA shall have the right in its sole discretion to implement the upgrades, replacements and changes described in sections 5.12.2.3(1) through 5.12.2.3(3) only to the extent it determines such implementation is consistent with the Slice product as described in section 5.1, and only after: (1) such implementation and related testing is reviewed and discussed by the SIG; and (2) such upgrades, replacements and changes have been subjected to testing as determined by BPA to be relevant and sufficient to demonstrate that each upgrade, replacement, or change functions as intended and does not cause any other portion of the SCA to malfunction. Such implementation by BPA shall not be subject to approval by the SIG. Notwithstanding BPA’s sole discretion to implement such upgrades, replacements and changes, «Customer Name» may dispute BPA’s determination of consistency with section 5.1 regarding any such upgrades, replacements, and changes, in accordance with section 22. If as a result of a dispute resolution process such upgrade, replacement, or change is determined to be inconsistent with section 5.1, then BPA, «Customer Name», and other members of the SIG shall consult to identify modifications that make such upgrade, replacement, or change consistent with section 5.1, and BPA shall promptly implement such modifications.

(1) BPA may change, upgrade or replace the Slice Computer Application as necessary to produce results that reasonably represent the energy production, peaking, storage, or ramping capability of the Tier 1 System.

(2) BPA may change, upgrade or replace the Slice Computer Application as necessary to maintain functionality with BPA’s internal business processes and systems.

(3) BPA may determine how Operating Constraints are translated into Simulator Parameters for application within the Slice Computer Application, and in a manner that reflects in the Slice Computer Application the impacts of such Operating Constraints on the Tier 1 System.

5.12.2.4 Subject to the procedures set forth below and except as otherwise provided in section 5.12.2.3, BPA or any Slice Customer may propose changes to the Slice Computer Application. Any such proposal shall be made in writing and be provided to all members of SIG. The proposal shall state the change or changes proposed, the reasons for such proposed change or changes, the expected impacts or benefits, and the time frame of implementation.

5.12.2.5 Following receipt of written notice proposing a change to the SCA pursuant to section 5.12.2.4, the SIG chairperson shall convene the SIG to discuss such proposed change(s). The SIG shall decide, using its normal rules of procedure, the type of analysis (if any) that should be performed on the proposed change(s), and, as applicable, whether the proposed change(s) shall be further considered.

5.12.2.6 After an analysis (if any) is completed and distributed to the SIG members, the SIG chairperson shall convene a meeting of the SIG to discuss the proposed change(s), and any modifications thereto. If BPA elects to submit the proposed change(s) for public comment, the SIG chairperson will postpone any vote on the proposed change(s) for up to 45 calendar days to permit BPA to conduct a public comment process.

5.12.2.7 At a meeting of the SIG, the SIG chairperson shall put to a vote the question of whether the proposed change(s) should be recommended for implementation. If a Majority of the SIG members vote in favor of implementing the proposed change(s), then the proposed change(s) will be implemented by BPA unless:

(1) the BPA SIG member opposes the proposed change(s), in which case the proposed change(s) shall not be adopted, and the Slice Computer Application shall not be revised; or

(2) the BPA SIG member approves the proposed change(s), and one or more Slice Customer SIG members who voted against the implementation of the proposed change(s) request in writing to all SIG members, within 10 calendar days of the Majority vote approving such implementation, a second vote by all Slice Customer SIG members on the question of whether the proposed change(s) should be implemented. In this event, implementation shall be deferred until such second vote is taken. Such second vote shall be taken within 20 calendar days of the date of such Majority vote. If a Super Majority of the Slice Customer SIG members affirm the proposal under such second vote to implement the proposed change(s), then the proposed change(s) will be implemented. If a Super Majority of the Slice Customer SIG members does not affirm under such second vote to implement the proposed change(s), then the proposed change(s) will not be implemented.

5.13 **Creditworthiness**

«Customer Name» shall execute a Creditworthiness Agreement with BPA prior to or coincident with execution of this Agreement.

5.14 **True-Up Adjustment Charge**

5.14.1 **Interest Rate Applied to Slice True-Up Adjustment Charge and Time Periods During Which Interest is Applied**

BPA shall calculate a Slice True-Up Adjustment Charge annually pursuant to section 2.7.4 of the TRM.

5.14.1.1 **Determination of Interest Rate**

Interest shall be computed and added to the Slice True‑Up Adjustment Charge using the daily simple interest rate. The daily simple interest rate shall be the Prime Rate for Large Banks as reported in the Wall Street Journal or successor publication in the first issue of the Fiscal Year in which the Slice True-Up Adjustment Charge is calculated, divided by 365. The daily simple interest rate will be fixed on the first day of the Fiscal Year in which the Slice True-Up Adjustment Charge is calculated for the time periods specified under section 5.14.1.2.

5.14.1.2 **Time Periods During Which Interest is Applied**

Interest determined pursuant to section 5.14.1.1 shall be computed and added to the Slice True-Up Adjustment Charge for «Customer Name» for the time periods defined as follows:

(1) If the Slice True-Up Adjustment Charge is a credit to «Customer Name», then the period for interest computation will begin with the first day of the Fiscal Year in which the Slice True-Up Adjustment Charge is calculated, and will end on the due date of the bill that contains such credit.

(2) If the Slice True-Up Adjustment Charge is a charge payable to BPA, then the period for interest computation will begin with the first day of the Fiscal Year in which the Slice True-Up Adjustment Charge is calculated, and will end, with regard to the portion to be paid, on the due date for each of the three monthly bills in which the Slice True-Up Adjustment Charge appears. If «Customer Name» elects to pay the charge in one month, then «Customer Name» shall notify BPA in writing and the period for interest computation will begin with the first day of the Fiscal Year in which the Slice True-Up Adjustment Charge is calculated and will end on the due date for the next monthly bill issued following the day such Slice True-Up Adjustment Change is calculated.

(3) If a creditor chargecontained in a Slice True-Up Adjustment Charge is subject to dispute resolution pursuant toAttachment A of the TRM or has been reserved for final disposition in the next 7(i) Process, all pursuant to the TRM, and if there is an adjustment to such creditor chargeas a result thereof, then the period for the interest calculation shall beginon the first day of the Fiscal Year in which the disputed Slice True-Up Adjustment Charge was calculated and will end as specified in section 5.14.1.2(1) or (2) depending upon whether the adjustment is a credit or a charge.

**6. TIERED RATE METHODOLOGY*(07/21/09 Version)***

6.1 BPA has proposed the TRM to FERC for either confirmation and approval for a period of 20 years (through September 30, 2028) or a declaratory order that the TRM meets cost recovery standards. The then-effective TRM shall apply in accordance with its terms and shall govern BPA’s establishment, review and revision pursuant to section 7(i) of the Northwest Power Act, of all rates for power sold under this Agreement.

6.2 In the event that FERC approves the TRM for a period less than through September 30, 2028, or issues a declaratory order that the TRM meets cost recovery standards for a period less than through September 30, 2028, BPA shall, before the approved period of the TRM expires: (1) propose continuation of the TRM in a hearing conducted pursuant to section 7(i) of the Northwest Power Act or its successor; and then (2) resubmit the TRM to FERC for approval or declaratory affirmation of cost recovery standards through September 30, 2028.

6.3 The recitation of language from the TRM in this Agreement is not intended to incorporate such language into this Agreement. The TRM’s language may be revised, but only in accordance with the requirements of TRM sections 12 and 13. If language of the TRM is revised, then any such language recited in this Agreement shall be modified accordingly, and the Amendment process of section 24.1 shall not apply to any such modifications.

6.4 Any disputes over the meaning of the TRM or rates or whether the Administrator is correctly implementing the TRM or rates, including but not limited to matters of whether the Administrator is correctly interpreting, applying, and otherwise adhering or conforming to the TRM or rate, shall (1) be resolved pursuant to any applicable procedures set forth in the TRM; (2) if resolved by the Administrator as part of a proceeding under section 7(i) of the Northwest Power Act, be reviewable as part of the United States Court of Appeals for the Ninth Circuit’s review under section 9(e)(5) of the Northwest Power Act of the rates or rate matters determined in such section 7(i) proceeding (subject to any further review by the United States Supreme Court); and (3) if resolved by the Administrator outside such a section 7(i) proceeding, be reviewable as a final action by the United States Court of Appeals for the Ninth Circuit under section 9(e)(5) of the Northwest Power Act (subject to any further review by the United States Supreme Court). The remedies available to «Customer Name» through such judicial review shall be «Customer Name»’s sole and exclusive remedy for such disputes, except as provided in the next paragraph.

Any knowing failure of BPA to abide by the TRM, or any BPA repudiation of its obligation here and under the TRM to revise the TRM only in accordance with the TRM sections 12 and 13 procedures for revision, would be a matter of contract to be resolved as would any other claim of breach of contract under this Agreement. For purposes of this paragraph, when there is a dispute between BPA and «Customer Name» concerning what the TRM means or requires, a “knowing failure” shall occur only in the event the United States Court of Appeals for the Ninth Circuit or, upon further review, the United States Supreme Court rules against BPA on its position as to what the TRM means or requires and BPA thereafter persists in its prior position.

6.5 BPA shall not publish a Federal Register Notice regarding BPA rates or the TRM that prohibits, limits, or restricts «Customer Name»’s right to submit testimony or brief issues on rate matters regarding the meaning or implementation of the TRM or establishment of BPA rates pursuant to it, provided however for purposes of BPA’s conformance to this paragraph a “rate matter” shall not include budgetary and program level issues.

6.6 The TRM established by BPA as of the Effective Date includes, among other things, the following:

6.6.1 Definitions (from Definitions section of the TRM):

“**Contract High Water Mark**” or “**CHWM**” means the amount (expressed in Average Megawatts), computed for each customer in accordance with section 4 of the TRM. For each customer with a CHWM Contract, the CHWM is used to calculate each customer’s RHWM in the RHWM Process for each applicable Rate Period. The CHWM Contract specifies the CHWM for each customer.

“**Rate Period High Water Mark**” or “**RHWM**” means the amount, calculated by BPA in each RHWM Process (as defined in the TRM) pursuant to the formula in section 4.2.1 of the TRM and expressed in Average Megawatts, that BPA establishes for each customer based on the customer’s CHWM and the RHWM Tier 1 System Capability (as defined in the TRM). The maximum planned amount of power a customer may purchase under Tier 1 Rates each Fiscal Year of the Rate Period is equal to the RHWM for Load Following customers and the lesser of RHWM or Annual Net Requirement for Block and Slice/Block customers.

“**Contract Demand Quantity**” or “**CDQ**” means the monthly quantity of demand (expressed in kilowatts) included in each customer’s CHWM Contract that is subtracted from the Customer System Peak (as defined in the TRM) as part of the process of determining the customer’s Demand Charge Billing Determinant (as defined in the TRM), as calculated in accordance with section 5.3.5 of the TRM.

6.6.2 Rate Period High Water Mark Calculation (from section 4.2.1 of the TRM)***(07/21/09 Version)***:

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

|  |  |  |
| --- | --- | --- |
| *RHWM* = | *CHWM* | × *T1SC* |
| Σ*CHWM* |

where:

*RHWM* = Rate Period High Water Mark, expressed in Average Megawatts

*CHWM* = Contract High Water Mark

*ΣCHWM* = sum of all Publics’ (as defined in the TRM) Contract High Water Marks, including those for Publics without a CHWM Contract

*T1SC* = forecast RHWM Tier 1 System Capability (as defined in the TRM), averaged for the Rate Period

**7. HIGH WATER MARKS AND CONTRACT DEMAND QUANTITIES**

7.1 **Contract High Water Mark (CHWM)*(07/21/09 Version)***

BPA shall establish «Customer Name»’s CHWM in the manner defined in section 4.1 of the TRM. «Customer Name»’s CHWM and the circumstances under which it can change are stated in Exhibit B.

7.2 **Rate Period High Water Mark (RHWM)**

«Customer Name»’s CHWM shall also be «Customer Name»’s RHWM for FY 2012 and FY 2013. BPA shall establish «Customer Name»’s RHWM for the next Rate Period by September 30, 2012, and for subsequent Rate Periods by September 30 of each Forecast Year thereafter. BPA shall establish «Customer Name»’s RHWM in the manner defined in section 4.2 of the TRM that was current as of the Effective Date.

7.3 **Contract Demand Quantities (CDQs)**

BPA shall establish «Customer Name»’s CDQs pursuant to the TRM. «Customer Name»’s CDQs are listed in Exhibit B.

**8. APPLICABLE RATES*(08/15/08 Version)***

Purchases under this Agreement are subject to the following rate schedules, or their successors: Priority Firm Power (PF), New Resource Firm Power (NR), and Firm Power Products and Services (FPS), as applicable. Billing determinants for any purchases will be included in each rate schedule. Power purchases under this Agreement are subject to BPA’s Wholesale Power Rate Schedules, established in accordance with the TRM, as applicable, and its GRSPs (or their successors).

8.1 **Priority Firm Power (PF) Rates*(07/21/09 Version)***

BPA shall establish its PF power rates that apply to purchases under this Agreement pursuant to section 7 of the Northwest Power Act, and in accordance with the TRM. BPA shall establish PF power rates that include rate schedules for purchase amounts at Tier 1 Rates and purchase amounts at Tier 2 Rates. «Customer Name»’s purchases of: (1) Tier 1 Block Amounts, as specified in section 1 of Exhibit C, and (2) Critical Slice Amounts, and associated Slice Output, shall be at Tier 1 Rates. «Customer Name»’s purchases of Tier 2 Block Amounts, if any, shall be at the applicable Tier 2 Rates and in accordance with the terms of section 2 of Exhibit C.

8.2 **New Resource Firm Power (NR) Rate*(12/13/13 Version)***

Pursuant to sections 23.3.6 and 23.3.7, «Customer Name» agrees to serve NLSLs with Dedicated Resources or Consumer-Owned Resources listed in section 4 or 7.4, respectively, of Exhibit A.

8.3 **Firm Power Products and Services (FPS) Rate**

Services sold under this Agreement to «Customer Name» at the FPS rate, if any, are listed in Exhibit D.

8.4 **Additional Charges**

«Customer Name» may incur additional charges or penalty charges as established in the Wholesale Power Rate Schedules and GRSPs, including the Unauthorized Increase Charge and the Resource Shaping Charge, or their successors.

**9. ELECTIONS TO PURCHASE POWER PRICED AT TIER 2 RATES*(08/15/08 Version)***

9.1 **Determination and Notice to Serve Above-RHWM Load*(08/15/08 Version)***

«Customer Name» shall determine and provide notice, as described below, to BPA whether «Customer Name» shall serve its Above-RHWM Load that is greater than or equal to 8,760 megawatt‑hours with either: (1) Firm Requirements Power purchased from BPA at a Tier 2 Rate or rates, (2) Dedicated Resources, or (3) a specific combination of both (1) and (2). «Customer Name» shall make such determination and provide such notice as follows:

9.1.1 **Notice Deadlines and Purchase Periods**

Notice Deadlines and corresponding Purchase Periods are as follows:

| **Notice Deadline** |  | **Purchase Period** |
| --- | --- | --- |
| November 1, 2009 | For | FY 2012 – FY 2014 |
| September 30, 2011 | For | FY 2015 – FY 2019 |
| September 30, 2016 | For | FY 2020 – FY 2024 |
| September 30, 2021 | For | FY 2025 – FY 2028 |

9.1.2 **Elections to Purchase at Tier 2 Rates**

By each Notice Deadline, «Customer Name» shall elect in writing to purchase, or not to purchase, Firm Requirements Power at Tier 2 Rates for at least the upcoming Purchase Period. If «Customer Name» elects to purchase Firm Requirements Power at Tier 2 Rates, then «Customer Name» shall make such election pursuant to sections 2.2 through 2.4 of Exhibit C. BPA shall update Exhibit C to state «Customer Name»’s Tier 2 Rate purchase elections.

9.1.3 **Elections Not to Purchase at Tier 2 Rates**

If «Customer Name» elects under section 9.1.2 not to purchase Firm Requirements Power at Tier 2 Rates to serve Above-RHWM Load for a Purchase Period, BPA shall update section 2.1 of Exhibit C to indicate such election. Such election shall not eliminate any existing obligation that extends into the Purchase Period or beyond to purchase Firm Requirements Power at Tier 2 Rates.

9.1.4 **Failure to Make an Election**

If «Customer Name» makes no election by a Notice Deadline in section 9.1.1 for the corresponding Purchase Period, «Customer Name» shall be deemed to have elected not to purchase Firm Requirements Power at Tier 2 Rates to serve Above-RHWM Load, except for any existing obligation to purchase such power that extends into the Purchase Period or beyond.

9.2 **Tier 2 Rate Alternatives**

Subject to the requirements of this section 9 and those stated in Exhibit C, «Customer Name» shall have the right to purchase Firm Requirements Power at Tier 2 Vintage Rates and Tier 2 Short-Term Rates.

9.3 **Flat Block**

Amounts of Firm Requirements Power priced at Tier 2 Rates and purchased by «Customer Name» shall be equal in all hours of the year.

**10. TIER 2 REMARKETING AND RESOURCE REMOVAL*(10/17/08 Version)***

For the purpose of this section 10, any Dedicated Resources added to Exhibit A pursuant to section 3.5.3 or 3.5.7 do not have temporary resource removal or remarketing rights under this section. In addition, any Dedicated Resource amounts or amounts purchased at a Tier 2 Rate that would otherwise be made eligible for removal or remarketing due to the addition of resources under section 3.5.3 do not have temporary resource removal or remarketing rights under this section.

10.1 **Definition of Preliminary Net Requirement**

“Preliminary Net Requirement” means BPA’s forecast of «Customer Name»’s Net Requirement for each Fiscal Year prior to the removal of any resources in accordance with this section 10.

10.2 **Resource Removal and Remarketing of Tier 2 Purchase Amounts – First Fiscal Year of Each Rate Period**

If «Customer Name»’s Preliminary Net Requirement for the first Fiscal Year of an upcoming Rate Period is less than the sum of: (1) «Customer Name»’s RHWM, and (2) «Customer Name»’s Tier 2 Rate purchase amounts, as stated in Exhibit C, then Tier 2 remarketing and removal of New Resources shall apply for such year to the extent necessary to comply with section 10.4. If such remarketing and removal of New Resources applies, then by August 31 of the applicable Rate Case Year, «Customer Name» may notify BPA of the order and associated amounts of «Customer Name»’s Tier 2 Rate purchase amounts that BPA shall remarket and the New Resources «Customer Name» shall remove for the upcoming Fiscal Year. If compliance with the requirements of section 10.4 would cause «Customer Name» to remove part or all of any New Resource that «Customer Name» uses to fulfill a state or federal renewable resource standard or other comparable legal obligation, then «Customer Name» shall have the right to substitute its right to remove New Resources for the same amount of Existing Resources to the extent necessary to comply with section 10.4, provided that the hourly, monthly, and Diurnal amounts so removed shall be equal to the hourly, monthly, and Diurnal amounts provided by the New Resources that «Customer Name» would have otherwise been obligated to remove.

If «Customer Name» does not provide BPA with such timely notice in accordance with the preceding paragraph, then BPA shall determine the order and associated amounts of Tier 2 remarketing and removal of New Resources to the extent necessary to comply with section 10.4.

10.3 **Resource Removal and Remarketing of Tier 2 Purchase Amounts – Subsequent Fiscal Years of Each Rate Period**

For each subsequent Fiscal Year of each Rate Period, the process established in section 10.2 shall also apply, and after BPA remarkets all Tier 2 Rate purchase amounts and «Customer Name» removes all amounts of its New Resources, then Existing Resources are eligible for resource removal to the extent necessary to comply with section 10.5. By August 31 prior to the applicable Fiscal Year, «Customer Name» may notify BPA of the order and associated amounts of Existing Resource removal for the upcoming Fiscal Year.

If «Customer Name» does not provide BPA with such timely notice, then BPA shall determine the order of and associated amounts of Existing Resource removal for the upcoming Fiscal Year.

10.4 **Extent of Removal for the First Fiscal Year of Each Rate Period**

Tier 2 remarketing and resource removal pursuant to section 10.2 shall apply until:

(1) the remarketed Tier 2 Rate purchase amounts plus the removed New Resource amounts equal the amount by which «Customer Name»’s Tier 2 Rate purchase amounts plus its RHWM exceed its Preliminary Net Requirement, or

(2) all of «Customer Name»’s Tier 2 Rate purchase amounts are remarketed and all of its New Resources are removed.

10.5 **Extent of Removal for Subsequent Fiscal Years of Each Rate Period**

For each subsequent Fiscal Year of a Rate Period, Tier 2 remarketing and resource removal pursuant to section 10.3 shall apply as stated in section 10.4. In addition, if «Customer Name»’s Preliminary Net Requirement for the applicable subsequent Fiscal Year of a Rate Period is lower than «Customer Name»’s Preliminary Net Requirement for the first Fiscal Year of the same Rate Period, then resource removal shall apply to «Customer Name»’s Existing Resources. As long as «Customer Name» has Existing Resources to remove, the amount of such removal shall equal the lesser of: (1) the remaining amount that «Customer Name»’s RHWM exceeds its Preliminary Net Requirement, or (2) the difference between «Customer Name»’s Preliminary Net Requirement for the first Fiscal Year and «Customer Name»’s Preliminary Net Requirement for the applicable subsequent Fiscal Year of the Rate Period. If «Customer Name»’s Preliminary Net Requirement for the applicable subsequent Fiscal Year of a Rate Period is greater than or equal to «Customer Name»’s Preliminary Net Requirement for the first Fiscal Year of the same Rate Period, then resource removal shall not apply to «Customer Name»’s Existing Resources.

10.6 **Partial Resource Removal**

When only a portion of a Specified Resource or Unspecified Resource Amounts is being removed pursuant to section 10.2 or 10.3, such resources shall be removed proportionally to maintain the same annual shape for the resource that «Customer Name» has established in Exhibit A.

10.7 **Rounding of Tier 2 Rate Purchase Amounts**

To the extent remarketing of Tier 2 Rate purchase amounts results in an amount less than a whole Average Megawatt, BPA shall round such amount to a whole Average Megawatt.

10.8 **Remarketing of Power*(07/21/09 Version)***

Consistent with rates established under the TRM, «Customer Name» shall be subject to applicable charges or credits associated with BPA’s remarketing of purchase amounts of Firm Requirements Power at Tier 2 Rates. Except as specified in section 10.9, «Customer Name» shall be responsible for remarketing of any amounts of its Dedicated Resources, Specified or Unspecified, that are removed or reduced pursuant to this Agreement.

10.9 **Removal of Resources Taking DFS**

The following shall apply for any Dedicated Resources: (1) for which «Customer Name» is purchasing DFS under this Agreement, and (2) that are partially or entirely removed in accordance with sections 10.2 or 10.3.

10.9.1 «Customer Name» shall continue to supply the entire amount of any such resources to BPA consistent with applicable provisions stated in Exhibit D.

10.9.2 BPA shall remarket the amounts of any such resources that are removed pursuant to sections 10.2 or 10.3 in the same manner BPA remarkets Tier 2 Rate purchase amounts in section 10.8. BPA shall continue to provide DFS in accordance with applicable provisions in Exhibit D to any amounts of such resources that remain after resource removal.

**11. RIGHT TO CHANGE PURCHASE OBLIGATION*(09/08/08 Version)***

11.1 **One-Time Right to Change Purchase Obligation**

Subject to this section 11.1, «Customer Name» shall have a one-time right to change its purchase obligation, identified in section 3, to another purchase obligation available from BPA, including Load Following or Block. If «Customer Name» chooses to change its purchase obligation under this section 11.1, then «Customer Name» shall first provide notice to BPA of its intent and then confirm its decision as established below. Any elections of Tier 2 Rate alternatives, Dedicated Resource additions, or other notices given to BPA under this Agreement shall continue to be applicable under the new purchase obligation, provided that BPA may update such terms and conditions consistent with the then current terms of the new purchase obligation, and additional costs may apply for service under the new purchase obligation as described in section 11.1.3.

11.1.1 **Notice to Change**

By May 31, 2016, «Customer Name» may provide written notice to BPA that it is requesting to change its purchase obligation effective October 1, 2019, subject to confirmation described in section 11.1.4. «Customer Name»’s notice shall state the type of service requested.

11.1.2 **Limitations Due to Peak Load Increase**

By July 31, 2016, BPA shall assess the aggregate effect of all requests to change purchase obligations on BPA’s forecast of its total monthly firm coincident peak loads in the first year the changes become effective. If the increase in this peak load in any one month exceeds 300 megawatts, then BPA may, after consulting with «Customer Name» and other customers with a CHWM Contract, do one of the following to reduce the increase in such peak load to 300 megawatts: (1) deny «Customer Name»’s request to change its purchase obligation, or (2) approve «Customer Name»’s request but defer the date on which «Customer Name»’s new purchase obligation change becomes effective.

11.1.3 **Charge to Change Purchase Obligation**

In addition to the limitations established in section 11.1.2, «Customer Name» may be subject to charges, in addition to the rates for the new service, as a result of changing its purchase obligation pursuant to this section 11.1. Such additional charges shall recover all additional costs that: (1) will be incurred by BPA to serve «Customer Name» under its new purchase obligation compared to its existing purchase obligation, and (2) would otherwise result in a rate impact on all other customers receiving service under a CHWM Contract. If «Customer Name» makes a request to change its purchase obligation pursuant to this section 11.1, then by August 31, 2016, BPA shall determine and present «Customer Name» with any such additional charges. BPA shall not be required to make a payment to «Customer Name» as a result of «Customer Name» changing its purchase obligation.

11.1.4 **Change Confirmation**

Within 30 days of BPA’s presentation to «Customer Name» of the additional charges determined in section 11.1.3, «Customer Name» shall provide BPA with written notice whether it wishes to proceed with its request to change its purchase obligation. If «Customer Name» does not provide BPA with such confirmation, then «Customer Name»’s existing purchase obligation identified in section 3 shall continue to apply.

11.1.5 **Amendment to Reflect New Purchase Obligation**

Following «Customer Name»’s confirmation of its decision to change its purchase obligation, the Parties shall amend this Agreement to replace the terms of «Customer Name»’s current purchase obligation with the terms of the new purchase obligation. The amended Agreement shall be effective no later than October 1, 2019.

11.2 **Additional Rights to Change Purchase Obligation**

In addition to the opportunity to change its purchase obligation provided in section 11.1, «Customer Name» may elect to change its purchase obligation to that stated in section 11.2.4 after the occurrence of any of the events listed in sections 11.2.1 through 11.2.3.

11.2.1 **Simulator Fails Simulator Performance Test**

If, as of October 31, 2010, BPA has failed to perform the Simulator Performance Test, or the Simulator has failed one or more of the four tests that comprise the Simulator Performance Test, then «Customer Name» may change its purchase obligation to that stated in 11.2.4 by providing written notice to BPA in accordance with section 20. Such written notice must be received by BPA no later than January 15, 2011. Unless the Parties agree otherwise, the effective date of the change in purchase obligation to the contingent contract amendment shall be July 1, 2011.

11.2.2 **No Slice Output Energy Available on a Forecasted Basis**

«Customer Name» may change its purchase obligation to that stated in 11.2.4 by providing written notice in accordance with section 20 not later than 60 days after BPA forecasts, prior to the first day of any Fiscal Year, that there will be no Slice Output Energy available for delivery to «Customer Name» during such Fiscal Year and the immediately following Fiscal Year, or in the event there is no Slice Output Energyavailable to «Customer Name» during any two consecutive Fiscal Years. Unless the Parties agree otherwise, the effective date of the contingent contract amendment shall be October 1 of the Fiscal Year in which BPA has forecasted that there will be no Slice Output Energy available for delivery to «Customer Name».

11.2.3 **Changes to Transmission Scheduling Practices**

«Customer Name» may change its purchase obligation to that stated in section 11.2.4 by providing written notice to BPA in accordance with section 20 not later than 60 calendar days after BPA, or its successor, adopts standards, rules, practices or procedures, that require «Customer Name» to schedule hourly energy based on Scheduling Points of Receipt for each of the Tier 1 System Resources from which «Customer Name» may receive Slice Output Energy under this Agreement. Unless the Parties agree otherwise, the effective date of the contingent contract amendment shall be October 1 of the Fiscal Year following the date BPA adopts such policy.

11.2.4 **Alternative Requirements Power Purchase Obligation**

Drafter’s Note: Insert the purchase obligation that the Slice/Block customer wants to convert to if it changes its purchase obligation under 11.2.1 through 11.2.2 above.

«Customer Name» selects the «Load Following Power Purchase Obligation or Block Power Purchase ObligationWithout Shaping Capacity or Block Power Purchase Obligation With Shaping Capacity» as the purchase obligation that it will purchase in the event «Customer Name» changes its purchase obligation under the events specified in sections 11.2.1 through 11.2.3. Not later than the deadlines shown in sections 11.2.1 through 11.2.3, the Parties shall execute a contract amendment for the selected purchase obligation. Such contract amendment shall contain the same terms and conditions as this Agreement, including any elections or choices made under this Agreement that are applicable to the new purchase obligation selected by «Customer Name».

11.2.5 **Waiver of Certain Claims for Damages**

In the event that «Customer Name» changes its purchase obligation in accordance with this section 11, «Customer Name» agrees not to seek and hereby waives the right, if any such right exists, to pursue any claim for damages from BPA due to any such change. This waiver is limited to any claims «Customer Name» may have arising from changes to «Customer Name»’s purchase obligation under this section 11. This waiver has no application to, and «Customer Name» hereby expressly preserves, any claims for damages arising under any other section of this Agreement.

**12. BILLING CREDITS AND RESIDENTIAL EXCHANGE*(08/15/08 Version)***

12.1 **Billing Credits**

If «Customer Name» develops a Generating Resource to serve its loads, then «Customer Name» agrees that it shall forego any request for, and BPA is not obligated to include, billing credits, as defined in section 6(h) of the Northwest Power Act, on «Customer Name»’s bills under this Agreement. This section does not apply to any billing credit contracts in effect as of the Effective Date.

12.2 **Agreement to Limit Exchange Costs of Existing Resources**

«Customer Name» agrees it will not seek and shall not receive residential exchange benefits pursuant to section 5(c) of the Northwest Power Act other than pursuant to Section IV(G) of BPA’s 2008 Average System Cost Methodology or its successor. «Customer Name» recognizes that the quantity of residential load will be determined in a subsequent policy or rate determination. «Customer Name»’s agreement in this section 12.2 is a material precondition to BPA offering and executing this Agreement.

**13. SCHEDULING*(08/15/08 Version)***

«Customer Name» shall schedule power in accordance with Exhibit F.

**14. DELIVERY*(08/15/08 Version)***

14.1 **Definitions**

14.1.1 “Integrated Network Segment” means those facilities of the Federal Columbia River Transmission System that are required for the delivery of bulk power supplies, the costs for which are recovered through generally applicable transmission rates, and that are identified as facilities in the Integrated Network Segment, or its successor, in the BPA segmentation study for the applicable transmission rate period as determined in a hearing establishing or revising BPA’s transmission rates pursuant to section 7(i) of the Northwest Power Act.

14.1.2 “Primary Points of Receipt” means the points on the Pacific Northwest transmission system where Firm Requirements Power is forecasted to be made available by Power Services to «Customer Name» for purposes of obtaining a long-term firm transmission contract.

*Reviewer’s Note: An amendment to the following Scheduling POR definition was offered to Slice/Block customers in two different amendments in 2012; Clark, Okanogan, Seattle and Snohomish declined to accept the offer. Their contracts read: ““Scheduling Points of Receipt” means the points on the Pacific Northwest transmission system where Slice Output Energy is made available by Power Services to «Customer Name» for purposes of transmission scheduling.” After Fall 2012, any new Slice/Block customers should receive the definition below. Because the edit to the definition was contentious, the amendment (dated 09/14/12) that some customers signed to change the definition did include a “right to terminate”.*

14.1.3 “Scheduling Points of Receipt”***(09/14/12 Version)*** means the points on the Pacific Northwest transmission system where Slice Output Energy and Block Product are made available by Power Services to «Customer Name» for purposes of transmission scheduling.

14.2 **Transmission Service**

*Option 1: Include the following for customers who are NOT served by transfer:*

14.2.1 «Customer Name» is responsible for delivery of power from the Scheduling Points of Receipt.

*End option 1*

*Option 2: Include the following for customers who ARE served by transfer.*

14.2.1 «Customer Name» is responsible for delivery of power from the Scheduling Points of Receipt, except as provided under section 14.6.

*End option 2*

14.2.2 «Customer Name» shall provide at least 60 days’ notice to Power Services prior to changing Balancing Authority Areas.

14.2.3 At «Customer Name»’s request, Power Services shall provide «Customer Name» with Primary Points of Receipt and other information needed to enable «Customer Name» to obtain long-term firm transmission for delivery of power sold under this Agreement. If required by Transmission Services for purposes of transmission scheduling, then Power Services shall provide «Customer Name» with Scheduling Points of Receipt. Power Services has the right to provide power to «Customer Name» at Scheduling Points of Receipt that are different than the Primary Points of Receipt. If BPA does provide power to «Customer Name» at Scheduling Points of Receipt that are different than the Primary Points of Receipt, then BPA shall reimburse «Customer Name» for any incremental, direct, non-administrative costs incurred by «Customer Name» to comply with delivering Firm Requirements Power from such a Scheduling Point of Receipt to «Customer Name»’s load if the following conditions, as outlined in (1) or (2) below, have been met:

(1) If «Customer Name» has long-term Point to Point (PTP) transmission service (as defined in BPA’s Open Access Transmission Tariff) for delivery of Firm Requirements Power to its load:

(A) «Customer Name» has requested long-term firm transmission service to deliver its Firm Requirements Power using the Primary Points of Receipt and other information provided by Power Services; and

(B) «Customer Name» has submitted a request to redirect its long-term firm PTP transmission service to deliver Firm Requirements Power from the Scheduling Point of Receipt on a firm basis, but that request was not granted; and

(C) «Customer Name»’s transmission schedule was curtailed due to non-firm status under PTP transmission service or «Customer Name» can provide proof of the reimbursable costs incurred to replace the curtailed schedule.

(2) If «Customer Name» has long-term Network Integration Transmission Service (as defined in BPA’s Open Access Transmission Tariff) for delivery of Firm Requirements Power to its load:

(A) «Customer Name» has requested long-term firm transmission service to deliver its Firm Requirements Power using the Primary Points of Receipt and other information provided by Power Services; and

(B) «Customer Name»’s transmission schedule was curtailed due to non-firm status under its secondary service status and «Customer Name» can provide proof of the reimbursable costs incurred to replace the curtailed schedule.

14.3 **Liability for Delivery**

«Customer Name» waives any claims against BPA arising under this Agreement for non-delivery of power to any points beyond the applicable Scheduling Points of Receipt, except for reimbursement of costs as described in section 14.2.3. BPA shall not be liable under this Agreement for any third-party claims related to the delivery of power after it leaves the Scheduling Points of Receipt. Neither Party shall be liable under this Agreement to the other Party for damage that results from any sudden, unexpected, changed, or abnormal electrical condition occurring in or on any electric system, regardless of ownership. These limitations on liability apply regardless of whether or not this Agreement provides for Transfer Service.

*Option 1:**Include the following if customer purchases the Slice/Block product and is NOT served by Transfer Service.*

14.4 **Real Power Losses *(09/08/08 Version)***

BPA is responsible for the real power losses necessary to deliver Tier 1 Block Amounts and Tier 2 Block Amounts to «Customer Name»’s PODs listed in Exhibit E.

«Customer Name» shall be responsible for all real power losses associated with the delivery of its Slice Output Energy.

*End Option 1*

*Option 2:**Include the following if customer purchases the Slice/Block product and IS served by Transfer Service.*

14.4 **Real Power Losses *(09/08/08 Version)***

BPA is responsible for the real power losses necessary to deliver Tier 1 Block Amounts and Tier 2 Block Amounts to «Customer Name»’s PODs listed in Exhibit E.

«Customer Name» shall be responsible for all real power losses associated with the delivery of its Slice Output Energy except BPA shall be responsible for real power losses associated with the delivery of Slice Output Energy across the Third Party Transmission Provider’s system to «Customer Name»’s PODs listed in Exhibit E.

*End Option 2*

14.5 **Metering Losses**

BPA shall adjust measured amounts of power to account for losses, if any, that occur between «Customer Name»’s PODs and the respective POMs, as specified in Exhibit E.

*Option: Include section 14.6 for customers served by Transfer Service. (\*Note: section 14.6 is over 2 pages long)*

14.6 **Delivery by Transfer**

Subject to the limitations in this section, BPA agrees to acquire and pay for Transfer Service to deliver Firm Requirements Power and Surplus Firm Power to «Customer Name»’s PODs, as listed in Exhibit E, in an amount not to exceed «Customer Name»’s Total Retail Load on an hourly basis. *[Drafter’s Note: Include the following sentence for all Transfer Service customers* ***with*** *ARTS contracts and add the ARTS contract number. Delete the following sentence for* *Transfer Service customers* ***without*** *ARTS contracts:*In the event that a conflict exists between the provisions of this Agreement and the Agreement Regarding Transfer Service (ARTS) Contract No. 05EO‑«#####», this Agreement shall govern.*]*

14.6.1 **Ancillary Services*(07/21/09 Version)***

BPA shall acquire and pay for Ancillary Services, as defined in BPA’s Open Access Transmission Tariff, needed for «Customer Name»’s Transfer Service subject to the following limitations:

(1) «Customer Name» shall reimburse BPA for load regulation service or its replacement at the applicable Transmission Services rate, or its successor.

(2) BPA shall pay for the Ancillary Service(s) charged by a Third-Party Transmission Provider to deliver Firm Requirements Power to the PODs listed in Exhibit E, only if «Customer Name» is also purchasing such Ancillary Service(s) from Transmission Services to deliver Firm Requirements Power to the PODs in Exhibit E. If at any time «Customer Name» is not purchasing Ancillary Service(s) from Transmission Services to deliver Firm Requirements Power to one or more of the PODs listed in Exhibit E, then «Customer Name» shall pay Power Services for the Ancillary Service(s) charges to deliver power to such POD(s), at the applicable or equivalent Transmission Services Ancillary Services rate, in accordance with any applicable BPA Wholesale Power Rate Schedules or GRSPs.

14.6.2 **Low Voltage Delivery**

Low Voltage Delivery is service over the Low Voltage Segment by any Third Party Transmission Provider’s system. “Low Voltage Segment” means the facilities of a Third-Party Transmission Provider that are equivalent to the voltage level of the facilities excluded by Transmission Services from the Integrated Network Segment. For Low Voltage Delivery, «Customer Name» shall pay Power Services the applicable General Transfer Agreement (GTA) Delivery Charge, or its successor rate, consistent with the applicable BPA Wholesale Power Rate Schedules and GRSPs. The Parties shall list «Customer Name»’s PODs that require Low Voltage Delivery in Exhibit E.

14.6.3 **Direct Assignment Costs**

«Customer Name» shall pay BPA for all directly assigned costs, including but not limited to: facility or system studies costs, construction costs, upgrade costs, and expansion costs, or other capital costs for facilities directly associated with service to any «Customer Name» PODs assessed by the Third Party Transmission Provider to BPA. Such costs shall be consistent with Transmission Services’ “Guidelines for Direct Assignment Facilities,” and the “Final Supplemental Guidelines for Direct Assignment of Facilities Costs Incurred Under Transfer Agreements” included in BPA’s Long Term Regional Dialogue Final Policy, July 2007, or any other revision of that policy, or as established in a BPA 7(i) Process.

14.6.4 **Penalties Assessed By the Third Party Transmission Provider**

BPA has the right to directly pass through to «Customer Name» any penalty charges assessed by the Third Party Transmission Provider that are associated with BPA’s acquisition of Transfer Service to the PODs identified in Exhibit E. Such charges may include, but are not limited to, power factor penalties or excessive energy imbalance penalties.

14.6.5 **Removal of PODs**

BPA may terminate deliveries at a POD if «Customer Name» consents to the termination or if the Parties determine that «Customer Name»’s requirements for power at such point may be adequately supplied under reasonable conditions and circumstances at different POD(s): (1) directly from the Federal Columbia River Transmission System, (2) indirectly from the facilities of another transmission owner/operator, or (3) both.

14.6.6 **Annexed Loads**

BPA shall arrange and pay for Transfer Service for federal power deliveries to serve «Customer Name»’s Annexed Load. «Customer Name» shall provide BPA written notice of any Annexed Load acquired greater than one Average Megawatt no later than 90 days prior to the commencement of service to the Annexed Load. However, BPA’s obligation to provide Transfer Service to «Customer Name»’s Annexed Load shall be limited by the megawatt caps and process for Annexed Load and new public customers set forth in BPA’s Long Term Regional Dialogue Final Policy, July 2007, or any revision of that policy.

*Drafter’s Note: Do not delete text “Governing Law and Dispute Resolution” in section reference in this section 14.6.7*

14.6.7 **Non-Federal Deliveries**

If «Customer Name» has a non-federal resource or is acquiring a non-federal resource necessary to serve its Above-RHWM Load, and «Customer Name» has requested that BPA assist in the acquisition of transmission services for such resource, then BPA shall offer «Customer Name» a separate agreement for specific terms and conditions under which BPA will obtain Transfer Service on a Third Party Transmission Provider’s system for delivery of that resource to «Customer Name»’s system. The terms of the agreement BPA offers to «Customer Name» shall not be subject to section 22, Governing Law and Dispute Resolution. BPA shall develop the agreement consistent with the principles of service specified in Exhibit G.

*END Option 14.6 for Transfer Service Customers.*

*Drafter’s Note: Include section 14.7 for customers served by Transfer Service with load interconnected to multiple transmission systems (This section is 2 pages long):*

14.7 **Delivery of New Resources Over Multiple Transmission Systems**

14.7.1 **Determination of «Customer Name»’s Baseline Load Percentages*(05/14/14 Version)***

If «Customer Name» is applying New Resources to serve its Above-RHWM Load and its load is located on multiple transmission systems, then BPA shall by October 31 of every Rate Case Year through the term of this Agreement:

(1) calculate «Customer Name»’s baseline delivery percentages and amounts for the upcoming Rate Period. Such percentages and amounts shall be based on BPA’s forecast Total Retail Load for «Customer Name» for use in the applicable RHWM process, and shall serve as the basis from which BPA calculates any cost shifts, pursuant to section 14.7.3 below. BPA shall calculate «Customer Name»’s load growth on each applicable transmission system by comparing forecast Total Retail Load on each applicable transmission system to Total Retail Load in 2010 on each applicable transmission system. BPA shall then calculate «Customer Name»’s baseline delivery percentages by comparing «Customer Name»’s load growth on each applicable transmission system and «Customer Name»’s load growth on all transmission systems. BPA shall then calculate «Customer Name»’s baseline delivery amounts by applying «Customer Name»’s baseline delivery percentage for each transmission system to «Customer Name»’s Above-RHWM Load; and

(2) provide «Customer Name» with written notice of its baseline delivery percentages and amounts.

14.7.2 **De Minimis Load**

If, when BPA calculates «Customer Name»’s baseline delivery percentages and amounts, «Customer Name»’s Above-RHWM Load served over a transmission system is forecasted to be less than 8,760 megawatt‑hours, then «Customer Name»’s delivery amount for that system shall be zero, and the load deemed de minimis shall be added to the delivery amount of the other transmission system(s).

14.7.3 **Delivery of New Resources at Percentages Different than Baseline**

14.7.3.1 **Notification of Proposed Delivery Option*(05/14/14 Version)***

«Customer Name» may notify BPA by November 15 of every Rate Case Year through the term of this Agreement, of «Customer Name»’s proposed option for delivering its New Resources and non-federal resources which «Customer Name» is seeking to include as a New Resource to its Above-RHWM Loads. In such notice, «Customer Name» shall provide BPA a table that includes the monthly amounts of each New Resource and non-federal resource which «Customer Name» is seeking to include as a New Resource, in megawatt‑hours, and that it proposes to deliver over each transmission system to its load(s) for the upcoming Rate Period. «Customer Name»’s proposed delivery amount over a transmission system shall be no more than the minimum forecast load served over such transmission system during any hour of the upcoming Rate Period.

If «Customer Name» does not notify BPA with a proposed option for delivering its New Resources and non-federal resources to its Above-RHWM Loads as described above, then BPA shall revise Exhibit D to include «Customer Name»’s baseline delivery percentages and amounts, including any applicable de minimis amounts, by December 31 of every Rate Case Year.

14.7.3.2 **Cost Shift Calculations*(05/14/14 Version)***

If BPA receives notification from «Customer Name» with its proposed delivery amounts, BPA shall compare the baseline delivery amounts and «Customer Name»’s proposed delivery amounts to calculate the costs BPA determines would be shifted between the «Customer Name» and Tier 1 Rates by such a proposal.

In its calculation of «Customer Name»’s cost shifts, BPA shall:

(1) include any reasonable cost shifts from «Customer Name» to Tier 1 Rates;

(2) include any reasonable benefits of «Customer Name»’s delivery proposal that offset costs to BPA; and

(3) not include any costs to «Customer Name» attributable to future BPA resource acquisition decisions.

Such categories of costs shall include, but are not limited to, losses, risk of increased curtailments, ancillary services, and increased costs of delivering remote BPA resources that BPA is acquiring at the time that «Customer Name»’s non-federal resource is first included in «Customer Name»’s delivery option. Once BPA, in consultation with «Customer Name», determines the categories of costs for each New Resource and non-federal resource which «Customer Name» is seeking to include as a New Resource that will apply in BPA’s cost shift calculation, BPA shall not add any additional categories of costs into its calculations as long as the resource remains committed to serve load interconnected to the same transmission system.

14.7.3.3 **Notification of Costs*(05/14/14 Version)***

BPA shall notify «Customer Name» of such costs by December 15 of every Rate Case Year through the term of this Agreement.

If, after «Customer Name»’s review of such costs, the Parties agree to mutually acceptable delivery options that are different than the baseline delivery percentages, the Parties shall, by December 31 of every Rate Case Year, revise Exhibit D to include the details of such delivery options.

After the December 31 revision each Rate Case Year, if there are any changes to «Customer Name»’s New Resources, significant changes to load, significant changes to transmission conditions, or other changes that directly affect the cost shift categories since the previous cost shift calculation, then the Parties shall revise Exhibit D to reflect such changes by September 30 of every Rate Case Year through the term of this Agreement.

14.7.4 **Delivery of New Resources at the Baseline Delivery Percentages**

Unless the Parties have agreed otherwise pursuant to section 14.7.3 above, «Customer Name» shall apply its New Resources to serve its Above-RHWM Load consistent with the baseline delivery percentages listed in Exhibit D.

*End Option 14.7 Proportional Scheduling*

**15. METERING*(09/08/08 Version)***

*Option 1: Include the following language for customers that do NOT have meters on* ***all*** *PODs:*

15.1 **Requirements for Meters**

«Customer Name»’s purchase commitment in section 3 does not require load meters for billing and payment. For purposes of forecasting and planning, BPA may require «Customer Name» to provide BPA some or all of «Customer Name»’s load data, as required by section 17.5.

If, during the term of this Agreement, BPA determines that the load data BPA has requested and «Customer Name» has provided to BPA is not adequate or verifiable, or if BPA determines that either load or resource meter data is needed to administer this Agreement, then «Customer Name» shall allow BPA to install BPA owned meters, at BPA’s expense, to collect such data. For all existing meters listed in Exhibit E, used by BPA for forecasting and planning, and for new meters, the following requirements shall apply.

*End Option 1*

*Option 2: Include the following language for customers that currently have load meters accessible to BPA on all of the customer’s load:*

15.1 **Requirements for Meters**

BPA shall access «Customer Name»’s load meter data for purposes of forecasting and planning. The following requirements shall apply to all meters listed in Exhibit E.

*End Option 2*

15.1.1 **BPA Owned Meters**

At BPA’s expense, BPA shall operate, maintain, and replace, as necessary all metering equipment owned by BPA that is needed to forecast and plan for «Customer Name»’s power needs under this Agreement. «Customer Name» authorizes BPA to maintain and replace any BPA owned meter on «Customer Name» facilities. With reasonable notice from BPA and for the purpose of implementing this provision, «Customer Name» shall grant BPA reasonable physical access to BPA owned meters at BPA’s request.

If, at any time, BPA or «Customer Name» determines that a BPA owned meter is defective or inaccurate, then BPA shall adjust, repair, or replace the meter to provide accurate metering as soon as practical.

BPA shall give «Customer Name» access to meter data from the BPA owned meters listed in Exhibit E.

15.1.2 **Non-BPA Owned Meters**

15.1.2.1 **Customer Owned Meters**

For all «Customer Name» owned metering equipment that is needed by BPA to forecast and plan for «Customer Name»’s power needs under this Agreement, «Customer Name» shall give BPA direct, electronic access to meter data from all «Customer Name» owned meters that are capable of being accessed electronically. For the purpose of inspection, «Customer Name» shall grant BPA reasonable physical access to «Customer Name»’s meters at BPA’s request.

«Customer Name» shall operate, maintain, and replace, as necessary at «Customer Name» expense, all «Customer Name» owned metering equipment.

If, at any time, BPA or «Customer Name» determines that a «Customer Name» owned meter listed in Exhibit E is defective or inaccurate, then «Customer Name» shall adjust, repair, or replace the meter, or shall make commercially reasonable efforts to arrange for the completion of such actions, to provide accurate metering as soon as practical. BPA shall have the right to witness any meter tests conducted by «Customer Name» on «Customer Name» owned meters listed in Exhibit E and, with reasonable advance notice, BPA may conduct tests on such meters. «Customer Name» shall have the right to witness any meter tests conducted by BPA.

15.1.2.2 **Non-BPA Owned Meters Not Owned by «Customer Name»**

For non-BPA owned meters not owned by «Customer Name» needed by BPA to forecast and plan, «Customer Name» shall make commercially reasonable efforts to arrange for such meters to be operated, maintained and replaced, as necessary.

If, at any time, it is determined that a non-BPA owned meter not owned by «Customer Name» listed in Exhibit E is defective or inaccurate, then «Customer Name» shall make commercially reasonable efforts to arrange to adjust, repair, or replace the meter, to provide accurate metering as soon as practical. To the extent possible, BPA may witness any meter tests on non-BPA owned meters not owned by «Customer Name» listed in Exhibit E and, with reasonable advance notice, BPA may conduct tests on such meters. «Customer Name» shall have the right to witness any meter tests conducted by BPA.

15.1.2.3 **Non-BPA Owned Meters Owned by a Third-Party Transmission Provider**

This section 15.1.2 shall not apply to non-BPA owned meters that are owned by a Third-Party Transmission Provider with which BPA holds a transmission contract for service to «Customer Name» load. In these cases the metering arrangements shall be between BPA and the Third-Party Transmission Provider.

15.1.3 **New Meters**

A separate agreement addressing the location, cost responsibility, access, maintenance, testing, and liability of the Parties with respect to new meters shall be between «Customer Name» and Transmission Services.

All new and replaced meters installed by BPA or «Customer Name» shall meet the American National Standard Institute standards, including, but not limited to, C12.20, Electricity Meters‑‑0.2 and 0.5 Accuracy Classes and the Institute of Electrical and Electronics Engineers, Inc. standard C57.13, Requirements for Instrument Transformers, or their successors. Any new and replaced meters shall be able to record meter data hourly, store data for a minimum of 45 days, and be accessed electronically.

15.2 **Metering an NLSL**

Any loads that are monitored by BPA for an NLSL determination and any NLSLs shall be metered pursuant to section 23.3.4.

15.3 **Metering Exhibit**

«Customer Name» shall provide meter data specified in section 17.3 and shall notify BPA of any changes to PODs, POMs, Interchange Points and related information for which it is responsible. BPA shall list «Customer Name»’s PODs and meters in Exhibit E.

**16. BILLING AND PAYMENT*(08/15/08 Version)***

16.1 **Billing**

BPA shall bill «Customer Name» monthly for all products and services provided during the preceding month(s). BPA may send «Customer Name» an estimated bill followed by a final bill. The Issue Date is the date BPA electronically sends the bill to «Customer Name». If electronic transmittal of the entire bill is not practical, then BPA shall transmit a summary electronically, and send the entire bill by United States mail.

16.2 **Payment**

«Customer Name» shall pay all bills electronically in accordance with instructions on the bill. Payment of all bills, whether estimated or final, must be received by the 20th day after the Issue Date of the bill (Due Date). If the 20th day is a Saturday, Sunday, or federal holiday, then the Due Date is the next Business Day.

If «Customer Name» has made payment on an estimated bill then:

(1) if the amount of the final bill exceeds the amount of the estimated bill, then «Customer Name» shall pay BPA the difference between the estimated bill and final bill by the final bill’s Due Date; or

(2) if the amount of the final bill is less than the amount of the estimated bill, then BPA shall pay «Customer Name» the difference between the estimated bill and final bill by the 20th day after the final bill’s Issue Date. If the 20th day is a Saturday, Sunday, or federal holiday, BPA shall pay the difference by the next Business Day.

16.3 **Late Payments**

After the Due Date, a late payment charge equal to the higher of:

(1) the Prime Rate (as reported in the Wall Street Journal or successor publication in the first issue published during the month in which payment was due) plus four percent, divided by 365; or

(2) the Prime Rate times 1.5, divided by 365;

shall be applied each day to any unpaid balance.

16.4 **Termination**

If «Customer Name» has not paid its bill in full by the Due Date, it shall have 45 days to cure its nonpayment by making payment in full. If «Customer Name» does not provide payment within three Business Days after receipt of an additional written notice from BPA, and BPA determines in its sole discretion that «Customer Name» is unable to make the payments owed, then BPA may terminate this Agreement. Written notices sent under this section 16.4 must comply with section 20.

16.5 **Disputed Bills**

16.5.1 If «Customer Name» disputes any portion of a charge or credit on «Customer Name»’s estimated or final bills, «Customer Name» shall provide written notice to BPA with a copy of the bill noting the disputed amounts. Notwithstanding whether any portion of the bill is in dispute, «Customer Name» shall pay the entire bill by the Due Date. This section 16.5.1 does not allow «Customer Name» to challenge the validity of any BPA rate.

16.5.2 Unpaid amounts on a bill (including both disputed and undisputed amounts) are subject to the late payment charges provided above. Notice of a disputed charge on a bill does not constitute BPA’s agreement that a valid claim under contract law has been stated.

16.5.3 If the Parties agree, or if after a final determination of a dispute pursuant to section 22, «Customer Name» is entitled to a refund of any portion of the disputed amount, then BPA shall make such refund with simple interest computed from the date of receipt of the disputed payment to the date the refund is made. The daily interest rate shall equal the Prime Rate (as reported in the Wall Street Journal or successor publication in the first issue published during the month in which payment was due) divided by 365.

**17. INFORMATION EXCHANGE AND CONFIDENTIALITY*(08/15/08 Version)***

17.1 **General Requirements**

Upon request, each Party shall provide the other Party with any information that is necessary to administer this Agreement and to forecast «Customer Name»’s Total Retail Load, forecast BPA system load, comply with NERC reliability standards, prepare bills, resolve billing disputes, administer Transfer Service, and otherwise implement this Agreement. For example, this obligation includes transmission and power scheduling information and load and resource metering information (such as one-line diagrams, metering diagrams, loss factors, etc.). In addition, «Customer Name» shall provide information BPA requests about Dedicated Resources for purposes of meeting BPA’s statutory obligations under section 7(b) of the Northwest Power Act. Information requested under this section 17.1 shall be provided in a timely manner. If «Customer Name» fails to provide BPA with information «Customer Name» is required to provide pursuant to this Agreement and the absence of such information makes it impossible for BPA to perform a calculation, make a determination, or take an action required under this Agreement, then BPA may suspend its obligation to perform such calculation, make such determination, or take such action until «Customer Name» has provided such information to BPA.

17.2 **Reports**

17.2.1 Within 30 days after final approval of «Customer Name»’s annual financial report and statements by «Customer Name»’s authorized officer, «Customer Name» shall either e-mail them to BPA at [kslf@bpa.gov](mailto:kslf@bpa.gov) or, if any of the information is publicly available, then «Customer Name» shall notify BPA of its availability.

17.2.2 Within 30 days after its submittal to the Energy Information Administration (EIA), or its successor, «Customer Name» shall e‑mail a copy of its Annual Form EIA-861 Reports to BPA at [kslf@bpa.gov](mailto:kslf@bpa.gov). If «Customer Name» is not required to submit such reports to the EIA, then this requirement does not apply.

17.3 **Meter Data**

17.3.1 In accordance with section 15 and Exhibit E, the Parties shall notify each other of any changes to PODs, POMs, Interchange Points and related information for which it is responsible. «Customer Name» shall ensure BPA has access to all data from load and resource meters that BPA determines is necessary to forecast, plan, schedule, and bill under this Agreement. Access to this data shall be on a schedule determined by BPA. Meter data shall be in hourly increments for all meters that record hourly data. Meter data includes, but is not limited to: «Customer Name»’s actual amounts of energy used or expended for loads and resources, and the physical attributes of «Customer Name»’s meters.

17.3.2 «Customer Name» consents to allow Power Services to receive the following information from Transmission Services or BPA’s metering function: (1) «Customer Name»’s meter data, as specified in section 17.3.1, section 15, and Exhibit E, and (2) notification of outages or load shifts.

17.3.3 At least 15 calendar days in advance, «Customer Name» shall e‑mail BPA at: (1) [mdm@bpa.gov](mailto:mdm@bpa.gov) and (2) the contact shown in section 20 when the following events are planned to occur on «Customer Name»’s system that will affect the load measured by the meters listed in Exhibit E: (1) installation of a new meter, (2) changes or updates to an existing meter not owned by BPA, (3) any planned line or planned meter outages, and (4) any planned load shifts from one POD to another. This section 17.3.3 is not intended to apply to retail meters not listed in Exhibit E.

17.3.4 If an unplanned load shift or outage occurs, materially affecting the load measured by the meters listed in Exhibit E, then «Customer Name» shall e‑mail BPA at: (1) [mdm@bpa.gov](mailto:mdm@bpa.gov), and (2) the contact shown in section 20 within 72 hours after the event.

17.4 **Data for Determining CHWM and CDQs**

Upon request, «Customer Name» shall provide to BPA any load and resource information that BPA determines is reasonably necessary to calculate «Customer Name»’s CHWM and CDQs. This may include historical load data not otherwise available to BPA and other data necessary to allow BPA to adjust for weather normalization.

17.5 **Hourly Total Retail Load Data**

BPA shall notify «Customer Name» by June 30, 2009, if BPA determines that it does not have adequate hourly meter data to calculate «Customer Name»’s Total Retail Load. If BPA sends such notification, «Customer Name» shall e‑mail the following hourly data to BPA at [kslf@bpa.gov](mailto:kslf@bpa.gov) according to the schedule below. «Customer Name» shall submit such data in a comma-separated-value (csv) format with the time/date stamp in one column and load amounts, with units of measurement specified, in another column.

17.5.1 By December 31, 2009, «Customer Name» shall send to BPA «Customer Name»’s actual hourly Total Retail Load data for Fiscal Year 2002 through Fiscal Year 2009.

17.5.2 By December 31, 2010, «Customer Name» shall send to BPA, «Customer Name»’s actual hourly Total Retail Load data for each Point of Delivery for Fiscal Year 2010.

17.5.3 By December 31, 2011, and by December 31 of each year thereafter, «Customer Name» shall send BPA «Customer Name»’s actual hourly Total Retail Load data for the immediately preceding Fiscal Year.

17.6 **Total Retail Load Forecast**

By June 30, 2011, and by June 30 of each year thereafter, «Customer Name» shall provide BPA a forecast of «Customer Name»’s monthly energy and «Customer Name»’s system coincidental peak of «Customer Name»’s Total Retail Load for the upcoming ten Fiscal Years. «Customer Name» shall e‑mail the forecast to BPA at [kslf@bpa.gov](mailto:kslf@bpa.gov), in a comma-separated-value (csv) format. «Customer Name» shall send the csv file with the following data elements in separate columns:

(1) four-digit calendar year,

(2) three-character month identifier,

(3) monthly energy forecast,

(4) unit measurement of monthly energy forecast,

(5) monthly «Customer Name»-system coincidental peak forecast, and

(6) unit measurement of monthly «Customer Name»-system coincidental peak forecast.

17.7 **Transparency of Net Requirements Process**

17.7.1 **Data Made Publicly Available**

By July 31, 2011, and by July 31 every year thereafter, BPA shall make the following information publicly available to «Customer Name» and all other BPA regional utility customers with a CHWM:

(1) «Customer Name»’s measured Total Retail Load data for the previous Fiscal Year in monthly energy amounts and monthly customer-system peak amounts,

(2) BPA’s forecast of «Customer Name»’s Total Retail Load, for the upcoming Fiscal Year, in monthly energy amounts and monthly customer-system peak amounts, and

(3) «Customer Name»’s Dedicated Resource energy and peak amounts for the upcoming Fiscal Year and the previous Fiscal Year.

17.7.2 **Waiver of Confidentiality and Comment Process**

«Customer Name» waives all claims of confidentiality regarding the data described above. «Customer Name» may provide comments regarding the published data to BPA within ten Business Days after notification. After reviewing any comments and no later than 60 days from the date BPA originally releases such data, BPA shall make available a final set of data and an explanation of any changes to «Customer Name» and all other customers with a CHWM.

17.8 **Confidentiality**

Before «Customer Name» provides information to BPA that is confidential, or is otherwise subject to privilege, or nondisclosure, «Customer Name» shall clearly designate such information as confidential. BPA shall notify «Customer Name» as soon as practicable of any request received under the Freedom of Information Act (FOIA), or under any other federal law or court or administrative order, for any confidential information. BPA shall only release such confidential information to comply with FOIA or if required by any other federal law or court or administrative order. BPA shall limit the use and dissemination of confidential information within BPA to employees who need it for purposes of administering this Agreement.

17.9 **Resources Not Used to Serve Total Retail Load**

«Customer Name» shall list in section 6 of Exhibit A all Generating Resources and Contract Resources «Customer Name» owns that are: (1) not Specified Resources listed in section 2 of Exhibit A, and (2) greater than 200 kilowatts of nameplate capability. At BPA’s request «Customer Name» shall provide BPA with additional data if needed to verify the information listed in section 6 of Exhibit A.

**18. CONSERVATION AND RENEWABLES*(08/15/08 Version)***

18.1 **Conservation**

18.1.1 **Evaluations**

At BPA’s expense, BPA may conduct, and «Customer Name» shall cooperate in, conservation impact and project implementation process evaluations to assess the amount, cost-effectiveness, and reliability of conservation in BPA’s or «Customer Name»’s service area.

BPA shall select the timing, frequency, and type of such evaluations. BPA shall do so with reasonable consideration of «Customer Name»’s and «Customer Name»’s consumers’ needs.

18.1.2 **Reporting Requirements**

18.1.2.1 This section 18.1.2.1 does not apply if «Customer Name»’s Total Retail Load from the most recent prior Fiscal Year is 25 annual Average Megawatts or less, or if «Customer Name» purchases all of its power from BPA to serve its Total Retail Load. Beginning June 1, 2010, and no later than June 1 every two years thereafter, «Customer Name» shall submit a ten‑year conservation plan stating «Customer Name»’s projection of planned conservation, including biennial conservation targets. This requirement may be satisfied by submitting any plans «Customer Name» prepares in the normal course of business if the plans include, or are supplemented by, the information required above. This includes plans required under state law (such as the Washington State Energy Independence Act (RCW 19.285)).

18.1.2.2 «Customer Name» shall verify and report all cost-effective (as defined by section 3(4) of the Northwest Power Act) non-BPA-funded conservation measures and projects savings achieved by «Customer Name» through the Regional Technical Forum’s Planning, Tracking and Reporting System or its successor tool. Verification protocols of conservation measures and projects, reporting timelines and documentation requirements shall comply with BPA’s Energy Efficiency Implementation Manual or its successor.

18.2 **Renewable Resources**

18.2.1 **Renewable Energy Certificates**

BPA shall transfer Renewable Energy Certificates (RECs), or their successors, to «Customer Name» in accordance with Exhibit H.

18.2.2 **Reporting Requirements*(07/21/09 Version)***

This section 18.2.2 does not apply if «Customer Name»’s Total Retail Load from the most recent prior Fiscal Year is 25 annual Average Megawatts or less or if «Customer Name» purchases all of its power from BPA to serve its Total Retail Load. If «Customer Name»’s Total Retail Load from the most recent prior Fiscal Year is above 25 annual Average Megawatts, the following requirements may be satisfied by submitting plans and reports «Customer Name» prepares in the normal course of business as long as such plans and reports include the information required below.

Beginning September 1, 2012, and by September 1 every year thereafter, «Customer Name» shall provide BPA with the following:

(1) updated information on power forecasted to be generated over the forthcoming calendar year by renewable resources with nameplate capabilities greater than 200 kilowatts, including net metered renewable resources operating behind the BPA meter, used by «Customer Name» to serve its Total Retail Load, under Exhibit A. Such information shall include: project name, fuel type(s), location, date power purchase contract signed, project energization date, capacity, capacity factor, remaining term of purchase (or if direct ownership remaining life of the project), and the percentage of output that will be used to serve «Customer Name»’s Total Retail Load that calendar year. Where resources are jointly owned by «Customer Name» and other customers that have a CHWM Contract, «Customer Name» may either submit a report on behalf of all owners or identify the customer that will submit the report;

(2) the amount of all purchases of RECs used to meet requirements under state or federal law for the forthcoming calendar year; and

(3) if «Customer Name» is required under state law or by Transmission Services to prepare long-term integrated resource plans or resource forecasts, then «Customer Name» shall provide Power Services with updated copies of such or authorize Transmission Services to provide them directly to Power Services.

**19. RESOURCE ADEQUACY*(08/15/08 Version)***

By November 30, 2010, and by November 30 each year thereafter, «Customer Name» shall provide to the Pacific Northwest Utilities Conference Committee (PNUCC), or its successor, forecasted loads and resources data to facilitate a region-wide assessment of loads and resources in a format, length of time, and level of detail specified in PNUCC’s Northwest Regional Forecast Data Request.

After consultation with the Regional Resource Adequacy Forum, or a successor, BPA may require «Customer Name» to submit additional data to the Northwest Power and Conservation Council (Council) that BPA determines is necessary for the Council to perform a regional resource adequacy assessment.

The requirements of this section 19 are waived if «Customer Name» purchases from BPA all of its power to serve its Total Retail Load.

**20. NOTICES AND CONTACT INFORMATION*(08/15/08 Version)***

Any notice required under this Agreement that requires such notice to be provided under the terms of this section shall be provided in writing to the other Party in one of the following ways:

(1) delivered in person;

(2) by a nationally recognized delivery service with proof of receipt;

(3) by United States Certified Mail with return receipt requested;

(4) electronically, if both Parties have means to verify the electronic notice’s origin, date, time of transmittal and receipt; or

(5) by another method agreed to by the Parties.

Notices are effective when received. Either Party may change the name or address for delivery of notice by providing notice of such change or other mutually agreed method. The Parties shall deliver notices to the following person and address:

*(Drafter’s Note: Check BPA address and phone number prefix to ensure it is applicable.)*

|  |  |
| --- | --- |
| If to «Customer Name»:  «Utility Name»  «Street Address»  «P.O. Box »  «City, State, Zip»  Attn: «Contact Name»  «Contact Title»  Phone: «###-###-####»  FAX: «###-###-####»  E-Mail: «E-mail address» | If to BPA:  Bonneville Power Administration  «Street Address»  «P.O. Box»  «City, State, Zip»  Attn: «AE Name - Routing»  «Senior »Account Executive  Phone: «###-###-####»  FAX: «###-###-####»  E-Mail: «E-mail address» |

**21. UNCONTROLLABLE FORCES*(08/15/08 Version)***

21.1 A Party shall not be in breach of an obligation under this Agreement to the extent its failure to fulfill the obligation is due to an Uncontrollable Force. “Uncontrollable Force” means an event beyond the reasonable control, and without the fault or negligence, of the Party claiming the Uncontrollable Force, that prevents that Party from performing its obligations under this Agreement and which that Party could not have avoided by the exercise of reasonable care, diligence and foresight. Uncontrollable Forces include each event listed below, to the extent it satisfies the foregoing criteria, but are not limited to these listed events:

(1) any curtailment or interruption of firm transmission service on BPA’s or a Third Party Transmission Provider’s System that prevents delivery of Firm Requirements Power sold under this Agreement to «Customer Name»;

(2) any failure of «Customer Name»’s distribution or transmission facilities that prevents «Customer Name» from delivering power to end-users;

(3) strikes or work stoppage;

(4) floods, earthquakes, other natural disasters, or terrorist acts; and

(5) final orders or injunctions issued by a court or regulatory body having subject matter jurisdiction which the Party claiming the Uncontrollable Force, after diligent efforts, was unable to have stayed, suspended, or set aside pending review by a court having subject matter jurisdiction.

21.2 Neither the unavailability of funds or financing, nor conditions of national or local economies or markets shall be considered an Uncontrollable Force. The economic hardship of either Party shall not constitute an Uncontrollable Force. Nothing contained in this provision shall be construed to require either Party to settle any strike or labor dispute in which it may be involved.

21.3 If an Uncontrollable Force prevents a Party from performing any of its obligations under this Agreement, such Party shall:

(1) immediately notify the other Party of such Uncontrollable Force by any means practicable and confirm such notice in writing as soon as reasonably practicable;

(2) use commercially reasonable efforts to mitigate the effects of such Uncontrollable Force, remedy its inability to perform, and resume full performance of its obligation hereunder as soon as reasonably practicable;

(3) keep the other Party apprised of such efforts on an ongoing basis; and

(4) provide written notice of the resumption of performance.

Written notices sent under this section must comply with section 20.

**22. GOVERNING LAW AND DISPUTE RESOLUTION*(08/15/08 Version)***

*Option: Include for new Tribal customers*«Customer Name» agrees that it will not assert as a defense to any claim by BPA hereunder, its sovereign immunity, and said immunity is hereby expressly waived for any obligations, liabilities, or duties owed by «Customer Name» to the Bonneville Power Administration, United States Department of Energy, under this Agreement.*End Tribal Option* This Agreement shall be interpreted consistent with and governed by federal law. «Customer Name» and BPA shall identify issue(s) in dispute arising out of this Agreement and make a good faith effort to negotiate a resolution of such disputes before either may initiate litigation or arbitration. Such good faith effort shall include discussions or negotiations between the Parties’ executives or managers. Pending resolution of a contract dispute or contract issue between the Parties or through formal dispute resolution of a contract dispute arising out of this Agreement, the Parties shall continue performance under this Agreement unless to do so would be impossible or impracticable. Unless the Parties engage in binding arbitration as provided for in this section 22, the Parties reserve their rights to individually seek judicial resolution of any dispute arising under this Agreement.

22.1 **Judicial Resolution*(07/21/09 Version)***

Final actions subject to section 9(e) of the Northwest Power Act are not subject to arbitration under this Agreement and shall remain within the exclusive jurisdiction of the United States Court of Appeals for the Ninth Circuit. Such final actions include, but are not limited to, the establishment and the implementation of rates and rate methodologies. Any dispute regarding any rights or obligations of «Customer Name» or BPA under any rate or rate methodology, or BPA policy, including the implementation of such policy, shall not be subject to arbitration under this Agreement. For purposes of this section 22, BPA policy means any written document adopted by BPA as a final action in a decision record or record of decision that establishes a policy of general application or makes a determination under an applicable statute or regulation. If BPA determines that a dispute is excluded from nonbinding arbitration under this section 22, then «Customer Name» may apply to the federal court having jurisdiction for an order determining whether such dispute is subject to nonbinding arbitration under this section 22.

22.2 **Arbitration**

Any contract dispute or contract issue between the Parties arising out of this Agreement, which is not excluded by section 22.1 above, shall be subject to arbitration, as set forth below.

«Customer Name» may request that BPA engage in binding arbitration to resolve any dispute. If «Customer Name» requests such binding arbitration and BPA determines in its sole discretion that binding arbitration of the dispute is appropriate under BPA’s Binding Arbitration Policy or its successor, then BPA shall engage in such binding arbitration, provided that the remaining requirements of this section 22.2 and sections 22.3 and 22.4 are met. BPA may request that «Customer Name» engage in binding arbitration to resolve any dispute. In response to BPA’s request, «Customer Name» may agree to binding arbitration of such dispute, provided that the remaining requirements of this section 22.2 and sections 22.3 and 22.4 are met. Before initiating binding arbitration, the Parties shall draft and sign an agreement to engage in binding arbitration, which shall set forth the precise issue in dispute, the amount in controversy and the maximum monetary award allowed, pursuant to BPA’s Binding Arbitration Policy or its successor.

Nonbinding arbitration shall be used to resolve any dispute arising out of this contract that is not excluded by section 22.1 above and is not resolved via binding arbitration, unless «Customer Name» notifies BPA that it does not wish to proceed with nonbinding arbitration.

22.3 **Arbitration Procedure**

Any arbitration shall take place in Portland, Oregon, unless the Parties agree otherwise. The Parties agree that a fundamental purpose for arbitration is the expedient resolution of disputes; therefore, the Parties shall make best efforts to resolve an arbitrable dispute within one year of initiating arbitration. The rules for arbitration shall be agreed to by the Parties.

22.4 **Arbitration Remedies**

The payment of monies shall be the exclusive remedy available in any arbitration proceeding pursuant to this section 22. This shall not be interpreted to preclude the Parties from agreeing to limit the object of arbitration to the determination of facts. Under no circumstances shall specific performance be an available remedy against BPA.

22.5 **Finality**

22.5.1 In binding arbitration, the arbitration award shall be final and binding on the Parties, except that either Party may seek judicial review based upon any of the grounds referred to in the Federal Arbitration Act, 9 U.S.C. §1-16 (1988). Judgment upon the award rendered by the arbitrator(s) may be entered by any court having jurisdiction thereof.

22.5.2 In nonbinding arbitration, the arbitration award is not binding on the Parties. Each Party shall notify the other Party within 30 calendar days, or such other time as the Parties otherwise agreed to, whether it accepts or rejects the arbitration award. Subsequent to nonbinding arbitration, if either Party rejects the arbitration award, either Party may seek judicial resolution of the dispute, provided that such suit is brought no later than 395 calendar days after the date the arbitration award was issued.

22.6 **Arbitration Costs**

Each Party shall be responsible for its own costs of arbitration, including legal fees. Unless otherwise agreed to by the Parties, the arbitrator(s) may apportion all other costs of arbitration between the Parties in such manner as the arbitrator(s) deem reasonable taking into account the circumstances of the case, the conduct of the Parties during the proceeding, and the result of the arbitration.

**23. STATUTORY PROVISIONS*****(08/15/08 Version)***

23.1 **Retail Rate Schedules**

«Customer Name» shall make its retail rate schedules available to BPA, as required by section 5(a) of the Bonneville Project Act, P.L. 75‑329, within 30 days of each of «Customer Name»’s retail rate schedule effective dates. This requirement may be satisfied by «Customer Name» informing BPA of its public website where such information is posted and kept current.

23.2 **Insufficiency and Allocations**

If BPA determines, consistent with section 5(b) of the Northwest Power Act and other applicable statutes, that it will not have sufficient resources on a planning basis to serve its loads after taking all actions required by applicable laws then BPA shall give «Customer Name» a written notice that BPA may restrict service to «Customer Name». Such notice shall be consistent with BPA’s insufficiency and allocations methodology, published in the Federal Register on March 20, 1996, and shall state the effective date of the restriction, the amount of «Customer Name»’s load to be restricted and the expected duration of the restriction. BPA shall not change that methodology without the written agreement of all public body, cooperative, federal agency and investor-owned utility customers in the Region purchasing federal power from BPA under section 5(b) of the Northwest Power Act. Such restriction shall take effect no sooner than five years after BPA provides notice to «Customer Name». If BPA imposes a restriction under this provision then the amount of Firm Requirements Power that BPA is obligated to provide and that «Customer Name» is obligated to purchase pursuant to section 3 and Exhibit C shall be reduced to the amounts available under such allocation methodology for restricted service.

23.3 **New Large Single Loads and CF/CTs**

23.3.1 **Determination of an NLSL*(07/21/09 Version)***

In accordance with BPA’s NLSL Policy, BPA may determine that a load is an NLSL as follows:

23.3.1.1 BPA shall determine an increase in production load to be an NLSL if any load associated with a new facility, an existing facility, or an expansion of an existing facility, which is not contracted for, or committed to (CF/CT), as determined by the Administrator, by a public body, cooperative, investor-owned utility, or federal agency customer prior to September 1, 1979, and which will result in an increase in power requirements of such customer of ten Average Megawatts (87,600,000 kilowatt‑hours) or more in any consecutive 12‑month period.

23.3.1.2 For the sole purpose of computing the increase in energy consumption between any two consecutive 12‑month periods of comparison under this section 23.3.1, reductions in the end-use consumer’s load associated with a facility during the first 12‑month period of comparison due to unusual events reasonably beyond the control of the end-use consumer shall be determined by BPA, and the energy consumption shall be computed as if such reductions had not occurred.

23.3.1.3 The Parties may agree that the applicable increase in load of installed production equipment at a facility will equal or exceed ten Average Megawatts consumption over any 12 consecutive months and that such production load shall constitute an NLSL. Any such agreement shall constitute a binding NLSL determination.

23.3.2 **Determination of a Facility**

BPA shall make a written determination as to what constitutes a single facility, for the purpose of identifying an NLSL, based on the following criteria:

(1) whether the load is operated by a single end-use consumer;

(2) whether the load is in a single location;

(3) whether the load serves a manufacturing process which produces a single product or type of product;

(4) whether separable portions of the load are interdependent;

(5) whether the load is contracted for, served or billed as a single load under «Customer Name»’s customary billing and service policy;

(6) consideration of the facts from previous similar situations; and

(7) any other factors the Parties determine to be relevant.

23.3.3 **Administrative Obligations and Rights**

23.3.3.1 «Customer Name»’s CF/CT loads and NLSLs are listed in Exhibit D.

23.3.3.2 «Customer Name» shall provide reasonable notice to BPA of any expected increase in a single load that may qualify as an NLSL. The Parties shall list any such potential NLSLs in Exhibit D. If BPA determines that any load associated with a single facility is capable of growing ten Average Megawatts or more in a consecutive 12‑month period, then such load shall be subject to monitoring as determined necessary by BPA.

23.3.3.3 When BPA makes a request, «Customer Name» shall provide physical access to its substations and other service locations where BPA needs to perform inspections or gather information for purposes of implementing section 3(13) of the Northwest Power Act, including but not limited to making a final NLSL, facility, or CF/CT determination. «Customer Name» shall make a request to the end-use consumer to provide BPA, at reasonable times, physical access to inspect a facility for these purposes.

23.3.3.4 Unless the Parties agree pursuant to section 23.3.1.3 above, BPA shall determine whether a new load or an increase in existing load at a facility is an NLSL. If BPA determines that the load is an NLSL, BPA shall notify «Customer Name» and the Parties shall add the NLSL to Exhibit D to reflect BPA’s determination.

23.3.4 **Metering an NLSL**

For any loads that are monitored by BPA for an NLSL determination, and for any loads at any facility that is determined by BPA to be an NLSL, BPA may, in its sole discretion, install BPA owned meters. If the Parties agree otherwise, «Customer Name» may install meters meeting the exact specification BPA provides to «Customer Name». «Customer Name» and BPA shall enter into a separate agreement for the location, ownership, cost responsibility, access, maintenance, testing, replacement and liability of the Parties with respect to such meters. «Customer Name» shall arrange for metering locations that allow accurate measurement of the facility’s load. «Customer Name» shall arrange for BPA to have physical access to such meters and «Customer Name» shall ensure BPA has access to all NLSL meter data that BPA determines is necessary to forecast, plan, schedule, and bill for power.

23.3.5 **Undetermined NLSLs*(07/21/09 Version)***

If BPA does not determine at the outset that an increase in load is an NLSL, then the Parties shall install metering equipment as required by section 23.3.4 above, and BPA shall bill «Customer Name» for the increase in load at the applicable PF rate during any consecutive 12‑month monitoring period. If BPA later determines that the increase in load is an NLSL, then BPA shall revise «Customer Name»’s bill to reflect the difference between the applicable PF rate and the applicable NR rate in effect for the monitoring period in which the increase takes place. «Customer Name» shall pay that bill with simple interest computed from the start of the monitoring period to the date the payment is made. The daily interest rate shall equal the Prime Rate (as reported in the Wall Street Journal or successor publication in the first issue published during the month in which the monitoring period began) divided by 365.

If BPA concludes in its sole judgment that «Customer Name» has not fulfilled its obligations, or has not been able to obtain access or information from the end-use consumer under sections 23.3.3 and 23.3.4, BPA may determine any load subject to NLSL monitoring to be an NLSL, in which case «Customer Name» shall be billed and pay in accordance with the last two sentences of the preceding paragraph. Such NLSL determination shall be final unless «Customer Name» proves to BPA’s satisfaction that the applicable increase in load did not equal or exceed ten Average Megawatts in any 12‑month monitoring period.

23.3.6 **Service Elections for an NLSL*(07/21/09 Version)***

«Customer Name» shall serve all NLSLs with Dedicated Resource amounts added in Exhibit A that are not already being used to serve «Customer Name»’s Total Retail Load in the region. «Customer Name» agrees to provide such Dedicated Resources on a continuous basis as identified in Exhibit A. Under no circumstances shall BPA be required to acquire firm power for service to such NLSLs.

23.3.7 **Consumer-Owned Resources Serving an NLSL**

23.3.7.1 **Renewable Resource/Cogeneration Exception**

An end-use consumer served by «Customer Name», with a facility whose load is, in whole or in part, an NLSL, may reduce its NLSL to less than ten Average Megawatts in a consecutive 12‑month period by applying an onsite renewable resource or onsite cogeneration behind «Customer Name»’s meter to its facility load. «Customer Name» shall ensure that such resource is continuously applied to serve the NLSL, consistent with BPA’s “Renewables and On-Site Cogeneration Option under the NLSL Policy” portion of its Policy for Power Supply Role for Fiscal Years 2007-2011, adopted February 4, 2005, and the NLSL policy included in BPA’s Long Term Regional Dialogue Final Policy, July 2007, as amended or replaced. If the NLSL end-use consumer meets the qualification for the exception, then the Parties shall: (1) list the Consumer-Owned Resource serving the NLSL in section 7.4 of Exhibit A and (2) amend Exhibit D to add the onsite renewable resource or cogeneration facility and the requirements for such service.

23.3.7.2 **Consumer-Owned Resources that are not Renewable Resources/Cogeneration**

If «Customer Name» serves an NLSL with a Consumer-Owned Resource that does not qualify for the renewable resource or cogeneration exception, the Parties shall list such Consumer-Owned Resource serving the NLSL in section 7.4 of Exhibit A.

23.4 **Priority of Pacific Northwest Customers**

The provisions of sections 9(c) and 9(d) of the Northwest Power Act and the provisions of P.L. 88‑552 as amended by the Northwest Power Act are incorporated into this Agreement by reference. «Customer Name», together with other customers in the Region, shall have priority to BPA power consistent with such provisions.

23.5 **Prohibition on Resale**

«Customer Name» shall not resell Firm Requirements Power except to serve «Customer Name»’s Total Retail Load or as otherwise permitted by federal law.

23.6 **Use of Regional Resources**

23.6.1 Within 60 days prior to the start of each Fiscal Year, «Customer Name» shall provide notice to BPA of any Firm Power from a Generating Resource, or a Contract Resource during its term, that has been used to serve firm consumer load in the Region and that «Customer Name» plans to export for sale outside the Region in the next Fiscal Year. For purposes of this section 23.6, “Firm Power” means electric power which is continuously made available from «Customer Name»’s operation of generation or from its purchased power, which is able to meet its Total Retail Load, except when such generation or power is curtailed or restricted due to an Uncontrollable Force. Firm Power includes firm energy and firm peaking energy or both.

BPA may request and «Customer Name» shall provide within 30 days of such request, additional information on «Customer Name»’s sales and dispositions of non-federal resources if BPA has information that «Customer Name» may have made such an export and not notified BPA. BPA may request and «Customer Name» shall provide within 30 days of such request, information on the planned use of any or all of «Customer Name» Generating and Contract Resources.

During any Purchase Period that «Customer Name» has no purchase obligation for Firm Requirements Power under section 3, «Customer Name» shall have no obligation to notify BPA of its exports under this section; provided, however, «Customer Name» shall provide notification of all applicable exports in Purchase Periods when it has a purchase obligation.

23.6.2 «Customer Name» shall be responsible for monitoring any Firm Power from Generating Resources and Contract Resources it sells in the Region to ensure such Firm Power is planned to be used to serve firm consumer load in the Region.

23.6.3 If «Customer Name» fails to report to BPA in accordance with section 23.6.1, above, any of its planned exports for sale outside the Region of Firm Power from a Generating Resource or a Contract Resource that has been used to serve firm consumer load in the Region, and BPA makes a finding that an export which was not reported was made, BPA shall decrement the amount of its Firm Requirements Power sold under this Agreement by the amount of the export that was not reported and by any continuing export amount. Decrements under the preceding sentence shall be first to power that would otherwise be provided at Tier 1 Rates. When applicable, such decrements shall be identified in section 3.2 of Exhibit A.

23.6.4 For purposes of this section 23.6, an export for sale outside the Region means a contract for the sale or disposition of Firm Power from a Generating Resource or a Contract Resource during its term that has been used to serve firm consumer load in the Region, which contract will be performed in a manner that such output isno longer used or not planned to be used solely to serve firm consumer load in the Region. Delivery of Firm Power outside the Region under a seasonal exchange agreement that is made consistent with BPA’s 5(b)/9(c) Policy will not be considered an export. Firm Power from a Generating Resource or a Contract Resource used to serve firm consumer load in the Region means the firm generating or load carrying capability of a Generating Resource or a Contract Resource as established under PNCA resource planning criteria, or other resource planning criteria generally used for such purposes within the Region.

23.7 **BPA Appropriations Refinancing**

The Parties agree that the provisions of section 3201(i) of the Bonneville Power Administration Refinancing section of the Omnibus Consolidated Rescissions and Appropriations Act of 1996 (BPA Refinancing Act), P.L. 104‑134, 110 Stat. 1321, 350, as stated in the United States Code on the Effective Date, are incorporated by reference and are a material term of this Agreement.

**24. STANDARD PROVISIONS*(08/15/08 Version)***

24.1 **Amendments**

Except where this Agreement explicitly allows for one Party to unilaterally amend a provision or exhibit, no amendment of this Agreement shall be of any force or effect unless set forth in writing and signed by authorized representatives of each Party.

24.2 **Entire Agreement and Order of Precedence**

This Agreement, including documents expressly incorporated by reference, constitutes the entire agreement between the Parties with respect to the subject matter of this Agreement. It supersedes all previous communications, representations, or contracts, either written or oral, which purport to describe or embody the subject matter of this Agreement. The body of this Agreement shall prevail over the exhibits to this Agreement in the event of a conflict.

*Option 1: Include the following for customers who do NOT need RUS approval:*

24.3 **Assignment**

This Agreement is binding on any successors and assigns of the Parties. Neither Party may otherwise transfer or assign this Agreement, in whole or in part, without the other Party’s written consent. Such consent shall not be unreasonably withheld. Without limiting the foregoing, BPA’s refusal to consent to assignment shall not be considered unreasonable if, in BPA’s sole discretion: (1) the sale of power by BPA to the assignee would violate any applicable statute, or (2) such sale might adversely affect the tax-exempt status of bonds issued as part of an issue that finances or refinances the Columbia Generating Station or that such sale might limit the ability to issue future tax-exempt bonds to finance or refinance the Columbia Generating Station. «Customer Name» may not transfer or assign this Agreement to any of its retail consumers.

*End Option 1*

*Option 2: Include the following for customers who must obtain RUS approval to execute this Agreement:*

24.3 **Assignment**

This Agreement is binding on any successors and assigns of the Parties. Neither Party may otherwise transfer or assign this Agreement, in whole or in part, without: (1) the other Party’s written consent, which shall not be unreasonably withheld; and (2) the written consent of the United States Department of Rural Utilities Service. Such consent shall not be unreasonably withheld. Without limiting the foregoing, BPA’s refusal to consent to assignment shall not be considered unreasonable if, in BPA’s sole discretion: (1) the sale of power by BPA to the assignee would violate any applicable statute, or (2) such sale might adversely affect the tax-exempt status of bonds issued as part of an issue that finances or refinances the Columbia Generating Station or that such sale might limit the ability to issue future tax-exempt bonds to finance or refinance the Columbia Generating Station. «Customer Name» may not transfer or assign this Agreement to any of its retail consumers.

*End Option 2*

24.4 **No Third‑Party Beneficiaries**

This Agreement is made and entered into for the sole benefit of the Parties, and the Parties intend that no other person or entity shall be a direct or indirect beneficiary of this Agreement.

24.5 **Waivers**

No waiver of any provision or breach of this Agreement shall be effective unless such waiver is in writing and signed by the waiving Party, and any such waiver shall not be deemed a waiver of any other provision of this Agreement or of any other breach of this Agreement.

24.6 **BPA Policies**

Any reference in this Agreement to BPA policies, including any revisions, does not constitute agreement of «Customer Name» to such policy by execution of this Agreement, nor shall it be construed to be a waiver of the right of «Customer Name» to seek judicial review of any such policy.

24.7 **Rate Covenant and Payment Assurance**

«Customer Name» agrees that it shall establish, maintain and collect rates or charges sufficient to assure recovery of its costs for power and energy and other services, facilities and commodities sold, furnished or supplied by it through any of its electric utility properties. BPA may require additional forms of payment assurance if: (1) BPA determines that such rates and charges may not be adequate to provide revenues sufficient to enable «Customer Name» to make the payments required under this Agreement, or (2) BPA identifies in a letter to «Customer Name» that BPA has other reasonable grounds to conclude that «Customer Name» may not be able to make the payments required under this Agreement. If «Customer Name» does not provide payment assurance satisfactory to BPA, then BPA may terminate this Agreement. Written notices sent under this section must comply with section 20.

*(Option: Include this section ONLY for cooperatives and tribal utilities.)*

24.8 **Bond Assurances**

BPA has advised «Customer Name» that: (1) the Columbia Generating Station has been financed and refinanced in large part by bonds that are intended to bear interest that is exempt from federal income tax under section 103 of the Internal Revenue Code of 1954, as amended, and Title XIII of the Tax Reform Act of 1986, and (2) the tax-exempt status of those bonds and other bonds issued together with those bonds might be jeopardized if «Customer Name» or any other nongovernmental person has a contract to purchase additional amounts of the output of the Columbia Generating Station.

Consequently, «Customer Name» shall notify BPA at least 90 days before «Customer Name» acquires an Annexed Load, or «Customer Name» is acquired, in whole or in part, as an Annexed Load. «Customer Name» hereby acknowledges and agrees that BPA shall have the right to reduce «Customer Name»’s CHWM in connection with any such Annexed Load to the extent the aggregate CHWM, including the Annexed Load, (or the aggregate CHWM, including the Annexed Load, of related entities) otherwise would result in a nongovernmental customer with a CHWM share of the Tier 1 System Resources that exceeds 2.8 percent.

*End Option 24.8*

**25. TERMINATION*(08/15/08 Version)***

25.1 **BPA’s Right to Terminate**

BPA may terminate this Agreement if:

(1) «Customer Name» fails to make payment as required by section 16.4, or

(2) «Customer Name» fails to provide payment assurance satisfactory to BPA as required by section 24.7.

Such termination is without prejudice to any other remedies available to BPA under law.

25.2 **Customer’s Right to Terminate**

«Customer Name» may provide written notice to terminate this Agreement not later than 60 days after: (1) a Final FERC Order is issued declining to approve the Tiered Rate Methodology (if BPA seeks FERC’s confirmation and approval of it), (2) FERC issues a final declaratory order finding that the TRM does not meet cost recovery standards, or (3) FERC issues a Final FERC Order that determines rates established consistent with the TRM cannot be approved because the TRM precludes the establishment of rates consistent with cost recovery. The notice shall include a date of termination not later than 90 days after the date of such notice. For purposes of this section 25.2, “Final FERC Order” means a dispositive order by FERC on the merits, and does not include any interim order. A dispositive order on the merits is, for purposes of this section, final when issued and there is no need to await a FERC order on rehearing before the decision is considered final.

**26. SIGNATURES**

The Parties have executed this Agreement as of the last date indicated below.

*[[See original Agreement for signatures]]*

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

**Exhibit A**

**NET REQUIREMENTS AND RESOURCES*(08/15/08 Version)***

**1.** **NET REQUIREMENTS**

«Customer Name»’s Net Requirement equals its Total Retail Load minus «Customer Name»’s Dedicated Resources determined pursuant to section 3.3 of the body of this Agreement and listed in sections 2, 3, and 4 of this exhibit. The Parties shall not add or remove resource amounts to change «Customer Name»’s purchase obligations from BPA under section 3.1 of the body of this Agreement except in accordance with sections 3.5 and 10 of the body of this Agreement.

BPA shall annually calculate a forecast of «Customer Name»’s Net Requirement for the upcoming Fiscal Year as follows:

1.1 **Forecast of Total Retail Load**

By September 15, 2011, and by each September 15 thereafter, BPA shall fill in the table below with «Customer Name»’s Total Retail Load forecast (submitted pursuant to section 17.6 of the body of this Agreement) for the upcoming Fiscal Year. BPA shall notify «Customer Name» by July 31 immediately preceding the start of the Fiscal Year if BPA determines «Customer Name»’s submitted forecast is reasonable or not reasonable. If BPA determines «Customer Name»’s submitted forecast is not reasonable, then BPA shall fill in the table below with a forecast BPA determines to be reasonable by September 15 immediately preceding the start of the Fiscal Year.

«Customer Name» may submit to arbitration, which may be binding arbitration under a separate agreement or nonbinding arbitration as agreed to by the Parties, pursuant to section 22 of the body of the Agreement, the issue of the reasonableness of BPA’s forecast of «Customer Name»’s Total Retail Load used by BPA to fill in the table below. Such arbitration shall not include issues of the interpretation or application of BPA’s policies with respect to such forecast, including without limitation BPA’s 5(b)/9(c) Policy.

*Drafter’s Note: The table below will be blank at contract signing.*

| **Annual Forecast of Monthly Total Retail Load** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Oct** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **annual aMW** |
| **Fiscal Year 2012** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2013** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2014** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2015** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2016** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2017** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2018** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2019** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2020** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2021** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2022** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2023** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2024** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2025** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2026** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2027** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2028** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Notes: Fill in the table above with megawatt‑hours rounded to whole megawatt‑hours, with megawatts rounded to one decimal place, and annual Average Megawatts rounded to three decimal places.  *Drafter’s Note: Add the following when revising this table: “2\_This table updated per Revision \_\_\_ to Exhibit A.”* | | | | | | | | | | | | | |

1.2 **Forecast of Net Requirements**

By September 15, 2011, and by each September 15 thereafter, BPA shall calculate, and fill in the table below with, «Customer Name»’s Net Requirement forecast for the upcoming Fiscal Year by month. «Customer Name»’s Net Requirement forecast equals «Customer Name»’s Total Retail Load forecast, shown in section 1.1 above, minus «Customer Name»’s Dedicated Resource amounts, shown in section 5 below.

On a planning basis «Customer Name» shall serve that portion of its Total Retail Load that is not served with Firm Requirements Power with «Customer Name»’s Dedicated Resources.

*Drafter’s Note: The table below will be blank at contract signing.*

| **Annual Forecast of Monthly Net Requirements** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Oct** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **annual aMW** |
| **Fiscal Year 2012** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2013** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2014** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2015** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2016** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2017** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2018** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2019** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2020** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2021** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2022** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2023** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2024** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2025** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2026** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2027** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2028** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Note: Fill in the table above with megawatt-hours rounded to whole megawatt-hours, with megawatts rounded to one decimal place, and annual Average Megawatts rounded to three decimal places.  *Drafter’s Note: Add the following when revising this table: “2\_This table updated per Revision \_\_\_ to Exhibit A.”* | | | | | | | | | | | | | |

**2. LIST OF SPECIFIED RESOURCES**

*Drafter’s Note: List each Specified Resource, in the applicable section, using the format shown below in section 2.1(1) for each Specified Resource. Determine the Dedicated Resource amounts for Specified Resources per the updated 5(b)/9(c) Policy. When using PNCA studies to calculate Dedicated Resource amounts use the results of the 2008-2009 Final Regulation Study released on August 6, 2008.*

2.1 **Generating Resources**

*Option 1: If «Customer Name» does NOT have any Generating Resources that are Specified Resources include the following text:*

«Customer Name» does not have any Generating Resources that are Specified Resources at this time.

*End Option 1.*

*Option 2: If «Customer Name» has Generating Resources that are Specified Resources include the following text and complete sections (1)(A) - (C) for each resource. When listing multiple resources renumber each resource as (2), (3), etc.*

All of «Customer Name»’s Generating Resources that are Specified Resources are listed below.

(1) **«Resource Name»**

(A) **Special Provisions**

*Drafter’s Note: Include any special provisions here that are applicable to this resource. If none, retain this section and state “None”.*

(B) **Resource Profile**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Fuel Type** | **Date Resource Dedicated to Load** | **Date of Resource Removal** | **Percent of Resource Used to Serve Load** | **Nameplate Capability (MW)** |
|  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Statutory Status** | | **Resource Status** | | **DFS or SCS?** | | **Dispatchable?** | | **PNCA?** | | **If PNCA, PNCA Updates?** | |
| 5b1A | 5b1B | Existing | New | Yes | No | Yes | No | Yes | No | Yes | No |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Note: Fill in the table above with “X”s. | | | | | | | | | | | |

(C) **Specified Resource Amounts**

| **Specified Resource Amounts** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Oct** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **annual aMW** |
| **Fiscal Year 2012** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2013** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2014** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2015** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2016** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2017** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2018** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2019** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2020** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2021** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2022** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2023** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2024** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2025** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2026** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2027** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2028** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Notes: Fill in the table above with megawatt‑hours rounded to whole megawatt‑hours, with megawatts rounded to one decimal place, and annual Average Megawatts rounded to three decimal places.  *Drafter’s Note: Add the following when revising this table: “2\_This table updated per Revision \_\_\_ to Exhibit A.”* | | | | | | | | | | | | | |

*End Option 2.*

2.2 **Contract Resources**

*Option 1: If «Customer Name» does NOT have any Contract Resources that are Specified Resources include the following text:*

«Customer Name» does not have any Contract Resources that are Specified Resources at this time.

*End Option 1.*

*Option 2: If «Customer Name» has Contract Resources that are Specified Resources include the following text and add and complete sections (1)(A) - (C) for each resource using the format in Option 2 of section 2.1:*

All of «Customer Name»’s Contract Resources that are Specified Resources are listed below.

*End Option 2.*

**3. UNSPECIFIED RESOURCE AMOUNTS**

3.1 **Unspecified Resource Amounts Used to Serve Total Retail Load**

*Option 1: If «Customer Name» does NOT have any Unspecified Resource Amounts include the following text:*

«Customer Name» does not have any Unspecified Resource Amounts at this time.

*End Option 1.*

*Option 2: If «Customer Name» has Unspecified Resource Amounts include the following text and fill in the table below (adding additional years as needed):*

«Customer Name»’s Unspecified Resource Amounts are listed in the table below.

| **Unspecified Resource Amounts** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Oct** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **annual aMW** |
| **Fiscal Year 2012** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2013** | | | | | | | | | | | | | |
| **Total (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Note: Fill in the table above with megawatt‑hours rounded to whole megawatt‑hours and with annual Average Megawatts rounded to three decimal places. | | | | | | | | | | | | | |

*End Option 2.*

3.2 **Unspecified Resource Amounts for 9(c) Export Decrements**

BPA shall insert a table below pursuant to section 3.5.3 of the body of this Agreement.

**4. DEDICATED RESOURCE AMOUNTS FOR AN NLSL**

*Option 1: If «Customer Name» does NOT have an NLSL or does NOT have any Dedicated Resource amounts serving an NLSL include the following text:*

«Customer Name» does not have any Dedicated Resource amounts serving an NLSL at this time, in accordance with section 3.5.7 of the body of this Agreement.

*End Option 1.*

*Option 2: If «Customer Name» wants to serve an NLSL with Dedicated Resource amounts include the following text and heading. If «Customer Name» is serving the NLSL with Specified Resources add and complete sections (1)(A) - (C) for each resource using the format in Option 2 of section 2.1. If «Customer Name» is serving the NLSL with Unspecified Resources Amounts add and fill in a table using the table format in section 3.1. Also describe in section 1.3 of Exhibit D how the resource listed below will match the NLSL.*

All of «Customer Name»’s Dedicated Resource amounts serving an NLSL, in accordance with section 3.5.7 of the body of this Agreement, are listed below.

(1) **«Name of NLSL»** **NLSL**

*End Option 2.*

**5. TOTAL DEDICATED RESOURCE AMOUNTS**

*Option 1: If «Customer Name» does NOT have any Dedicated Resource amounts listed in sections 2, 3, or 4 above include the following text:*

«Customer Name» does not have any Dedicated Resource amounts at this time.

*End Option 1.*

*Option 2: If «Customer Name» has any Dedicated Resource amounts listed in sections 2, 3, or 4 above insert a table below, using the table format in section 2.1(1)(C), with amounts equal to the sum of all Dedicated Resource amounts listed in section 2, 3, and 4, and changing the title of the table from Specified Resource Amounts to Dedicated Resource Amounts.*

The amounts in the table below equal the sum of all resource amounts used to serve «Customer Name»’s Total Retail Load listed above in sections 2, 3, and 4.

*End Option 2.*

**6. LIST OF RESOURCES NOT USED TO SERVE TOTAL RETAIL LOAD**

*Option 1: If «Customer Name» does NOT own any resources not dedicated to its TRL include the following text:*

Pursuant to section 17 of the body of this Agreement, «Customer Name» does not own any Generating Resources or Contract Resources that are: (1) not Specified Resources listed in section 2 of Exhibit A, and (2) greater than 200 kilowatts of nameplate capability.

*End Option 1.*

*Option 2: If «Customer Name» owns resources not dedicated to its TRL include the following text and complete sections (1)(A) and (B) below for each resource:*

Pursuant to section 17 of the body of this Agreement, all Generating Resources and Contract Resources «Customer Name» owns that are: (1) not Specified Resources listed in section 2 of Exhibit A, and (2) greater than 200 kilowatts of nameplate capability, are listed below.

(1) **«Resource Name»**

(A) **Resource Profile**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Fuel Type** | **Type of Resource** | | **Percent of Resource Not Used to Serve Load** | **Nameplate Capability (MW)** |
| **Generating Resource** | **Contract Resource** |
|  |  |  |  |  |

(B) **Expected Resource Output**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Expected Output – Energy (aMW)** | | | | | | | | | |
| **Fiscal Year** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** |
| **Annual aMW** |  |  |  |  |  |  |  |  |  |
| **Fiscal Year** | **2021** | **2022** | **2023** | **2024** | **2025** | **2026** | **2027** | **2028** |  |
| **Annual aMW** |  |  |  |  |  |  |  |  |  |
| Note: Fill in the table above with annual Average Megawatts rounded to three decimal places. | | | | | | | | | |

*End Option 2.*

**7. LIST OF CONSUMER-OWNED RESOURCES**

7.1 **Consumer-Owned Resources Serving Onsite Consumer Load**

*Option 1: If «Customer Name» does NOT have any Consumer-Owned Resources serving Onsite Consumer Load include the following text:*

Pursuant to section 3.6 of the body of this Agreement, «Customer Name» does not have any Consumer-Owned Resources serving Onsite Consumer Load at this time.

*End Option 1.*

*Option 2: If «Customer Name» has Consumer-Owned Resources serving Onsite Consumer Load include the following text and complete sections (1)(A) and (B) below for each resource:*

Pursuant to section 3.6 of the body of this Agreement, all of «Customer Name»’s Consumer-Owned Resources serving Onsite Consumer Load are listed below.

(1) **«Resource Name»**

(A) **Resource Profile**

|  |  |  |
| --- | --- | --- |
| **Resource Owner** | **Fuel Type** | **Nameplate Capability (MW)** |
|  |  |  |

(B) **Expected Resource Output**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Expected Output – Energy (aMW)** | | | | | | | | | |
| **Fiscal Year** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** |
| **Annual aMW** |  |  |  |  |  |  |  |  |  |
| **Fiscal Year** | **2021** | **2022** | **2023** | **2024** | **2025** | **2026** | **2027** | **2028** |  |
| **Annual aMW** |  |  |  |  |  |  |  |  |  |
| Note: Fill in the table above with annual Average Megawatts rounded to three decimal places. | | | | | | | | | |

*End Option 2.*

7.2 **Consumer-Owned Resources Serving Load Other than Onsite Consumer Load**

*Option 1: If «Customer Name» does NOT have any Consumer-Owned Resources serving load other than Onsite Consumer Load include the following text:*

Pursuant to section 3.6 of the body of this Agreement, «Customer Name» does not have any Consumer-Owned Resources serving load other than Onsite Consumer Load at this time.

*End Option 1.*

*Option 2: If «Customer Name» has Consumer-Owned Resources serving load other than Onsite Consumer Load include the following text and complete sections (1)(A) and (B) below for each resource:*

Pursuant to section 3.6 of the body of this Agreement, all of «Customer Name»’s Consumer-Owned Resources serving load other than Onsite Consumer Load are listed below.

(1) **«Resource Name»**

(A) **Resource Profile**

|  |  |  |
| --- | --- | --- |
| **Resource Owner** | **Fuel Type** | **Nameplate Capability (MW)** |
|  |  |  |

(B) **Expected Resource Output**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Expected Output – Energy (aMW)** | | | | | | | | | |
| **Fiscal Year** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** |
| **Annual aMW** |  |  |  |  |  |  |  |  |  |
| **Fiscal Year** | **2021** | **2022** | **2023** | **2024** | **2025** | **2026** | **2027** | **2028** |  |
| **Annual aMW** |  |  |  |  |  |  |  |  |  |
| Note: Fill in the table above with annual Average Megawatts rounded to three decimal places. | | | | | | | | | |

*End Option 2.*

7.3 **Consumer-Owned Resources Serving Both Onsite Consumer Load and Load Other than Onsite Consumer Load**

*Option 1: If «Customer Name» does NOT have any Consumer-Owned Resources serving both Onsite Consumer Load and load Other than Onsite Consumer Load include the following text:*

Pursuant to section 3.6 of the body of this Agreement, «Customer Name» does not have any Consumer-Owned Resources serving both Onsite Consumer Load and load other than Onsite Consumer Load at this time.

*End Option 1.*

*Option 2: If «Customer Name» has Consumer-Owned Resources serving both Onsite Consumer Load and load other than Onsite Consumer Load include the following text and complete sections (1)(A) – (D) below for each resource:*

Pursuant to section 3.6 of the body of this Agreement, all of «Customer Name»’s Consumer-Owned Resources serving both Onsite Consumer Load and load other than Onsite Consumer Load are listed in tables below.

(1) **«Resource Name»**

(A) **Resource Profile**

|  |  |  |
| --- | --- | --- |
| **Resource Owner** | **Fuel Type** | **Nameplate Capability (MW)** |
|  |  |  |

(B) **Expected Resource Output**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Expected Output – Energy (aMW)** | | | | | | | | | |
| **Fiscal Year** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** |
| **Annual aMW** |  |  |  |  |  |  |  |  |  |
| **Fiscal Year** | **2021** | **2022** | **2023** | **2024** | **2025** | **2026** | **2027** | **2028** |  |
| **Annual aMW** |  |  |  |  |  |  |  |  |  |
| Note: Fill in the table above with annual Average Megawatts rounded to three decimal places. | | | | | | | | | |

(C) **Expected Onsite Consumer Load**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Expected Onsite Consumer Load – Energy (aMW)** | | | | | | | | | |
| **Fiscal Year** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** |
| **Annual aMW** |  |  |  |  |  |  |  |  |  |
| **Fiscal Year** | **2021** | **2022** | **2023** | **2024** | **2025** | **2026** | **2027** | **2028** |  |
| **Annual aMW** |  |  |  |  |  |  |  |  |  |
| Note: Fill in the table above with annual Average Megawatts rounded to three decimal places. | | | | | | | | | |

*Sub-Option A: If «Customer Name» has Consumer-Owned Resources serving both Onsite Consumer Load and load other than Onsite Consumer Load AND «Customer Name» chose OPTION A in section 3.6.5 then complete the following table:*

(D) **Maximum Amounts Serving Onsite Consumer Load**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Maximum Hourly Amounts Serving Onsite Consumer Load** | | | | | | | | | | | | |
|  | **Oct** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** |
| **HLH (MW/hr)** |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MW/hr)** |  |  |  |  |  |  |  |  |  |  |  |  |
| Note: Fill in the table above with megawatts rounded to one decimal place. | | | | | | | | | | | | |

*End Sub-Option A.*

*Sub-Option B: If «Customer Name» has Consumer-Owned Resources serving both Onsite Consumer Load and load other than Onsite Consumer Load AND «Customer Name» chose OPTION B in section 3.6.5 then complete the following table:*

(D) **Maximum BPA-Served Onsite Consumer Load**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Maximum Hourly Amounts of Onsite Consumer Load Served by BPA** | | | | | | | | | | | | |
|  | **Oct** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** |
| **HLH (MW/hr)** |  |  |  |  |  |  |  |  |  |  |  |  |
| **LLH (MW/hr)** |  |  |  |  |  |  |  |  |  |  |  |  |
| Note: Fill in the table above with megawatts rounded to one decimal place. | | | | | | | | | | | | |

*End Sub-Option B.*

*End Option 2.*

7.4 **Consumer-Owned Resources Serving an NLSL**

*Option 1: If «Customer Name» does NOT have any Consumer-Owned Resources serving an NLSL include the following text:*

Pursuant to section 23.3.7 of the body of this Agreement, «Customer Name» does not have any Consumer-Owned Resources serving an NLSL at this time.

*End Option 1.*

*Option 2: If «Customer Name» has Consumer-Owned Resources serving an NLSL include the following text and complete sections (1)(A) and (B).*

Pursuant to section 23.3.7 of the body of this Agreement, all of «Customer Name»’s Consumer-Owned Resources serving an NLSL are listed below.

(1) **«Resource Name»**

(A) **Resource Profile**

|  |  |  |
| --- | --- | --- |
| **Resource Owner** | **Fuel Type** | **Nameplate Capability (MW)** |
|  |  |  |

(B) **Expected Resource Output**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Expected Output – Energy (aMW)** | | | | | | | | | |
| **Fiscal Year** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** |
| **Annual aMW** |  |  |  |  |  |  |  |  |  |
| **Fiscal Year** | **2021** | **2022** | **2023** | **2024** | **2025** | **2026** | **2027** | **2028** |  |
| **Annual aMW** |  |  |  |  |  |  |  |  |  |
| Note: Fill in the table above with annual Average Megawatts rounded to three decimal places. | | | | | | | | | |

*End Option 2.*

**8. REVISIONS**

BPA shall revise this exhibit to reflect: (1) «Customer Name»’s elections regarding the application and use of all resources owned by «Customer Name» and «Customer Name»’s retail consumers and (2) BPA’s determinations relevant to this exhibit and made in accordance with this Agreement.

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

**Exhibit B**

**HIGH WATER MARKS AND CONTRACT DEMAND QUANTITIES**

**1. CONTRACT HIGH WATER MARK (CHWM)**

1.1 **CHWM Amount*(04/09/14 Version)***

By September 15, 2011, BPA shall fill in the table below with «Customer Name»’s CHWM. Once established, «Customer Name»’s CHWM shall not change for the term of this Agreement except as allowed in section 1.2 of this exhibit.

*Drafter’s Note: Fill in the table with customer’s CHWM.*

*Drafter’s Note: New customers will receive the “Note” but will not receive the number 1 footnote.*

|  |  |
| --- | --- |
| **CHWM (annual aMW) )**« 1/»**:** | «x.xxx» |
| Note: BPA shall round the number in the table above to three decimal places.  «1/ CHWM amount effective October 1, 2013 consistent with section 4.1.9 of the TRM.» | |

1.2 **Changes to CHWM**

If a change is made to «Customer Name»’s CHWM pursuant to this section 1.2, then BPA shall determine and notify «Customer Name» of the date such change will be effective as follows:

1.2.1 If a load included in «Customer Name»’s Measured 2010 Load, as defined in the TRM, is later found to have been an NLSL in FY 2010, then BPA shall reduce «Customer Name»’s CHWM by the amount of the NLSL. BPA shall notify «Customer Name» 30 days prior to when the updated CHWM will become effective. «Customer Name» shall be liable for payment of any charges to adjust for the ineligible Tier 1 PF rate purchases dating back to October 1, 2011.

1.2.2 If «Customer Name» acquires an Annexed Load from a utility that has a CHWM, then BPA shall increase «Customer Name»’s CHWM by adding part of the other utility’s CHWM to «Customer Name»’s CHWM. The CHWM increase shall be effective on the date that «Customer Name» begins service to the Annexed Load. BPA shall establish the amount of the CHWM addition as follows:

(1) If «Customer Name» and the other utility involved in the annexation agree on the amount of the CHWM addition, then BPA shall adopt that amount if BPA determines such amount is reasonable.

(2) If «Customer Name» and the other utility cannot agree on the amount of the CHWM addition, or if BPA determines the amount agreed to in section 1.2.2(1) of this exhibit is unreasonable, then the amount of the CHWM addition shall equal the calculated amount below; provided however, BPA may adjust the calculated amount below to reflect the division of Dedicated Resources between the utilities and other pertinent information advanced by «Customer Name» and the other utility:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| [ | Annexed Load minus annexed NLSLs, if any | ] | × | [ | Other utility’s pre-annexation CHWM | ] |
| Other utility’s pre-annexation Total Retail Load minus total NLSLs, if any |

*[Drafter’s Note: Include the following sentence for any cooperative. If not a cooperative, delete the following sentence:*Any change to «Customer Name»’s CHWM related to the acquisition of an Annexed Load is subject to section 24.8 of the body of this Agreement.*]*

1.2.3 If another utility with a CHWM annexes load of «Customer Name», then BPA shall reduce «Customer Name»’s CHWM by adding part of «Customer Name»’s CHWM to the other utility’s CHWM. The CHWM reduction shall be effective on the date that the other utility begins service to the Annexed Load. BPA shall establish the amount of the CHWM reduction as follows:

(1) If «Customer Name» and the other utility involved in the annexation agree on the amount of the CHWM reduction, then BPA shall adopt that amount if BPA determines such amount is reasonable.

(2) If «Customer Name» and the other utility cannot agree on the amount of the CHWM reduction, or if BPA determines the amount agreed to in section 1.2.3(1) of this exhibit is unreasonable, then the amount of the CHWM reduction shall equal the calculated amount below; provided however, BPA may adjust the calculated amount below to reflect the division of Dedicated Resources between the utilities and other pertinent information advanced by «Customer Name» and the other utility:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| [ | Annexed Load minus annexed NLSLs, if any | ] | × | [ | «Customer Name»’s pre-annexation CHWM | ] |
| «Customer Name»’s pre-annexation Total Retail Load minus total NLSLs, if any |

1.2.4 BPA may change «Customer Name»’s CHWM if BPA’s Administrator determines that BPA is required by court order about an Annexed Load to make such changes. BPA shall determine the effective date of such a change and shall update this exhibit with the changed CHWM.

*Drafter’s Note: Include in DOE Richland’s contract:*

1.2.5 «Customer Name»’s CHWM may also change under the following conditions:

1.2.5.1 Subject to sections 1.2.5.2 through 1.2.5.5 of this exhibit, BPA shall increase «Customer Name»’s CHWM if «Customer Name»’s electricity consumption increases due to the loads related to defense materials activities that are onsite at the DOE facilities that «Customer Name» serves in the state of Washington.

1.2.5.2 «Customer Name» shall notify BPA at least three years prior to when the loads related to defense materials activities are expected to increase. «Customer Name» may satisfy this notice requirement by providing BPA with annual 10‑year load forecasts that indicate, with at least three years lead time, when these loads are expected to increase. If BPA is notified pursuant to these terms, then by the next September 30 of a Forecast Year BPA shall revise this exhibit to increase «Customer Name»’s CHWM for the Rate Period where these loads are expected to increase.

1.2.5.3 In no circumstance shall «Customer Name»’s CHWM exceed 92 average megawatts.

1.2.5.4 «Customer Name» shall meter loads not related to defense materials activities separately from «Customer Name»’s loads related to defense materials activities. Meters and metering equipment necessary to meter loads not related to defense materials activities shall be installed at «Customer Name»’s expense.

1.2.5.5 Tier 2 Rates shall apply to Firm Requirements Power that «Customer Name» purchases from BPA to serve new loads not related to defense materials activities after September 30, 2011.

*Drafter’s Note: End 1.2.5 for DOE Richland.*

*Drafter’s Note: Include in contracts of qualifying tribal utilities (e.g. Yakama and Umpqua Indian Utility Cooperative):*

1.2.5 «Customer Name»’s CHWM may also change under the following conditions stated in this section 1.2.5. This section 1.2.5 shall not apply after September 30, 2021.

1.2.5.1 At the time BPA calculates «Customer Name»’s RHWM for each Rate Period, and subject to sections 1.2.5.4 and 1.2.5.5 of this exhibit, BPA shall increase «Customer Name»’s CHWM by the amount of «Customer Name»’s forecasted load growth during the upcoming Rate Period.

1.2.5.2 If «Customer Name» acquires an Annexed Load from a utility that does not have a CHWM, then BPA shall increase «Customer Name»’s CHWM by the amount of Annexed Load subject to sections 1.2.5.4 and 1.2.5.5 of this exhibit.

1.2.5.3 If «Customer Name» acquires an Annexed Load from a utility that has a CHWM, and if such Annexed Load exceeds the CHWM amount added from the other utility pursuant to section 1.2.2 of this exhibit, then BPA shall increase «Customer Name»’s CHWM by an additional amount equal to the amount of the excess, minus any annexed NLSLs, subject to sections 1.2.5.4 and 1.2.5.5 of this exhibit.

1.2.5.4 BPA shall not increase «Customer Name»’s CHWM under this section 1.2.5 if either of the following limits have been reached:

(1) the 40 Average Megawatts limit identified in section 4.1.6.4 of the TRM for all New Tribal Utilities as defined in the TRM, or

(2) the 250 Average Megawatts limit identified in section 4.1.6 of the TRM for all New Publics, as defined in the TRM.

For any Rate Period where the total amount of CHWM additions granted to all New Tribal Utilities would exceed either of the above limits, BPA shall reduce the CHWM additions of all New Tribal Utilities so that each such utility receives a pro rata share of the remaining amount under the applicable limit for that Rate Period. Each utility’s pro rata share shall be based on the amount that the utility’s CHWM would have been increased for that Rate Period absent the applicable limit.

1.2.5.5 Even while this section 1.2.5 is in effect, «Customer Name» shall elect whether it will serve its Above-RHWM Load with Firm Requirements Power purchased at Tier 2 Rates or with its Dedicated Resources, as provided in section 9.1 of the body of this Agreement.

*Drafter’s Note: End 1.2.5 for tribal utilities.*

**2. CONTRACT DEMAND QUANTITIES (CDQs)**

2.1 **CDQ Amounts*(04/09/14 Version)***

By September 15, 2011, BPA shall fill in the table below with «Customer Name»’s monthly CDQs. Calculation of such CDQs is established in the TRM. «Customer Name»’s monthly CDQs shall not change for the term of this Agreement except as allowed below.

*Drafter’s Note: Fill in the table with customer’s CDQs in whole numbers. Numbers should not be bolded and include the comma for numbers over 1,000. Include a footnote for customers that had their CDQ amounts adjusted as a result of the Provisional CHWM process.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Monthly Contract Demand Quantities**« 1/» | | | | | | | | | | | | |
|  | **Oct** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** |
| **kW** | «x» | «x» | «x» | «x» | «x» | «x» | «x» | «x» | «x» | «x» | «x» | «x» |
| Note: BPA shall round the amounts in the table above to the nearest whole kilowatt.  «1/ Monthly CDQs effective October 1, 2011 consistent with section 4.1.9 of the TRM.» | | | | | | | | | | | | |

2.2 **Changes Due to Annexation**

The Parties shall determine when changes to «Customer Name»’s CDQs, as allowed below, will become effective.

2.2.1 If «Customer Name» acquires an Annexed Load from a utility that has monthly CDQs, then BPA shall increase «Customer Name»’s CDQ for each month by adding the portion of the other utility’s monthly CDQ that is attributable to such Annexed Load. For each month, the sum of «Customer Name»’s and the other utility’s post-annexation CDQs shall not exceed the sum of the pre-annexation CDQs for such utilities. BPA shall establish the amount of the CDQ additions as follows:

(1) If «Customer Name» and the other utility involved in the annexation agree on the amounts of the CDQ additions, then BPA shall adopt those amounts.

(2) If «Customer Name» and the other utility cannot agree on the amounts of the CDQ additions, then BPA shall determine the amounts based on the monthly load factors of the Annexed Load.

2.2.2 If another utility with monthly CDQs annexes load of «Customer Name», then BPA shall reduce «Customer Name»’s CDQ for each month by removing the portion of «Customer Name»’s monthly CDQ that is attributable to the load that was annexed. For each month, the sum of «Customer Name»’s and the other utility’s post-annexation CDQs shall not exceed the sum of the pre-annexation CDQs for such utilities. BPA shall establish the amount of the CDQ reductions as follows:

(1) If «Customer Name» and the other utility involved in the annexation agree on the amounts of the CDQ reductions, then BPA shall adopt those amounts.

(2) If «Customer Name» and the other utility cannot agree on the amounts of the CDQ reductions, then BPA shall determine the amounts based on the monthly load factors of the Annexed Load.

**3. REVISIONS**

BPA may revise this exhibit to the extent allowed in sections 1 and 2 of this exhibit. All other changes shall be made by mutual agreement.

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

**Exhibit C**

**PURCHASE OBLIGATIONS**

**1. DETERMINATION OF TIER 1 BLOCK AMOUNTS**

1.1 **Determination of Annual Tier 1 Block Amounts**

By September 15, 2011, and by each September 15 thereafter, BPA shall enter in the table below «Customer Name»’s annual Tier 1 Block Amount as determined pursuant to section 4.3.1 of the body of this Agreement.

|  |  |  |
| --- | --- | --- |
| **Annual Tier 1 Block Amounts** | | |
| **Fiscal Year** | **Annual Tier 1 Block Amount (aMW)** | **Annual Tier 1 Block Amount (MWh)** |
| 2012 |  |  |
| 2013 |  |  |
| 2014 |  |  |
| 2015 |  |  |
| 2016 |  |  |
| 2017 |  |  |
| 2018 |  |  |
| 2019 |  |  |
| 2020 |  |  |
| 2021 |  |  |
| 2022 |  |  |
| 2023 |  |  |
| 2024 |  |  |
| 2025 |  |  |
| 2026 |  |  |
| 2027 |  |  |
| 2028 |  |  |

*Option 1: Include if customer chooses a Flat Annual Shape*

1.2 **Flat Annual Shape*(06/02/09 Version)***

Under the Flat Annual Shape, «Customer Name»’s hourly Tier 1 Block Amount shall be equal in all hours of the year. For each Fiscal Year, the megawatt amount of such power for each hour shall equal the annual Tier 1 Block Amount (aMW) stated in section 1.1 of this exhibit, rounded to a whole number. Due to rounding, total megawatt-hour deliveries during any Fiscal Year may be slightly different than the megawatt-hours stated in section 1.1 of this exhibit.*(Drafter’s Note****:*** *Add the following language to this paragraph if customer purchases DFS:* Pursuant to provisions necessary to implement Diurnal Flattening Service the total monthly Tier 1 Block Amounts scheduled by «Customer Name» to its Total Retail Load may be less than the planned monthly Tier 1 Block Amounts. «Customer Name»’s planned monthly Tier 1 Block Amounts shall equal the annual Tier 1 Block Amount (aMW) stated in the section 1.1 of this exhibit, rounded to a whole number, and multiplied by the number of hours in the appropriate month.*)*

End Option 1

*Option 2: Include if customer chooses a Flat Within-Month Shape.*

1.2 **Flat Within-Month Shape**

«Customer Name»’s monthly Tier 1 Block Amounts, expressed in MWh, shall be determined based on the Monthly Shaping Factors. «Customer Name»’s Monthly Shaping Factors that are used to determine monthly Tier 1 Block Amounts shall be determined as follows:

1.2.1 **Monthly Shaping Factors for a Flat Within-Month Shape**

«Customer Name»’s Monthly Shaping Factors for a Flat Within-Month Shape shall be determined in accordance with section 1.2.1.2 of this exhibit, using «Customer Name»’s “monthly 2010 load values” and “annual 2010 load value” as determined in accordance with section 1.2.1.1 of this exhibit.

1.2.1.1 **Calculation of Monthly and Annual 2010 Load Values*(07/25/11 Version)***

Each “monthly 2010 load value” for «Customer Name» shall be equal to «Customer Name»’s monthly Total Retail Load for FY 2010, as adjusted in accordance with sections 4.1.1.1, 4.1.1.2, and 4.1.1.3 of the TRM. «Customer Name»’s “annual 2010 load value” shall be equal to the sum of «Customer Name»’s “monthly 2010 load values” for all months of FY 2010.

1.2.1.2 **Calculation of Monthly Shaping Factors for a Flat Within-Month Shape**

«Customer Name»’s Monthly Shaping Factors for a Flat Within-Month Shape shall be determined as follows:

(1) The “monthly shape numerator” shall be equal to (a) the “monthly 2010 load value” for the corresponding month in FY 2010 minus (b) «Customer Name»’s Existing Resource amounts for each month of FY 2012, as listed in section 2 of Exhibit A, expressed in MWh;

(2) The “monthly shape denominator” shall be equal to (a) the “annual 2010 load value,” minus (b) the sum of «Customer Name»’s Existing Resource amounts for all months of FY 2012, as listed in section 2 of Exhibit A, expressed in MWh; and

(3) The Monthly Shaping Factors for a Flat Within-Month Shape shall be equal to (a) the “monthly shape numerator” for each month, divided by (b) the “monthly shape denominator” for each such month, rounded to three decimal places and set forth in the table below.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Monthly Shaping Factors** | | | | | | | | | | | | | |
| **Month** | **Oct** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **Total** |
| Monthly Shaping Factor |  |  |  |  |  |  |  |  |  |  |  |  | 1.000 |

1.3 **Monthly Tier 1 Block Amounts*(06/02/09 Version)***

*Sub-Option 1: include the following language for customers that do NOT purchase DFS, as defined in section 2 of Exhibit D.*

The monthly Tier 1 Block Amounts for each month of each Fiscal Year, beginning with FY 2012, shall be equal to: (1) the annual Tier 1 Block Amount as specified in section 1.1 of this exhibit multiplied by (2) the Monthly Shaping Factor for the corresponding month as specified in section 1.2 of this exhibit, rounded to a whole number. BPA shall enter such amounts into the table below. Due to rounding, total megawatt-hour deliveries during any Fiscal Year may be slightly different than the megawatt-hours stated in section 1.1 of this exhibit. «Customer Name» shall schedule the monthly Tier 1 Block Amounts as flat as possible on all hours of each month.

*End Sub-Option 1*

*Sub-Option 2: Include the following language for customers that purchase DFS as defined in section 2 of Exhibit D.*

The monthly Tier 1 Block Amounts for each month of each Fiscal Year, beginning with FY 2012, shall be equal to: (1) the annual Tier 1 Block Amount as specified in section 1.1 of this exhibit multiplied by (2) the Monthly Shaping Factor for the corresponding month as specified in section 1.2 of this exhibit, rounded to a whole number. BPA shall enter such amounts into the table below. Due to rounding, total megawatt-hour deliveries during any Fiscal Year may be slightly different than the megawatt-hours stated in section 1.1 of this exhibit. «Customer Name» shall schedule the monthly Tier 1 Block Amounts as flat as possible on all hours of each month. Pursuant to provisions necessary to implement Diurnal Flattening Service the total monthly Tier 1 Block Amounts scheduled by «Customer Name» to its Total Retail Load may be less than the planned monthly Tier 1 Block Amounts stated in the table below. «Customer Name» shall purchase the monthly Tier 1 Block Amounts stated in the table below.

*End Sub-Option 2*

| **Monthly Tier 1 Block Amounts (MWh)** | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **FY** | **Oct** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** |
| 2012 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2013 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2014 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2016 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2017 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2018 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2019 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2020 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2021 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2022 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2023 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2024 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2025 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2026 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2027 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2028 |  |  |  |  |  |  |  |  |  |  |  |  |

*End Option 2*

**2. FIRM REQUIREMENTS POWER AT TIER 2 RATES**

2.1 **Notice to Purchase Zero Amounts at Tier 2 Rates**

If «Customer Name» elects not to purchase Firm Requirements Power at Tier 2 Rates for a Purchase Period, then by March 31 immediately following the corresponding Notice Deadline, BPA shall update this exhibit to indicate such election by adding an “X” to the applicable cell in the following table. Such election means that for the Purchase Period specified below, «Customer Name» shall: (1) purchase zero amounts of Firm Requirements Power at Tier 2 Rates, and (2) serve all of its Above-RHWM Load with power other than Firm Requirements Power.

*Drafter’s Note: Leave table blank at contract signing:*

| **Zero Tier 2** | **Purchase Period** |
| --- | --- |
|  | FY 2012 - FY 2014 |
|  | FY 2015 - FY 2019 |
|  | FY 2020 - FY 2024 |
|  | FY 2025 - FY 2028 |

2.2 **Tier 2 Load Growth Rate**

«Customer Name» shall not have the right to purchase Firm Requirements Power at Tier 2 Load Growth Rates for the term of this Agreement.

2.3 **Tier 2 Vintage Rates**

2.3.1 **Election Process**

2.3.1.1 **Right to Convert**

Subject to the amounts of power BPA makes available at one or more Tier 2 Vintage Rates, «Customer Name» shall have the right to convert some or all of the amounts of Firm Requirements Power it has elected to purchase at Tier 2 Short-Term Rates, as stated in section 2.4 of this exhibit, to an equal purchase amount at Tier 2 Vintage Rates.

2.3.1.2 **Statement of Intent**

If «Customer Name» elects to purchase Firm Requirements Power from BPA at Tier 2 Vintage Rates, then «Customer Name» shall sign a Statement of Intent offered by BPA. “Statement of Intent” means a statement prepared by BPA and signed by «Customer Name» that describes the approach and cost structure that will be used for a specific Tier 2 Cost Pool. If BPA establishes a Tier 2 Cost Pool for a Tier 2 Vintage Rate consistent with the Statement of Intent, then «Customer Name» agrees to have the portion of its Tier 2 Rate power purchase specified in the Statement of Intent priced at that rate. If BPA is unable to establish the Tier 2 Cost Pool for the specific Tier 2 Vintage Rate, then «Customer Name» agrees to purchase such amount of Firm Requirements Power at Tier 2 Short-Term Rates, except as stated in section 2.3.1.5 of this exhibit.

2.3.1.3 **Insufficient Availability**

The Statement of Intent shall include procedures to allocate between competing applications for a specific Tier 2 Cost Pool if requests exceed amounts available.

2.3.1.4 **Conversion Costs**

Upon establishment of a Tier 2 Vintage Rate for which «Customer Name» signed a Statement of Intent, «Customer Name» shall be liable for payment of any outstanding costs under Tier 2 Short-Term Rates that apply to «Customer Name». Such costs shall be those that BPA: (1) is obligated to pay and will not recover from «Customer Name» under Tier 2 Short-Term Rates as a result of the conversion, and (2) is unable to recover through other transactions. BPA shall determine such costs, if any, in the first 7(i) Process that establishes the applicable Tier 2 Vintage Rate. In no event shall BPA make payment to «Customer Name» as a result of «Customer Name»’s conversion of purchase amounts at Tier 2 Short-Term Rates to purchase amounts at Tier 2 Vintage Rates.

2.3.1.5 **Additional Offerings**

In addition to the right to convert to Tier 2 Vintage Rates established in section 2.3.1.1 of this exhibit, «Customer Name» may have the opportunity to purchase Firm Requirements Power at Tier 2 Vintage Rates regardless of whether «Customer Name» is purchasing at Tier 2 Short-Term Rates if:

(1) BPA determines, in its sole discretion, that all requests for service at Tier 2 Vintage Rates by purchasers of Firm Requirements Power at Tier 2 Short-Term Rates are able to be satisfied, and

(2) BPA determines, in its sole discretion, to offer «Customer Name» a Statement of Intent that would provide «Customer Name» the opportunity to purchase Firm Requirements at Tier 2 Vintage Rates.

If «Customer Name» signs a Statement of Intent offered by BPA pursuant to this section 2.3.1.5, and if BPA is unable to establish the Tier 2 Cost Pool for the applicable Tier 2 Vintage Rate, then «Customer Name»’s current elections for service to its Above-RHWM Load shall continue to apply.

Except as provided in this section 2.3.1, any election by «Customer Name» to purchase Firm Requirements Power at Tier 2 Vintage Rates shall not relieve «Customer Name» of any obligation to purchase Firm Requirements Power at another Tier 2 Rate.

2.3.1.6 **Exhibit Updates**

By September 15 immediately following the establishment of a Tier 2 Vintage Rate for which «Customer Name» signed a Statement of Intent, BPA shall amend this exhibit to show «Customer Name»’s Tier 2 Vintage Rate purchases and remove «Customer Name»’s Tier 2 Short-Term Rate purchases by the amounts purchased at the Tier 2 Vintage Rate, if «Customer Name» is converting to the Tier 2 Vintage Rate from the Tier 2 Short-Term Rate. BPA shall insert applicable tables, terms, and conditions for each Tier 2 Vintage Rate in section 2.3.2 of this exhibit.

*Option 1: For customers that* ***did not*** *sign the SOI for VR1-2014 or VR1-2016, leave in the following existing language:*

2.3.2 **Vintage Rate Elections*(02/25/15 Version)***

«Customer Name» has no Tier 2 Vintage Rate elections at this time.

*END Option 1*

*Option 2: For customers with a Vintage Rate election only. (Note: Each Vintage Rate is different. The language below does not apply to a new customer or a customer changing products. Use Option 1 for these instances.)*

*Drafter’s Note: Include for customers that signed the SOI for the VR1-2014 Rate:*

2.3.2.«#» **VR1-2014 Rate Purchase Obligation**

Pursuant to Contract No. 11PB-«#####», PF Tier 2 Vintage Market Sourced Rate Statement of Intent, «Customer Name» has elected to purchase Firm Requirements Power at a Tier 2 Vintage Rate (VR1‑2014 Rate), if established, for the Fiscal Years and in the amounts listed in the table below. If BPA is unable to establish the VR1‑2014 Rate, then «Customer Name» shall «purchase such amounts of Firm Requirements Power at Tier 2 Short-Term Rates/use Unspecified Resource Amounts» to serve that portion of its Above-RHWM Load.

| VR1-2014 Rate Purchase Obligation | | | | | |
| --- | --- | --- | --- | --- | --- |
| **Fiscal Year** | **2015** | **2016** | **2017** | **2018** | **2019** |
| **Election** |  |  |  |  |  |
| Note: Insert amounts in Average Megawatts rounded to three decimal places for each year. | | | | | |

All applicable costs associated with the VR1-2014 Rate shall be determined in the 7(i) Process used to establish the VR1‑2014 Rate in each Rate Period. Costs shall be determined in accordance with the TRM and PF Tier 2 Vintage Market Sourced Rate Statement of Intent.

If BPA is unable to establish the VR1-2014 Rate then BPA shall update this exhibit accordingly.

*Drafter’s Note: Include for customers that signed the SOI for the VR1-2016 Rate. Replace the existing VR1-2016 Rate Election language with the following:*

2.3.2.«#» **VR1-2016 Rate Purchase Obligation**

Pursuant to Contract No. 12PS-«#####», Tier 2 Vintage Rate Statement of Intent, «Customer Name» has elected to purchase Firm Requirements Power at a Tier 2 Vintage Rate (VR1‑2016 Rate), if established, for the Fiscal Years and in the amounts listed in the table below. If BPA is unable to establish the VR1‑2016 Rate, then «Customer Name» shall purchase such amounts of Firm Requirements Power at Tier 2 Short‑Term Rates to serve that portion of its Above‑RHWM Load.

| **VR1-2016 Rate Purchase Obligation** | | | | |
| --- | --- | --- | --- | --- |
| **Fiscal Year** | **2016** | **2017** | **2018** | **2019** |
| **Election** |  |  |  |  |
| Note: Insert amounts in Average Megawatts rounded to three decimal places for each year. | | | | |

All applicable costs associated with the VR1‑2016 Rate shall be determined in the 7(i) Process used to establish the VR1‑2016 Rate in each Rate Period. Costs shall be determined in accordance with the TRM and Tier 2 Vintage Rate Statement of Intent.

If BPA is unable to establish the VR1‑2016 Rate then BPA shall update this exhibit accordingly.

*END Option 2*

2.4 **Tier 2 Short-Term Rate**

If «Customer Name» elects by the applicable Notice Deadline to purchase Firm Requirements Power at Tier 2 Short-Term Rates for a Purchase Period, then in its election «Customer Name» shall state its purchase amounts of such power for each year of the corresponding Purchase Period. By March 31 immediately following each Notice Deadline, BPA shall update the table below with: (1) «Customer Name»’s purchase amounts, if any, at Tier 2 Short-Term Rates for the corresponding Purchase Period, or (2) a zero purchase amount if «Customer Name» does not elect to purchase Firm Requirements Power at Tier 2 Short-Term Rates for the corresponding Purchase Period.

*Drafter’s Note: Leave table blank at contract signing:*

| **Tier 2 Short-Term Rate Table** | | | | | |
| --- | --- | --- | --- | --- | --- |
| **Fiscal Year** | **2012** | **2013** | **2014** | **2015** | **2016** |
| **aMW** |  |  |  |  |  |
| **Fiscal Year** | **2017** | **2018** | **2019** | **2020** | **2021** |
| **aMW** |  |  |  |  |  |
| **Fiscal Year** | **2022** | **2023** | **2024** | **2025** | **2026** |
| **aMW** |  |  |  |  |  |
| **Fiscal Year** | **2027** | **2028** |  |  |  |
| **aMW** |  |  |  |  |  |
| Note: Insert whole megawatt amounts for each year of the applicable Purchase Period. | | | | | |

2.5 **Amounts of Power to be Billed at Tier 2 Rates**

Prior to each Fiscal Year and consistent with «Customer Name»’s elections, BPA shall determine the amounts, if any, of Firm Requirements Power at Tier 2 Rates that need to be remarketed subject to section 10 of the body of this Agreement. By September 15 of each Fiscal year beginning September 15, 2011, BPA shall update the table below for the upcoming Fiscal Year with: (1) the annual average amounts of Firm Requirements Power which «Customer Name» shall purchase at each applicable Tier 2 Rate, (2) any remarketed Tier 2 Rate purchase amounts, and (3) the total amount of Firm Requirements Power priced at Tier 2 Rates, net of any remarketed amounts.

*Drafter’s Note: Leave table blank at contract signing:*

| **Annual Amounts Priced at Tier 2 Rates (aMW)** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Fiscal Year** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** | **2020** |
| **No Tier 2 at this time** |  |  |  |  |  |  |  |  |  |
| **Minus Remarketed Amounts** |  |  |  |  |  |  |  |  |  |
| **Total Amount at Tier 2** |  |  |  |  |  |  |  |  |  |
| **Fiscal Year** | **2021** | **2022** | **2023** | **2024** | **2025** | **2026** | **2027** | **2028** |  |
| **No Tier 2 at this time** |  |  |  |  |  |  |  |  |
| **Minus Remarketed Amounts** |  |  |  |  |  |  |  |  |
| **Total Amount at Tier 2** |  |  |  |  |  |  |  |  |
| Notes:  1. List each applicable Tier 2 rate in the table above. For the first applicable Tier 2 rate replace **No Tier 2 at this time** with the name of the applicable Tier 2 rate. For each additional Tier 2 rate, add a new row above the **Remarketed Amounts** row. If «Customer Name» elects not to purchase at Tier 2 rates, then leave **No Tier 2 at this time** in the table and leave the remainder of the table blank.  2. Fill in the table above with whole annual Average Megawatts. | | | | | | | | | |

*Drafter’s Note: Include the following language if customer purchases DFS, as defined in section 2 of Exhibit D.*

2.6 **Displacement of Block Product Amounts for Diurnal Flattening Service*(06/02/09 Version)***

For each hour when the total scheduled generation from «Customer Name»’s Specified Resources listed in section 2.3.6.1 of Exhibit D, is greater than (up to the resource’s combined Operating Maximum amount) the total Planned Resource Amount for such Specified Resources, BPA’s obligation to make available the total planned Block Product amount (Tier 1 Block Amounts plus Tier 2 Block Amounts) specified in this exhibit shall be reduced by the amount the sum of the generation of such Specified Resources (that is equal to or less than the sum of the Operating Maximum of such resources) exceeds the sum of Planned Resource Amounts of such resources for each hour. «Customer Name» shall schedule its reduced Block Product deliveries as required for Diurnal Flattening Service pursuant to section 2.3 of Exhibit D and section 6 of Exhibit F. The total amount of DFS service provided to «Customer Name» for the month shall not exceed the total Block Product amount for that month.

*End Option for DFS*

**3. MONTHLY PF RATES**

Applicable monthly Tier 1 and Tier 2 Rates are specified in BPA Wholesale Power Rate Schedules and GRSPs.

**4. REVISIONS**

BPA shall revise this exhibit to reflect «Customer Name»’s elections regarding service to its Above-RHWM Load and BPA’s determinations relevant to this exhibit and made in accordance with this Agreement.

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here*

**Exhibit D**

**ADDITIONAL PRODUCTS AND SPECIAL PROVISIONS**

**1. CF/CT AND NEW LARGE SINGLE LOADS*(09/08/08 Version)***

*Option 1: Include the following if customer has* ***no*** *CF/CT loads.*

1.1 **CF/CT Loads**

«Customer Name» has no loads identified that were contracted for, or committed to (CF/CT), as of September 1, 1979, as defined in section 3(13)(A) of the Northwest Power Act.

*End Option 1*

*Option 2: Include the following if customer* ***has*** *CF/CT loads.*

*Drafter’s Note: If customer has more than one CF/CT, number each separately as (1), (2), etc. and indent appropriately.*

1.1 **CF/CT Loads**

The Administrator has determined that the following loads were contracted for, or committed to be served (CF/CT), as of September 1, 1979, as defined in section 3(13)(A) of the Northwest Power Act, and are subject to PF rates:

End-use consumer’s name:

Facility name:

Facility location:

Date of CF/CT determination:

Facility description:

Amount of firm energy (megawatts at 100 percent load factor) contracted for, or committed to:

*End Option 2*

*Option 1: Include the following if customer* ***has no*** *POTENTIAL NLSLs.*

1.2 **Potential NLSLs**

«Customer Name» has no identified potential NLSLs.

*End Option 1*

*Option 2: Include the following if customer* ***has*** *POTENTIAL NLSL(s).*

*Drafter’s Note: If customer has more than one potential NLSL, number each separately as (1), (2), etc. and indent appropriately.*

1.2 **Potential NLSLs**

«Customer Name» has the following potential NLSL(s):

End-use consumer name:

Facility location:

*End Option 2*

1.3 **Existing NLSLs**

*Option 1: Include the following if customer* ***has no*** *existing NLSLs AND DELETE sections 1.3.1 and 1.3.2.*

«Customer Name» has no existing NLSLs.

*End Option 1*

*Option 2: Include the following if customer* ***has*** *an existing NLSL*

1.3.1 **«Name of NLSL»** **NLSL**

«Customer Name» has an NLSL and elects to serve the NLSL with resource amounts in Exhibit A that are not already used to serve any other portion of «Customer Name»’s Total Retail Load. The Parties shall list such Dedicated Resources or Consumer-Owned Resources in section 4 or section 7.4, respectively, of Exhibit A. The Parties shall administer service to the following NLSL consistent with section 23.3 of the body of this Agreement.

End–use consumer name:

Facility location:

Date load determined as an NLSL:

Approximate load:

Description of NLSL:

Manner of service:

*End Option 2*

*Option 1: Include the following if customer* ***has*** *an existing NLSL but* ***has no*** *onsite renewable or cogeneration facilities to apply to an NLSL:*

1.3.2 **Renewable Resource/Cogeneration Exception**

«Customer Name»’s end-use consumer is not currently applying an onsite renewable resource or cogeneration facility to an NLSL.

*End Option 1*

*Option 2: Include the following if customer* ***has*** *an existing NLSL and* ***has*** *an onsite renewable or cogeneration facility to apply to an NLSL.*

1.3.2 **Renewable Resource/Cogeneration Exception**

*Drafter’s Note: Use Revision 5 to Exhibit D under Flathead’s Subscription Contract 00PB-12172 as a template and coordinate with the NLSL expert and general counsel to add specific renewable or cogeneration resource information.*

*Option: Choose whether customer is applying a renewable or cogeneration facility.*

«Customer Name»’s end-use consumer is applying an onsite «renewable resource or cogeneration facility» to its NLSL listed in section 1.3.1 of this exhibit.

*End Option 2*

**2.** **RESOURCE SUPPORT SERVICES*(07/21/09 Version)***

RSS is only available to «Customer Name» to support renewable resources that are added after September 30, 2006 and are Specified Resources used to serve Total Retail Load. «Customer Name»’s purchase of RSS shall include those support services necessary and consistent with «Customer Name»’s Slice/Block purchase to convert the actual scheduled output from the resource being supported into a flat annual block.

2.1 BPA shall develop the RSS products to support applicable Specified Resources 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 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 Resources, 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.

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

*Reviewer’s Note: The DFS language and tables below have been drafted assuming DFS is provided on an individual resource basis. If after a future 7(i) process it is advantageous for a customer to use a “portfolio approach” for pricing DFS for multiple resources getting DFS, then the language below will need to be modified. Such modification will need to occur prior to September 30 of a Rate Case Year.*

2.3 **Diurnal Flattening Service (DFS)*(06/01/09 Version)***

From October 1, 20«##» through September 30, 20«##», BPA shall support «Customer Name»’s Specified Resources listed in section 2.3.6.1 below with DFS in accordance with section 2.3.1 below. «Customer Name» shall apply such resources to serve «Customer Name»’s Total Retail Load and provide BPA with any necessary information concerning such resources 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. «Customer Name» shall schedule such resources, Block Product amounts and DFS Support Amounts in accordance with section 2.3.7 and section 6 of Exhibit F. Definitions that are specific to this section 2.3 are listed below in section 2.3.8.

2.3.1 **DFS Obligations**

To support variations in the generation of «Customer Name»’s Specified Renewable Resources listed in 2.3.6.1, BPA will make DFS available to «Customer Name» for such Specified Renewable Resources in months when «Customer Name»’s total Block Product amounts are equal to or greater than the combined Operating Maximums minus the total Planned Resource Amounts for such Specified Renewable Resources for such months. The total amount of DFS service provided to «Customer Name» for the month shall not exceed the total Block Product amount for that month.

Pursuant to section 4.5 of the body of this Agreement, sections 1.3 and 2.6 of Exhibit C, and section 2.3.1 of this exhibit, for each hour there is a combined DFS Excess Amount, «Customer Name» shall reduce «Customer Name»’s total Block Product amount by the combined DFS Excess Amount for each such hour. On each such hour, «Customer Name» shall calculate and schedule both the reduced total Block Product amount, and the combined generation of such Specified Renewable Resources, all to its Total Retail Load.

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

In any election period where «Customer Name» has elected to purchase DFS, any yearly changes in the number of Specified Resources or change in «Customer Name»’s total Block Product amounts shall require changes to: (1) the Specified Resources listed in section 2.3.6.2; (2) the Specified Resource’s, Operating Maximum, Planned Resource Amounts and DFS Support Amounts in section 2.3.6.1; and (3) charges shown in section 2.3.6.3 calculated in the previous rate case.

For the hours within each month in which BPA does not provide Diurnal Flattening Service «Customer Name» shall not be obligated to pay for Diurnal Flattening Service for those hours within such month and shall not revise in real‑time its Block Product deliveries for those hours within such month.

DFS is a BPA Power Services product, and «Customer Name» shall be responsible for any non-Power Service obligations needed for DFS service and to meet its Total Retail Load, including but not limited to transmission, other reserves, and replacement power.

BPA shall on an hourly basis provide DFS Support Amounts for delivery to «Customer Name»’s Total Retail Load as follows:

2.3.1.1 The hourly individual DFS Support Amount for each Specified Renewable Resource listed in 2.3.6.1 shall be computed as follows:

(1) for hours when the scheduled generation of such Specified Renewable Resource is equal to or greater than the Operating Minimum of such resource, the hourly individual DFS Support Amount shall be equal to the Planned Resource Amount minus the greater of the scheduled generation or the Operating Minimum for such Specified Renewable Resource.

(2) for hours when the scheduled generation of such Specified Renewable Resource is less than the Operating Minimum, then the hourly individual DFS Support Amount for such Specified Renewable Resource shall be zero, and

(3) for hours when the scheduled generation of such Specified Renewable Resource is greater than the Planned Resource Amount, then the hourly individual DFS Support Amount for each such Specified Renewable Resource shall be zero.

2.3.1.2 The hourly individual DFS Excess Amount for each Specified Renewable Resource listed in 2.3.6.1 shall be computed as follows:

(1) for hours when the scheduled generation of such Specified Renewable Resource is greater than the Planned Resource Amount the hourly individual DFS Excess Amount shall be equal to the lesser of (A) the Operating Maximum, or (B) the scheduled generation minus the Planned Resource Amount for such Specified Renewable Resource; and

(2) for hours when the scheduled generation of such Specified Renewable Resource is greater than the Operating Maximum, then the hourly individual DFS Excess Amount shall be equal to Operating Maximum for such Specified Renewable Resource.

2.3.1.3 For any hours in the month when the total scheduled generation for such Specified Renewable Resources is less than the total Planned Resource Amount, then:

(1) BPA shall provide a combined DFS Support Amount in hourly amounts equal to the greater of (A) zero; or (B) the sum of the hourly individual DFS Support Amount of each Specified Renewable Resource minus the hourly individual DFS Excess Amount of each Specified Renewable Resource;

(2) the combined DFS Excess Amount shall be zero;

(3) «Customer Name» shall not reduce its total Block Product amount; and

(4) «Customer Name» shall calculate and schedule to its Total Retail Load: (A) the generation of each Specified Renewable Resource; (B) the combined DFS Support Amount; and (C) «Customer Name»’s total Block Product amount.

2.3.1.4 For any hours in the month when the total scheduled generation of such Specified Renewable Resource is equal to the total Planned Resource Amount, then:

(1) BPA shall not provide a DFS Support Amount;

(2) the combined DFS Excess Amount shall be zero;

(3) «Customer Name» shall not reduce its total Block Product amount; and

(4) «Customer Name» shall schedule to its Total Retail Load: (A) the generation of each Specified Renewable Resource; (B) no DFS Support Amount; and (C) «Customer Name»’s total Block Product amount.

2.3.1.5 For any hours in the month when the total scheduled generation for such Specified Renewable Resource is greater than the total Planned Resource Amount, then

(1) BPA shall not provide a DFS Support Amount;

(2) «Customer Name» will reduce its total Block Product schedule by an amount equal to the greater of (A) zero, or (B) the sum of the hourly individual DFS Excess Amount of each Specified Renewable Resource minus the hourly individual DFS Support Amount of each Specified Renewable Resource;

(3) «Customer Name» shall calculate and schedule to its Total Retail Load: (A) the generation of each Specified Renewable Resource up to its Operating Maximum amount; (B) no DFS Support Amount; and (C) «Customer Name»’s reduced Block Product amount; and

(4) «Customer Name» shall also use or dispose of any scheduled generation above the combined Operating Maximum amount for the Specified Renewable Resources listed in section 2.3.6.1. BPA shall not pay or give a credit to «Customer Name» for any such used or disposed generation above the combined Operating Maximum amount.

2.3.2 **Operational Requirements**

«Customer Name» shall apply the output from the Specified Resources listed in section 2.3.6.1 below, as such output is generated, to serve «Customer Name»’s Total Retail Load. If for any hour the output generated by each individual Specified Resource is less than Operating Minimum for that individual Specified Resource, then: (1) the individual DFS Support Amount for such Specified Resource shall be zero; and (2) the individual DFS Excess Amount for such Specified Resource shall be zero.

2.3.3 **Information Requirements**

«Customer Name» shall provide BPA with hourly meter data from the Specified Resources 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. «Customer Name» shall provide hourly generation forecast data and schedule data to BPA for such resources 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 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 Resources listed below in section 2.3.6.1 on non-firm or firm transmission, regardless of whether the resource is located inside or outside BPA’s Balancing Authority Area. BPA shall have no obligation for any costs or related services attributable to «Customer Name»’s acquisition of such firm or non-firm transmission. 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.

*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. Although this provision will be out-of-date by the time the exhibit revision is signed (since by then the plan of service will be in place) it needs to be included since it is a term of the agreement the customer will commit to on September 30. (See section 2.1 and 2.2 of this exhibit for details.) The March 31, 2012 date will be revised for future notice opportunities and purchase periods.*

2.3.4 **Delivery Requirements *(08/01/11 Version)***

For each Specified Resource listed in section 2.3.6.1 below, Power Services and «Customer Name» agree to develop by March 31, 2012, 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 March 31, 2012, 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. 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 Resources 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. Although this provision will be out-of-date by the time the exhibit revision is signed (since by then the plan of service will be in place) it needs to be included since it is a term of the agreement the customer will commit to on September 30. (See section 2.1 and 2.2 of this exhibit for details.) The March 31, 2012 date will be revised for future notice opportunities and purchase periods.*

2.3.4 **Delivery Requirements *(08/01/11 Version)***

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 Resources 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 the Specified Resources listed below in section 2.3.6.1 on non-firm or firm transmission, regardless of whether the resource is located inside or outside BPA’s Balancing Authority Area. BPA shall have no obligation for any costs or related services attributable to «Customer Name»’s acquisition of such firm or non-firm transmission. 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.

2.3.4.2 **Delivery Requirements for Resources 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, 2012, 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 March 31, 2012, 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. 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 Resources 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.

*Reviewer’s Note: (Reviewer’s Notes are not part of the contract and included for information only.) See BP-12 GRSPs for information on possible DFS pricing methodology.*

2.3.6 **Applicable Resources, Amounts, and Charges**

2.3.6.1 **List of Specified Resources**

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

|  |  |  |
| --- | --- | --- |
| **Resource Name** | **Resource Balancing Authority Area Location** | **Resource Transmission** |
|  |  |  |
|  |  |  |

2.3.6.2 **Resource Amounts**

In consultation with «Customer Name» BPA shall determine the monthly and Diurnal Operating Minimums, Operating Maximums, Planned Resource Amounts, and Maximum DFS Support 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 amounts in the tables below.

*Drafter’s Note: Include the Operating Minimum, Operating Maximum, Planned Resource Amount, and Maximum DFS Support Amount tables below for each resource listed in section 2.3.6.1 above.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **«RESOURCE NAME»’S** **OPERATING MINIMUMS** | | | | | | | | | | | | |
|  | 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. | | | | | | | | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **«RESOURCE NAME»’S** **OPERATING MAXIMUMS** | | | | | | | | | | | | |
|  | 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: The amounts in the table above shall be rounded to a whole megawatt value. | | | | | | | | | | | | |

| **«RESOURCE NAME»’S** **PLANNED RESOURCE AMOUNTS** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **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 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Note: Fill in the table above with megawatt-hours rounded to whole megawatt-hours and annual Average Megawatts rounded to three decimal places. | | | | | | | | | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **«RESOURCE NAME»’S** **MAXIMUM DFS SUPPORT AMOUNTS** | | | | | | | | | | | | |
|  | 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: The amounts in the table above shall be rounded to a whole megawatt value. | | | | | | | | | | | | |

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 and energy rate, as established in each rate case and in accordance with sections 2.3.5.1 and 2.3.5.2 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 to the title of the table (use the tables in section 2.3.6.2 as an example.)*

| **DFS CAPACITY CHARGE** | |
| --- | --- |
| **Rate Period** | **$/month** |
| 2012 – 2013 |  |
| 2014 – 2015 |  |
| 2016 – 2017 |  |
| 2018 – 2019 |  |
| 2020 – 2021 |  |
| 2022 – 2023 |  |
| 2024 – 2025 |  |
| 2026 – 2027 |  |
| 2028 |  |

| **DFS ENERGY RATE** | |
| --- | --- |
| **Rate Period** | **$/MWh** |
| 2012 – 2013 |  |
| 2014 – 2015 |  |
| 2016 – 2017 |  |
| 2018 – 2019 |  |
| 2020 – 2021 |  |
| 2022 – 2023 |  |
| 2024 – 2025 |  |
| 2026 – 2027 |  |
| 2028 |  |

2.3.7 **Scheduling Requirements**

«Customer Name» shall schedule the generation of each Specified Renewable Resource listed in section 2.3.6.1 and described in section 2.3.3 (up to the resources’ combined Operating Maximum amount) to its Total Retail Load. For scheduling purposes, the Planned Resource Amounts in the table in section 2.3.6.2 shall be rounded to a whole megawatt value.

For the months when DFS is available, «Customer Name» shall on an hourly basis submit preschedules and then revise such schedules in real-time, according to sections 2.3.7.1 and 2.3.7.2, and as required for DFS pursuant to section 2.3 and section 6 of Exhibit F, by the amounts listed and described below:

(1) the generation of each Specified Renewable Resource listed in section 2.3.6.1 and described in section 2.3.3;

(2) the combined DFS Support Amount specified in section 2.3.1 of this exhibit for the combined Specified Renewable Resources listed above; and

(3) the total Block Product amount specified in Exhibit C, or the reduced Block Product amounts described in section 2.3.1

2.3.7.1 **Prescheduling**

«Customer Name» is responsible for any calculation and submittal to BPA for preschedule of the following:

(1) hourly generation schedules for each Specified Renewable Resource;

(2) hourly combined DFS Support Amount for such Specified Renewable Resources; and

(3) hourly total or reduced Block Product amount resulting from the computation of the combined DFS Excess Amount.

2.3.7.2 **Real‑Time Scheduling**

«Customer Name» is responsible for any revised calculation and submittal to BPA on real-time for the following:

(1) updated hourly generation schedules for each Specified Renewable Resource;

(2) updated hourly combined DFS Support Amount schedules for such Specified Renewable Resources; and

(3) updated hourly total or reduced Block Product amount schedules resulting from updated computation of the combined DFS Excess Amount.

2.3.7.3 **Scheduling Penalties**

If «Customer Name» fails to schedule the hourly amounts specified in sections 2.3.7.1 and 2.3.7.2 of this exhibit, an Unauthorized Increase Charge under BPA’s Wholesale Power and GRSPs will be assessed under BPA’s Wholesale Power Rate Schedules and GRSPs for each such hour for the following conditions and in the following amounts:

(1) when the amount by which the real‑time updated total schedule, or reduced Block Product amount schedule is greater than the planned total Block Product amount;

(2) when the amount by which (A) the real‑time updated combined DFS Support Amount schedule is greater than (B) the combined DFS Support Amount computed pursuant to section 2.3.1 above;

(3) when the amount by which (A) the sum of the real-time updated hourly individual generation schedules plus the updated combined DFS Support Amount schedule plus the updated total or reduced Block Product amount schedule is greater than the (B) the sum of the combined Planned Resource Amount plus the planned total Block Product amount;

(4) when any amount of the scheduled combined DFS Support Amount is taken as a result of the individual scheduled generation of a Specified Resource being less than the Operating Minimum of such Specified Resource;

(5) when any amount of the scheduled combined DFS Support Amount is taken as a result of any transmission curtailment; and

(6) during any transmission curtailment, when the amount of any scheduled total Block Product amount is not reduced and it was required to be reduced, based upon the hourly updated generation schedules, and in the amount of the missed reduction in schedule.

2.3.8 **Definitions**

2.3.8.1 “DFS Excess Amount” means the amount by which the scheduled generation from a Specified Renewable Resource listed in section 2.3.6.1 for the applicable period is greater than the Planned Resource Amount of such Specified Renewable Resource, but is less than or equal to the Operating Maximum of such Specified Renewable Resource.

2.3.8.2 “DFS Support Amount” means the amount of power BPA makes available to «Customer Name» to support the Planned Resource Amount from a Specified Renewable Resource listed in section 2.3.6.1.

2.3.8.3 “Operating Maximum” means the highest level of power generation for a Specified Renewable Resource that is established for the applicable period pursuant to section 2.3.6.2 as the maximum hourly power delivery amount when the Specified Renewable Resource is operating.

2.3.8.4 “Operating Minimum” means the lowest level of power generation for a Specified Renewable Resource that is established for the applicable period pursuant to section 2.3.6.2 as the minimum hourly power delivery amount when the Specified Renewable Resource is operating.

2.3.8.5 “Planned Resource Amount” means the expected level of power generation for a Specified Renewable Resource that is established for the applicable period pursuant to section 2.3.6.2 as the expected hourly power delivery amount when the Specified Renewable Resource is operating.

2.3.8.6 "Specified Renewable Resource" means a Specified Resource that has been established as renewable in the Northwest Power and Conservation Council's most recent Power Plan or other resources that the Parties agree is renewable, such as biogas, biomass, geothermal, small hydro (nameplate capability less than or equal to ten megawatts), landfill gas, ocean, solar or wind resources.

*End Option 1*

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

2.3 **Diurnal Flattening Service (DFS)*(06/01/09 Version)***

«Customer Name» has chosen not to purchase DFS.

*End Option 2*

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

2.4 **Forced Outage Reserve Service (FORS)*(06/01/09 Version)***

From October 1, 20«##» through September 30, 20«##», BPA shall provide power to serve «Customer Name»’s Total Retail Load during a Forced Outage of «Customer Name»’s Specified Resources, listed in section 2.4.5.1 below, in amounts in accordance with section 2.4.2 below. «Customer Name» shall deliver such resources 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 Resources listed below in section 2.4.5.1 on non-firm or firm transmission, regardless of whether the resource is located inside or outside BPA’s Balancing Authority Area. 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.

*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. Although this provision will be out-of-date by the time the exhibit revision is signed (since by then the plan of service will be in place) it needs to be included since it is a term of the agreement the customer will commit to on September 30. See section 2.1 and 2.2 of this exhibit for details. The March 31, 2012 date will be revised for future notice opportunities and purchase periods.*

2.4.1 **Delivery Requirements *(08/01/11 Version)***

For each Specified Resource listed in section 2.4.5.1 below, Power Services and «Customer Name» agree to develop by March 31, 2012, 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 March 31, 2012, 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. 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 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 to a resource serving load served by Transfer Service. Although this provision will be out-of-date by the time the exhibit revision is signed (since by then the plan of service will be in place) it needs to be included since it is a term of the agreement the customer will commit to on September 30. (See section 2.1 and 2.2 of this exhibit for details.) The March 31, 2012 date will be revised for future notice opportunities and purchase periods.*

* + 1. **Delivery Requirements *(08/01/11 Version)***

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 Resources 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 from the Specified Resources listed below in section 2.4.5.1 on non-firm or firm transmission, regardless of whether the resource is located inside or outside BPA’s Balancing Authority Area. 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.

2.4.1.2 **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, 2012, 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 March 31, 2012, 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. 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 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 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 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 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 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 BP-12 GRSPs for information on possible FORS pricing methodology.*

2.4.4 **Additional «Customer Name» Obligations**

2.4.4.1 **Requesting FORS *(08/01/11 Version)***

«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

(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.

2.4.4.2 **Information and Scheduling Requirements**

«Customer Name» shall provide BPA with hourly meter data from the Specified Resources 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 resources in accordance with Exhibit F.

«Customer Name» shall schedule FORS in accordance with the provisions of section 2.4.4.1 of this exhibit, reflecting the metered data in section 2.4.4.2 of this exhibit and section 6 of 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 FORS.

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

2.4.5.1 **List of Specified Resources**

*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.

*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.*

|  |  |  |  |
| --- | --- | --- | --- |
| **«RESOURCE NAME»’S** **ANNUAL MWH LIMITS** | | | |
| **FY** | **MWh** | **FY** | **MWh** |
| 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. | | | |

|  |  |
| --- | --- |
| **«RESOURCE NAME»’S** **PURCHASE PERIOD MWH LIMITS** | |
| **Purchase Period** | **MWh** |
| 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.

| **FORS CAPACITY CHARGE** | |
| --- | --- |
| **Rate Period** | **$/month** |
| 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*

2.4 **Forced Outage Reserve Service (FORS) *(05/22/2009 Version)***

«Customer Name» has chosen not to purchase FORS.

*End Option 2 for FORS*

*Option: Include the following for customers who are eligible to receive irrigation rate mitigation; delete this section if not applicable.*

**3. IRRIGATION RATE MITIGATION**

Subject to the terms specified in BPA’s applicable Wholesale Power Rate Schedules and GRSPs:

3.1 for billing purposes, in the months listed below for each year during the term of this Agreement, BPA shall apply Irrigation Rate Mitigation to the lesser of the corresponding amount purchased at the Tier 1 Rate in the month or the energy amount in the table below:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Irrigation Amounts (kWh)** | | | | | |
| **May** | **Jun** | **Jul** | **Aug** | **Sept** | **Annual Total** |
|  |  |  |  |  |  |

3.2 after the end of each irrigation season, the Parties shall administer a true-up process to ensure «Customer Name»’s irrigation load meets or exceeds the total eligible irrigation amount (in kilowatt‑hours) listed above; and

3.3 «Customer Name» shall be responsible for implementing cost-effective conservation measures on irrigation systems in their service territories. «Customer Name» shall verify and report all conservation measures and project savings consistent with section 18.1.2 of the body of this Agreement.

*End IRM Option*

*Drafter’s Note: The following “Limitations on Exchange of Existing Resources” was offered to existing public customers, as a one-time offer, during the Regional Dialogue Clean-up Amendment (07/21/09). For the remaining term of the Regional Dialogue contracts, the following provision is only to be offered to new public customers.*

**«#». LIMITATIONS ON EXCHANGE OF EXISTING RESOURCES*(07/21/09 Version)***

«#».1 **Option on Full ASC Participation and Alternative Contract**

BPA’s 2008 Average System Cost (ASC) Methodology limits the loads and resource costs included in ASCs for consumer-owned utilities that sign a CHWM Contract. The TRM establishes a Tier 1 PF Exchange Rate for such consumer-owned utilities. Pursuant to section 12.2 of the body of this Agreement and section 20 of the Residential Purchase and Sale Agreement (RPSA), «Customer Name» is contractually precluded from seeking or receiving Residential Exchange Program (REP) benefits based on an ASC other than as provided for in Section IV(G) of the 2008 ASC Methodology or its successor.

BPA and «Customer Name» understand and acknowledge that this is the first time BPA has attempted to implement an REP with two different ASC cost structures and two differing levels of benefits, and that as a consequence, the implementation of the REP may be revised over time. Because of the contractual preclusions in the paragraph above and because a limited number of consumer-owned utilities with CHWM Contracts may participate in the REP, the intent of this section «#» is to provide limited protection to such consumer-owned utilities from future changes in the REP.

Any impact to «Customer Name»’s access to REP benefits, pursuant to section 5(c) of the Northwest Power Act, as a result of an action taken by BPA as required by a statutory change or final judicial action shall not be considered an Action as provided in section «#».2 below, shall not be subject to the criteria provided in section «#».3 below, and shall not make available the option provided in section «#».4 below.

Absent the exercise by «Customer Name» of the option set forth in section «#».4 below, nothing in this section «#» is intended to alter the application of any provision of the ASC Methodology.

«#».2 **Actions**

If BPA takes any of the following Actions and such Actions meet the criteria specified in section «#».3, then «Customer Name» may elect the option set forth in section «#».4 below.

**Action 1.** BPA adopts, in a final record of decision issued in a section 7(i) proceeding for a Rate Period, a Base Tier 1 PF Exchange Rate for customers with CHWM Contracts which is calculated in a manner that differs from the following:

Base T1 PF Exchange Rate =

(PFCosts – PFCredits) – (T2Costs – T2Credits) + TmnAddr

PFLoad – T2Load

Where:

Base T1 PF Exchange Rate is the Base Tier 1 PF Exchange rate prior to the final allocation of any rate protection costs arising from the section 7(b)(2) rate test, as determined in each 7(i) Process.

PFCosts are all costs allocated in a 7(i) Process to the Priority Firm rates when the Base PF Exchange rate is calculated (also known as the unbifurcated PF rate) and prior to any reflection of the tiering of the PF Preference rate.

PFCredits are all credits allocated in a 7(i) Process to the Priority Firm rates when the Base PF Exchange rate is calculated (also known as the unbifurcated PF rate) and prior to any reflection of the tiering of the PF Preference rate.

T2Costs are all costs allocated in a 7(i) Process to Tier 2 Cost Pools.

T2Credits are all credits allocated in a 7(i) Process to Tier 2 Cost Pools.

PFLoad is the BPA forecast of load used to determine the unbifurcated PF rate in a 7(i) Process.

T2Load is the BPA forecast of load used to determine Tier 2 Rates in a 7(i) Process.

TmnAddr is the same unit charge for transmission added to the Base PF Exchange rate.

The Tier 1 PF Exchange rate used to calculate «Customer Name»’s REP benefits is the Base Tier 1 PF Exchange rate as modified by any Supplemental 7(b)(3) Rate Charge, as determined in each 7(i) Process and may be adjusted pursuant to the Supplemental 7(b)(3) Rate Charge Adjustment, any cost recovery adjustment clause, and any dividend distribution clause, as determined to be applicable to the Tier 1 PF Exchange rate in a 7(i) Process.

**Action 2.** BPA adopts, in a final record of decision, policy or interpretation, a method of calculating «Customer Name»’s ASC for a Fiscal Year(s) of an Exchange Period pursuant to BPA’s 2008 ASC Methodology or its successor that differs from the following formula:

RHWM ASC =      Contract System Cost – NewRes$

Contract System Load – NewResMWh

Where:

RHWM ASC is the ASC for «Customer Name» for an Exchange Period, as defined by BPA’s 2008 ASC Methodology.

Contract System Cost is as defined in BPA’s 2008 ASC Methodology.

NewRes$ is the forecast cost of resources (including purchased power contracts) used under this Agreement to serve «Customer Name»’s Above-RHWM Load. Such resources are exclusive of «Customer Name»’s Existing Resources for CHWMs as specified in Attachment C, Column D, of the TRM, and exclusive of purchases of power at Tier 1 Rates from BPA. The costs included in NewRes$ will be determined using a methodology similar to Appendix 1 Endnote d of BPA’s 2008 ASC Methodology.

Contract System Load is as defined in BPA’s 2008 ASC Methodology.

NewResMWh is the forecast generation from resources (including purchased power contracts) used under this agreement to serve «Customer Name»’s Above-RHWM Load. Such resources are exclusive of «Customer Name»’s Existing Resources for CHWMs specified in Attachment C, Column D, of the TRM, and exclusive of purchases of power at Tier 1 Rates from BPA.

**Action 3.** BPA offers «Customer Name» an RPSA with an Exchange Load used to calculate «Customer Name»’s REP benefits payments that differs from the following formula, or interprets such RPSA in a manner that differs from the following formula:

Actual RHWM Exchange Load = RRL × T1Pctg

Where:

Actual RHWM Exchange Load is the monthly residential and small farm load of «Customer Name» used to calculate the actual monthly REP payments to «Customer Name» as specified in the RPSA.

RRL is «Customer Name»’s actual total qualifying residential and small farm retail load for a month as specified in the RPSA.

T1Pctg = T1MWh + ExistResMWh

TRL – NLSL

Where:

T1Pctg is BPA’s forecast percentage of «Customer Name»’s load that is expected to be served by purchases of power at Tier 1 Rates from BPA and from «Customer Name»’s Existing Resources for CHWM, and will be computed for each Fiscal Year of the applicable Rate Period. Such computation will be performed in the applicable RHWM Process for the Rate Period.

T1MWh is the amount of power at Tier 1 Rates BPA forecasts to be purchased by «Customer Name» from BPA in each Fiscal Year of a Rate Period as forecast in each RHWM Process for a Rate Period.

ExistResMWh is the specified output of «Customer Name»’s Existing Resources for CHWM, as specified in Attachment C, Column D, of the TRM.

TRL is BPA’s forecast of «Customer Name»’s Total Retail Load in each Fiscal Year of a Rate Period as forecast in each RHWM Process for a Rate Period.

NLSL is BPA’s forecast of «Customer Name»’s New Large Single Loads in each Fiscal Year of a Rate Period as forecast in each RHWM Process for a Rate Period.

**Action 4.** BPA adopts a final record of decision, policy or interpretation that changes the terms of the TRM or the 2008 ASC Methodology applicable to REP participants with CHWM Contracts and such change is not encompassed in Actions 1‑3, and such change meets the criteria in section «#».3 for application of the option in section «#».4.

«#».3 **Criteria**

The option set forth in section «#».4 below is available to «Customer Name» if BPA has taken any of the Actions 1‑4 set forth in section «#».2 and the Actions taken, when considered in combination with all BPA actions being undertaken at that time, result in a material reduction in the REP benefits of the class of REP participants with CHWM Contracts. A reduction shall not be “material” for purposes of this section «#».3 if such Action(s), when considered in combination with all BPA actions being undertaken at that time, are applied to the provisions applicable to all REP participants and produce the same or comparable effects on all REP participants, even if such Action(s) results in an otherwise material reduction in the REP benefits of the class of REP participants with CHWM Contracts.

«#».4 **Option**

If «Customer Name» believes that BPA has taken any of the Actions 1 through 4 set forth in section «#».2 that satisfies the criteria for this option as set forth in section «#».3, and if BPA has provided a public comment process as part of BPA’s decision process (for the relevant Action of Actions 1 through 4 set forth in section «#».2) in which «Customer Name» has commented that BPA was proposing or about to take such Action, then «Customer Name», within 30 calendar days of BPA taking such alleged Action(s), may provide written notice to BPA in accordance with section 20 of this Agreement requesting an alternative power sales contract without a CHWM.  Upon receipt of such written notice, BPA shall review the request and, within 60 calendar days, issue a written statement regarding whether the criteria of section «#».3 have been satisfied.

«#».4.1 If BPA believes the criteria of section «#».3 have not been satisfied, the dispute shall be resolved through the dispute resolution provisions in section 22 of this Agreement, provided, however, that the sole function of arbitration shall be to determine whether the criteria of section «#».3 have been satisfied, not the exclusive remedy of money damages set forth in section 22.4 of this Agreement. If the dispute resolution results in a final determination that the criteria of section «#».3 have been satisfied, BPA shall have 90 calendar days from the date of such final determination to take curative action to restore the REP benefits of the class of REP participants with CHWM Contracts to the level that would have existed had BPA not taken the Action(s) that resulted in the criteria of section «#».3 being satisfied; provided, however, that if BPA elects not to take such curative action within such 90 day period, BPA shall have 180 calendar days after the date of such determination to offer to «Customer Name» an alternative power sales contract without a CHWM.

«#».4.2 If BPA determines that the criteria of section «#».3 have been satisfied, BPA shall have 90 calendar days from the date of such determination to take curative action to restore the REP benefits of the class of REP participants with CHWM Contracts to the level that would have existed had BPA not taken the Action(s) that resulted in the criteria of section «#».3 being satisfied; provided, however, that if BPA elects not to take such curative action, it shall have 180 calendar days after the date of such determination to offer to «Customer Name» an alternative power sales contract without a CHWM.

«#».4.3 Such alternative power sales contract shall be for the same purchase obligation in section 3 of this Agreement that is in effect at the time the notice under this section «#».4 is provided to BPA. «Customer Name» acknowledges that the terms and conditions of such alternative power sales contract may vary from those contained in the CHWM Contract.

«#».4.4 «Customer Name» shall notify BPA in accordance with section 20 no later than 60 calendar days after the date of its receipt of such alternative power sales contract whether it will terminate its CHWM Contract and execute such alternative power sales contract, or retain its CHWM Contract. If «Customer Name» fails to notify BPA within the 60‑day period of its decision regarding its CHWM Contract, BPA’s offer of the alternative power sales contract without a CHWM shall be withdrawn as of the 61st day and «Customer Name» will be conclusively presumed to have elected to retain its CHWM Contract.

«#».4.5 If «Customer Name» provides BPA timely notice of its election to terminate its CHWM Contract and executes the alternative power sales contract, service under such alternative power sales contract shall not commence until the beginning of the Rate Period immediately following the Rate Period in which the alternative power sales contract is executed. Termination of «Customer Name»’s CHWM Contract shall be effective at commencement of service under the alternative power sales contract.

*Drafter’s Note: Include the following for customers with a BPA-managed WREGIS subaccount.*

**«#». TERMS AND CONDITIONS OF «CUSTOMER NAME»’S WREGIS SUBACCOUNT*(07/15/11 Version)***

Although section 5(2) of Exhibit H, Renewable Energy Certificates and Carbon Attributes states that the terms and conditions of «Customer Name»’s BPA-managed WREGIS subaccount (WREGIS subaccount) will be established in a separate agreement, this provision establishes the terms and conditions of «Customer Name»’s WREGIS subaccount into this Exhibit D in lieu of a separate agreement.

«#».1 **Definitions**

In addition to the defined terms included in Exhibit H, Renewable Energy Certificates and Carbon Attributes, this section «#» also includes the following defined term: “Retire” or “Retirement” which means an action taken to remove a REC from circulation within Western Renewable Energy Generation Information System (WREGIS) or its successor.

«#».2 **Establishment of WREGIS Subaccount**

In accordance with «Customer Name»’s election under section 5(2) of Exhibit H to have «Customer Name»’s RECs transferred to a WREGIS subaccount, BPA shall establish a subaccount in «Customer Name»’s name within BPA’s WREGIS account. BPA shall provide «Customer Name» read‑only access to its subaccount.

BPA shall use such subaccount solely for the purposes of transferring and Retiring RECs that «Customer Name» receives from BPA.

«Customer Name» gives its consent to be bound by the terms stated in the WREGIS Account Holder Registration Agreement, also referred to as the WREGIS Terms of Use (WREGIS TOU) Agreement, Contract No. 08PB‑11957, executed by BPA and including any revisions. BPA shall make the executed WREGIS TOU Agreement available at a publicly accessible website.

«#».3 **Transfer of RECs to «Customer Name»’s WREGIS Subaccount**

BPA shall transfer «Customer Name»’s share of Tier 1 RECs, and Tier 2 RECs if applicable, to «Customer Name»’s WREGIS subaccount pursuant to the timeline established in section 5 of Exhibit H.

Any RECs BPA transfers to «Customer Name» shall be limited to those available to BPA through WREGIS and shall be a blend of RECs pursuant to Exhibit H. If BPA adds, replaces, or removes a resource from the list in section 2 of Exhibit H, then BPA may adjust the blend of RECs accordingly. BPA shall notify «Customer Name» of any such changes in the letter BPA provides to «Customer Name» by April 15 pursuant to section 3(2) of Exhibit H.

«#».4 **Resale, Purchase, and Retirement of RECs**

If «Customer Name» wants to sell RECs received from BPA outside of its service territory or purchase RECs other than those RECs it receives from BPA, then «Customer Name» shall terminate its WREGIS subaccount pursuant to section «#».6 below and establish its own WREGIS account.

Upon receipt of written notice for Retirement from «Customer Name», BPA shall Retire «Customer Name»’s RECs on its behalf. In such notice, for the RECs «Customer Name» wants BPA to Retire «Customer Name» shall identify REC quantity, the name of the renewable project(s) which generated the RECs, and the month and year the RECs were generated by the project(s).

«#».5 **WREGIS Subaccount Fees**

Consistent with section 6 of Exhibit H, BPA shall pay any fees associated with establishing «Customer Name»’s WREGIS subaccount and any fees associated with the transfer of RECs into «Customer Name»’s WREGIS subaccount. «Customer Name» shall reimburse BPA for all other fees associated with «Customer Name»’s WREGIS subaccount including but not limited to any REC Retirement fees. Such reimbursement shall be effectuated through a charge on «Customer Name»’s bill pursuant to section 16 of this Agreement. «Customer Name» shall be responsible for all WREGIS fees incurred from the termination of its WREGIS subaccount and «Customer Name» shall pay all fees associated with establishment of its own WREGIS account.

«#».6 **Termination of «Customer Name»’s WREGIS Subaccount**

Either Party may terminate «Customer Name»’s WREGIS subaccount after providing 30 days’ advance written notice to the other Party.

However, BPA shall not terminate «Customer Name»’s WREGIS subaccount until: (1) «Customer Name» has established its own WREGIS account and BPA has received written notice from «Customer Name» to transfer 100 percent of «Customer Name»’s RECs into «Customer Name»’s own WREGIS account; or (2) BPA has provided all RECs due to «Customer Name» for the previous calendar year under section «#».3 above and BPA has received written notification from «Customer Name» to Retire 100 percent of «Customer Name»’s RECs contained in «Customer Name»’s WREGIS subaccount. «Customer Name» may not have both a WREGIS account and a WREGIS subaccount open at the same time.

Unless otherwise agreed by the Parties, if «Customer Name» terminates its WREGIS subaccount, then BPA shall not establish another WREGIS subaccount for «Customer Name» for the remaining term of this Agreement.

*Drafter’s Note: Include the following for customers served by Transfer Service with load interconnected to multiple transmission systems. The entire provision included below represents two separate contract revisions offered to customers. See section 14.7 of the body of the Agreement for more information.*

**«#». BASELINE DELIVERY PERCENTAGES AND AMOUNTS**

*Option 1: Include for customers that do NOT have an NLSL(s)*

«Customer Name»’s baseline delivery percentages and amounts, calculated in accordance with section 14.7.1 of the body of this Agreement, are listed in the table below. For each applicable Rate Period, «Customer Name» shall apply its New Resource(s) to serve its Above-RHWM Load consistent with the baseline delivery percentages and amounts listed in the table below.

*End Option 1*

*Option 2: Include for customers that HAVE an NLSL(s) or Planned NLSL(s)****(01/10/17 Version)***

«Customer Name»’s baseline delivery percentages and amounts are listed in the table below. For each applicable Rate Period, «Customer Name» shall apply its New Resource(s) to serve its Above-RHWM Load consistent with the baseline delivery percentages and amounts listed in the table below. A customer’s NLSL «(and any applicable Planned NLSLs)» is not part of its Above-RHWM Load eligible for service at the PF rates. Since «Customer Name» has «a Planned NLSL *or* an NLSL» as part of its Total Retail Load, BPA has modified the calculation of «Customer Name»’s baseline percentages and amounts, as stated in section 14.7.1, to exclude such NLSL(s).

*End Option 2*

*Drafter’s Note: Add rows to table as needed to identify multiple transfer system providers. If the customer is receiving this provision/table for the first time, do not include past Fiscal Years; just include the upcoming applicable Fiscal Years. For customers that already have this provision, add rows for upcoming Fiscal Years. If there is a gap between fiscal years, add rows for the missing fiscal years and put zeros in for the percentages and aMW amounts.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Baseline Delivery Percentages and Amounts** | | | |
| **Transmission System** | **Baseline Delivery Percentage** | **De Minimis Amount (aMW)** | **Baseline Delivery Amount (aMW)** |
| **Fiscal Year 2012** | | | |
| BPAT | «#.#»% | «#.###» | «#.###» |
| «Transfer System» | «#.#»% | «#.###» | «#.###» |
| **Fiscal Year 2013** | | | |
| BPAT | «#.#»% | «#.###» | «#.###» |
| «Transfer System» | «#.#»% | «#.###» | «#.###» |
| **Fiscal Year 2014** | | | |
| BPAT | «#.#»% | «#.###» | «#.###» |
| «Transfer System» | «#.#»% | «#.###» | «#.###» |
| **Fiscal Year 2015** | | | |
| BPAT | «#.#»% | «#.###» | «#.###» |
| «Transfer System» | «#.#»% | «#.###» | «#.###» |
| *Optional to include if a customer had proportional scheduling in prior Rate Period, but not current Rate Period:* Note: «Customer Name» did not have baseline delivery percentages and amounts for delivery of a New Resource to serve Above RHWM Load in FY«##»-FY«##». | | | |

*Drafter’s Note: Add rows to table as needed to identify multiple transfer system providers.*

A zero baseline delivery amount for a transmission system in the table above indicates the Above-RHWM Load served over that transmission system is deemed to be de minimis in accordance with section 14.7.2 of the body of this Agreement.

If, in accordance with section 14.7.3.3 of the body of this Agreement, the Parties agree to a delivery option other than the baseline delivery percentages, the Parties shall revise this exhibit to include the delivery option in a table below.

*Drafter’s Note: Add the following table and paragraph(s) for customers that propose a delivery option other than the baseline. Add rows to table as needed to identify multiple New Resources. If the customer is receiving this provision/table for the first time, do not include past Fiscal Years; just include the upcoming applicable Fiscal Years. For customers that already have this provision (PNGC has an example of this), add rows for upcoming Fiscal Years. The Delivery Amount (aMW) column should include the total amount of non-federal resource(s) that the customer is obligated to deliver to serve its Above-RHWM load.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Delivery Option Amount and Cost** | | | |
| **New Resource** | **Transmission System** | **Delivery Amount (aMW)** | **Cost ($ per month)** |
| **Fiscal Year 2012** | | | |
| «Resource Name» | «Transfer System» | «#.###» | $«##.##» |
| **Fiscal Year 2013** | | | |
| «Resource Name» | «Transfer System» | «#.###» | $«##.##» |
| **Fiscal Year 2014** | | | |
| «Resource Name» | «Transfer System» | «#.###» | $«##.##» |
| **Fiscal Year 2015** | | | |
| «Resource Name» | «Transfer System» | «#.###» | $«##.##» |
| Note: N/A (not applicable) in the Cost column indicates the delivery option is in accordance with the baseline delivery amount for that year. | | | |

«Customer Name» shall deliver its New Resources to serve the portion of its Above-RHWM Load served over the transmission system(s) listed in the table above titled Delivery Option Amount and Cost. BPA shall bill «Customer Name» monthly for the cost associated with this delivery option, if any, listed in the table above.

*Drafter’s Note: Include a section for each New Resource listed in the table above using one of the following options. If more than one option is necessary, number each section using the list format (i.e. (1), (2), etc.).*

*Option 1: Include the following for customers with a “Specified” New Resource listed in the table above.*

*Option 1a (Specified New Resources): Include the following if there is NO increased cost of delivering remote BPA resources:*

BPA shall apply the following cost categories to calculate the cost associated with the delivery option for «Customer Name»’s «Resource Name» resource served over the «Transfer System» transmission system: losses, risk of increased curtailments, ancillary services, «and» increased cost of delivering remote BPA resources that BPA is acquiring at the time the non-federal resource is first included in «Customer Name»’s delivery option, «add additional cost categories that apply». By December 15 of every Rate Case Year, BPA shall determine the costs associated with the categories listed above except for the increased cost of delivering remote BPA resources. BPA has determined that at the time «Customer Name» first notified BPA of its delivery option for its «Resource Name» resource, there was no increased cost of delivering remote BPA resources.

*End Option 1a*

*Option 1b (Specified New Resources): Include the following if there is an increased cost for delivering remote BPA resources:*

BPA shall apply the following cost categories to calculate the cost associated with the delivery option for «Customer Name»’s «Resource Name» resource served over the «Transfer System» transmission system: losses, risk of increased curtailments, ancillary services, «and» increased cost of delivering remote BPA resources that BPA is acquiring at the time the non-federal resource is first included in «Customer Name»’s delivery option, «add additional cost categories that apply». By December 15 of every Rate Case Year, BPA shall determine the costs associated with the categories listed above except for the increased cost of delivering remote BPA resources. BPA has determined that at the time «Customer Name» first notified BPA of its delivery option for its «Resource Name» resource the increased cost of delivering remote BPA resources was $«##.##» annually.

*End Option 1b*

*End Option 1*

*Option 2: Include the following for customers with an “Unspecified” New Resource amount listed in the table above.*

For FY 2014 – FY2015, BPA shall apply the following cost categories to calculate the cost associated with the delivery option for «Customer Name»’s Unspecified Resource Amounts served over the «Transfer System» transmission system: losses, risk of increased curtailments, ancillary services, «and» increased cost of delivering remote BPA resources that BPA is acquiring at the time the non-federal resource is first included in «Customer Name»’s delivery option, «add additional cost categories that apply».

*End Option 2*

**«#». «PLACEHOLDER FOR SPECIAL PROVISIONS»**

*Drafter’s Note: Insert any special provisions unique to the customer here,* ***before*** *the revisions section, and number sections accordingly. Otherwise, delete this section if not applicable.*

*Option 1: Include the following for customers that have NOT purchased DFS and/or FORS.*

**«#». REVISIONS*(10/26/2018 Version)***

Except for revisions to section 1, CF/CT and New Large Single Loads for determinations made by BPA under section 23.3 of the body of the Agreement and section 1 of this Exhibit D, this exhibit shall be revised by mutual agreement of the Parties to reflect additional products «Customer Name» purchases during the term of this Agreement.

*End Option 1*

*Option 2: If customer purchases DFS and/or FORS, then replace the Revisions section in Exhibit D with the following revisions section.*

**«#». REVISIONS*(10/26/2018 Version)***

«#».1 **General Exhibit Revisions**

Except for: (1) revisions to section 1, CF/CT and New Large Single Loads for determinations made by BPA under section 23.3 of the body of the Agreement and section 1 of this Exhibit D, and (2) those provisions in this exhibit for Diurnal Flattening Service (DFS) and Forced Outage Reserve Service (FORS), this exhibit shall be revised by mutual agreement of the Parties to add products «Customer Name» purchases during the term of this Agreement.

«#».2 **Revisions to DFS and FORS**

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

(1) an established 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.

*End Option 2*

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

***ANY CHANGES (EXCEPT FORMATTING) TO THIS EXHIBIT MUST GO THROUGH THE BACK OFFICE.***

*Drafter’s Note: Wherever the customer’s name should appear in the exhibit, leave “«Customer Name»”. The Front Office will replace that with what is used throughout the contract when the exhibit is placed in the contract.*

*Drafter’s Note: Wherever you are referring to BPA, use the term “BPA”.*

*Drafter's Note: If the data for a particular data element is uncertain or unknown, the CA should make their best "guess" and hand‑key a footnote with an ASTERISK\* OR insert "TBD" and hand‑key a footnote with an ASTERISK\*. The footnote should read "This data element is unresolved and shall be determined by BPA prior to June 1, 2011."*

*Option 1: for Customers who do not operate their own Balancing Authority Areas.*

**Exhibit E**

**METERING*(08/15/08 Version)***

**1. METERING**

*Drafter’s Note:* ***Direct*** *means the customer is not served by transfer over a Third Party Transmission Provider’s system.*

*Drafter’s Note: If a customer has no directly connected PODs, then enter a return after the header (1.1 Directly Connected Points…) and enter “None.” Then delete all information down to section 1.2.*

1.1 **Directly Connected Points of Delivery and Load Metering**

*Drafter’s Note: List all PODs for this customer that are directly connected. If there is only one POD, remove the numbering “(1)” from this section, move indent appropriately to line up and renumber the metering section. Make sure that each section ends with a semicolon, except the last item ends with a period.*

(1) **BPA POD Name:** «BPA POD Name»;

**BPA POD Number:** «BPA POD #»;

**WECC Balancing Authority:** «BA Name»;*{Drafter’s Note: WECC Balancing Authority Area is the new term for Control Area.}*

**Location:** the point«s» in «Owner’s Name»’s «Substation Name» Substation where the «##» kV facilities of «BPA» and «Customer Name» are connected;

**Voltage:** «##» kV;

*Drafter’s Note: List all POMs for this POD. If there is only one POM, remove the numbering “(A)” from this section, format it similarly to the Location section above. Renumber the (i) and (ii) meter information below with (A) and (B).*

**Metering:**

(A) in «Owner’s Name»’s «Substation Name» Substation in the «##» kV circuit«s» over which such electric power flows;

*Drafter’s Note: List all meters for this POM. If there is only one meter, remove the numbering “(i)” from this section and keep indented ½ inch from metering location description.*

(i) **BPA Meter Point Name:** «BPA POM Name»;

**BPA Meter Point Number:** «BPA POM #»;

**Direction for PF Billing Purposes:** «Positive/Negative/Not used»;

**Manner of Service:** «Direct, BPA to «Customer Name» or «Customer Name» to BPA»;

(ii) **BPA Meter Point Name:** «BPA POM Name»;

**BPA Meter Point Number:** «BPA POM #»;

**Direction for PF Billing Purposes:** «Positive/Negative/Not used»;

**Manner of Service:** «Direct, BPA to «Customer Name» or «Customer Name» to BPA»;

*Drafter’s Note: If there is more than one POM for this POD that requires metering loss factor adjustment, then list them by name. Enter “None” if there aren’t any.*

**Metering Loss Adjustment:** BPA shall adjust for losses between the POD and the «BPA POM Names» POM(s). Such adjustments shall be specified in writing between BPA and «Customer Name»;

*Drafter’s Note: Edit this to include any exceptions for this POD. Enter “None.” if there aren’t any. If there are none or only one, then format similar to Metering Loss Adjustment above.*

**Exception«s»:**

*Drafter’s Note: The following exceptions are guidelines for possible exceptions needed in sections 1.1 and 1.2 of the Metering Exhibit. Do not include in the final exhibit if not applicable.*

(A) The period of service for «BPA POD Name or BPA POM Name» shall commence when the «substation or equipment» is energized for commercial operation; *(Drafter’s Note: Use only when adding a new metering point that has not yet been energized.)*

(B) The period of service for « BPA POD Name or BPA POM Name» shall commence at «####» hours on «Month dd, yyyy»;*(Drafter’s Note: Use only if added a new metering point during the term of the contract and the date is known.)*

(C) The period of service for « BPA POD Name or BPA POM Name» shall end at «####» hours on «Month dd, yyyy»;*(Drafter’s Note: Use only if deleting a metering point during the term of the contract and the date is known.)*

(D) The revenue meters for «BPA POM Name» POM are owned by «Owner Name»;*(Drafter’s Note: Use only if revenue meters are not owned by BPA.)*

(E) This POD is subject to charges for Low Voltage Delivery established in section 14.6.2 of the body of this Agreement;*(Drafter’s Note: Use only if the POD is served by transfer and is subject to Low Voltage Delivery charges.)*

(F) This POD is subject to a «#,###» kWh demand limit;*(Drafter’s Note: Use only if the POD is subject to demand limit under the Transfer Agreement.)*

(G) «Customer Name» provides «#» kV step-down to «#» kV delivery service at «Owner Name»’s «Substation Name» Substation.*(Drafter’s Note: Use only if customer is providing step-down service and it is not a BPA owned substation.)*

(2) **BPA POD Name:** «BPA POD Name»;

**BPA POD Number:** «BPA POD #»;

**WECC Balancing Authority:** «BA Name»;

**Location:** the point«s» in «Owner’s Name»’s «Substation Name» Substation where the «##» kV facilities of «BPA» and «Customer Name» are connected;

**Voltage:** «##» kV;

**Metering:**

(A) in «Owner’s Name»’s «Substation Name» Substation in the «##» kV circuit«s» over which such electric power flows;

(i) **BPA Meter Point Name:** «BPA POM Name»;

**BPA Meter Point Number:** «BPA POM #»;

**Direction for PF Billing Purposes:** «Positive/Negative/Not used»;

**Manner of Service:** «Direct, BPA to «Customer Name» or «Customer Name» to BPA»;

(ii) **BPA Meter Point Name:** «BPA POM Name»;

**BPA Meter Point Number:** «POM #»;

**Direction for PF Billing Purposes:** «Positive/Negative/Not used»;

**Manner of Service:** «Direct, BPA to «Customer Name» or «Customer Name» to BPA»;

**Metering Loss Adjustment:** BPA shall adjust for losses between the POD and the «BPA POM Names» POM(s). Such adjustments shall be specified in writing between BPA and «Customer Name»;

**Exception«s»:**

*Drafter’s Note:* ***Transfer*** *means the customer is served by transfer over a Third Party Transmission Provider’s system.*

*Drafter’s Note: If a customer is not served by transfer, enter a return after the header (1.2 Transfer Points…) and enter “None.” Then delete all information down to section 1.3.*

1.2 **Transfer Points of Delivery and Load Metering**

*Drafter’s Note: List all PODs for this customer that are served by Transfer. If there is only one POD, remove the numbering “(1)” from this section, move indent appropriately to line up and renumber the metering section. Make sure that each section ends with a semicolon, except the last item ends with a period.*

(1) **BPA POD Name:** «BPA POD Name»;

**BPA POD Number:** «BPA POD #»;

**WECC Balancing Authority:** «BA Name»;*{Drafter’s Note: WECC Balancing Authority is the new term for Control Area.}*

**Location:** the point«s» in «Owner’s Name»’s «Substation Name» Substation where the «##» kV facilities of «BPA» and «Customer Name» are connected;

**Voltage:** «##» kV;

*Drafter’s Note: List all POMs for this POD. If there is only one POM, remove the numbering “(A)” from this section, format it similarly to the Location section above and renumber the meter information below.*

**Metering:**

(A) in «Owner’s Name»’s «Substation Name» Substation in the «##» kV circuit«s» over which such electric power flows;

*Drafter’s Note: List all meters for this POM. If there is only one meter, remove the numbering “(i)” from this section and move indent appropriately to line up.*

(i) **BPA Meter Point Name:** «BPA POM Name»;

**BPA Meter Point Number:** «BPA POM #»;

**Direction for PF Billing Purposes:** «Positive/Negative/Not used»;

**Manner of Service:** « Transfer, BPA to Transferor Name to «Customer Name» or «Customer Name» to Transferor Name to BPA»;

(ii) **BPA Meter Point Name:** «BPA POM Name»;

**BPA Meter Point Number:** «BPA POM #»;

**Direction for PF Billing Purposes:** «Positive/Negative/Not used»;

**Manner of Service:** « Transfer, BPA to Transferor Name to «Customer Name» or «Customer Name» to Transferor Name to BPA»;

*Drafter’s Note: If there is more than one POM for this POD that requires metering loss factor adjustment, then list them by name. Enter “None” if there aren’t any.*

**Metering Loss Adjustment:** BPA shall adjust for losses between the POD and the «BPA POM Names» POM(s). Such adjustments shall be specified in writing between BPA and «Customer Name»;

*Drafter’s Note: Edit this to include any exceptions for this POD. Enter “None.” if there aren’t any. If there are none or only one, then format similar to Metering Loss Adjustment above.*

**Exception«s»:**

*Drafter’s Note: If a customer does not have resources, enter a return after the header (1.3 Resource Locations) and enter “None.” Then delete all information down to section 2 Revisions.*

1.3 **Resource Locations and Metering**

*Drafter’s Note: If there is only one resource, remove the numbering “(1)” from this section, move indent appropriately to line up and renumber the metering sections.*

(1) **Resource Name:** «Resource Name»

*Drafter’s Note: If there is only one metering location, remove the numbering “(A)” from this section, move indent appropriately to line up and renumber the meter information below.*

**Metering:**

(A) in «Owner’s Name»’s «Substation Name» Substation in the «##» kV circuit«s» over which such electric power flows;

*Drafter’s Note: List all meters for this POM. If there is only one meter, remove the numbering “(i)” from this section and move indent appropriately to line up.*

(i) **BPA Meter Point Name:** «BPA POM Name»;

**BPA Meter Point Number:** «BPA POM #»;

**Direction for PF Billing Purposes:** «Positive/Negative»;

*Drafter’s Note: Below* ***Directly Connected*** *means the resource is directly connected to the customer’s system,* ***Wheeled*** *means the resource is not connected directly to the customer’s system and the power and energy from that resource is brought to the customer’s system over another utility’s transmission system.*

**Manner of Service:** «Directly Connected/Wheeled, Resource to BPA to «Customer Name» or Resource to «Customer Name» to BPA»;

(ii) **BPA Meter Point Name:** «BPA POM Name»;

**BPA Meter Point Number:** «POM #»;

**Direction for PF Billing Purposes:** «Positive/Negative»;

**Manner of Service:** «Direct/Transfer, Resource to BPA to «Customer Name» or Resource to «Customer Name» to BPA»;

*Drafter’s Note: If there is more than one POM that requires metering loss factor adjustment, then list them by name. Enter “None.” if there aren’t any.*

**Metering Loss Adjustment:** BPA shall adjust for losses between the «BPA POD Name» POD and the «BPA POM Names» POM(s). Such adjustments shall be specified in written correspondence between BPA and «Customer Name»;

*Drafter’s Note: Edit this to include any exceptions for this resource. Enter “None.” if there aren’t any. If there are none or only one, then format similar to Metering Loss Adjustment above. See section 1.1.1 for examples.*

**Exception«s»:**

**2. REVISIONS**

Each Party shall notify the other in writing if updates to this exhibit are necessary to accurately reflect the actual characteristics of POD and meter information described in this exhibit. The Parties shall revise this exhibit to reflect such changes. The Parties shall mutually agree on any such exhibit revisions and agreement shall not be unreasonably withheld or delayed. The effective date of any exhibit revision shall be the date the actual circumstances described by the revision occur.

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

*End Option 1 for Customers who do not operate their own Balancing Authority Areas.*

*Option 2: for Customers who operate their own Balancing Authority Areas.*

**Exhibit E**

**METERING *(10/07/08 Version)***

**1. DESCRIPTION OF INTERCHANGE METERS**

Although the following interchange meters are not necessary in order to prepare «Customer Name»’s power bills, inclusion of this information will help both Parties administer this Agreement. Information about the points of interchange and meter to interchange relationships are useful in providing the Parties a better understanding of the scope of «Customer Name»’s and BPA’s Balancing Authority Areas. This information will also help BPA review its forecasting assumptions.

*Drafter’s Note: If there is only one Point of Interchange, remove the numbering “1.1” from this section, move indent appropriately to line up.*

1.1 **Name of Interchange Point: «NAME» INTERCHANGE**

**Owner:** «Owner»;

**Metering Location:**

**2. REVISIONS**

Each Party shall notify the other in writing if updates to this exhibit are necessary to accurately reflect the actual characteristics of POD and meter information described in this exhibit. The Parties shall revise this exhibit to reflect such changes. The Parties shall mutually agree on any such exhibit revisions and agreement shall not be unreasonably withheld or delayed. The effective date of any exhibit revision shall be the date the actual circumstances described by the revision occur.

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

*End Option 2 for Customers who operate their own Balancing Authority Areas.*

*Reviewer’s Note: Of all the Slice/Block customers, Okanogan is the only customer that did not sign the 09/17/12 version of Exhibit F.*

*Option 1: Include for Directly Connected customers:*

**Exhibit F**

**SCHEDULING**

*Option 1: Include the following for directly-connected Slice customers with Point-to-Point Transmission*

**1. SCHEDULING FEDERAL POWER*(09/17/12 Version)***

«Customer Name» is responsible for creating electronic tags for all amounts of Slice Output Energy, Tier 1 Block Amounts and Tier 2 Block Amounts purchased under this Agreement from the Scheduling Points of Receipt to their ultimate destination. «Customer Name» agrees to provide copies of such electronic tags to Power Services consistent with the requirements of this exhibit.

*End Option 1 for PTP*

*Option 2: Include the following for directly-connected Slice customers with NT service*

**1. SCHEDULING FEDERAL POWER*(09/17/12 Version)***

«Customer Name» is responsible for creating electronic tags for all amounts of Slice Output Energy purchased under this Agreement from the Scheduling Points of Receipt to their ultimate destination. «Customer Name» agrees to provide copies of such electronic tags to Power Services consistent with the requirements of this exhibit.

If any electronic tags are required for «Customer Name»’s Tier 1 Block Amounts and Tier 2 Block Amounts purchased under this Agreement, then BPA shall be responsible for creating such electronic tags.

*End Option 2 for NT*

**2. COORDINATION REQUIREMENTS*(09/17/12 Version)***

2.1 **Hourly Tier 1 and Tier 2 Block Amounts*(08/15/11 Version)***

Consistent with section 4 of the body of the Agreement and sections 1.3 and 2.5 of Exhibit C, BPA shall determine «Customer Name»’s hourly Tier 1 Block Amounts and Tier 2 Block Amounts for all hours of the upcoming Fiscal Year and shall provide «Customer Name» with such amounts at least five Business Days prior to October 1 of each Fiscal Year.

2.2 **Prescheduling*(09/17/12 Version)***

«Customer Name»’s submittal of electronic tags, pursuant to section 1 above, shall be due to Power Services in accordance with the parameters specified in section 4.3 of this exhibit.

2.3 **Real-Time Scheduling*(09/17/12 Version)***

«Customer Name» shall have the right to submit new or modified electronic tags associated with a change to scheduled deliveries of Slice Output Energy in real-time in accordance with the parameters specified in section 4 of this exhibit.

2.4 **After the Fact**

Power Services and «Customer Name» agree to reconcile all transactions, schedules and accounts at the end of each month (as early as possible within the first 10 calendar days of the next month). Power Services and «Customer Name» shall verify all transactions per this Agreement, as to product or type of service, hourly amounts, daily and monthly totals, and related charges.

**3. SLICE OUTPUT ENERGY SCHEDULING REQUIREMENTS*(08/15/08 Version)***

3.1 Schedule submissions to Power Services will primarily be via Power Services approved electronic methods, which may include specific interfaces. However, other Power Services’ agreed-upon submission methods (verbal, fax, etc.) are acceptable if electronic systems are temporarily not available. Transmission scheduling arrangements are handled under separate agreements/provisions with the designated transmission provider, and may not necessarily be the same requirements as Power Services’ scheduling arrangements.

3.2 Schedules of Slice Output Energy submitted to Power Services by «Customer Name» shall comply with Delivery Limits established in the Slice Computer Application.

3.3 The timeline within which Power Services shall approve or deny «Customer Name»’s Delivery Requests, as represented by «Customer Name»’s electronic tags, shall conform to Power Services’ then current preschedule and real-time scheduling guidelines as specified in section 4 of this exhibit.

3.3.1 For the purpose of approving requests for deliveries of Slice Output Energy, Power Services shall approve electronic tags, as described in section 3.3.2 below, that «Customer Name» submits to Power Services consistent with section 3.2 above prior to the applicable Power Services scheduling deadline, as specified in section 4 of this exhibit.

3.3.2 Electronic tags submitted to Power Services shall: (1) identify BPA as the generation providing entity, (2) identify «Customer Name» as first downstream purchasing-selling entity, (3) identify hourly energy amounts in MWh, and (4) maintain all data consistent with applicable industry standards.

3.3.3 Power Services shall have the sole discretion to accept or deny electronic tags that «Customer Name» submits to Power Services after the applicable Power Services’ scheduling deadline set forth in section 4 of this exhibit, regardless of the reason for the late submission, and regardless of submission method (electronic, verbal, fax, etc.).

3.3.4 Changes to tagged energy amounts required by the Balancing Authority for maintaining system reliability, as determined by the responsible Balancing Authority, shall be implemented by Power Services and «Customer Name» at the time of such notification by the Balancing Authority.

3.4 «Customer Name» shall be responsible for verifying the sum of its hourly tagged and non-tagged (e.g., transmission loss schedules, etc., that are not tagged) energy amounts is equal to its Delivery Request, as described in section 7 of Exhibit M, for each Scheduling Hour.

3.4.1 «Customer Name» shall have the right to submit adjusted Customer Inputs to Power Services, pursuant to section 4.1 of this exhibit, in order to alter the associated Simulated Output Energy Schedules within established Delivery Limits, such that «Customer Name»’s Delivery Request is made equal to the sum of its tagged and non-tagged energy amounts for each Scheduling Hour.

3.4.2 For each Scheduling Hour, the amount «Customer Name»’s hourly tagged and non-tagged energy amount is in excess of its Delivery Request shall be subject to the UAI Charge for energy, and the amount «Customer Name»’s hourly tagged and non-tagged energy amount is less than its Delivery Request shall be forfeited.

3.4.3 Electronic tag and Delivery Request mismatches that result from Balancing Authority reliability required actions shall not be subject to penalty if such required reliability action is implemented by the Balancing Authority less than 30 minutes prior to the start of the Scheduling Hour in which the mismatch occurs.

4. SCHEDULING DEADLINES*(08/15/08 Version)*

4.1 Customer Input and BOS Flex Submission Deadline

«Customer Name» shall have until 15 minutes prior to the start of each Scheduling Hour to submit revised Customer Inputs and BOS Flex requests to Power Services in order to affect the associated Delivery Request for each such Scheduling Hour. Power Services shall have the sole discretion to reject for any reason «Customer Name»’s Customer Inputs and BOS Flex requests associated with the upcoming Scheduling Hour that are submitted to Power Services after 15 minutes prior to the start of each such Scheduling Hour.

4.2 Real-Time Electronic Tag Submission Deadline

Power Services shall approve electronic tags, as described in section 3.3.2 of this exhibit, that are consistent with section 3.2 of this exhibit and submitted to Power Services by «Customer Name» prior to the Power Services’ scheduling deadline, which is 30 minutes prior to the start of each Scheduling Hour.

4.3 **Preschedule Electronic Tag Submissions**

Unless otherwise mutually agreed, all «Customer Name» preschedule electronic tags will be submitted to Power Services according to NERC instructions and deadlines for electronic tagging, as specified or modified by the Balancing Authority and WECC.

**5. SCHEDULING OF DEDICATED RESOURCES**

No later than 10 days following the end of each month, «Customer Name» agrees that it will electronically copy Power Services on all electronic tags that were created or modified during the previous month in association with the delivery of «Customer Name»’s Dedicated Resources, if any, listed in sections 2, 3, and 4 of Exhibit A.

*Option 1:**Include the following if customer has NOT elected to purchase RSS.*

**6. REVISIONS*(08/15/08 Version)***

BPA may unilaterally revise this exhibit:

(1) to implement changes that BPA determines are necessary to allow it to meet its power scheduling obligations under this Agreement, or

(2) to comply with the prevailing industry practice and requirements, currently set by WECC, NAESB, or NERC, or their successors or assigns.

BPA shall provide a draft of any material revisions of this exhibit to «Customer Name», with a reasonable time for comment, prior to BPA providing written notice of the revision. Revisions are effective 45 days after BPA provides written notice of the revisions to «Customer Name» unless, in BPA’s sole judgment, less notice is necessary to comply with an emergency change to the requirements of the WECC, NAESB, NERC, or their successors or assigns. In this case, BPA shall specify the effective date of such revisions.

*End Option 1*

*Option 2: Include the following if customer DID elect to purchase RSS.*

**6. SCHEDULING NON-FEDERAL RESOURCE SUPPORT SERVICES (RSS)*(06/02/09 Version)***

«Customer Name» is responsible for scheduling all amounts of Resource Support Service such as Diurnal Flattening Service (DFS) and Forced Outage Reserves (FORS) purchased under this Agreement from the generation source to their Total Retail Load, and for creating and adjusting all associated electronic tags. «Customer Name» agrees to provide all copies of such electronic tags to Power Services consistent with the requirements of section 4.2 and 4.3 in Exhibit F for DFS, and section 2.4.4.1 in Exhibit D for FORS.

6.1 **DFS and FORS Coordination Requirements**

6.1.1 **DFS and FORS Prescheduling**

«Customer Name» shall submit separate delivery schedules for each DFS and FORS amounts to Power Services by 1100 Pacific Prevailing Time on the day(s) on which prescheduling occurs, as specified by WECC. Preschedule electronic tags are due to Power Services in accordance with the scheduling deadline parameters specified in section 4.3 of this exhibit.

6.1.2 **DFS and FORS Real-Time Scheduling**

«Customer Name» shall have the right to submit new or modified DFS and FORS delivery schedules and electronic tags associated with deliveries of DFS and FORS in real-time in accordance with the scheduling deadline parameters specified in section 4.2 of this exhibit for DFS, and section 4.2.2.1 in Exhibit D for FORS.

6.1.3 **DFS and FORS After the Fact**

Power Services and «Customer Name» agree to reconcile all transactions, for each DFS and FORS delivery schedules and accounts at the end of each month (as early as possible within the first 10 calendar days of the next month). Power Services and «Customer Name» shall verify all transactions per this Agreement, as to DFS and FORS service, hourly amounts, daily and monthly totals.

6.2 **DFS and FORS Coordination Requirements**

6.2.1 DFS and FORS delivery schedule submissions to Power Services will primarily be via Power Services approved electronic methods, which may include specific interfaces. However, other Power Services’ agreed-upon submission methods (verbal, fax, etc.) are acceptable if electronic systems are temporarily not available. Transmission scheduling arrangements are handled under separate agreements/provisions with the designated transmission provider, and may not necessarily be the same requirements as Power Services’ scheduling arrangements.

6.2.2 DFS and FORS delivery schedules submitted to Power Services by «Customer Name» shall comply with the specific resource shapes and amounts established in Exhibits A, C, and D.

6.2.3 The timeline within which Power Services shall approve or deny each «Customer Name» DFS and FORS delivery schedules, as represented by «Customer Name» electronic tags, shall conform to Power Services’ then current preschedule and real-time scheduling guidelinesas specified in sections 4.2 and 4.3 of this exhibit for DFS, and section 2.4.4.1 in Exhibit D for FORS.

6.2.4 DFS and FORS electronic tags submitted to Power Service shall: (1) identify the generation providing entity, (2) identify «Customer Name» as the load sink, (3) identify hourly energy amounts in MWh, and (4) maintain all data consistent with applicable industry standards.

6.2.5 Power Services shall have the sole discretion to accept or deny DFS or FORS electronic tags that «Customer Name» submits to Power Services after the applicable Power Services’ timelines and scheduling deadline set forth in section 4.2 and 4.3 of this exhibit for DFS and section 2.4.4.1 in Exhibit D for FORS, regardless of the reason for the late submission, and regardless of submission method (electronic, verbal, fax, etc.)

6.2.6 Changes to tagged energy amounts required by the Balancing Authority for maintaining system reliability, as determined by the responsible Balancing Authority, shall be implemented by Power Services and «Customer Name» at the time of such notification by the Balancing Authority.

6.2.7 «Customer Name» shall be responsible for verifying that the sum of its hourly tagged and non-tagged energy amounts is equal to each of its DFS and FORS delivery schedule amounts.

**7. REVISIONS*(06/02/09 Version)***

BPA may unilaterally revise this exhibit:

(1) to implement changes that BPA determines are necessary to allow it to meet its power scheduling obligations under this Agreement, or

(2) to comply with the prevailing industry practice and requirements, currently set by WECC, NAESB, or NERC, or their successors or assigns.

BPA shall provide a draft of any material revisions of this exhibit to «Customer Name», with a reasonable time for comment, prior to BPA providing written notice of the revision. Revisions are effective 45 days after BPA provides written notice of the revisions to «Customer Name» unless, in BPA’s sole judgment, less notice is necessary to comply with an emergency change to the requirements of the WECC, NAESB, NERC, or their successors or assigns. In this case, BPA shall specify the effective date of such revisions.

*End Option 2*

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

*Option 2: Include for customers served by served by Transfer Service:*

**Exhibit F**

**SCHEDULING**

*Option 1: Include for customers that are partially served by Transfer Service with NT service.*

**1. SCHEDULING FEDERAL POWER*(******09/17/12 Version)***

«Customer Name» shall be responsible for creating electronic tags for all amounts of Slice Output Energy purchased under this Agreement from the Scheduling Points of Receipt to their ultimate destination. «Customer Name» agrees to provide copies of such electronic tags to Power Services consistent with the requirements of this exhibit.

If any electronic tags are required for of «Customer Name»’s Tier 1 Block Amounts and Tier 2 Block Amounts purchased under this Agreement, then BPA shall be responsible for creating such electronic tags.

If any electronic tags are required for the portion of «Customer Name»’s load located outside the BPA Balancing Authority Area, scheduling and electronic tagging shall be performed in accordance with section 6 of this exhibit.

*End Option 1 for partial Transfer Service customers with NT*

*Option 2: Include for customers that are partially served by Transfer Service with Point-to-Point transmission service.*

**1. SCHEDULING FEDERAL POWER*(09/17/12 Version)***

«Customer Name» is responsible for creating electronic tags for all amounts of Slice Output Energy Tier 1 Block Amounts and Tier 2 Block Amounts purchased under this Agreement , and serving a portion of «Customer Name»’s load located inside the BPA Balancing Authority Area, from the Scheduling Points of Receipt to their ultimate destination. «Customer Name» agrees to provide copies of such electronic tags to Power Services consistent with the requirements of this exhibit.

If any electronic tags are required for «Customer Name»’s Tier 1 Block Amounts and Tier 2 Block Amounts purchased under this Agreement serving a portion of «Customer Name»’s load located outside the BPA Balancing Authority Area, then BPA shall be responsible for creating such electronic tags.

For any portion of «Customer Name»’s load located outside the BPA Balancing Authority Area, scheduling and electronic tagging shall be performed in accordance with section 6 of this exhibit.

*End Option 2 for partial Transfer Service customers with PTP*

*Option 3: Include for customers that are entirely served by Transfer Service.*

**1. SCHEDULING FEDERAL POWER*(09/17/12 Version)***

«Customer Name» shall be responsible for creating electronic tags for the portion of «Customer Name»’s Slice Output Energy that is not applied to «Customer Name»’s load from the Scheduling Points of Receipt to its ultimate destination. «Customer Name» agrees to provide copies of such electronic tags to Power Services consistent with the requirements of this exhibit

«Customer Name» shall be responsible for scheduling the portion of «Customer Name»’s Slice Output Energy that is applied to «Customer Name»’s load consistent with section 2.2 below and using the Integrated Scheduling Allocation After-the-Fact Calculation (ISAAC) Portal, or its successor. BPA shall be responsible for creating electronic tags associated with «Customer Name»’s Slice Output Energy that is applied to «Customer Name»’s load.

If any electronic tags are required for «Customer Name»’s Tier 1 Block Amounts and Tier 2 Block Amounts purchased under this Agreement, then BPA shall be responsible for creating such electronic tags.

In addition, scheduling and electronic tagging shall be performed in accordance with section 6 of this exhibit.

*End Option 3 for full Transfer Service customers*

**2. COORDINATION REQUIREMENTS**

2.1 **Hourly Tier 1 and Tier 2 Block Amounts*(08/15/11 Version)***

Consistent with section 4 of the body of the Agreement and sections 1.3 and 2.5 of Exhibit C, BPA shall determine «Customer Name»’s hourly Tier 1 Block Amounts and Tier 2 Block Amounts for all hours of the upcoming Fiscal Year and shall provide «Customer Name» with such amounts at least five Business Days prior to October 1 of each Fiscal Year.

2.2 **Prescheduling*(09/17/12 Version)***

Except as otherwise stated in section 6 below, all preschedule electronic tags are due to Power Services in accordance with the parameters specified in section 4.3 of this exhibit.

*Option 1: Include the following for customers that partially served by Transfer Service customers (PTP or NT).*

2.3 **Real-Time Scheduling*(09/17/12 Version)***

«Customer Name» shall have the right to submit new or modified electronic tags associated with a change to scheduled deliveries of Slice Output Energy in real-time in accordance with the parameters specified in section 4 of this exhibit.

*End Option 1*

*Option 2: Include the following for customers that are entirely served by Transfer Service*

2.3 **Real-Time Scheduling*(09/17/12 Version)***

«Customer Name» shall coordinate any real‑time changes to scheduled deliveries to load served by federal power consistent with section 6.2 of this exhibit.

*End Option 2*

2.4 **After the Fact**

Power Services and «Customer Name» agree to reconcile all transactions, schedules and accounts at the end of each month (as early as possible within the first 10 calendar days of the next month). Power Services and «Customer Name» shall verify all transactions per this Agreement, as to product or type of service, hourly amounts, daily and monthly totals, and related charges.

**3. SLICE OUTPUT ENERGY SCHEDULING REQUIREMENTS*(08/15/08 Version)***

3.1 Schedule submissions to Power Services will primarily be via Power Services approved electronic methods, which may include specific interfaces. However, other Power Services’ agreed-upon submission methods (verbal, fax, etc.) are acceptable if electronic systems are temporarily not available. Transmission scheduling arrangements are handled under separate agreements/provisions with the designated transmission provider, and may not necessarily be the same requirements as Power Services’ scheduling arrangements.

3.2 Schedules of Slice Output Energy submitted to Power Services by «Customer Name» shall comply with Delivery Limits established in the Slice Computer Application.

3.3 The timeline within which Power Services shall approve or deny «Customer Name»’s Delivery Requests, as represented by «Customer Name»’s electronic tags, shall conform to Power Services’ then current preschedule and real-time scheduling guidelinesas specified in section 4 of this exhibit.

3.3.1 For the purpose of approving requests for deliveries of Slice Output Energy, Power Services shall approve electronic tags, as described in section 3.3.2 below, that «Customer Name» submits to Power Services consistent with section 3.2 above prior to the applicable Power Services scheduling deadline, as specified in section 4 of this exhibit.

3.3.2 Electronic tags submitted to Power Services shall: (1) identify BPA as the generation providing entity, (2) identify «Customer Name» as first downstream purchasing-selling entity, (3) identify hourly energy amounts in MWh, and (4) maintain all data consistent with applicable industry standards.

3.3.3 Power Services shall have the sole discretion to accept or deny electronic tags that «Customer Name» submits to Power Services after the applicable Power Services’ scheduling deadline set forth in section 4 of this exhibit, regardless of the reason for the late submission, and regardless of submission method (electronic, verbal, fax, etc.).

3.3.4 Changes to tagged energy amounts required by the Balancing Authority for maintaining system reliability, as determined by the responsible Balancing Authority, shall be implemented by Power Services and «Customer Name» at the time of such notification by the Balancing Authority.

3.4 «Customer Name» shall be responsible for verifying the sum of its hourly tagged and non-tagged (e.g., transmission loss schedules, etc., that are not tagged) energy amounts is equal to its Delivery Request, as described in section 7 of Exhibit M, for each Scheduling Hour.

3.4.1 «Customer Name» shall have the right to submit adjusted Customer Inputs to Power Services, pursuant to section 4.1 of this exhibit, in order to alter the associated Simulated Output Energy Schedules within established Delivery Limits, such that «Customer Name»’s Delivery Request is made equal to the sum of its tagged and non-tagged energy amounts for each Scheduling Hour.

3.4.2 For each Scheduling Hour, the amount «Customer Name»’s hourly tagged and non-tagged energy amount is in excess of its Delivery Request shall be subject to the UAI Charge for energy, and the amount «Customer Name»’s hourly tagged and non-tagged energy amount is less than its Delivery Request shall be forfeited.

3.4.3 Electronic tag and Delivery Request mismatches that result from Balancing Authority reliability required actions shall not be subject to penalty if such required reliability action is implemented by the Balancing Authority less than 30 minutes prior to the start of the Scheduling Hour in which the mismatch occurs.

**4. SCHEDULING DEADLINES*(08/15/08 Version)***

4.1 Customer Input and BOS Flex Submission Deadline

«Customer Name» shall have until 15 minutes prior to the start of each Scheduling Hour to submit revised Customer Inputs and BOS Flex requests to Power Services in order to affect the associated Delivery Request for each such Scheduling Hour. Power Services shall have the sole discretion to reject for any reason «Customer Name»’s Customer Inputs and BOS Flex requests associated with the upcoming Scheduling Hour that are submitted to Power Services after 15 minutes prior to the start of each such Scheduling Hour.

4.2 Real-Time Electronic Tag Submission Deadline

Power Services shall approve electronic tags, as described in section 3.3.2 of this exhibit, that are consistent with section 3.2 of this exhibit and submitted to Power Services by «Customer Name» prior to the Power Services’ scheduling deadline, which is 30 minutes prior to the start of each Scheduling Hour.

4.3 **Preschedule Electronic Tag Submissions**

Unless otherwise mutually agreed, all «Customer Name» preschedule electronic tags will be submitted to Power Services according to NERC instructions and deadlines for electronic tagging, as specified or modified by the Balancing Authority and WECC.

**5. SCHEDULING OF DEDICATED RESOURCES**

No later than 10 days following the end of each month, «Customer Name» agrees that it will electronically copy Power Services on all electronic tags that were created or modified during the previous month in association with the delivery of «Customer Name»’s Dedicated Resources, if any, listed in sections 2, 3, and 4 of Exhibit A.

*Option 1a: Include the following if customer has no scheduling requirements.*

**6. SPECIAL SCHEDULING PROVISIONS FOR TRANSFER CUSTOMERS*(08/15/11 Version)***

«Customer Name» currently has no scheduling obligations that are specific to «Customer Name»’s Transfer Service arrangements.

*End Option 1a*

*Option 1b: Include the following if customer is served by Transfer Service via a General Transfer Agreement (GTA) and currently has no deviation scheduling.*

**6. SPECIAL SCHEDULING PROVISIONS FOR TRANSFER CUSTOMERS*(09/17/12 Version)***

«Customer Name» shall submit all forecasts in this section 6 using the ISAAC Portal, or its successor.

6.1 «Customer Name» shall submit an hourly load forecast for load served by federal power to BPA by 0900 Pacific Prevailing Time the day(s) on which prescheduling occurs, as specified by WECC, for the portion of «Customer Name»’s load that is served outside the BPA Balancing Authority Area.

6.2 «Customer Name» may submit real-time changes to such hourly load forecast for load served by federal power no later than 30 minutes prior to the hour of delivery for the portion of «Customer Name»’s load served outside BPA’s Balancing Authority Area.

6.3 If «Customer Name»’s General Transfer Agreement No. ###### expires, then BPA shall replace this section 6 with provisions that are compatible with the service agreement between BPA and the Third Party Transmission Provider.

*End Option 1b*

*Option 1c: Include the following if customer is served by Transfer Service via a General Transfer Agreement (GTA) and does have deviation scheduling*

**6. SPECIAL SCHEDULING PROVISIONS FOR TRANSFER CUSTOMERS*(09/17/12 Version)***

«Customer Name» shall submit all schedules and forecasts in this section 6 using the Integrated Scheduling Allocation After-the-Fact Calculation (ISAAC) Portal, or its successor.

6.1 **Resources Applied to Load Served by Transfer Service*(09/17/12 Version)***

For purposes of serving Transfer Service load located outside of the BPA Balancing Authority Area, «Customer Name» shall apply Tier 1 Block Amounts and Tier 2 Block Amounts purchased under this Agreement, or any non-federal resources that are listed in sections 2, 3, 4, 7.1, 7.3 or 7.4 of Exhibit A to the portion of «Customer Name»’s load served outside the BPA Balancing Authority Area. «Customer Name» may only apply non-federal resources to load served by Transfer Service provided that such application is consistent with section 14.6.7 of the body of this Agreement and Exhibit G, and provided that the Parties have executed a Transfer Service Support for Non-Federal Resources Agreement (TSSA), and a network resource exhibit within such, that supports the delivery of the specific non-federal resource(s) across the Third Party Transmission Provider’s transmission system.

6.2 **Development of Power Schedules*(09/17/12 Version)***

6.2.1 «Customer Name» shall submit an hourly forecast of the portion of «Customer Name»’s load that is served outside the BPA Balancing Authority Area and that is not served by a non‑federal resource to BPA by 0900 Pacific Prevailing Time the day(s) on which prescheduling occurs, as specified by WECC.

6.2.2 «Customer Name» shall create all electronic tags necessary for delivery of non-federal power to the portion of «Customer Name»’s load that is served outside the BPA Balancing Authority Area.

6.2.3 «Customer Name»’s schedules and electronic tags for the portion of its load served outside the BPA Balancing Authority Area shall represent «Customer Name»’s best available forecast of the load.

6.3 **Deviation Scheduling**

6.3.1 No later than the fifth Business Day of each month BPA shall notify «Customer Name» of the current deviation balance for «Customer Name» loads served by Transfer Service. In such deviation balance, BPA shall identify separate deviation balances for HLH and LLH for the accrued deviation through the previous month. Such deviation balance shall be based on «Customer Name»’s metered loads served by Transfer Service, including losses, and both federal and non‑federal deliveries to such loads, as well as outstanding deviation balances from previous months, if any.

6.3.2 No later than the tenth Business Day of each month, «Customer Name» shall submit to BPA an hourly deviation return schedule. In such hourly deviation return schedule, «Customer Name» shall:

(1) for both HLH and LLH, identify whether the deviation schedule is to account for energy owed to the Third Party Transfer Service Provider or energy owed to «Customer Name»;

(2) schedule the return of the entire deviation balance. The deviation balance in HLH shall be returned in HLH and the deviation balance in LLH shall be returned in LLH;

(3) ensure such schedule is as flat as possible over the hours remaining in the month; and

1. ensure deviation return is no greater than 5 megawatts in any hour.

6.3.3 If it is impossible for «Customer Name» to meet all the requirements of section 6.3.2(1) through section 6.3.2(4) above due to the amount of accrued deviation and the number of hours remaining in the month, then the Parties shall work together to establish a mutually agreeable hourly deviation return schedule.

*End Option 1c*

*Option 1d: Include the following for customers served by Transfer Service via an OATT*

**6. SPECIAL SCHEDULING PROVISIONS FOR TRANSFER CUSTOMERS*(09/17/12 Version)***

6.1 **Resources Applied to Load Served by Transfer Service*(09/17/12 Version)***

For purposes of serving Transfer Service load located outside of the BPA Balancing Authority Area, «Customer Name» shall apply Slice Output Energy purchased under this Agreement or any non-federal resources that are listed in sections 2, 3, 4, 7.1, 7.3, or 7.4 of Exhibit A to the portion of «Customer Name»’s load served outside the BPA Balancing Authority Area. «Customer Name» may only apply non‑federal resources to the portion of load served by Transfer Service provided that such application is consistent with section 14.6.7 of the body of this Agreement and Exhibit G and provided that the Parties have executed a Transfer Service Support for Non‑Federal Resources Agreement (TSSA), and a network resource exhibit within such, that supports the delivery of the specific non‑federal resource(s) across the Third Party Transmission Provider’s transmission system.

However, if the portion of «Customer Name»’s load that is served inside the BPA Balancing Authority Area is less than «Customer Name»’s entire Tier 1 Block Amounts and Tier 2 Block Amounts in any hour, then «Customer Name» may, consistent with section 6.2.3 below, apply Tier 1 Block Amounts and Tier 2 Block Amounts to load served by Transfer Service.

6.2 **Development of Power Schedules*(09/17/12 Version)***

6.2.1 «Customer Name»’s schedules and electronic tags for the portion of its load served outside the BPA Balancing Authority Area shall represent «Customer Name»’s best available forecast of the load and shall be compliant with the applicable Third Party Transmission Provider’s most current Open Access Transmission Tariff.

6.2.2 If «Customer Name»’s forecast of its load outside the BPA Balancing Authority Area exceeds BPA’s rights to firm transmission over the Third Party Transmission Provider’s system, «Customer Name» shall notify BPA and the Parties shall coordinate to obtain the necessary additional Transfer Service from the Third Party Transmission Provider.

6.2.3 «Customer Name» shall submit all schedules and forecasts in this section 6.2.3 using the Integrated Scheduling Allocation After-the-Fact Calculation (ISAAC) Portal, or its successor. If «Customer Name» applies Tier 1 Block Amounts and Tier 2 Block Amounts to «Customer Name»’s load outside the BPA Balancing Authority Area pursuant to section 6.1 of this exhibit, then: (1) «Customer Name» shall notify BPA of the hourly amounts of Tier 1 Block Amounts and Tier 2 Block Amounts that «Customer Name» will apply to load served by Transfer Service by 0900 Pacific Prevailing Time the day(s) on which prescheduling occurs, as specified by WECC and (2) may not submit changes to such hourly load forecast in real-time.

6.2.4 During a transmission event, which may include a transmission curtailment or a planned transmission outage that affects service to the portion of «Customer Name»’s load that is served outside the BPA Balancing Authority Area, «Customer Name» shall use commercially reasonable efforts to resume full performance. During a transmission event that interrupts service to the portion of «Customer Name»’s load that is served outside the BPA Balancing Authority Area, «Customer Name» may use sources of power to meet such load other than the sources described in section 6.1 of this exhibit. In such event, the Parties shall coordinate to obtain the necessary Transfer Service from the Third Party Transmission Provider to cover the duration of a transmission event.

6.3 **Pass-Through Charges Under OATT Service**

If BPA receives a charge or credit from the Third Party Transmission Provider for energy imbalance, redispatch or unauthorized increase, then BPA shall charge or credit «Customer Name» accordingly for the energy imbalance, redispatch or unauthorized increase associated with the portion of «Customer Name»’s load served by Transfer Service. Such charges or credits will be based on any of «Customer Name»’s electronic tags serving remote loads, metered values for such remote loads, and the charges or credits BPA receives from the Third Party Transmission Provider. BPA shall reflect any charges or credits on «Customer Name»’s monthly bill.

*End Option 1d*

**7. SPECIAL SCHEDULING PROVISIONS FOR RSS*(08/15/11 Version)***

Because scheduling provisions for RSS for Slice/Block customers served by Transfer Service will be specific to the resource and situation, BPA shall add such provisions after an RSS election is made.

**8. REVISIONS*(06/02/09 Version)***

BPA may unilaterally revise this exhibit:

(1) to implement changes that BPA determines are necessary to allow it to meet its power scheduling obligations under this Agreement, or

(2) to comply with the prevailing industry practice and requirements, currently set by WECC, NAESB, or NERC, or their successors or assigns.

BPA shall provide a draft of any material revisions of this exhibit to «Customer Name», with a reasonable time for comment, prior to BPA providing written notice of the revision. Revisions are effective 45 days after BPA provides written notice of the revisions to «Customer Name» unless, in BPA’s sole judgment, less notice is necessary to comply with an emergency change to the requirements of the WECC, NAESB, NERC, or their successors or assigns. In this case, BPA shall specify the effective date of such revisions.

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

*Option 1: Include the following for customers not served by Transfer Service.*

**Exhibit G**

**THIS EXHIBIT INTENTIONALLY LEFT BLANK*(08/15/08 Version)***

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

*End Option 1*

*Option 2: Include the following exhibit for customers served by Transfer Service.*

**Exhibit G**

**PRINCIPLES OF NON-FEDERAL TRANSFER SERVICE*(08/15/08 Version)***

As provided by section 14.6.7 of the body of this Agreement and BPA’s Long-Term Regional Dialogue Final Policy, July 2007, or any other later revision of that policy, if «Customer Name» acquires non-federal resources to serve its retail load above its established RHWM, then BPA’s support and assistance to «Customer Name» regarding transfer service for its non-federal resources shall be consistent with the following principles:

**1.** **Established Caps and Limitations**

BPA shall provide financial support for the transmission capacity associated with non-federal resource purchases to all Transfer Service customers up to a maximum of 41 megawatts per fiscal year, cumulative over the duration of this Agreement. This cumulative megawatt limit is shown in the table below.

| **Fiscal Year** | **Per Year MW Limit** | **Cumulative MW Limit** |
| --- | --- | --- |
| FY 2012 | 41 | 41 |
| FY 2013 | 41 | 82 |
| FY 2014 | 41 | 123 |
| FY 2015 | 41 | 164 |
| FY 2016 | 41 | 205 |
| FY 2017 | 41 | 246 |
| FY 2018 | 41 | 287 |
| FY 2019 | 41 | 328 |
| FY 2020 | 41 | 369 |
| FY 2021 | 41 | 410 |
| FY 2022 | 41 | 451 |
| FY 2023 | 41 | 492 |
| FY 2024 | 41 | 533 |
| FY 2025 | 41 | 574 |
| FY 2026 | 41 | 615 |
| FY 2027 | 41 | 656 |
| FY 2028 | 41 | 697 |

**2.** Application of section 14.6.7 of the body of this Agreement shall be on a first come, first served basis in each year based on the date each request is received by BPA. Requests not met, in whole or in part, in any Fiscal Year will have priority over subsequent requests the following year. Once granted, BPA shall honor such request for the duration of the resource acquisition period, not to exceed the term of this Agreement.

**3. Process and Parameters For Initially Choosing A Non-Federal Resource*(05/14/14 Version)***

3.1 BPA obtains Transfer Service from Third Party Transmission Providers pursuant to OATT Network Integration Transmission Service. Additionally, BPA acquires firm transmission for all load service obligations incurred. Therefore, BPA shall, on behalf of «Customer Name», pursue Network Resource designation, as defined in the FERC OATT for «Customer Name»’s non-federal resource. BPA shall provide all information the Third Party Transmission Provider requires to evaluate the Network Resource designation request. «Customer Name» shall provide all relevant information BPA determines is required to submit an application for designation of the resource as a Network Resource per section 29 of the OATT, or its successor.

*Option 1: Include the following for Transfer Service customers that have load served over multiple transmission systems (customers with proportional scheduling).*

3.2 «Customer Name» shall notify BPA of its intent and/or actions to acquire or purchase a non-federal resource at least one year prior to delivery. Such acquisition or purchase shall be for a period of no less than one year in duration.

On a case by case basis, BPA may, but is not obligated to, consider notifications made less than one year prior to delivery. One such instance for which BPA may consider less than one year notice is if «Customer Name» has a non-federal resource with a delivery option determined in accordance with section 14.7.3 of the Agreement.

*End option 1 for customers with proportional scheduling*

*Option 2: Include the following for Transfer Service customers that do NOT have load served over multiple transmission systems (customers that do NOT have proportional scheduling).*

3.2 «Customer Name» shall notify BPA of its intent and/or actions to acquire or purchase a non-federal resource at least one year prior to delivery. Such acquisition or purchase shall be for a period of no less than one year in duration. On a case by case basis, BPA may, but is not obligated to, consider notifications made less than one year prior to delivery.

*End option 2 for customers without proportional scheduling*

3.3 If BPA’s existing Transfer Service to «Customer Name» is pursuant to a non-OATT contractual arrangement, then BPA shall pursue all reasonable arrangements, including but not limited to OATT service, sufficient to enable «Customer Name» to utilize the non-federal resource to serve its load.

3.4 BPA shall not be liable to «Customer Name» in the event that Network Resource designation cannot be obtained.

3.5 BPA shall only obtain or pay for Transfer Service for «Customer Name»’s non-federal resource if it is designated as a Network Resource under the Third Party Transmission Provider’s OATT with a commitment of at least one year. The limitations in this principle 3 do not pertain to market purchases and the use of secondary network transmission, which are addressed below in principle 15.

**4.** «Customer Name» shall provide BPA all information BPA determines is reasonably necessary to administer firm network transmission service over the Third Party Transmission Provider’s system.

**5.** BPA shall pay only the capacity costs associated with transmission service to «Customer Name» over transmission facilities of the Third Party Transmission Provider that either: (1) interconnect directly to «Customer Name»’s facilities or (2) interconnect to BPA transmission facilities which subsequently interconnect with «Customer Name»’s facilities. «Customer Name» shall arrange for, and pay any costs associated with, the delivery of non-federal power to an interconnection point with the Third Party Transmission Provider, including obtaining and paying for firm transmission across all intervening transmission systems.

**6.** «Customer Name» shall pay a portion of the costs of all Ancillary Services necessary to deliver any non-federal resource to serve its load. The Ancillary Service costs imposed by the Third Party Transmission Provider shall be apportioned between BPA and «Customer Name» based on either:

(1) metered/scheduled quantities of the non-federal resource, expressed as a percentage of total load, multiplied by the total costs assessed BPA by the Third Party Transmission Provider; or

(2) actual charges assessed by the Third Party Transmission Provider.

However, BPA shall treat the cost of load regulation service consistent with the load regulation service cost as described in section 14.6.1(1) of the body of this Agreement. BPA shall be responsible for the cost of generation supplied reactive power, and «Customer Name» shall be responsible for any generation imbalance costs, if any, related to «Customer Name»’s non-federal resource.

**7.** «Customer Name» shall be responsible for the costs of all other transmission services for non-federal deliveries not included in principles 5 and 6 above, including, but not limited to: redispatch, congestion management costs, system and facility study costs associated with adding the non-federal generation as a Network Resource, direct assigned system upgrades, distribution and low-voltage charges, if applicable and real power losses.

**8.** «Customer Name» shall be responsible for all costs of interconnecting generation to a transmission system.

**9.** «Customer Name» shall be responsible for acquiring transmission services from BPA, including wheeling for non-federal resources. If «Customer Name» does not require transmission services from BPA for wheeling non-federal resources, then «Customer Name» shall be responsible for a pro rata share of the Third Party Transmission Provider transmission costs that BPA incurs to serve «Customer Name».

**10.** «Customer Name» shall be responsible for all integration services to support its non-federal resources:

(1) in accordance with all requirements of the host Balancing Authority and/or Third Party Transmission Provider, and

(2) which are necessary for designation of the non-federal resource as a Network Resource.

**11.** As necessary, «Customer Name» shall meet all resource metering requirements including compliance with BPA standards and any requirements of the generation host Balancing Authority and/or Third Party Transmission Provider.

**12.** The Parties shall cooperate to establish the protocols, procedures, data exchanges or other arrangements the Parties deem reasonably necessary to support the transmission of «Customer Name»’s non-federal resource.

**13.** Unless otherwise agreed, «Customer Name» shall be responsible for managing any non-federal resource consistent with Exhibit F.

**14.** BPA shall have no obligation to pay for Transfer Service for non-federal power to serve any portion of «Customer Name»’s retail load that «Customer Name» is obligated to serve with federal power pursuant to this Agreement.

**15.** Once «Customer Name»’s non-federal resource has been designated as a Network Resource, BPA will not undesignate «Customer Name»’s Network Resource for marketing purposes. Also, once such Network Resource designation has been made, «Customer Name» may make market purchases to displace the Network Resource, which BPA shall schedule on secondary network service, provided that:

(1) such market purchases are at least one day in duration;

(2) the megawatt amount of the market purchase does not exceed the amount of the designated Network Resource that «Customer Name» would have scheduled to its load;

(3) such market purchases are only scheduled in preschedule consistent with section 4.1 of Exhibit F;

(4) «Customer Name» does not, under any circumstances, remarket its designated Network Resource or perform any other operation that would cause BPA to be in violation of its obligations under the Third Party Transmission Provider’s OATT;

(5) «Customer Name» is responsible for any additional energy imbalance, redispatch, and/or UAI charges that result from a transmission curtailment that impacts the resulting secondary network schedule; and

(6) any RSS products that «Customer Name» has purchased from BPA are not applied to the market purchase(s).

**16.** These principles will be the basis for a separate agreement BPA shall offer to «Customer Name» to support the Transfer Service of «Customer Name»’s non-federal resource. BPA shall include terms specific to a particular non-federal resource in exhibits to the separate agreement, with a separate exhibit for each non-federal resource. «Customer Name» is under no obligation to accept this separate agreement or the exhibit for the particular non-federal resource and BPA is not bound to acquire or pay for Transfer Service for non-federal resources if «Customer Name» does not accept the separate agreement or the exhibit for the particular non-federal resource.

**17.** BPA shall recover the costs associated with any agreements with «Customer Name» reached under these principles pursuant to BPA’s Wholesale Power Rate Schedules and GRSPs.

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

*End Option 2*

*Reviewer’s Note: The following Exhibit H was negotiated during the REP Settlement conversations. This is not the version of Exhibit H that customers received when the RD contract was initially executed. This version is for all new customers.*

**Exhibit H**

**RENEWABLE ENERGY CERTIFICATES AND CARBON ATTRIBUTES*(08/11/11 Version)***

**1. DEFINITIONS**

1.1 “Available Carbon Credits” means (i) eighty-six percent (86%) of the Carbon Credits that BPA determines are attributable to resources whose output is used to establish Tier 1 System Capability, as Tier 1 System Capability is defined in the TRM, excluding the Initial Tier 1 Renewable Projects; and (ii) one-hundred percent (100%) of the Carbon Credits attributable to electrical generation from Initial Tier 1 Renewable Projects, excluding Carbon Credits associated with EPP RECs.

1.2 “Available Tier 1 RECs” means the sum of: (i) eighty-six percent (86%) of the Future Tier 1 RECs; and (ii) one-hundred percent (100%) of the Current Tier 1 RECs.

1.3 “Carbon Credits” means Environmental Attributes consisting of greenhouse gas emission credits, certificates, or similar instruments.

1.4 “Current Tier 1 RECs” means Tier 1 RECs that BPA determines are attributable to electrical generation from Initial Tier 1 Renewable Projects, excluding EPP RECs.

1.5 “Environmental Attributes” means the current or future credits, benefits, emission reductions, offsets and allowances attributable to the generation of energy from a resource. Environmental Attributes do not include the tax credits associated with such resource. One megawatt‑hour of energy generation from a resource is associated with one megawatt‑hour of Environmental Attributes.

1.6 “Environmentally Preferred Power RECS” or “EPP RECs” means the portion of the Current Tier 1 RECs that is equal to an amount of up to 130 percent of the annual average of equivalent environmentally preferred power (EPP) contracted for as of October 1, 2009, for FYs 2010 and 2011 under Subscription power sales contracts containing rights to Environmental Attributes through FY 2016, as determined by BPA to be necessary to administer such rights.

1.7 “Future Tier 1 RECs” means Tier 1 RECs that BPA determines are attributable to resources whose output is used to establish Tier 1 System Capability, as Tier 1 System Capability is defined in the TRM, excluding the Initial Tier 1 Renewable Projects.

1.8 “Initial Tier 1 Renewable Projects” means the following projects existing as of the Effective Date of «Customer Name»’s CHWM Contract:

|  |  |
| --- | --- |
| **Project** | **Capacity (MW)** |
| Foote Creek I | 15.32 |
| Foote Creek II | 1.8 |
| Stateline | 89.76 |
| Condon | 49.8 |
| Klondike I | 24 |
| Klondike III | 50 |
| Ashland Solar | 0.015 |

1.9 “Renewable Energy Certificates” or “RECs”means the certificates, documentation, or other evidence that demonstrates, in the tracking system selected under section 5 of this exhibit, the ownership of Environmental Attributes.

1.10 “Tier 1 RECs”means the sum of the Current Tier 1 RECs and Future Tier 1 RECs.

1.11 “Tier 2 RECs”means the RECs attributable to generation of the resources whose costs are allocated to a given Tier 2 Cost Pool in accordance with the TRM.

**2. BPA’S TIER 1 REC INVENTORY**

BPA shall maintain a list on a publicly accessible BPA website and shall periodically update it. This list will include any then-current resources that BPA has determined have Tier 1 RECs attributable to them. BPA shall also include on this list its inventory of then-current resources that BPA has determined have Available Tier 1 RECs (and Available Carbon Credits). BPA shall calculate its Available Tier 1 RECs and Available Carbon Credits annually and after‑the‑fact based on energy generated by listed applicable resources during the previous calendar year.

**3. «CUSTOMER NAME»’S SHARE OF TIER 1 RECS**

Beginning April 15, 2012, and by April 15 every year thereafter over the term of this Agreement, BPA shall transfer to «Customer Name», or manage in accordance with section 5 of this exhibit, at no additional charge or premium beyond «Customer Name»’s payment of the otherwise applicable Tier 1 Rate, a pro rata share of Available Tier 1 RECs based on «Customer Name»’s RHWM divided by the total RHWMs of all holders of CHWM Contracts.

The amount of Available Tier 1 RECs available to BPA to transfer or manage shall be subject to available Available Tier 1 REC inventory.

**4. TIER 2 RECS**

If «Customer Name» chooses to purchase Firm Requirements Power at a Tier 2 Rate, and there are RECs which BPA has determined are attributable to the resources whose costs are allocated to the Tier 2 Cost Pool for such rate, then beginning April 15 of the year immediately following the first Fiscal Year in which «Customer Name»’s Tier 2 purchase obligation commences, and by April 15 every year thereafter for the duration of «Customer Name»’s Tier 2 purchase obligation, BPA shall, based on «Customer Name»’s election pursuant to section 5 of this exhibit, transfer to or manage for «Customer Name» a pro rata share of applicable Tier 2 RECs generated during the previous calendar year. BPA shall, for transferred RECs, provide «Customer Name» with a letter assigning title of such Tier 2 RECs to «Customer Name». The pro rata share of Tier 2 RECs BPA transfers to «Customer Name» shall be the ratio of «Customer Name»’s amount of power purchased at the applicable Tier 2 Rate to the total amount of purchases under that Tier 2 Rate.

**5. TRANSFER, TRACKING, AND MANAGEMENT OF RECS**

Subject to BPA’s determination that the commercial renewable energy tracking system WREGIS is adequate as a tracking system, BPA shall transfer «Customer Name»’s share of Available Tier 1 RECs, and Tier 2 RECs if applicable, to «Customer Name» via WREGIS or its successor. If, during the term of this Agreement, BPA determines in consultation with customers that WREGIS is not adequate as a tracking system, then BPA may change commercial tracking systems with one year advance notice to «Customer Name». In such case, the Parties shall establish a comparable process for BPA to provide «Customer Name» its Available Tier 1 and Tier 2 RECs.

Starting on July 15, 2011, and by July 15 prior to each Rate Period through the term of this Agreement, «Customer Name» shall notify BPA which one of the following three options it chooses for the transfer and management of «Customer Name»’s share of Available Tier 1 RECs, and Tier 2 RECs if applicable, for each upcoming Rate Period:

(1) BPA shall transfer «Customer Name»’s Available Tier 1 and Tier 2 RECs into «Customer Name»’s own WREGIS account, which shall be established by «Customer Name»; or

(2) BPA shall transfer «Customer Name»’s Available Tier 1 and Tier 2 RECs into a BPA-managed WREGIS subaccount. Such subaccount shall be established by BPA on «Customer Name»’s behalf and the terms and conditions of which shall be determined by the Parties in a separate agreement; or

(3) «Customer Name» shall give BPA the authority to market «Customer Name»’s Available Tier 1 and Tier 2 RECs on «Customer Name»’s behalf. BPA shall annually credit «Customer Name» for «Customer Name»’s pro rata share of all revenues generated by sales of Available Tier 1 and Tier 2 RECs from the same rate pool on its April bill, issued in May.

If «Customer Name» fails to notify BPA of its election by July 15 before the start of each Rate Period, then «Customer Name» shall be deemed to have elected the option in section 5(3) of this exhibit.

Any Available Tier 1 and Tier 2 RECs BPA transfers to «Customer Name» on April 15 of each year shall be limited to those generated January 1 through December 31 of the prior year, except that any Available Tier 1 and Tier 2 RECs BPA transfers to «Customer Name» by April 15, 2012, shall be limited to those generated October 1, 2011, through December 31, 2011.

**6. FEES**

BPA shall pay any reasonable fees associated with: (1) the provision of «Customer Name»’s Available Tier 1 and Tier 2 RECs and (2) the establishment of any subaccounts in «Customer Name»’s name pursuant to sections 5(1) and 5(2) of this exhibit. «Customer Name» shall pay all other fees associated with any WREGIS or successor commercial tracking system, including WREGIS retirement, reserve, and export fees.

**7. CARBON CREDITS**

In the absence of regulations or legislation concerning carbon credits and directly affecting BPA, BPA intends to convey the value of any future Available Carbon Credits to «Customer Name» on a pro rata basis in the same manner as described for Available Tier 1 RECs and Tier 2 RECs in sections 3 and 4 of this exhibit. This value may be conveyed as: (1) the Available Carbon Credits themselves; (2) a revenue credit after BPA markets such Available Carbon Credits; or (3) the ability to claim that power purchases at the applicable PF rate are derived from certain federal resources.

**8. BPA’S RIGHT TO TERMINATE «CUSTOMER NAME»’S RECS AND/OR CARBON CREDITS**

To the extent necessary to comply with any federal regulation or legislation which addresses Carbon Credits or any other form of Environmental Attribute(s) and includes compliance costs applicable to BPA, BPA may, upon reasonable notice to «Customer Name», terminate «Customer Name»’s contract rights to Available Tier 1 RECs under section 3 of this exhibit and/or «Customer Name»’s pro rata share of Available Carbon Credits under section 7 of this exhibit.

*End Option 2*

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**Exhibit I**

**CRITICAL SLICE AMOUNTS *(09/08/08 Version)***

**1. ESTABLISHING ADJUSTED ANNUAL RHWM TIER 1 SYSTEM CAPABILITY**

No later than 90 days prior to the start of each Fiscal Year, beginning with FY 2012, BPA shall determine the annual and monthly Average Megawatt and MWh amounts of Adjusted Annual RHWM Tier 1 System Capability for the upcoming Fiscal Year.

Such Adjusted Annual RHWM Tier 1 System Capability amounts shall be determined by adjusting the Fiscal Year amounts used to calculate the RHWM Tier 1 System Capability for known and determinable events that have occurred since the most recently concluded RHWM Process, such as changes in the availability or performance of Tier 1 System Resources, changes in Tier 1 System Obligations or the requirements of an applicable biological opinion, and which events: (1) would have caused BPA to use different assumptions in determining the RHWM Tier 1 System Capability had such events been known before the RHWM Process; (2) will result in the Adjusted Annual RHWM Tier 1 System Capability differing materially from the applicable annual RHWM Tier 1 System Capability; and (3) will be reflected in BPA’s operation of the FCRPS during the applicable Fiscal Year. The monthly Average Megawatt amounts of Adjusted Annual RHWM Tier 1 System Capability so determined shall be specified in the applicable rows of the table below for each Fiscal Year. The monthly Adjusted Annual RHWM Tier 1 System Capability expressed in megawatt-hours will be the product of the monthly Adjusted Annual RHWM Tier 1 System Capability in Average Megawatts multiplied by the number of hours in the month, and will be specified in the applicable rows of the table below for each Fiscal Year.

*Drafter’s Note: The table below will be blank at contract signing.*

| **Adjusted Annual RHWM Tier 1 System Capability** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Oct** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **annual aMW** |
| **Fiscal Year 2012** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2013** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2014** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2015** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2016** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2017** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2018** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2019** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2020** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2021** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2022** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2023** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2024** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2025** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2026** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2027** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2028** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Note: Fill in the table above with megawatt‑hour values rounded to a whole number, and average megawatt values rounded to three decimal places.  *Drafter’s Note: Add the following when revising this table: “2\_This table updated per Revision \_\_\_ to Exhibit I.”* | | | | | | | | | | | | | |

**2. ESTABLISHING CRITICAL SLICE AMOUNTS**

By September 15, 2011, and by each September 15 thereafter, BPA shall determine «Customer Name»’s Critical Slice Amounts by multiplying the monthly average megawatt amounts of Adjusted AnnualRHWM Tier 1 System Capability set forth in the table in section 1 for each Fiscal Yearby «Customer Name»’s Slice Percentage applicable to each such Fiscal Year stated in section 2 of Exhibit K. The Critical Slice Amounts so determined will be specified in the applicable row of the table below for each Fiscal Year. The monthly Critical Slice Amounts, expressed as megawatt-hours, shall be the product of the monthly Critical Slice Amounts in Average Megawatts multiplied by the number of hours in the applicable month, and will be specified in the applicable row of the table below for each Fiscal Year.

*Drafter’s Note: The table below will be blank at contract signing.*

| **Annual Critical Slice Amount** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Oct** | **Nov** | **Dec** | **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **annual aMW** |
| **Fiscal Year 2012** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2013** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2014** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2015** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2016** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2017** | | | | | | | | | | | | | |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Peak (MW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2018** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2019** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2020** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2021** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2022** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2023** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2024** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2025** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2026** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2027** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fiscal Year 2028** | | | | | | | | | | | | | |
| **Energy (aMW)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Energy (MWh)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Note: Fill in the table above with megawatt‑hour values rounded to a whole number, and average megawatt values rounded to three decimal places.  *Drafter’s Note: Add the following when revising this table: “2\_This table updated per Revision \_\_\_ to Exhibit I.”* | | | | | | | | | | | | | |

**3. REVISIONS**

By September 15, 2011, and by each September 15 thereafter, BPA shall provide «Customer Name» a revised Exhibit I reflecting the annual and monthly Adjusted AnnualRHWM Tier 1 System Capability and Critical Slice Amounts for the upcoming Fiscal Year determined in accordance with this Exhibit I, and a written summary stating any changes to the assumptions used by BPA to determine the RHWM Tier 1 System Capability for such Fiscal Year, the reasons for such change and the resulting impacts to the RHWM Tier 1 System Capability. Other changes shall be by mutual agreement of the Parties.

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

**Exhibit J**

**PRELIMINARY SLICE PERCENTAGE AND INITIAL SLICE PERCENTAGE*(09/08/08 Version)***

*Drafter’s Note: Enter Preliminary Slice Percentage and decimal value below.*

**1. PRELIMINARY SLICE PERCENTAGE*(07/21/09 Version)***

«Customer Name»’s Preliminary Slice Percentage is as specified below:

Preliminary Slice Percentage = «xx.xxxxx»%, or 0.xxxxxxx as a decimal value.

*Drafter’s Note: This percentage below to be left blank at contract signing.*

*Drafter’s Note: This percentage below should be equal to the Preliminary Slice Percentage captured above in Section 1.*

**2. INITIAL SLICE PERCENTAGE**

«Customer Name»’s Initial Slice Percentage shall be determined in accordance with section 4 of Exhibit Q. Promptly following such determination, BPA shall enter «Customer Name»’s Initial Slice Percentage below:

Initial Slice Percentage = xx.xxxxx%, or 0.xxxxxxx as a decimal value.

**3. REVISIONS**

No later than May 1, 2011, BPA shall revise section 2 of this Exhibit J to enter «Customer Name»’s Initial Slice Percentage.

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

**Exhibit K**

**ANNUAL DETERMINATION OF SLICE PERCENTAGE*(09/08/08 Version)***

**1. ANNUAL SLICE PERCENTAGE DETERMINATION PROCESS**

1.1 **Definitions**

The following definitions apply only to this exhibit.

1.1.1 “Slice Percentage Adjustment Ratio” or “SPAR” means, for a given Fiscal Year, the ratio that is determined by dividing: (1) the Initial CHWM by (2) the sum of the Initial CHWM and the Additional CHWM for such Fiscal Year. The SPAR shall be expressed as a five-digit decimal number and entered into the table in section 1.2 below.

1.1.2 “Tier 1 Purchase Amount” means the lesser of «Customer Name»’s Annual Net Requirement or «Customer Name»’s RHWM.

1.2 **Establishing SPAR Amounts**

No later than 15 days prior to the first day of each Fiscal Year, beginning with FY 2012, BPA shall compute the SPAR for such Fiscal Year and enter it into the table below.

*Drafter’s Note: This table left blank at contract signing*

| **Fiscal Year** | **Slice Percentage Adjustment Ratio** |
| --- | --- |
| FY 2012 | x.xxxxx |
| FY 2013 | x.xxxxx |
| FY 2014 | x.xxxxx |
| FY 2015 | x.xxxxx |
| FY 2016 | x.xxxxx |
| FY 2017 | x.xxxxx |
| FY 2018 | x.xxxxx |
| FY 2019 | x.xxxxx |
| FY 2020 | x.xxxxx |
| FY 2021 | x.xxxxx |
| FY 2022 | x.xxxxx |
| FY 2023 | x.xxxxx |
| FY 2024 | x.xxxxx |
| FY 2025 | x.xxxxx |
| FY 2026 | x.xxxxx |
| FY 2027 | x.xxxxx |
| FY 2028 | x.xxxxx |

1.3 **Determination of** **Slice Percentage**

By September 15, 2011, and by each September 15 thereafter, BPA shall determine «Customer Name»’s Slice Percentage by adjusting «Customer Name»’s Initial Slice Percentage, as set forth in section 2 of Exhibit J, using the procedure set forth below.

1.3.1 **Annual Net Requirement Greater Than or Equal to the Product of AART1SC\*ISP\*SPAR**

If «Customer Name»’s Annual Net Requirement is greater than or equal to the product of: (1) the Adjusted Annual RHWM Tier 1 System Capability, (2) «Customer Name»’s Initial Slice Percentage, and (3) the SPAR, then «Customer Name»’s Slice Percentage shall be set equal to its Initial Slice Percentage multiplied by the SPAR.

1.3.2 **Annual Net Requirement Less Than the Product of AART1SC\*ISP\*SPAR**

If «Customer Name»’s Annual Net Requirement is less than the product of: (1) the Adjusted Annual RHWM Tier 1 System Capability, (2) «Customer Name»’s Initial Slice Percentage, and (3) the SPAR, then «Customer Name»’s Slice Percentage shall be set equal to the ratio determined by dividing (A) the product of «Customer Name»’s Tier 1 Purchase Amount and the SPAR, by (B) the Adjusted Annual RHWM Tier 1 System Capability.

**2. SLICE PERCENTAGE**

BPA shall enter «Customer Name»’s Slice Percentage calculated pursuant to section 1.3 of this exhibit into the table below as a percentage rounded to the fifth digit, and as a decimal value rounded to the seventh digit.

*Drafter’s Note: This table left blank at contract signing*

| **Fiscal Year** | **Slice Percentage (decimal value)** |
| --- | --- |
| FY 2012 | xx.xxxxx % (0.xxxxxxx) |
| FY 2013 | xx.xxxxx % (0.xxxxxxx) |
| FY 2014 | xx.xxxxx % (0.xxxxxxx) |
| FY 2015 | xx.xxxxx % (0.xxxxxxx) |
| FY 2016 | xx.xxxxx % (0.xxxxxxx) |
| FY 2017 | xx.xxxxx % (0.xxxxxxx) |
| FY 2018 | xx.xxxxx % (0.xxxxxxx) |
| FY 2019 | xx.xxxxx % (0.xxxxxxx) |
| FY 2020 | xx.xxxxx % (0.xxxxxxx) |
| FY 2021 | xx.xxxxx % (0.xxxxxxx) |
| FY 2022 | xx.xxxxx % (0.xxxxxxx) |
| FY 2023 | xx.xxxxx % (0.xxxxxxx) |
| FY 2024 | xx.xxxxx % (0.xxxxxxx) |
| FY 2025 | xx.xxxxx % (0.xxxxxxx) |
| FY 2026 | xx.xxxxx % (0.xxxxxxx) |
| FY 2027 | xx.xxxxx % (0.xxxxxxx) |
| FY 2028 | xx.xxxxx % (0.xxxxxxx) |

**3. REVISIONS**

BPA shall revise the table in section 1.2 and the table in section 2 of this Exhibit K for each Fiscal Year in accordance with the terms of this Exhibit K. Other changes to this Exhibit K shall be by mutual agreement of the Parties.

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

**Exhibit L**

**RHWM AUGMENTATION**

**1. RHWM AUGMENTATION AMOUNTS**

The amounts of RHWM Augmentation applicable to each Fiscal Year of each Rate Period shall be entered into the table below no later than 60 days after the conclusion of the RHWM Process for each such Rate Period.

Drafters Note: Prior to the start of each Rate Case the RHWM Process will determine for each FY of the Rate Period, the total amount of RHWM augmentation, enter this amount into table below. The table will be left blank until the CHWM/RHWM process for FY2012 & FY2013 is completed.

| **Fiscal Year** | **RHWM Augmentation** |
| --- | --- |
| FY 2012 | xxx aMW |
| FY 2013 | xxx aMW |
| FY 2014 | xxx aMW |
| FY 2015 | xxx aMW |
| FY 2016 | xxx aMW |
| FY 2017 | xxx aMW |
| FY 2018 | xxx aMW |
| FY 2019 | xxx aMW |
| FY 2020 | xxx aMW |
| FY 2021 | xxx aMW |
| FY 2022 | xxx aMW |
| FY 2023 | xxx aMW |
| FY 2024 | xxx aMW |
| FY 2025 | xxx aMW |
| FY 2026 | xxx aMW |
| FY 2027 | xxx aMW |
| FY 2028 | xxx aMW |

2. MODELING OF RHWM AUGMENTATION IN THE SLICE COMPUTER APPLICATION(07/21/09 Version)

The amounts of RHWM Augmentation listed in section 1 of this exhibit will be a component of the BOS Base amount as determined by the BOS Module pursuant to section 4.1.1 of Exhibit M, and shall be made available to «Customer Name» in a Flat Annual Shape for the applicable Fiscal Year.

**3. REVISIONS**

This Exhibit L shall be revised by BPA in accordance with its terms and such revision provided to «Customer Name» not later than 60 days after the conclusion of each RHWM Process.

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

**Exhibit M*(09/08/08 Version)***

**SLICE COMPUTER APPLICATION**

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**1. SLICE COMPUTER APPLICATION – GENERAL DESCRIPTION*(08/08/11 Version)***

The Slice Computer Application (SCA) is a proprietary BPA computer application developed and maintained by BPA in consultation with «Customer Name» and other SIG members. The Slice Computer Application consists of the Slice Water Routing Simulator, the Balance of System Module, the Default User Interface, and other related processes used for scheduling, tagging, and accounting of Slice Output and communication of information, all as described below.

The Slice Computer Application is used to determine «Customer Name»’s hourly Slice Output Energy amounts that will be made available by Power Services for delivery to «Customer Name». The total amount of Slice Output Energy to be scheduled each hour is comprised of the results of the Simulator and the BOS Module, as set forth in section 7 of this exhibit.

In the event Exhibit O is implemented pursuant to section 5.10.3.2 of the body of this Agreement, only sections 3.5, 5, 8, and 9 of this Exhibit M shall be in effect as long as Exhibit O remains in effect.

**2. DEFINITIONS*(08/08/11 Version)***

The following definitions apply only to this Exhibit M.

2.1 “Algorithm Tuning Parameters” means factors, coefficients, or variables that are embedded within Simulator algorithms or formulas and are adjusted by Power Services as needed to appropriately implement provisions of this Agreement.

2.2 “Bypass Spill” means Spill that occurs at a hydroelectric project associated with lock operations, leakage and fish bypass systems.

2.3 “Forced Spill” means Spill other than Bypass Spill, Elective Spill, or Fish Spill that occurs at a hydroelectric project and is unavoidable in order to operate the project within applicable Operating Constraints.

2.4 “Incremental Side Flows” means the portion of a hydroelectric project’s natural inflow that enters the river on which the project is located between that project and the next-upstream project.

2.5 “Logic Control Parameters” means flags or toggles that are embedded within the Slice Computer Application logic and are set by Power Services as needed to appropriately implement provisions of this Agreement.

2.6 “Simulator Initialization Time” means the date and time that represents the beginning of the first one-hour period of the Simulator Modeling Period.

2.7 “Simulator Modeling Period” means the variable time period represented by the Simulator output, including between 216 and 241 one-hour time periods, as described in section 3.1.2 of this exhibit.

**3. SLICE WATER ROUTING SIMULATOR**

3.1 **General Description*(08/08/11 Version)***

The Simulator is designed to determine «Customer Name»’s potential range of available Simulated Output Energy Schedules and Delivery Limits associated with the Simulator Projects. «Customer Name» shall utilize the Simulator to simulate the routing of available stream flow through the Simulator Projects in compliance with established Simulator Parameters. Power Services is responsible for establishing and managing Simulator Parameters within the Simulator, pursuant to section 3.2 of this exhibit, and «Customer Name» is responsible for establishing and managing Customer Inputs within the Simulator, pursuant to section 3.3 of this exhibit. «Customer Name» shall use the Slice Computer Application to determine and make its requests for Slice Output Energy scheduled from Power Services.

3.1.1 «Customer Name» shall have access to the Simulator for the purpose of running various Simulated Operating Scenarios.

3.1.2 The Simulator shall be designed to produce Simulated Operating Scenarios in one-hour time periods for no less than 216 hours and no more than 241 hours, depending upon the Simulator Initialization Time. The one-hour time periods shall begin with the hour that begins with the Simulator Initialization Time and will continue for the remaining hours of that calendar day plus the subsequent nine calendar days.

3.1.3 The Simulator shall incorporate approximate hydraulic time lags between Simulator Projects.

3.1.4 The Simulator shall reflect the application of all Operating Constraints in effect for each Simulator Project, including compliance with Operating Constraints in effect at downstream projects.

3.1.5 The Simulator shall calculate simulated inflows to Grand Coulee based upon forecast (or measured when available) discharges from upstream projects plus forecast Incremental Side Flows between those projects and Grand Coulee, as adjusted for forecast Banks Lake irrigation pumping flows.

3.1.6 The Simulator shall compute the simulated Grand Coulee discharge, generation, and forebay elevation based on «Customer Name»’s Customer Inputs and shall use such computed discharge to establish «Customer Name»’s simulated Chief Joseph inflow, given appropriate time lags, and as adjusted for forecast Chief Joseph Incremental Side Flows.

3.1.7 The Simulator shall calculate simulated inflows to McNary based upon forecast (or measured when available) discharges from Priest Rapids and Ice Harbor after considering approximate hydraulic time lags between those projects and McNary, as adjusted for forecast McNary Incremental Side Flows. The Simulator shall also incorporate «Customer Name»’s Hydraulic Link Adjustment, pursuant to section 3.7 of this exhibit, into «Customer Name»’s simulated McNary inflow.

3.1.8 The Simulator shall compute the simulated McNary discharge, generation, and forebay elevation based on «Customer Name»’s Customer Inputs and shall use such computed discharge to establish «Customer Name»’s simulated John Day inflow, given appropriate time lags, and as adjusted for forecast John Day Incremental Side Flows.

3.1.9 The Simulator will compute the simulated discharge, generation and forebay elevations for John Day, The Dalles and Bonneville, as well as simulated inflows into The Dalles and Bonneville for «Customer Name», in the manner described in section 3.1.8 above.

3.1.10 The Simulator will not be designed to accept aggregated Customer Inputs for the LCOL Complex or the Coulee-Chief Complex. «Customer Name» may develop aggregated Customer Inputs for use in its in-house processes but must translate such aggregated Customer Inputs into individual Customer Inputs for each Simulator Project to enable the Slice Computer Application to validate «Customer Name»’s simulated operation of individual Simulator Projects against Operating Constraints.

3.2 **Simulator Parameters**

Power Services shall establish, monitor and update the Simulator Parameters, as specified in this section 3.2, applicable to each Simulator Project to reflect: (1) Operating Constraints in effect or to take effect at the actual Tier 1 System Resource, and (2) forecast system conditions used by BPA in the operation of the Tier 1 System Resources, for the entire Simulator Modeling Period. Power Services shall designate each Operating Constraint established as a Simulator Parameter as either an Absolute Operating Constraint, a Hard Operating Constraint, or a Soft Operating Constraint. The simulated operating capability available from the Simulator Projects as affected by the Simulator Parameters shall reasonably represent the actual operating capability available from the Tier 1 System Resources that comprise the Simulator Projects as affected by the associated Operating Constraints. To the maximum extent practicable, Power Services shall monitor the operating conditions that affect the Simulator Projects and shall revise the Simulator Parameters as necessary to reflect changes.

3.2.1 Power Services shall have the right to revise Simulator Parameters affecting each Scheduling Hour up to one hour prior to the beginning of each such Scheduling hour. For example, Power Services shall have the right to revise Simulator Parameters affecting Scheduling Hour 13 up until 11:00 a.m.

3.2.2 The Simulator Parameters shall include:

1. Hourly regulated inflows (Grand Coulee and McNary only);
2. Hourly Incremental Side Flows;
3. Initial forebay elevations;
4. Water to energy conversion factors (H/Ks);
5. Content to elevation conversion tables;
6. Project turbine capacities;
7. Spill limitations and requirements, including Bypass Spill quantities;
8. Generation limitations and requirements;
9. Discharge limitations and requirements as needed to meet both discharge and tailwater elevation requirements;
10. Forebay limitations and requirements;
11. System wide requirements that affect the Simulator Projects (e.g. Vernita Bar, chum spawning, or Operating Reserves);
12. Algorithm Tuning Parameters;
13. Logic Control Parameters that affect the Simulator Projects (e.g. CGS Displacement election, PSB enforcement flag, etc.); and,
14. Simulator Parameters as implemented pursuant to section 5.12 of the body of this Agreement and included in the specification manual described in section 3.5.1 of this exhibit.

3.3 **«Customer Name»’s Customer Inputs and Use of the Simulator*(04/30/14 Version)***

«Customer Name» shall be responsible for accessing the Simulator and submitting at least one Customer Input for each of the Simulator Projects for each one-hour time period for the entire Simulator Modeling Period. «Customer Name» is required to submit Customer Inputs to the Simulator separately from all other Slice Customers’ Customer Inputs.

3.3.1 Customer Inputs shall include:

1. Generation requests;
2. Elevation requests;
3. Discharge requests; and,
4. Customer Inputs as implemented pursuant to section 5.12 of the body of this Agreement and included in the specification manual described in section 3.5.1 of this exhibit.

3.3.2 Customer Inputs shall be stated in terms of whole project capability rather than «Customer Name»’s Slice Percentage of project capability.

3.3.3 The Simulator shall apply a fixed prioritization of Customer Inputs among generation, elevation, and discharge requests.

3.3.4 Upon submission to Power Services, the Simulator shall process «Customer Name»’s Customer Inputs to determine a Simulated Operating Scenario. The simulated generation values resulting from each Simulated Operating Scenario shall represent «Customer Name»’s potential Simulated Output Energy Schedules. Simulated Output Energy Schedules are not considered schedules for power delivery.

3.3.5 For each Simulated Operating Scenario the Slice Computer Application will provide «Customer Name» with a report stating for each Simulator Project: (1) the resulting simulated generation, discharge and elevation values, (2) which, if any, Absolute or Hard Operating Constraints limited the Simulated Operating Scenario, and (3) which, if any, Absolute or Hard Operating Constraints were violated.

3.3.6 If «Customer Name» submits Customer Inputs for a Simulated Operating Scenario that would otherwise result in violations of one or more Absolute or Hard Operating Constraints, the Simulator shall, to the extent possible, establish a Simulated Operating Scenario that conforms to the Absolute or Hard Operating Constraints. In such event, «Customer Name» shall make the election to either cancel the submission of its Customer Inputs or accept the results of the Simulated Operating Scenario.

3.3.7 «Customer Name» shall have the right to modify and submit to Power Services its Customer Inputs for each Scheduling Hour within the scheduling deadline established in section 4.1 of Exhibit F. As of the scheduling deadline prior to each Scheduling Hour, the Simulator shall process the Customer Inputs last submitted by «Customer Name» to determine «Customer Name»’s final Simulated Operating Scenario and associated final Simulated Output Energy Schedules, which shall be the basis of «Customer Name»’s Delivery Request, as described in section 7 of this exhibit, for each such Scheduling Hour.

3.3.8 At least once per day, «Customer Name» shall be required to produce a final Simulated Operating Scenario that demonstrates all Simulator Projects are in compliance with all applicable Operating Constraints for the duration of the Simulator Modeling Period. «Customer Name» may elect to produce more than one such Simulated Operating Scenario during a day. Power Services may suspend this requirement during periods when Power Services determines «Customer Name» is not able to comply due to conflicting Operating Constraints.

3.3.9 Power Services shall provide «Customer Name» with access, via the Slice Computer Application, to a test version of the Simulator that can be used for scenario testing. In this test version «Customer Name» shall have the ability to modify Simulator Parameters.

3.4 **Simulator Output*(08/08/11 Version)***

Based on the Simulator Parameters and Customer Inputs in effect, the Simulator shall produce the following results for each one-hour timeperiod for the entire Simulator Modeling Period:

3.4.1 «Customer Name»’s potential Simulated Output Energy Schedules (simulated generation), simulated discharge, and simulated forebay elevation associated with each Simulator Project.

3.4.2 A list of Customer Inputs that resulted in violation of Operating Constraints within the Simulated Operating Scenario, pursuant to section 3.3.6 of this exhibit, or that were not achieved by the Simulator, for each Simulator Project.

3.4.3 A list of Operating Constraints that were violated within «Customer Name»’s simulated operation for each Simulator Project.

3.4.4 An explanation for each occurrence listed pursuant to sections 3.4.2 and 3.4.3 of this exhibit.

3.4.5 «Customer Name»’s Hydraulic Link Adjustment amounts as established pursuant to section 3.7 of this exhibit.

3.5 **Simulator Documentation, Performance Test, and Accuracy**

3.5.1 **Simulator Documentation*(08/08/11 Version)***

Power Services, with «Customer Name»’s input, shall develop a Slice Water Routing Simulator (SWRS) manual with specifications describing the Simulator computations, processes and algorithms in sufficient detail to permit «Customer Name» to understand and verify the Simulator computations and accuracy of the Simulator outputs. The SWRS manual shall include, but shall not be limited to, the following:

1. A documented list of data points, including the source systems of record, such as BPA’s internal modeling tools or stream flow forecasting databases, that are accessed and used to determine Simulator Parameters;
2. Full documentation, excluding computer code, of the processes by which the Simulator computes and produces output values;
3. Full documentation, excluding computer code, of the Simulator functions available to «Customer Name», including access and controls of the Simulator; and
4. Full documentation of the data output/display processes and communication protocols associated with «Customer Name»’s computer systems.

3.5.2 If requested, Power Services may provide «Customer Name» assistance in developing an operational manual to explain how the Simulator is to be operated by «Customer Name». After a reasonable period of time (as determined by Power Services) following the SCA Implementation Date, Power Services may charge «Customer Name» for any such assistance Power Services provides.

3.5.3 **Simulator Performance Test**

Power Services shall conduct the Simulator Performance Test specified in this section 3.5.3 of this exhibit, and as required pursuant to section 5.10.4 of the body of this Agreement and section 3.5.4.2 of this exhibit.

3.5.3.1 **Storage Content Test**

Using actual stream flows (including calculated Incremental Side Flows), operating constraints, initial monthly Simulator Project forebay elevations, and Simulator Project discharges for the months of January through September 2010, as input parameters, Power Services shall produce Simulated Operating Scenarios for each month of that period. Power Services shall compute the hourly Storage Content difference for each Simulator Project as the difference between the simulated Storage Content and the actual Storage Content for each such Simulator Project for each hour of the test period. For each month of the test period, a Simulator Project will have passed the Storage Content test if: (1) the hourly Storage Content difference is greater than the Storage Content value contained in column A of the table below on no more than 4 percent of the hours in the month; and, (2) no hourly Storage Content difference during the month is greater than the lesser of (i) the Storage Content value contained in column B of the table below or (ii) one-half of the applicable monthly available Storage Content. If a Simulator Project fails either of these tests for a month, then such Simulator Project will have failed the Storage Content test for such month.

|  |  |  |
| --- | --- | --- |
| **Simulator Project** | **Column A** | **Column B** |
| Grand Coulee | 5 ksfd | 15 ksfd |
| Chief Joseph | 5 ksfd | 11.5 ksfd |
| McNary | 5 ksfd | 15 ksfd |
| John Day | 5 ksfd | 15 ksfd |
| The Dalles | 5 ksfd | 12.5 ksfd |
| Bonneville | 5 ksfd | 15 ksfd |

The overall Storage Content test will be deemed to have failed if one or more of the following occurs:

(1) Grand Coulee fails the test in one or more of the nine months;

(2) More than 25 percent of the 54 monthly tests fail;

(3) Four or more Simulator Projects fail the test in any single month; or

(4) Any of the Simulator Projects fail the test in all 9 months.

3.5.3.2 **Energy Test**

Using actual stream flows (including calculated Incremental Side Flows), operating constraints, initial monthly Simulator Project forebay elevations, Simulator Project discharge values, and Simulator Project H/Ks for the months of January through September 2010, as input parameters, Power Services shall produce Simulated Operating Scenarios for each month of that period. Power Services shall compute the daily and monthly differences between the simulated generation and actual generation for each Simulator Project. For each month of the test period, a Simulator Project will have passed the energy test if: (1) for each day of the month the daily generation difference is no greater than 5 percent of the associated Simulator Project’s actual daily generation; and, (2) the monthly generation difference is no greater than 3 percent of the associated Simulator Project’s actual monthly generation. The overall energy test will be deemed to have failed if one or more of the following occurs:

(1) Grand Coulee fails the test in one or more of the 9 months;

(2) More than 25 percent of the 54 monthly tests fail;

(3) Four or more Simulator Projects fail the monthly test in any single month; or

(4) Any of the Simulator Projects fail the test in all 9 months.

3.5.3.3 **Peaking Test**

Power Services shall produce a separate Simulated Operating Scenario as specified below, for the hottest consecutive 3‑day period and the coldest consecutive 3‑day period that occurred during the period January through September 2010.

The 3‑day test periods shall be determined by Power Services based on the weighted-average temperatures for three major load centers: Portland, Seattle, and Spokane. The weighted-average temperatures for these load centers will be determined as follows:

(1) Each city’s daily maximum and daily minimum temperature will be averaged;

(2) The resulting day-average temperature from each city will be weighted by applying load center percentage weightings, which will be determined by Power Services and will sum to 100 percent for the three cities; and

(3) The resulting weighted day-average temperatures for each city will then be combined to determine each day’s weighted-average load center temperature.

The daily weighted-average load center temperatures will be averaged for each consecutive 3‑day period for the January through September 2010 period. The lowest such average will establish the coldest 3‑day period and the highest such average will establish the hottest 3‑day period.

The Simulated Operating Scenarios will be developed using actual stream flows (including calculated Incremental Side Flows), operating constraints, and initial Simulator Project forebay elevations from the 3‑day test periods as input parameters. Each Simulator Project’s hourly generation request will be set equal to such Simulator Project’s actual generation value from the representative test periods. Power Services will compare each of the Simulator Project’s simulated hourly generation values to such Simulator Project’s actual hourly generation values for each of the 6 peak hours on any of the test days. The 6 peak hours shall be established as the 6 hours with the largest combined actual Simulator Project generation each day. The peaking test will be deemed to have failed if either of the following occurs:

(1) The Simulator Projects’ combined simulated generation value deviates from the Simulator Projects’ combined actual generation value by more than 200 aMW over the 6 peak hours on any of the test days; or

(2) The Simulator Projects’ combined simulated generation value deviates from the Simulator Projects’ combined actual generation value by more than 400 MW on any of the 6 peak hours on any of the test days.

3.5.3.4 **Ramp Down Test*(08/08/11 Version)***

Using actual stream flows (including calculated Incremental Side Flows), operating constraints, initial Simulator Project forebay elevations, and Simulator Project generation values from the dates specified below as input parameters, Power Services shall develop a separate Simulated Operating Scenario for each specified date. Power Services shall compute the difference between the simulated Grand Coulee generation change and the actual Grand Coulee generation change for each two consecutive hours between Scheduling Hour 20 and Scheduling Hour 02 for each study day. The ramp down test will be deemed to have failed if one or more of the following occurs:

(1) The difference between the simulated and actual Grand Coulee generation change is greater than 300 MW on any two consecutive hours between Scheduling Hour 20 and Scheduling Hour 02, on any ramp down test date;

(2) The average difference between the simulated and actual Grand Coulee generation change is greater than 100 MW for each two consecutive hours between Scheduling Hour 20 and Scheduling Hour 02 on any ramp down test date.

(3) The ramp down test dates will be:  
January 7-8 (Th-F) and 16-17 (Sa-Su), 2010,  
February 4-5 (Th-F) and 24-25 (W-Th), 2010,  
March 10-11 (W-Th) and 22-23 (M-Tu), 2010,  
April 2-3 (F-Sa) and 19-20 (M-Tu), 2010,  
May 6-7 (Th-F) and 27-28 (Th-F), 2010,  
June 9-10 (W-Th) and 21-22 (M-Tu), 2010,  
July 1-2 (Th-F) and 30-31 (F-Sa), 2010,  
August 12-13 (Th-F) and 20-21 (F-Sa), 2010,  
September 6-7 (M-Tu) and 16-17 (Th-F), 2010.

3.5.3.5 **Changes to Simulator Performance Test Criteria**

If the Simulator Performance Test fails, and after Power Services discusses the results of the test with «Customer Name», and the Parties agree the test criteria is unreasonable, inappropriate, or unattainable, then the Parties may mutually agree to either deem the Simulator Performance Test as having passed, or alter the test criteria prior to conducting subsequent Simulator Performance Tests.

3.5.4 **Simulator Accuracy*(04/30/14 Version)***

«Customer Name» and Power Services acknowledge that model errors are inevitable. No cumulative accounting of model error impacts shall be required or established.

3.5.4.1 To minimize such errors Power Services shall ensure Simulator Parameters established for the Simulator reasonably reflect the expected values for forecasted inflows and Operating Constraints and that the Simulator reasonably represents the operational attributes of the Simulator Projects. Power Services shall develop a process to account and correct for differences between forecasted and measured inflows and H/K values reflected in the Simulator in an effort to minimize cumulative deviations. «Customer Name» shall accept such inputs and corrections, and shall ensure that Customer Inputs established for the Simulator reasonably reflect «Customer Name»’s intended use of hourly scheduling flexibility within the established Delivery Limits.

3.5.4.2 As an ongoing check of the Simulator’s accuracy, Power Services shall run a retrospective Simulator Performance Test, as described in section 3.5.3 of this exhibit, each calendar year during the term of this Agreement, beginning with calendar year 2012. The Simulator accuracy criteria for each Simulator Performance Test shall be set equal to actual Simulator accuracy associated with the preceding Simulator Performance Test results, unless the Parties agree otherwise through the SIG process. The specific study dates for each Simulator Performance Test shall be as agreed by the Parties. The test criteria for each Simulator Performance Test may be modified as agreed by the Parties. The results of each such test shall be made available to «Customer Name» by November 15 of each calendar year. The frequency of such tests may be modified by agreement of the Parties through the SIG process.

3.5.4.3 If any annual Simulator Performance Test results are not within the accuracy criteria established pursuant to section 3.5.4.2 of this exhibit, Power Services, in consultation with «Customer Name» and other members of the SIG, shall promptly implement modifications needed to bring the Simulator output in compliance with such accuracy criteria.

3.5.5 **Documentation of** **Simulator Updates, Upgrades, or Replacements and «Customer Name»’s Required Actions*(08/08/11 Version)***

At least 30 days prior to Power Services implementing any updates, upgrades, or replacements to the Simulator, the Simulator specifications manual described in section 3.5.1 of this exhibit shall be revised by Power Services, with «Customer Name»’s input, and distributed to «Customer Name»’s SIG representative. Within such 30 day period «Customer Name» shall test its systems and provide sufficient training to its staff to allow it to prudently manage the changes resulting from the updates, upgrades, or replacements.

3.6 **Forecasted H/K, Corrected H/K, Bypass Spill, and Fish Spill*(08/08/11 Version)***

3.6.1 Power Services shall compute forecasted h/k values for each Simulator Project for use as h/k Simulator Parameters. Forecasted h/k values shall be computed using observed turbine discharge and gross generation amounts associated with the most recent contiguous periods that include hours ending 2300 through 0600 and hours ending 0700 through 2200) separately. The forecast h/k values shall be applied to all hours of each future, like, contiguous period within the Simulator Modeling Period. Such applied forecasted h/k values shall be adjusted for each hour based upon the ratio of «Customer Name»’s hourly simulated head associated with the prior hour and the observed head associated with the applicable observed contiguous period.

3.6.2 Power Services shall compute observed hourly h/k values for each Simulator Project for use in deviation accounting. Observed hourly h/k values shall be based on observed turbine discharge and gross generation amounts for each hour and shall be adjusted based upon the ratio of «Customer Name»’s simulated head and the observed head for each hour. Observed hourly h/k values shall be applied to «Customer Name»’s final simulated turbine discharge values associated with the same hour to determine corrected SOES amounts and h/k correction return amounts («Customer Name»’s Slice Percentage of the corrected SOES minus «Customer Name»’s Slice Percentage of the final SOES). The sum of «Customer Name»’s h/k correction return amounts for each hour shall be applied to «Customer Name»’s Delivery Request for the Scheduling Hour that occurs 168 hours after the applicable observed hour.

3.6.3 Power Services shall apply forecasted Bypass Spill amounts to «Customer Name»’s simulations for the entire Simulation Modeling Period. Power Services shall compute hourly observed Bypass Spill amounts as soon as practicable following each hour. Such hourly observed Bypass Spill amounts shall replace the forecasted Bypass Spill amounts for the Scheduling Hour that occurs 24 hours after the applicable observed hour.

3.6.4 Power Services shall monitor for differences between forecasted and observed Fish Spill amounts. Power Services shall apply adjustments to «Customer Name»’s deviation account balance for differences between forecasted and observed Fish Spill amounts which equal or exceed 5% of the day-average observed Fish Spill amounts, as measured in kcfs.

3.7 **Calculation and Application of the Hydraulic Link Adjustment*(08/08/11 Version)***

3.7.1 «Customer Name»’s Hydraulic Link Adjustment values shall be determined for each hour of this Agreement, beginning October 1, 2011.

3.7.2 «Customer Name»’s Hydraulic Link Adjustment values shall be equal to «Customer Name»’s Chief Joseph simulated discharge for each hour, minus the Chief Joseph measured discharge for the same hour.

3.7.3 «Customer Name»’s Hydraulic Link Adjustment values shall be applied as a component of «Customer Name»’s simulated inflow to McNary after considering appropriate lag times and smoothing functions.

**4.** **BALANCE OF SYSTEM MODULE**

The BOS Module will include processes that compute: (1) the BOS Base amounts, (2) the BOS Flex amounts, (3) «Customer Name»’s BOS Deviation Return amounts, and (4) «Customer Name»’s Additional Energy amounts, all as specified below.

4.1 **BOS Base Amount*(08/08/11 Version)***

Consistent with the following provisions, the BOS Base amount shall be determined by Power Services and provided to «Customer Name».

4.1.1 The BOS Base amount, for each hour, shall be equal to the sum of: (1) Power Services’ latest planned or scheduled generation amounts associated with the BOS Complex projects, (2) the amount of Elective Spill Power Services implements on the BOS Complex projects, (3) the amount of RHWM Augmentation, as described in Exhibit L, and (4) the forecast amount of energy associated with Tier 1 System Obligations. Tier 1 System Obligations will be netted against or added to the BOS Complex generation as appropriate. Energy associated with RHWM Augmentation included in the BOS Base amount shall be applied in equal amounts each hour of each FY.

4.1.2 «Customer Name»’s hourly BOS Base schedules shall be equal to the hourly BOS Base amounts multiplied by «Customer Name»’s Slice Percentage.

4.1.3 Power Services shall have the right to revise BOS Base amounts to reflect changes in items listed in section 4.1.1(1) – (4) affecting each Scheduling Hour up to one hour prior to the beginning of each such Scheduling hour. For example, Power Services shall have the right to revise BOS Base amounts affecting Scheduling Hour 13 up until 11:00 a.m.

4.2 **BOS Flex Amount*(08/08/11 Version)***

Consistent with the following provisions, the BOS Flex amount shall be determined by Power Services and made available to «Customer Name» on an as available basis.

4.2.1 The BOS Module will: (1) determine if there is sufficient flexibility to reshape the hourly generation associated with the Lower Snake Complex that is included in the BOS Base amount, and if so, (2) provide as output the resulting amount by which the BOS Base amount can be increased or decreased on any given hour. The BOS Module will specify the BOS Flex amounts that are available for the current calendar day and the subsequent calendar day.

4.2.2 Such BOS Flex amounts shall reflect, in the judgment of Power Services, the amount by which the BOS Base amount can reasonably be reshaped using the within-day flexibility available in the Lower Snake Complex, taking into account the Operating Constraints and stream flow conditions.

4.2.3 «Customer Name» shall determine its planned hourly use of the BOS Flex and submit to Power Services, positive and negative hourly BOS Flex schedules that sum to zero for each day. A positive hourly BOS Flex schedule shall reflect an increase relative to the BOS Base amount and a negative hourly BOS Flex schedule shall reflect a decrease relative to the BOS Base amount.

4.2.4 «Customer Name» shall update its hourly BOS Flex schedules to comply with revised BOS Flex amounts. If a mid-day change to the BOS Flex amounts prohibits «Customer Name» from scheduling its net day-total BOS Flex energy to equal zero, then «Customer Name» shall adjust its BOS Flex schedules to bring its net day total BOS Flex schedule as close to zero as possible within the revised BOS Flex amounts. Any non-zero BOS Flex balance remaining at the end of a calendar day shall be applied as «Customer Name»’s beginning BOS Flex balance for the following calendar day.

4.2.5 The BOS Flex available to «Customer Name» shall be equal to the BOS Flex amounts determined pursuant to this section 4.2 multiplied by «Customer Name»’s Slice Percentage.

4.2.6 If «Customer Name» determines it has a significant risk of not meeting its firm load service at any time, «Customer Name» may request that Power Services, as time permits and based on its professional judgment, assess the ability to modify the established BOS Flex amounts within applicable Operating Constraints. If Power Services alters such BOS Flex amounts, such updated values shall apply to all Slice Customers. «Customer Name» acknowledges such assessment by Power Services may result in an increase, decrease or no change to any of the remaining hourly BOS Flex amounts.

4.2.7 Power Services shall have the right to revise BOS Flex amounts to reflect changes in items listed in section 4.2.1(1) – (2) and section 4.2.6 affecting each Scheduling Hour up to one hour prior to the beginning of each such Scheduling hour. For example, Power Services shall have the right to revise BOS Flex amounts affecting Scheduling Hour 13 up until 11:00 a.m.

4.3 **BOS Deviation Return Amounts**

The BOS Module will compute and establish «Customer Name»’s BOS Deviation Return amounts as established in section 4.2.1 of Exhibit N.

4.4 **Additional Energy Amounts**

The BOS Module will compute and establish «Customer Name»’s Additional Energy schedules pursuant to section 5.8 of the body of this Agreement.

4.5 **Total BOS Amounts*(08/08/11 Version)***

«Customer Name»’s total BOS amount shall be equal to the sum the following components:

(1) the BOS Base schedule as established pursuant to section 4.1 of this exhibit;

(2) the BOS Flex schedule as established pursuant to section 4.2 of this exhibit;

(3) the BOS Deviation Return amount described in section 4.3 of this exhibit; and,

(4) the Additional Energy amount described in section 4.4 of this exhibit.

**5.** **DEFAULT USER INTERFACE**

Power Services shall develop and maintain a Default User Interface (DUI) for «Customer Name»’s use in interacting with the Slice Computer Application. «Customer Name» may utilize the DUI as its primary interface or may use an interface it develops in-house. If «Customer Name»’s primary interface is not the DUI, then «Customer Name» shall maintain back-up functionality through, and staff capability to operate, the DUI in the event «Customer Name»’s in-house interface is unavailable. The DUI shall include the functional capabilities listed below.

(1) Provide «Customer Name» access to the Simulator for submittal of Customer Inputs and to run Simulated Operating Scenarios.

(2) Provide «Customer Name» feedback and reports from the Simulator and BOS Module as set forth in sections 3.4 and 4.2.1 of this exhibit.

(3) Provide «Customer Name» input/output displays related to the Simulator and BOS Module.

**6. SCA REPORTS*(08/08/11 Version)***

6.1 As soon as practicable, but no later than 30 minutes past the end of each Scheduling Hour, the SCA shall provide «Customer Name» a detailed report that specifies: (1) «Customer Name»’s hourly Storage Offset Adjustment (SOA) amounts as defined in section 2.2 of Exhibit N, and as specified in section 4 of Exhibit N, and (2) the after-the-fact project data associated with the determination of such hourly SOA amounts.

6.2 Power Services shall make available to «Customer Name», via the Slice Computer Application, a report which shall present all changes to Simulator Parameters that have been made by Power Services between a user specified start date/time and end date/time. Power Services shall include brief, concise explanatory statements coincidental with significant Simulator Parameter changes.

6.3 Power Services shall make available to «Customer Name», via the Slice Computer Application, a report which shall present all Prudent Operating Decisions implemented by Power Services in the Simulator, between a user specified start date/time and end date/time. The report shall include the reason for imposing the Prudent Operating Decision and the manner in which Power Services incorporated the Prudent Operating Decision into the Simulator Parameters.

**7. HOURLY DELIVERY REQUEST*(08/08/11 Version)***

«Customer Name»’s hourly Delivery Request for Slice Output Energy associated with any given Scheduling Hour shall be equal to the sum of the following components, rounded to a whole number:

(1) the sum of «Customer Name»’s final Simulated Output Energy Schedules established per section 3.3.7 of this exhibit for each of the Simulator Projects multiplied by «Customer Name»’s Slice Percentage;

(2) «Customer Name»’s total BOS amount, established pursuant to section 4.5 of this exhibit;

(3) «Customer Name»’s reduction penalty amount established per section 5.1.4 of Exhibit N, multiplied by -1; and,

(4) «Customer Name»’s H/K correction return established per section 3.6.2 of this exhibit.

«Customer Name» shall revise its hourly Delivery Requests for Slice Output Energy consistent with the requirements of section 3.4 of Exhibit F.

8. SCA TRIAL PERIODS*(08/08/11 Version)*

BPA shall facilitate at least four week-long SCA trial periods. During these trial periods, BPA shall maintain a test version of the SCA in a form as near to production status as possible, including the functionality for «Customer Name» to submit Customer Inputs and run the Simulator to produce Simulated Operating Scenarios and final Simulated Operating Scenarios through the DUI and through the secure network protocols, and to receive results from the submittal processes. The selection of specific weeks for such trial periods will be coordinated through the SIG, but shall begin no earlier than April 1, 2011 and shall end no later than 14 days prior to the SCA Implementation Date. Results and feedback of the trial periods will be reported to the SIG at which time any suggestions for improving the SCA, the Simulator, or the processes necessary to support and maintain the SCA will be discussed and considered by the Parties.

9. REVISIONS

Revisions to this Exhibit M shall be by mutual agreement of the Parties.

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

**Exhibit N**

**SLICE IMPLEMENTATION PROCEDURES*(09/08/08 Version)***

**Table of Contents*(04/30/14 Version)***

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**1. SLICE IMPLEMENTATION PROCEDURES – GENERAL DESCRIPTION**

The procedures established in this Exhibit N shall be used by BPA and «Customer Name» in conjunction with Exhibit M to implement deliveries of energy sold to «Customer Name» under the Slice Product.

In the event Exhibit O is implemented pursuant to section 5.10.3.2 of the body of this Agreement and provisions of this Exhibit N are in conflict with provisions of Exhibit O, provisions of Exhibit O shall prevail.

**2. DEFINITIONS*(08/08/11 Version)***

The following definitions apply only to this Exhibit N.

2.1 “Multiyear Hydroregulation Study” means a hydroregulation study that simulates the prospective monthly operation of the Tier 1 System, typically for a 12‑month period, given a range of stream flow sequences.

2.2 “Storage Offset Adjustment” or “SOA” means the hourly difference between forecasted and observed inflows for each Simulator Project, as more fully set forth in section 4 of this exhibit.

**3. DATA PROVIDED BY POWER SERVICES*(08/08/11 Version)***

In addition to information exchanged and provided through provisions of Exhibit M and in order to assist «Customer Name» in managing and planning the use of its Slice Output, Power Services shall provide «Customer Name» the following information.

3.1 Tier 1 System operational information as described in sections 7, 8 and 9 of this exhibit.

3.2 «Customer Name»’s SOA amounts and BOS deviation account balance as described in section 4 of this exhibit.

**4. STORAGE OFFSET ADJUSTMENT AND DEVIATION ACCOUNTING*(08/08/11 Version)***

As described below, Power Services shall determine and make available to «Customer Name» a separate Storage Offset Adjustment (SOA) for each Simulator Project that represents simulated water deviation accounting. Power Services shall also determine and make available to «Customer Name» a BOS deviation account balance that represents energy deviation accounting.

4.1 «Customer Name»’s Storage Offset Adjustments shall be established for each Simulator Project each hour and shall account for the differences between forecasted and observed stream flow values. SOAs shall be stated in terms of thousands of second-foot-hours (ksfh), and shall be applied as adjustments to «Customer Name»’s associated Simulator Project inflows on the third hour following the hour for which the SOA is calculated. For example, an SOA that is calculated for Grand Coulee for Scheduling Hour 14 shall be applied to Grand Coulee’s simulated inflow for Scheduling Hour 17 of the same day.

4.2 «Customer Name»’s BOS Deviation Account, expressed in MWh, shall be equal to the sum of (1) the cumulative difference between «Customer Name»’s BOS Base amount for each Scheduling Hour and the product of the Actual BOS Generation and «Customer Name»’s Slice Percentage for each such hour, (2) the mathematical remainder resulting from rounding «Customer Name»’s hourly Delivery Requests to whole numbers, and (3) miscellaneous deviation adjustments, such as those related to fish spill discrepancies. «Customer Name»’s BOS Deviation Account balance shall be adjusted based on the following procedures:

4.2.1 Any time the absolute value of «Customer Name»’s BOS Deviation Account balance, as of 2400 hours any calendar day, is greater than «Customer Name»’s Slice Percentage of 4800 MWh (Slice Percentage \* 4800 MWh), a BOS Deviation Return will be triggered. When a BOS Deviation Return is triggered, the following shall occur;

(1) «Customer Name»’s BOS Deviation Account balance shall be adjusted toward zero by an amount equal to «Customer Name»’s Slice Percentage of 2400 MWh (Slice Percentage \* 2400 MWh); and,

(2) BOS Deviation Return amounts shall be applied to «Customer Name»’s total BOS amount, as described in Section 4.5 of Exhibit M, for each hour of the following full calendar day. For example, if «Customer Name»’s BOS Deviation Account balance associated with 2400 hours on a Monday, as determined the following Tuesday, triggers a BOS Deviation Return, then «Customer Name»’s total BOS amounts for the following Wednesday shall include BOS Deviation Return amounts. BOS Deviation Return amounts shall be applied in equal amounts for each hour of the associated calendar day. Such BOS Deviation Return amounts shall be applied as positive or negative values in accordance with the sign of «Customer Name»’s BOS Deviation Balance that triggers the associated BOS Deviation Return.

4.2.2 On or before the 15th day of each month Power Services shall determine and provide to «Customer Name» the results of an Actual BOS Generation calculation for the previous month that incorporates updated actual project generation and Tier 1 System Obligation values for each hour of such month. Based on the monthly Actual BOS Generation calculation for each hour, Power Services shall determine a monthly BOS deviation, expressed in MWh, compared to the hourly BOS Base amounts. On the 20th day of each month Power Services shall adjust «Customer Name»’s BOS Deviation Account balance by an amount equal to «Customer Name»’s Slice Percentage multiplied by the monthly BOS deviation calculated for such previous month.

4.3 «Customer Name» shall make all reasonable efforts to adjust its Simulated Operating Scenarios such that their simulated forebay elevations are equal to Power Services forecasted forebay elevations for 2400 hours PPT on September 30, 2028, or the date of conversion to another power product under section 11 of this Agreement, or the date of termination of this Agreement, whichever occurs earlier. For purposes of this section, such date shall be referred to as the Product End Date. Any differences between «Customer Name»’s simulated project forebays and the measured project forebays as of the Product End Date shall be converted to energy amounts by multiplying such differences (simulated minus actual) by the associated federal downstream H/Ks. The resulting energy amounts shall be summed with «Customer Name»’s BOS Deviation Account balance as of one month after the Product End Date. The resulting amount of energy, expressed in MWh, if positive, shall be delivered by Power Services to «Customer Name», or if negative, delivered by «Customer Name» to Power Services, within the next 60 days after the Product End Date.

**5. OPERATING CONSTRAINT VIOLATIONS AND BOS FLEX VALIDATIONS*(08/08/11 Version)***

5.1 **Operating Constraint Violations**

The Simulator is designed such that «Customer Name»’s Simulated Operating Scenario maintains compliance with all Hard and Absolute Operating Constraints, whenever possible. However, Power Services and «Customer Name» recognize there may be occasions where one or more Hard or Absolute Operating Constraints are violated within a Simulated Operating Scenario. In the event the Customer Inputs submitted by «Customer Name» result in the violation of one or more Hard or Absolute Operating Constraints in a final Simulated Operating Scenario, as established per section 3.3.7 of Exhibit M, Power Services shall establish operating guidelines based upon its determination of how Power Services would operate the system under similar conditions, such as operating to a minimum flow constraint, that «Customer Name» shall follow until such time as «Customer Name»’s final Simulated Operating Scenario is in compliance with all Operating Constraints. Power Services may also, upon its determination that «Customer Name» could have reasonably avoided such Operating Constraint violation, apply a penalty pursuant to section 5.1.4 of this exhibit for as long as such Hard or Absolute Operating Constraint is violated based upon «Customer Name»’s final Simulated Operating Scenarios.

5.1.1 «Customer Name» shall be responsible for monitoring and anticipating potential Operating Constraint violations on a prospective basis and adjusting Customer Inputs as needed to maintain compliance.

5.1.2 Hourly Operating Constraint validations and violations associated with the Simulator Projects shall be based on Customer Inputs established by «Customer Name» and submitted to Power Services within the Power Services real-time scheduling deadline pursuant to section 4.1 of Exhibit F.

5.1.3 Grand Coulee’s Project Storage Bound validations and «Customer Name»’s actions for associated violations shall be determined pursuant to section 6 of this exhibit.

5.1.4 Pursuant to the terms set forth in section 5 above, but not prior to February 1, 2012, Power Services shall have the right to reduce «Customer Name»’s Delivery Request by up to 100% of «Customer Name»’s total Simulated Output Energy Schedule for the Lower Columbia Complex for lower Columbia Simulator Project violations, or the Coulee-Chief Complex for Grand Coulee or Chief Joseph Simulator Project violations, on any given hour, taking into account the extent to which BPA determines it would face consequences under similar conditions, subject to the following provisions:

5.1.4.1 Only for hours in which «Customer Name»’s final Simulated Operating Scenarios are in violation of a Hard or Absolute Operating Constraint at one or more Simulator Projects, which includes instances where there is a Soft Constraint of the same value applicable to the same Simulator Project as the Hard or Absolute Operating Constraint that is violated;

5.1.4.2 Only to the extent Power Services notifies «Customer Name» of the reduction at least 60 minutes prior to the Scheduling Hour on which the reduction shall be applied, and;

5.1.4.3 Only to the extent «Customer Name» fails to remedy the Operating Constraint violation prior to the deadline established in section 4.1 of Exhibit F.

5.2 **BOS Flex Validations**

Delivery Limit validations associated with BOS Flex amounts shall be based on «Customer Name»’s BOS Flex requests submitted to Power Services as of the deadline set forth in section 4.1 of Exhibit F. «Customer Name»’s BOS Flex schedules shall be limited to «Customer Name»’s Slice Percentage multiplied by such BOS Flex amounts.

**6. GRAND COULEE PROJECT STORAGE BOUNDS (PSB)*(04/30/14 Version)***

When Grand Coulee’s upper or lower PSB is established as either a Soft or Hard Operating Constraint, «Customer Name»’s simulated Grand Coulee forebay elevation shall be validated against such Grand Coulee’s PSB at least once each day. When Grand Coulee’s upper or lower PSB is established as an Absolute Operating Constraint, «Customer Name»’s simulated Grand Coulee forebay elevation shall be validated against such Grand Coulee’s PSB on all hours of each day.

6.1 **Determination of Grand Coulee PSB**

Power Services shall estimate the upper and lower Grand Coulee PSB associated with each day of the following 3 months as part of each 3‑month forecast submitted pursuant to section 8 of this exhibit, and shall update such Grand Coulee PSB as conditions change and as needed to reflect updated Operating Constraints. To determine Grand Coulee’s PSBs, Power Services shall calculate the Storage Content associated with the Grand Coulee upper and lower ORCs as established by Operating Constraints in effect. Power Services shall apply a Storage Content difference between the upper and lower Grand Coulee PSB equivalent to at least ½‑foot at all times except when Grand Coulee is required to fill to 1290.0 feet for verification of refill. Power Services may specify other conditions under which this ½‑foot difference does not apply.

6.2 **Application of the Grand Coulee PSB**

Power Services shall designate each Grand Coulee PSB that does not represent an Absolute Operating Constraint as either a Hard Operating Constraint or a Soft Operating Constraint. Unless designated otherwise by Power Services, Grand Coulee PSB associated with date-specific required forebay elevations shall be designated as Hard Operating Constraints and Grand Coulee PSB associated with interpolated points in effect on days between such date-specific required forebay elevations shall be designated as Soft Operating Constraints. «Customer Name» shall maintain its simulated Grand Coulee forebay elevation within the upper and lower Grand Coulee PSB that are designated as Hard Operating Constraints, or be subject to penalties as established in section 5.1.4 of this exhibit. «Customer Name»’s simulated Grand Coulee forebay may exceed the upper or lower Grand Coulee PSB designated as Soft Operating Constraints without penalties. However, «Customer Name» recognizes that simulating Grand Coulee’s forebay outside of the upper or lower Grand Coulee PSB designated as Soft Operating Constraints increases «Customer Name»’s risk of violating the Grand Coulee PSB designated as Hard Operating Constraints and incurring the associated penalties.

6.3 **Grand Coulee PSB** **Violations and «Customer Name»’s Actions**

«Customer Name» shall be responsible for monitoring its Simulated Operating Scenarios and any Grand Coulee PSB violations.

6.3.1 If «Customer Name»’s simulated Grand Coulee forebay elevation violates the upper Grand Coulee PSB on a day in which the upper Grand Coulee PSB is designated as a Hard Operating Constraint, the following shall apply.

6.3.1.1 «Customer Name» shall immediately modify and submit to Power Services its Customer Inputs associated with Grand Coulee such that Grand Coulee’s simulated forebay elevation is within the upper Grand Coulee PSB. If the upper Grand Coulee PSB is not attainable, «Customer Name» shall immediately modify and submit to Power Services its Customer Inputs such that the most restrictive maximum discharge constraint in effect at the Simulator Projects is achieved in its Simulated Operating Scenario. «Customer Name» shall maintain such simulated operation until such time as «Customer Name»’s simulated Grand Coulee forebay elevation is within Grand Coulee’s upper and lower PSB.

6.3.1.2 Such actions shall not relieve «Customer Name» of any penalty that may apply under section 5.1.4.

6.3.2 If «Customer Name»’s simulated Grand Coulee forebay elevation violates the lower Grand Coulee PSB on a day in which the lower Grand Coulee PSB is designated as a Hard Operating Constraint, the following shall apply.

6.3.2.1 «Customer Name» shall immediately modify and submit to Power Services its Customer Inputs associated with Grand Coulee such that Grand Coulee’s simulated forebay elevation is within the lower Grand Coulee PSB. If the lower Grand Coulee PSB is not attainable, «Customer Name» shall immediately modify and submit to Power Services its Customer Inputs such that the most restrictive minimum discharge constraint in effect at the Simulator Projects is achieved in its Simulated Operating Scenario. «Customer Name» shall maintain such simulated operation until such time as «Customer Name»’s simulated Grand Coulee forebay elevation is within Grand Coulee’s upper and lower PSB.

6.3.2.2 Such actions shall not relieve «Customer Name» of any penalty that may apply under section 5.1.4.

**7. COMMUNICATIONS**

7.1 «Customer Name» shall be solely responsible for its internal dissemination of information provided by Power Services pursuant to Exhibit M and this Exhibit N.

7.2 «Customer Name» shall be able to utilize the Default User Interface, as described in section 5 of Exhibit M, to review the Simulator Parameters established by Power Services.

7.3 Power Services shall make reasonable efforts to promptly notify «Customer Name» of potential and significant system condition or operational changes via e‑mail, XML messaging, and/or the daily conference call described in section 7.5 of this exhibit.

7.4 Power Services shall communicate Federal Operating Decisions and Prudent Operating Decisions to «Customer Name» in the following manner:

7.4.1 An initial listing and description of Federal Operating Decisions and Prudent Operating Decisions that affect the Simulator Projects and are in effect as of September 30, 2011;

7.4.2 A publication via the Slice Computer Application as soon as practicable after BPA is informed of a Federal Operating Decision, or BPA makes either a Federal Operating Decision or Prudent Operating Decision affecting the Simulator Projects; and

7.4.3 A verbal report to the attendees during the next scheduled daily conference call as described in section 7.5 of this exhibit regarding Federal Operating Decisions or Prudent Operating decisions that have a material impact on the operation of the Simulator Projects, BOS Complex, or Tier 1 System Obligations.

7.5 Beginning September 28, 2011, and on each Business Day thereafter, Power Services shall initiate an informational conference call with «Customer Name» and the other Slice Customers promptly at 12:40 PPT to discuss current and upcoming operating parameters and other related matters. The time and frequency of the call may be changed upon the mutual agreement of Power Services, «Customer Name», and the other SIG members. «Customer Name» shall receive notice from Power Services via e‑mail at least three Business Days prior to any such change.

7.6 Subject to the provisions set forth in section 5.12 of the body of this Agreement, Power Services, «Customer Name», and other Slice Customers shall establish a forum to review and discuss Operating Constraints and their application.

**8. 3-MONTH FORECAST OF SLICE OUTPUT*(08/08/11 Version)***

8.1 Prior to September 24, 2011 and prior to the 24th day of each month thereafter, Power Services shall provide «Customer Name» with the results of a 3‑month forecast, pursuant to section 8.2 of this exhibit. Power Services shall revise such forecast during the month in the event conditions change significantly and shall make such revised forecast available to «Customer Name» in a timely manner.

8.2 Power Services, consistent with its internal study processes, shall perform two single-trace hydroregulation studies that incorporate the expected stream flow condition for the upcoming 3‑month period in weekly time periods. One study shall operate Grand Coulee as needed to satisfy the minimum Simulator Project flow constraint in order to attain the highest reservoir elevations possible at Grand Coulee, limited by its upper ORC, and one study shall operate Grand Coulee as needed to satisfy the Simulator Project maximum flow constraint in order to attain the lowest reservoir elevations possible at Grand Coulee, limited to its lower ORC. Both studies shall reflect a pass-inflow operation at all other Simulator Projects and the expected operation at all other Tier 1 System Resources and non-federal projects that are represented in the study, such as Brownlee, Kerr, and the mid-Columbia projects. Power Services shall initialize the starting reservoir Storage Contents for each study equal to the Storage Contents projected to occur at midnight on the study initialization date. Based on the results of these studies, Power Services shall provide to «Customer Name» the weekly natural inflow, turbine discharge, generation, Spill discharge, and ending elevation for each of the Simulator Projects, the Snake Complex projects, Libby, Hungry Horse, Dworshak, and Keenleyside (Arrow); the weekly generation forecasts for the sum of the remaining BOS projects, excluding CGS; the weekly CGS generation forecast; and the weekly forecast of the individual Tier 1 System Obligations. Power Services shall also provide a summary of weekly aggregated planned generator maintenance outages for all Tier 1 System Resources, expressed in total MW, as well as the estimated daily Grand Coulee upper and lower PSB for the study period.

**9. 12-MONTH FORECAST OF SLICE OUTPUT*(04/30/14Version)***

9.1 Prior to June 15, 2014, and prior to each June 15 thereafter during the term of this Agreement, Power Services, «Customer Name», and other Slice purchasers shall meet to discuss and review inputs, assumptions, and content of the Multiyear Hydroregulation Study used to develop the 12‑month forecast described in section 9.4 of this exhibit.

9.2 Prior to July 1, 2014, and prior to each July 1 thereafter during the term of this Agreement, Power Services shall provide «Customer Name» with results from the 12‑month forecast, pursuant to section 9.4 of this exhibit.

9.3 Prior to August 15, 2014, and prior to each August 15 thereafter during the term of this Agreement, Power Services, «Customer Name», and other Slice purchasers shall meet to discuss the results of the 12‑month forecast described in section 9.4 of this exhibit.

9.4 Power Services, consistent with its internal study processes, shall perform a single Multiyear Hydroregulation Study for the upcoming October through September period representing a range of potential stream flow traces, using the number of traces used by Power Services for its internal study purposes. The study shall reflect Grand Coulee operating to its ORC at times when its upper and lower ORC are equal. At times when Grand Coulee’s upper and lower ORC are not equal, the study shall reflect Coulee operating in a manner that achieves all Simulator Project flow constraints when possible. The study shall represent a pass-inflow operation at all other Simulator Projects and the expected operation at all other Tier 1 System Resources and non-federal projects that are represented in the study, such as Brownlee, Kerr, and the mid-Columbia projects. Power Services shall initialize the starting reservoir Storage Contents for this study at the Storage Contents projected to occur at midnight on the study initialization date. Based on the results of this study, Power Services shall provide to «Customer Name» the monthly natural inflow, turbine discharge, generation, Spill discharge, and ending elevation for each of the Simulator Projects, the Snake Complex projects, Libby, Hungry Horse, Dworshak, and Keenleyside (Arrow); the monthly generation forecasts for the sum of the remaining BOS projects, excluding CGS; the monthly CGS generation forecast; and the monthly forecast of the individual Tier 1 System Obligations. Power Services shall also provide a summary of monthly aggregated planned generator maintenance outages, expressed in total MW, for all Tier 1 System Resources.

**10. CONGESTION MANAGEMENT**

If there are congestion management requirements placed on Power Services by the Balancing Authority, Power Services shall adhere to the operational requirements of such congestion management requirements and shall apply such operational requirements to «Customer Name» consistent with the terms of this Agreement.

**11. CONFIDENTIALITY**

BPA considers all prospective operational information associated with the Tier 1 System or any Tier 1 System Resource to be proprietary and business sensitive. Such information that is provided by BPA to «Customer Name» or its scheduling agent pursuant to Exhibit M or this Exhibit N shall be treated as confidential by «Customer Name» and its scheduling agent. «Customer Name» shall limit its use of such information to its employees or agent solely for the implementation of the terms of this Agreement, and to no others. BPA reserves the right to withhold such operational information from scheduling agents that BPA determines are significant, active participants in WECC wholesale power or transmission markets and that are not purchasers of the Slice Product. If «Customer Name» enlists the services of a scheduling agent that is not a purchaser of the Slice Product «Customer Name» shall require its scheduling agent to develop systems or procedures that create functional separation between Slice related operational information and such scheduling agent’s marketing functions.

**12. REVISIONS**

Revisions to this Exhibit N shall be by mutual agreement of the Parties**.**

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

**Exhibit O**

**INTERIM SLICE IMPLEMENTATION PROCEDURES*(09/08/08 Version)***

***Drafter’s Note****:* ***Do not modify the numbering convention of this exhibit or delete any provisions intentionally left blank****. The numbering convention is consistent with the Subscription Block and Slice Agreement Exhibit J, and needs to remain as such to avoid confusion regarding provisions that BPA and Slice customers have utilized since 2001.*

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This Exhibit O shall be implemented only if the SCA Implementation Date, as established pursuant to section 5.10.3.2 of the body of this Agreement, is later than October 1, 2011. If implemented, this Exhibit O shall be in effect beginning October 1, 2011 and shall remain in effect until the SCA Implementation Date.

If this Exhibit O is implemented, any provisions of this Exhibit O that are in conflict with provisions of Exhibit N shall prevail over such provisions of Exhibit N.

To implement the provisions of this Exhibit O, BPA and «Customer Name» shall not utilize the Slice Computer Application as described in Exhibit M, but shall instead utilize the computer application developed and utilized to implement the Block and Slice Power Sales Agreements (Subscription Slice Agreements) that were in effect between October 1, 2001 and September 30, 2011. If «Customer Name» was not a party to such Subscription Slice Agreements «Customer Name» shall enlist the services of a BPA customer that was a party to such Subscription Slice Agreements, or its scheduling agent, in order to implement the provisions of this exhibit. The cost for such services that may be required for «Customer Name» to implement this Exhibit O shall be borne solely by «Customer Name».

**1. DEFINITIONS**

Terms with initial capitalization that are not defined in this exhibit shall be as defined in the body of this Agreement. Generally, calculations associated with defined terms within this exhibit are for the whole of the Slice System. Wherever a similar value is needed for «Customer Name»’s share of the Slice System values, the term “individual” is inserted before the defined term. Defined terms that contain the word “Generation” are for the Slice System as a whole. Defined terms that contain the word “Output” or are preceded by “individual” are customer-specific.

For purposes of implementing this Exhibit O, all references to “Slice System”, “Slice System Resources”, “System Obligations”, “Slice System Obligations” and any internal reference to “Slice System” will be deemed to mean Tier 1 System, such as Tier 1 System Resources, Tier 1 System Obligations and Tier 1 System Capability.

1(a) “Absolute Minimum Estimated Slice System Generation” means the least amount of energy the Slice System, as adjusted by System Obligations, can produce in a given time period.

1(b) “Actual Net Slice System Generation (ANSSG)” means the sum of the ATSG in megawatt-hours (MWh) and the gross Elective Spill in MWh used in the calculation of net Elective Spill in section 7(g)(2).

1(c) “Dispatchable Projects” means those Slice System generation resources that are available for redispatching with less advance notice than a calendar day, and include, but are not limited to, Grand Coulee, Chief Joseph, Lower Granite, Little Goose, Lower Monumental, Ice Harbor, McNary, John Day, The Dalles, and Bonneville.

1(d) “Estimated Slice System Generation (ESSG)” means the sum of the estimated generation produced at all the projects in the Slice System after adjustment for Operating Constraints and System Obligations over a given period of time.

1(e) “Fixed Flow” shall refer to an operational state when the maximum and minimum daily Estimated Slice System Generation, as provided by BPA pursuant to section 9(a)(5), are the same, and which is the result of Operating Constraints that restrict the ability to utilize the capability of the Slice System to store or draft water on different days.

1(f) “Grace Margin” means the amount by which «Customer Name» may exceed its SSSB without incurring penalties.

1(g) “Grace Margin Spill Account (GMSA)” means the account which Power Services maintains that reflects the total amount of energy subtracted from the Slice purchasers’ Slice Storage Deviation Accounts each day as a result of the Slice purchasers accruing Slice Storage Account balances that exceed their individual upper Slice System Storage Bound limit and their individual Grace Margin.

1(h) “Immediate Spill Deliveries” means energy BPA delivers to other parties for purposes of shifting spill from the FCRPS to the other parties’ systems.

1(i) “Lower Snake Projects (LSN)” means the four hydroelectric Projects located on the lower reach of the Snake River, consisting of Lower Granite, Little Goose, Lower Monumental, and Ice Harbor

1(j) “Non-Dispatchable Projects” means the Slice System generating resources that are not Dispatchable Projects.

1(k) “Pondage” means the ability of the hydro facilities of the Slice System to use lower river ponds (e.g., the LCOL and LSN) in combination with Grand Coulee and Chief Joseph to shift energy within the day and between days. Pondage includes Pondage Up and Pondage Down as described and calculated in section 3(c). Pondage Up may be used to exceed the daily maximum ESSG and/or the TOP HLH maximum ESSG. Pondage Down may be used to generate below the daily minimum ESSG.

1(l) “Ramp Rate” means the maximum rate of change in the level of generation for a specified period within all applicable Operating Constraints.

1(m) “Slice Output Limits” means all storage, energy, capacity, and rate of change limits defined in this exhibit that limit the availability and use of Slice Output by «Customer Name».

1(n) “Slice Storage Account” means the quantity equal to the sum of «Customer Name»’s SSDA and the product of «Customer Name»’s Slice Percentage and the Slice System Storage Energy, expressed in megawatt‑days (MW‑days).

1(o) “Slice System Deviation Account (SSDA)” means the amount of energy, in MW-days, that «Customer Name»’s ASOE deviates from the product of the ANSSG and «Customer Name»’s Slice Percentage, as described in section 7(d).

1(p) “Slice System Storage Bounds (SSSB)” means the maximum and minimum limits of the storage that is available to the Slice System, as calculated in section 3(b) below.

1(q) “Slice System Storage Energy (SSSE)” means the Storage Energy of the Slice System calculated by summing the Storage Energy in MW‑days of certain Slice System projects, which shall include, but not be limited to Grand Coulee.

1(r) “Storage Energy” means the energy that would be produced if a reservoir released its entire Storage Content. Storage Energy amounts are determined by multiplying a reservoir’s Storage Content, expressed in thousands of second‑foot-days (KSFD), by such reservoir’s at-site and downstream federal water-to-energy conversion factor (H/K).

1(s) “Technical Management Team” means that group comprised of representatives from federal and state (Oregon, Washington, Idaho, and Montana) agencies that is responsible for determining river operations in accordance with the FCRPS biological opinion and other applicable operational requirements.

1(t) “TOP Heavy Load Hours” or “TOP HLH” means the hours ending 0700 through 2200 Pacific prevailing time (PPT) for each day of the week (including Sundays and holidays).

1(u) “TOP Light Load Hours” or “TOP LLH” means the hours ending 0100 through 0600 PPT and hours ending 2300 through 2400 PPT for each day of the week (including Sundays and holidays).

1(v) “Weekly Constraint” means an operation of the FCRPS that requires a specific flow requirement for the week, typically specified as a discharge from McNary Dam. During this operation, the weekend average flow requirement must be at least 80% of the previous 5-weekday average discharge.

2. CALCULATION OF INDIVIDUAL LIMITS, ROUNDING, AND PENALTY CHARGES

2(a) This section intentionally left blank

2(b) This section intentionally left blank

2(c) This section intentionally left blank

2(d) **Calculation of «Customer Name»’s Individual Limits**

Unless otherwise specified, the calculation of such individual values, in MW, MWh, or MW-days, shall be the product of such value for the Slice System and «Customer Name»’s Slice Percentage.

2(e) **Rounding of Calculations**

All values in this exhibit that are expressed in terms of megawatts shall be expressed in whole megawatts. To the extent that a calculation results in a value that is not an integer, the number shall be converted to an integer using the following method:

2(e)(1) If the decimal is less than 0.50, round down to the nearest whole number.

2(e)(2) If the decimal is equal to or greater than 0.50, round up to the nearest whole number.

2(f) This section intentionally left blank

2(g) This section intentionally left blank

2(h) **Penalty Charges*(08/08/11 Version)***

If, after the day, it is determined that «Customer Name» has scheduled ASOE in excess of «Customer Name»’s Slice Percentage of: (1) the one-hour maximum ESSG, (2) the one-hour maximum ESSG for Lower Snake Projects (LSN), (3) the one-hour maximum ESSG for the rest of the system, (4) the TOP HLH maximum ESSG for LSN, (5) the TOP HLH maximum ESSG for the rest of the system (except as permitted in section 7(f) of this exhibit), (6) the daily maximum ESSG (except as permitted in section 7(f) of this exhibit) as adjusted by «Customer Name»’s right to Pondage, and/or (7) the Ramp Rate Up, all as calculated under the provisions of this Exhibit O, then «Customer Name» may be charged at the Unauthorized Increase Charge for energy for the amount of such exceedence.

If, after the day, it is determined that «Customer Name» has scheduled ASOE in an amount less than «Customer Name»’s Slice Percentage of: (1) the Absolute Minimum ESSG, (2) daily minimum ESSG as adjusted by «Customer Name»’s right to Pondage, and/or (3) the one-hour or two-hour Ramp Rate Down, all as calculated under the provisions of this Exhibit O (such amount to be designated as “generation shortfall”), «Customer Name»’s SSDA may be reduced by the generation shortfall. Such generation shortfall will be added to «Customer Name»’s ASOE when computing «Customer Name»’s Pondage and SSDA balances for that day.

Penalties assessed by Power Services pursuant to this Exhibit O may be waived by Power Services in accordance with section 24.5 of the body of this Agreement. Any waiver granted with respect to a specific circumstance shall not constitute a waiver of future exceedence, nor create a waiver for a recurrence of such circumstance or for any other circumstance.

**3. CALCULATING THE SLICE SYSTEM STORAGE AND PONDAGE**

The following procedures shall be used in determining all quantities related to SSSE, SSSB and Pondage values. The calculation of SSSE and SSSB set out below is a generic methodology, which is to be used in specific applications in this Exhibit.

3(a) **Calculating the SSSE**

Power Services shall calculate the SSSE, as defined in section 1(q), by summing the Storage Energy of the project(s) listed in section 1(q).

3(b) **Calculating the SSSB**

Prior to midnight on the 23rd day of each month, Power Services shall provide «Customer Name» with a forecast of the upper and lower SSSB for the subsequent three months. To determine the SSSB, Power Services shall calculate the SSSE associated with the upper and the lower ORC, except that whenever Grand Coulee’s upper ORC is 1,290.0 feet (full pool), the upper SSSB shall reflect the Storage Energy associated with 1,289.7 feet. The upper and the lower SSSB shall be increased or decreased as appropriate to reflect available Pondage.

3(c) **Calculating Pondage*(08/08/11 Version)***

To calculate the Pondage limits Power Services will reflect the estimated effective H/K values, as adjusted for required Fish Spill, and shall assume the forebay elevations for the Simulator Projects are initialized for the day at two-thirds full within their current operational storage ranges. Using these input values for the current day or next day(s), as appropriate, Power Services shall calculate the maximum amount that the LCOL Complex and LSN Complex projects can be utilized, relative to their expected operation, to increase the maximum daily ESSG and decrease the minimum daily ESSG by utilizing storage capabilities to store or draft water as appropriate. The resulting ability of the Federal System to increase maximum daily ESSG represents Pondage Up and the resulting ability of the Federal System to decrease minimum daily ESSG represents Pondage Down. Storing water at a particular project may increase or decrease overall Slice System generation, depending on the Operating Constraints in effect, and Power Services shall include such adjustment in the calculation of Pondage on an ongoing basis. Pondage Up limits shall be reported in positive values and Pondage Down limits shall be reported in negative values.

3(c)(1) During times when the Hanford Reach protection level flow is in effect, as established pursuant to the Hanford Reach Fall Chinook Protection Program Agreement as it then exists, the Pondage Down limit will be increased (made more negative) on Saturdays, Sundays, and holidays as appropriate to reflect the right to reduce discharge from Grand Coulee and Chief Joseph to levels below such protection level flow.

3(c)(2) During Fixed Flow operations associated with Weekly Constraints at McNary Dam, as defined in section 1(v), Pondage Up will be modified to reflect the shaping and flexibility allowed between the weekdays and the weekends as follows:

For Monday-Friday: Increase Pondage Up by the product of .303 \* 24 \* H/KGCL \* weekly flow target

For Saturday: Increase Pondage Up by the product of .75 \* .303 \* 24 \* H/KGCL \* weekly flow target

For Sunday: Increase Pondage Up by 0

Where:

H/KGCL is the sum of the actual expected water-to-energy conversion factor for all Slice System projects from Grand Coulee to Bonneville Dam, taking into account the spill requirements at each of the projects, and the weekly McNary flow target, which is the flow requirement as determined by the Technical Management Team or through a Federal Operating Decision, in thousand second foot days (ksfd).

3(c)(3) During Fixed Flow operations, «Customer Name»’s Pondage Up balance shall be increased and Pondage Down balance shall be decreased (made more negative) from time to time based on the change in «Customer Name»’s SSDA balance since the start of the Fixed Flow operation. Such adjustment shall be calculated each day as described below and shall be applicable on the 2nd day following such calculation, as follows:

**Formula 1**

**UpAdjI = Greater of 0 or [(SSDAI-2 – SSDA0)\*24 - (SSP \* K)]**

**Formula 2**

**DownAdjI = Lesser of 0 or [(SSDAI-2 – SSDA0)\*24 + (SSP \* K)]**

Where:

**UpAdji** is the amount of additional Pondage Up which «Customer Name» shall have a right to utilize on day I.

**DownAdjI** is the amount of additional Pondage Down which «Customer Name» shall have a right to utilize on day I.

**SSDAI-2**is «Customer Name»’s SSDA on the day 2 calendar days prior to day I.

**SSDA0**is «Customer Name»’s SSDA on the last day prior to the start of Fixed Flow operation.

**SSP** is «Customer Name»’s Slice Percentage.

**K** is a constant equal to 50,000 MWh. 50,000 MWh was selected as a reasonable deadband for accumulated changes in SSDA and is subject to change upon the mutual agreement of BPA and «Customer Name».

**4. FORECASTED SLICE OUTPUT CALCULATION, POWER SERVICES REAL-TIME ADJUSTMENTS, ELECTIVE SPILL DECLARATION, AND RAMP RATE CALCULATIONS**

The following procedures shall be used in determining «Customer Name»’s minimum and maximum available Slice Output on a daily and hourly basis.

4(a) **Calculating the ESSG**

To determine the ESSG, Power Services shall calculate for each project in the Slice System such project’s generation in terms of MW. When calculating the generation of such a project, Power Services shall estimate the energy that could be produced with those generating units that are planned to be available for such period while observing all applicable Operating Constraints. Power Services shall calculate the ESSG by adding the generation of all projects included in the Slice System and adjusting for any forecasted System Obligations.

4(b) **Projects With a Fixed Operation**

There are several Slice System projects whose operation is typically governed by non‑power requirements and, as such, their operation will not typically be altered for power purposes. These projects are listed in Table 3.1 of the TRM under the headings “Independent Hydro Projects” and in Table 3.2 of the TRM under the heading “Designated Non-Federally Owned Resources”.

4(c) **12-Month Forecast of Slice Output Energy*(08/08/11 Version)***

BPA shall provide «Customer Name» the results of a 12-month forecast as set forth in section 9 of Exhibit N, except BPA shall provide data associated with the appropriate corresponding terms defined in this Exhibit O rather than data associated with the terms Simulator Project, Snake Complex, BOS, and PSB as defined in Exhibit M.

4(d) **90-Day Forecast of Slice Output Energy*(08/08/11 Version)***

BPA shall provide «Customer Name» the results of a 90-day forecast as set forth in section 8 of Exhibit N, except BPA shall provide data associated with the appropriate corresponding terms defined in this Exhibit O rather than data associated with the terms Simulator Project, Snake Complex, BOS, and PSB as defined in Exhibit M.

4(e) **Calculating the Maximum and Minimum Daily ESSG*(08/08/11 Version)***

Beginning no later than September 28, 2011, and on each Business Day thereafter for as long as this exhibit is in effect, Power Services shall provide «Customer Name» with a forecast of the maximum and minimum ESSG for the total of all hours, the maximum ESSG for the total of the TOP HLHs, and the minimum ESSG for the total of the TOP LLHs of each day, for the upcoming preschedule day and the following six consecutive days.

In determining such maximum and minimum daily ESSG, Power Services shall perform two hydroregulation studies, one operating Grand Coulee as needed to achieve the maximum flow constraint in effect, and one operating Grand Coulee as needed to achieve the minimum flow constraint in effect. For such studies, Power Services shall initialize the starting reservoir Storage Contents to the previous day’s actual elevations. Power Services shall incorporate forecasted probable regulated inflows for each project, forecasted unit outages, and all applicable Operating Constraints. For such studies, Power Services shall reflect the expected project operation of the LSN Complex, Hungry Horse, Libby, Dworshak and all non-federal projects. Power Services shall reflect a pass inflow operation of LCOL Complex to the extent allowed by such projects’ Operating Constraints.

During periods of Fixed Flow operations, Power Services will compute the accumulated energy difference, in MWh, between each day’s last official maximum and minimum daily ESSG, and that day’s ANSSG with no adjustment for actual use of Pondage. On the first Business Day of each week, if the absolute value of the previous day’s accumulated difference exceeds 15,000 MWh, Power Services will make an adjustment to the maximum and minimum daily ESSG values for the following day and each subsequent day through the following Sunday. Such daily adjustment shall be no greater than the accumulated deviation divided by the number of days over which the adjustment will be effective.

4(f) **Calculating the Daily ESSG Assuming a Pass-Inflow Operation*(08/08/11 Version)***

Beginning no later than September 28, 2011, and on each Business Day thereafter as long as this exhibit is in effect, Power Services shall provide «Customer Name» with a forecast of the daily ESSG assuming a pass inflow operation for the upcoming preschedule day and the following six consecutive days. To calculate this value, Power Services shall determine the daily ESSG based on the expected operation of the Slice System as adjusted by the Storage Energy associated with the daily change in Storage Content expected to occur at the Dispatchable Projects. Parties agree that the foregoing study does not reflect then-current Federal Operating Decisions and Operating Constraints, and will not accurately reflect Slice Output Energy actually available.

4(g) **Calculating the Hourly Maximum ESSG**

Power Services shall calculate the hourly maximum ESSG separately for the LSN Complex and for the rest of the Slice System. For such maximums, Power Services shall sum the maximum hourly generation of the Slice System projects in each of the two groups above. The maximum hourly generation for each project shall be the lesser of the capability of the generating units that are available for service on that hour or the maximum generation allowed consistent with Operating Constraints.

Power Services shall also separately calculate for the LSN and for the rest of the Slice System, the maximum ESSG that can be produced over the TOP HLH in MWh, consistent with Operating Constraints. The LSN maximum generation for TOP HLH is that generation in excess of the minimum generation for the LSN on TOP HLH.

4(h) **Calculating the Hourly Absolute Minimum ESSG**

The hourly Absolute Minimum ESSG reflects the least amount of generation that the Slice System can produce in any hour, without causing Elective Spill. To determine the hourly Absolute Minimum ESSG, Power Services shall calculate the ESSG that would result from a minimum flow operation, while observing all Operating Constraints.

4(i) **Adjustments By Power Services**

On an hourly basis, Power Services shall monitor the Slice System and communicate to «Customer Name» changes in the hourly and daily Slice Output Limits for the current day. Changes to the Slice Output Limits for the next day(s) may be communicated to «Customer Name» at a later time, but shall be communicated as soon as practicable. «Customer Name» shall make adjustments to its schedules to stay within such limits. No modifications to schedules that begin within 60 minutes from the notification by Power Services of such adjustment will be necessary. Power Services shall have the authority to make any such changes based on the conditions listed below.

4(i)(1) **Corrections of Errors, Omissions, or Assumptions**

Estimates of daily maximum ESSG, the hourly maximum ESSG, and Absolute Minimum ESSG may be adjusted in real-time by Power Services to reflect corrections of errors, omissions, or changes in the assumptions used to calculate the Slice System capability.

4(i)(2) **Changes in Federal Operating Decisions**

Power Services may adjust information and Slice Output Limits previously provided by Power Services to reflect new Federal Operating Decisions, the termination or suspension of a Federal Operating Decision already reflected in the estimates, or if Power Services determines that the Slice Output Limits do not accurately reflect the actual Slice System operation on the current day.

4(i)(3) **Notification of Elective Spill**

Power Services shall notify «Customer Name» of Elective Spill for TOP HLH and/or TOP LLH as soon as practicable after Power Services determines that it is at risk of having Elective Spill. Such notice shall include a revised TOP LLH Minimum ESSG, which will be updated to reflect operating conditions of the Slice System. If the System is declared to be in an Elective Spill condition for TOP HLH during periods of Fixed Flow operations, Power Services may not declare the system to be out of Elective Spill condition unless such declaration is made prior to the start of the actual day for which the declaration was made; provided, however, during a period of Elective Spill in TOP HLH the hourly maximum generation pursuant to section 4(g) may be reduced if necessary to cause a reduction in system generation as directed by another federal agency. Failure by BPA to notify «Customer Name» of Elective Spill conditions shall not protect «Customer Name» from Elective Spill allocation per section 7(g) below.

4(i)(4) **Changes in the Hourly or Daily Slice System Capability**

Power Services shall revise the estimates of daily maximum ESSG, the hourly maximum ESSG, or Absolute Minimum ESSG when there is a change on the Slice System that exceeds either 500 MW on any remaining hour or 200 aMW for the remaining hours of the day.

4(j) **Calculation of Maximum Ramp Rates**

4(j)(1) **Ramp Rate Up**

The Ramp Rate Up equals:

MRR + NDGN – NDGN-1

Where:

MRR = the maximum rate of increase in generation for the Dispatchable Projects between 2 hours.

NDGN/NDGN-1 = The generation from the Non-Dispatchable Projects and the sum of the System Obligations for the schedule hour **N** and schedule hour **N-1**.

«Customer Name»’s increase in schedules between two hours shall be computed as:

[RGN – RGN-1]

Where:

RGN/RGN-1 = The lesser of the hourly maximum generation times the SSP, or «Customer Name»’s requested generation for schedule hour **N** and schedule hour **N-1**.

If «Customer Name» submits schedules such that the increase calculated in accordance with the immediately preceding formula exceeds the product of «Customer Name»’s Slice Percentage and the Ramp Rate Up, such exceedence will be subject to the UAI Charge for energy, and such exceedence amount will be subtracted from «Customer Name»’s daily ASOE for purposes of computing the daily Pondage and SSDA balances.

4(j)(2) **Ramp Rate Down**

Ramp Rate Down is the maximum rate of decrease in generation for the Dispatchable Projects over any three consecutive schedule hours. The Ramp Rate Down limit is calculated as both a limit to the amount of decrease in generation over any two consecutive hours and the decrease in generation over any three consecutive schedule hours.

***One-Hour Test***

The Ramp Rate Down limit between two consecutive hours, N-1 and N is the greater of:

4(j)(2)(i) C \* SSP, or

4(j)(2)(ii) B \* (RGN-1 – HMN)

***Two-Hour Test***

The Ramp Rate Down limit between two hours, N-2 and N is the sum of:

4(j)(2)(i) The greater of [(SSP \* C) or (A \* (RGN-2 – HMN-1))], and

4(j)(2)(ii) The greater of {(SSP \* C) or A \* (RGN-2 – the greater of [(SSP \* C) or (A \* (RGN-2 – HMN-1) – HMN)])}

In no event shall the results of the two-hour test cause a limit that would be less than C \* SSP for any two consecutive hours.

Where:

**A** = 0.4

**B** = 0.5

**C** = The minimum hourly down ramp limit for the Slice System, set for 1,000 megawatts on all hours

**SSP** = «Customer Name»’s Slice Percentage

**RGN/RGN-2**= The greater of the Absolute Minimum ESSG times the SSP for hour N, or «Customer Name»’s requested generation for schedule hour N and schedule hour N-2

**HMN/HMN-2**= Absolute Minimum ESSG for schedule hour N and schedule hour N-2, multiplied by «Customer Name»’s Slice Percentage.

The following formula shall be used to determine «Customer Name»’s actual ramp down across any two hours:

[(RGN– SSP \* (NDGN + SON)) - (RGN-x - SSP \* (NDGN-x+ SON-x))]

Where:

**RGN-X** =The greater of the Absolute Minimum ESSG times the SSP, or the scheduled generation for the schedule hour **X** hours prior to hour **N**

**SSP** = «Customer Name»’s Slice Percentage

**NDGN-X** = The Slice System generation from the Non-Dispatchable Projects for the schedule hour **X** hours prior to hour **N**

**SON-X** = The System Obligations for the schedule hour **X** hours prior to hour **N**

**X** shall be set to the value one for calculating «Customer Name»’s schedule decrease for the 1-hour Ramp Rate Down test and shall be set to the value two for the 2-hour Ramp Rate Down test.

If «Customer Name» submits a schedule which results in the delivery of energy such that the decrease calculated in accordance with the preceding paragraph exceeds the Ramp Rate Down limit as determined for either the 1-hour test or 2-hour test as specified above, such exceedence will be subject to transfer from «Customer Name»’s SSDA, consistent with the provisions of section 2(h) of this Exhibit O. In the event that an exceedence of both the 1-hour test and 2-hour test occurs across the same delivery hour, the greater of the two amounts shall be so transferred, and such exceedence amount will be added to «Customer Name»’s daily ASOE for purposes of computing the daily Pondage and SSDA balances.

4(k) This section intentionally left blank.

**5. CALCULATING ACTUAL SLICE OUTPUT**

The following procedures shall be used in determining the actual quantities of Slice Output.

5(a) **Calculation of Actual SSSE and Slice Storage Account Balance**

Beginning October 2, 2011, and on each day thereafter as long as this Exhibit O is in effect, Power Services shall calculate and provide «Customer Name» with the SSSE and «Customer Name»’s Slice Storage Account balance for the previous day, as measured in MW‑days. Power Services shall calculate such SSSE based on the actual reservoir Storage Contents, as measured at midnight for the previous day. To determine «Customer Name»’s Slice Storage Account balance, Power Services shall sum the product of the SSSE and «Customer Name»’s Slice Percentage with «Customer Name»’s Slice Storage Deviation Account (SSDA) balance as of midnight the same day, as determined in section 7(d).

5(b) **Calculation of ANSSG and ASOE**

Beginning October 2, 2011, and on each day thereafter as long as this Exhibit O is in effect, Power Services shall calculate and provide «Customer Name» with a daily accounting of the ANSSG produced on the previous day, as measured in MWh. Power Services shall calculate such ANSSG in the same manner as the ESSG but using: (1) actual project generation instead of forecasted generation, and (2) actual System Obligations instead of forecasted System Obligations, as adjusted by (3) the gross Elective Spill pursuant to section 7(g).

To determine «Customer Name»’s daily individual ASOE, Power Services shall sum for each hour of the day, the greater of «Customer Name»’s scheduled Slice Output Energy and «Customer Name»’s individual Absolute Minimum ESSG. In the event that «Customer Name»’s daily individual ASOE is less than the minimum individual Slice Output Limit for such day, as adjusted by «Customer Name»’s available Pond Down, «Customer Name»’s daily individual ASOE shall be deemed to be equal to the minimum individual Slice Output Limit for such day, as adjusted by «Customer Name»’s available Pond Down. The difference between «Customer Name»’s daily individual ASOE and the sum of «Customer Name»’s scheduled Slice Output Energy for all hours of such day shall be forfeited and transferred from «Customer Name»’s SSDA.

**6. GRACE MARGIN**

6(a) **General**

It is anticipated that «Customer Name»’s Slice Storage Account balance may not always be within its individual SSSB. Such deviation could be due to potential forecast or accounting errors on Power Services’s part or errors on «Customer Name»’s part. A Grace Margin will be provided to mitigate any penalty. The Grace Margin is both added to the maximum storage bounds and subtracted from the minimum storage bounds. The Grace Margin is applied on an after‑the-fact basis only. If the Slice System is in Fixed Flow, the UAI Charge will not be applied for being below the minimum storage bounds, nor will the forfeiture of energy for being above the maximum storage bounds be applied, as set forth in section 6(e). It is recognized that unusual events may require «Customer Name» and Power Services to institute by mutual oral or written agreement special actions with regard to the Grace Margin.

If, as of the last day of Fixed Flow, when the Slice System is transitioning to a period of operating within maximum and minimum storage bounds, «Customer Name»’s SSA balance exceeds its individual SSSB, «Customer Name» shall have up to 7 days (or longer if allowed in section 6(e)) beginning on the day that such transition was commenced to bring its SSA balance within its individual SSSB by utilizing the procedure described in section 6(e) without penalty or charge. If, within such 7-day period, «Customer Name» brings its SSA balance within its individual SSSB, the provisions described in section 6(e) shall become effective beginning on the day such compliance was achieved. If, within or by the end of such 7-day period, «Customer Name» fails to bring its SSA balance within its individual SSSB, «Customer Name» shall be subject to the penalties described in this section 6 for any amount its SSA balance remains outside the SSSB at the end of such 7‑day period (or longer period if allowed in section 6(e)).

6(b) **Calculation of Grace Margin**

To determine «Customer Name»’s Grace Margin, Power Services shall calculate the greater of:

6(b)(1) The product of 17,300 MWh and «Customer Name»’s Slice Percentage, or

6(b)(2) The value equal to the difference between the forecast and actual daily ESSG assuming a pass-inflow operation on that day, multiplied by «Customer Name»’s Slice Percentage.

6(c) **Calculation of SSSB Exceedence**

Power Services shall determine the exceedence of «Customer Name»’s Slice Storage Account relative to «Customer Name»’s individual SSSB, by using Formula 3. Power Services shall also determine the quantity of «Customer Name»’s SSDA that is subject to forfeiture and transfer out of its SSA, if any, using Formula 4, and the quantity of energy subject to the Unauthorized Increase Charge for energy, if any, by using Formula 5.

**Formula 3**

**E = (Greater of 0 or (SSSEI – uSSSB)) + (Lesser of 0 or (SSSEI – lSSSB))**

Where:

**E** is the amount by which «Customer Name»’s SSSE exceeds the Slice System Storage Bounds in MW‑days.

**SSSEI** is «Customer Name»’s Slice Storage Account balance as measured in MW‑days.

**uSSSB** is «Customer Name»’s individual upper Slice System Storage Bound as measured in MW‑days.

**lSSSB** is «Customer Name»’s individual lower Slice System Storage Bound as measured in MW‑days.

**Formula 4**

**gmSPILL = Greater of {0, or the Lesser of [(0.99\*DmaxGen – ASOE/24), or (E – GMI)]}**

Where:

**E** is «Customer Name»’s exceedence calculated in Formula 3 above in MW‑days.

**gmSPILL** is the amount of «Customer Name»’s exceedence that is considered to be spilled as measured in MW‑days.

**GMI** is «Customer Name»’s individual Grace Margin as measured in MW‑days.

**DmaxGen** is the maximum daily ESSG multiplied by «Customer Name»’s Slice Percentage as measured in MW‑days.

**Formula 5**

**gmUAI = Absolute value of {Lesser of {0, or the Greater of [(ASOE/24 – 1.01\*DminGen), or (E + GMI)]}}**

Where:

**E** is «Customer Name»’s exceedence calculated in Formula 3 above in MW‑days.

**gmUAI** is the amount of «Customer Name»’s exceedence, measured in MW‑days, that is considered to be subject to the UAI Charge for energy.

**GMI** is «Customer Name»’s individual Grace Margin as measured in MW‑days.

**DminGen** is the minimum daily ESSG multiplied by «Customer Name»’s Slice Percentage as measured in MW‑days.

**Formula 6**

[This formula has been intentionally left blank]

6(d) **Grace Margin Spill Account (GMSA)**

Power Services shall establish a GMSA that shall be initialized each day to zero and maintained in MW‑days. Power Services shall calculate the GMSA pursuant to section 6(e)(3) and shall utilize the GMSA to calculate net Elective Spill pursuant to section 7(g)(2).

6(e) **Application of the Grace Margin*(08/08/11 Version)***

Any time that gmSpill and gmUAI as calculated in Formulae 4 and 5 are greater than zero, the gmSpill or gmUAI must be eliminated by «Customer Name». «Customer Name» shall take the action(s) described below to return its Slice Storage Account balance to a condition that is within its Grace Margin to avoid the penalties below. If «Customer Name»’s exceedence as calculated in Formula 3 is greater than zero at a time when Grand Coulee’s ORC is 1,290.0 feet, then «Customer Name» shall take the actions specified in section 6(e)(2) by the day following the day on which «Customer Name» is notified of such exceedence. In all other instances where «Customer Name»’s exceedence as calculated in Formula 3 above is not zero, «Customer Name» shall take such actions by the third day following the day of notification. The day of notification shall be the day «Customer Name» receives the ANSSG that applies to the day on which the exceedence occurs.

6(e)(1) This section intentionally left blank.

6(e)(2) «Customer Name» shall adjust its ASOE in compliance with one of the following two requirements:

6(e)(2)(A) «Customer Name»’s exceedence as calculated in Formula 4 and 5 shall be reduced to zero; or

6(e)(2)(B) If Slice Output Limits prevent «Customer Name» from making such adjustment, then «Customer Name» shall continue to schedule its Slice Output Energy within 1 percent below the daily maximum or 1 percent above the daily minimum Slice Output Limit, without being required to utilize Pondage, for as many days as necessary to eliminate such exceedence.

If «Customer Name» fails to schedule its ASOE as specified in section 6(e)(2), such exceedence, if positive, will be treated as gmSPILL pursuant to section 6(e)(3); if negative, such amount shall be treated as gmUAI pursuant to section 6(e)(4).

«Customer Name» may elect to schedule its ASOE in a manner to reduce the exceedence amount to zero prior to the day following the day of notification, or the third day following the day of notification, as described in section 6(e). If «Customer Name» does so, «Customer Name» shall not be required to adjust its ASOE as specified in this section 6(e)(2).

6(e)(3) **Applied gmSpill and the Grace Margin Spill Account**

Power Services shall decrease «Customer Name»’s SSDA by the amount of gmSPILL calculated in Formula 4 above that is applied pursuant to sections 6(e) and 6(e)(2). In addition, Power Services shall add such amounts to the GMSA, which shall represent the sum of all Slice purchasers’ applied gmSPILL for each day.

6(e)(4) **Unauthorized Increase Charge for Applied gmUAI**

Power Services shall charge «Customer Name» for the amount of gmUAI calculated in Formula 5 above that is applied pursuant to sections 6(e), and 6(e)(2) at the UAI Charge for energy. In addition, Power Services shall increase «Customer Name»’s SSDA by the amount of gmUAI for which such a charge is assessed.

**7. SLICE PARTICIPANT’S DAILY SLICE STORAGE DEVIATION ACCOUNT (SSDA) BALANCE, ALLOCATION OF ELECTIVE SPILL, AND PONDAGE ACCOUNT BALANCE**

Power Services shall establish and maintain an accounting of the daily SSSE based upon the Slice System reservoirs’ actual Storage Contents (actual SSSE). Power Services shall establish and maintain an accounting of the daily deviation of Slice Storage (SSDA) for «Customer Name» as specified below. Power Services shall measure or calculate such account balances in MW‑days as of midnight each day. For purposes of section 6 and this section 7, the SSDA shall only be computed as a daily storage balance and shall not be computed as an hourly estimate of «Customer Name»’s SSDA balances. «Customer Name» shall utilize its SSDA as an indicator of its proximity to its individual SSSB and shall adjust its request of Slice Output Energy as needed to stay within such storage bounds. If «Customer Name»’s Slice Storage Account balance is outside of its individual SSSB, the Grace Margin rules in section 6 shall apply.

7(a) This section intentionally left blank.

7(b) **Initial Balances**

Power Services shall initialize the September 30, 2011, actual SSSE to the SSSE associated with the actual elevations of the projects in the Slice System as of 2400 hours PPT on September 30, 2011. Power Services shall initialize «Customer Name»’s September 30, 2011, SSDA balance to zero.

7(c) This section intentionally left blank.

7(d) **Daily Calculation of the SSDA Balance**

Beginning October 2, 2011, and on each day thereafter as long as this Exhibit O is in effect, Power Services shall calculate and provide «Customer Name» with daily account balances of «Customer Name»’s dSSDA and SSDA for the previous day using Formulae 7 and 8.

**Formula 7**

**SSDA-1 = SSDA-2 + dSSDA-1 - eSPILLI**

Where:

**SSDA-1** is the SSDA for day –1 as measured in MW‑days.

**SSDA-2** is the SSDA for day –2 as measured in MW‑days.

**dSSDA-1** is the change in the SSDA for day –1 calculated in Formula 8 below, in MW‑days.

**eSPILLI** is «Customer Name»’s allocated share of the net Elective Spill for the Slice System calculated in Formula 13 below, expressed in MW‑days.

**Formula 8**

**dSSDA-1 = [(SSP \* ANSSG-1) – ASOE-1] / 24**

Where:

**dSSDA-1** is the change in the SSDA for day –1 as measured in MW‑days.

**SSP** is the Slice Percentage.

**ANSSG-1** is the ASSG for day –1 as measured in MWh.

**ASOE-1** is «Customer Name»’s individual ASOE for day –1 as measured in MWh.

7(e) **Termination of the Interim Slice Implementation Procedures and Slice Participant’s SSDA Balance**

BPA shall provide «Customer Name» notice that these Interim Slice Implementation Procedures shall terminate no less than five (5) days prior to the date of such termination. Any balance remaining in «Customer Name»’s SSDA as of 2400 hours on the date these Interim Slice Implementation Procedures are terminated shall be transferred to «Customer Name»’s BOS Deviation Account as the initial balance in that account.

7(f) **Procedures During Fixed Flow and Declared Elective Spill Condition for TOP HLH**

The procedures outlined in this subsection 7(f) shall be used when the Slice System is in a Fixed Flow state and Elective Spill is declared for TOP HLH.

7(f)(1) **Pondage Balance Calculation**

The daily change in «Customer Name»’s Pondage Account balance, calculated pursuant to section 7(h), shall be zero regardless of the difference between «Customer Name»’s generation schedule compared to its Slice Percentage of the daily maximum ESSG and daily minimum ESSG.

7(f)(2) **dSSDA Calculation**

The dSSDA as defined in section 7(d) of this exhibit shall be set to zero for each such calendar day.

7(f)(3) **Allocation of Expenses Associated with Elective Spill**

Expenses incurred by Power Services due to the delivery of Elective Spill energy will be allocated to «Customer Name» by multiplying the amount of such expenses incurred by Power Services on such day by «Customer Name»’s Slice Percentage.

7(f)(4) **Daily Maximum ESSG**

«Customer Name» will have the right to exceed its share of daily maximum ESSG, as adjusted by «Customer Name»’s available Pond Up.

7(f)(5) **TOP HLH Maximum ESSG for the Rest of the System**

«Customer Name» will have the right to exceed its share of the TOP HLH maximum ESSG for the rest of the system, as adjusted by «Customer Name»’s available Pondage Up.

7(f)(6) **One-Hour Maximum ESSG**

«Customer Name» will not have the right to exceed its share of the one-hour maximum ESSG.

7(g) **Procedures Due to Elective Spill in Other Conditions**

The procedures outlined in this section 7(g) shall be used to calculate and allocate actual amounts of Elective Spill that occur when the Slice System is not in a Fixed Flow state or when the Slice System is in a Fixed Flow state and Elective Spill is declared only for TOP LLH.

7(g)(1) **General**

Power Services may need to reduce the actual Elective Spill by delivering energy as Immediate Spill Deliveries or by paying other parties to take energy that would otherwise be implemented as Elective Spill. Power Services shall increase the Elective Spill quantity by the amount of energy delivered under either of such arrangements, which total shall be known as the gross Elective Spill.

7(g)(2) **Calculation of Net Elective Spill**

The quantity of Elective Spill that occurs on the Slice System on any given day shall be reduced by the quantity in the GMSA to determine net Elective Spill for that day. Power Services shall use Formula 9 to calculate the net Elective Spill for the Slice System.

**Formula 9**

**eSPILLNET = Greater of 0 or (eSPILLGROSS – GMSA- HourlySpill)**

Where:

**eSPILLNET** is the net Elective Spill for the Slice System to be allocated to the Slice Purchasers in MW‑days.

**eSPILLGROSS** is the gross Elective Spill for the Slice System in MW‑days.

**GMSA** is the sum of all Slice purchaser’s applied gmSpill as calculated in section 6(e)(3) in MW‑days.

**HourlySpill** is the total amount of energy transferred from all Slice customers SSDAs pursuant to the second paragraph of section 2(h).

7(g)(3) **Allocation of Net Elective Spill**

As needed, Power Services shall calculate for «Customer Name», all other Slice Customers, and Power Services, the net Elective Spill to be allocated to each Party, using Formulae 10, 11, and 12. When requested, Power Services shall make available to «Customer Name» the calculations and all data necessary to verify the calculation of the allocated net Elective Spill.

**Formula 10**

**llhMINGEN= (llhASSGADO + eSPILLNET\*24)/TOP LLH**

Where:

**llhMINGEN** is the minimum TOP LLH Slice System generation needed to avoid Elective Spill for the day, expressed in average MW.

**llhASSGADO**is the portion of the daily ASSG that was generated on TOP LLH, less the quantity of energy delivered as Immediate Spill Deliveries, and the energy for which Power Services paid other parties to take during such TOP LLH, expressed in MWh.

**eSPILLNET** is the net Elective Spill for the Slice System, to be allocated to the Slice Customers, as calculated in Formula 9 and expressed in MW‑days.

**TOP LLH** is the number of TOP LLH in the day.

**Formula 11**

**llhADDGENI = the greater of   
((llhMINGEN \* SSP) – llhASOEI/TOP LLH) or 0**

Where:

**llhADDGENI** is «Customer Name»’s additional individual ASOE that was needed on TOP LLH to avoid Elective Spill for the day, as expressed in average MW.

**llhMINGEN** is the minimum TOP LLH Slice System generation needed to avoid Elective Spill for the day, calculated in Formula 10, expressed in average MW.

**SSP** is «Customer Name»’s Slice Percentage.

**llhASOEI** is the portion of «Customer Name»’s daily individual ASOE that was scheduled on TOP LLH, plus the energy associated with hourly spill penalties that occur on TOP LLH, as expressed in MWh.

**TOP LLH** is the number of TOP LLH in the day.

**Formula 12**

**eSPILLI = eSPILLNET \* llhADDGENI / llhADDGENTOT**

Where:

**eSPILLI** is «Customer Name»’s allocated share of the net Elective Spill for the Slice System, expressed in MW‑days.

**eSPILLNET** is the net Elective Spill for the Slice System to be allocated to the Slice Customers, as determined in Formula 9, expressed in MW‑days.

**llhADDGENI** is «Customer Name»’s minimum TOP LLH Slice System Generation needed to avoid Elective Spill for the day, as determined in Formula 11, expressed in average MW.

**llhADDGENTOT** is the minimum TOP LLH Slice System generation needed to avoid Elective Spill for the day, as determined in Formula 11, summed for all Slice Customers, and expressed in average MW.

7(h) **Pondage Account and Daily/Weekly Use of Pondage**

Power Services shall establish and maintain daily accounting of the Pondage limits on the Slice System, calculated pursuant to section 3(c) of this Exhibit.

Power Services shall also establish and maintain an accounting of the daily use of Pondage for «Customer Name» as specified below. Power Services shall measure or calculate such account balances in whole megawatt-hours (MWh) as of midnight PPT each day.

7(h)(1) «Customer Name»’s Pondage account will be calculated in daily energy quantities and shall be cumulative, with a negative balance indicating use of Pondage Up and a positive balance indicating use of Pondage Down. The account balance will be changed each day by the sum of the following items:

7(h)(1)(A) The energy amount by which «Customer Name»’s ASOE exceeds the daily maximum ESSG shall be subtracted from «Customer Name»’s Pondage account balance and the amount by which the ASOE is lower than the daily minimum ESSG shall be added to «Customer Name»’s Pondage account balance.

7(h)(1)(B) If «Customer Name»’s Pondage account balance for the prior day is positive, the account balance shall be decreased by the lesser of: (1) the amount of the Pondage account balance for the prior day, or (2) the amount that «Customer Name»’s ASOE is greater than the daily minimum ESSG, limited by the daily maximum ESSG.

7(h)(1)(C) If «Customer Name»’s Pondage account balance for the prior day is negative, the account balance shall be increased by the lesser of: (1) the amount of the Pondage account balance for the prior day, or (2) the amount that «Customer Name»’s ASOE is lower than the daily maximum ESSG, limited by the daily minimum ESSG.

7(h)(1)(D) If «Customer Name» has specified amounts in addition to those calculated automatically by Power Services for the Pondage account balance to be used for Pondage operations, including taking and returning of energy from the Pondage account, then Power Services shall include such amounts in the calculation.

7(h)(2) If «Customer Name» schedules ASOE such that its Pondage account balance does not exceed, in a positive amount, its Slice Percentage times the Pondage Down limit (note: a negative number), and does not exceed in a negative amount, its Slice Percentage times the Pondage Up limit (note: a positive number), no penalty for Pondage shall be applied. If «Customer Name»’s Pondage account balance exceeds either limit, the energy amount in excess of the limit will be assessed as gmSpill or gmUAI as appropriate, provided however, that if the Pondage limits become smaller, «Customer Name» shall not be obligated to reduce the balance in order to comply with the limit and shall not be assessed gmSpill or gmUAI for that amount. However, any subsequent increases in «Customer Name»’s Pondage account balance while its balance exceeds the reduced limit will be subject to gmSpill or gmUAI as appropriate.

7(h)(3) During periods when protection level flows are in effect at Priest Rapids Dam pursuant to the Hanford Reach Fall Chinook Protection Program Agreement as it then exists, «Customer Name» shall schedule ASOE such that «Customer Name»’s Pondage account balance is within its share of the Pondage Down limit by midnight of each Wednesday.

7(i) This section intentionally left blank

**8. THIS SECTION INTENTIONALLY LEFT BLANK**

**9. DATA AND INFORMATION PROVIDED BY POWER SERVICES**

9(a) **Slice System Estimates Provided Each Business Day By Power Services**

Power Services shall provide to «Customer Name» no later than 1630 hours PPT on each Business Day the estimates specified in sections 9(a)(1) through 9(a)(13) for the day or days for which preschedules shall be established on the next Business Day in accordance with the WECC Preschedule Calendar, pursuant to section 2 of Exhibit F. All estimates will be provided net of expected Operating Constraints and in MWh except where noted. Power Services does not guarantee or assume any particular or specific result from use by «Customer Name» of these estimates and any of the information provided.

9(a)(1) **One-Hour Maximum ESSG**

This estimate represents the maximum Slice System generation that can be produced for 1 hour. The ESSG shall be separated into the following two categories:

9(a)(1)(A) the LSN maximum generation for an hour that is in excess of the hourly minimum generation for the LSN for such hour; and

9(a)(1)(B) the rest of the Slice System.

9(a)(2) **TOP HLH Maximum ESSG**

This estimate represents the portion of the maximum ESSG that can be produced over the TOP HLH for:

9(a)(1)(A) the LSN, and

9(a)(1)(B) the rest of the Slice System.

9(a)(3) **Absolute Minimum ESSG**

This estimate reflects the Absolute Minimum ESSG that can be produced during any hour without causing Elective Spill.

9(a)(4) **TOP LLH Minimum ESSG**

This estimate is the amount of Slice System generation that needs to be produced over the TOP LLH to minimize the potential of Elective Spill given expected system conditions. This estimate is not a limit, and there is also no guarantee or assurance by Power Services that in providing this estimate, a Slice Output Energy request at that level will not incur some amount of Elective Spill.

9(a)(5) **Daily Maximum and Minimum ESSG**

This estimate represents the maximum and minimum amount of Slice System generation that can be produced for the day, without utilizing available Pondage.

9(a)(6) **Fixed Project Generation Schedules**

This estimate represents the hourly expected generation from the projects described in section 4(b).

9(a)(7) **Maximum Hourly Ramp Rates**

The estimate for the maximum hourly Ramp Rates, in MW, for increasing and decreasing Slice System generation will be calculated using the methodology in section 4(j).

9(a)(8) **Maximum and Minimum Storage Bounds**

This estimate will provide the SSSB in MW‑days for the preschedule day and the following 6 days.

9(a)(9) **ESSG Pass-Inflow Forecast**

This is the theoretical ESSG, assuming a modified inflow operation, as discussed in section 4(f). This will provide «Customer Name» with an estimated amount of Slice Output Energy to schedule in order to maintain its SSA balance from day to day.

9(a)(10) **Planned Unit Outages**

Under normal operating conditions, this will include planned unit outages of at least 500 MW for all Slice System projects for the next preschedule day and the following 6 days and will be provided during the daily conference call described in section 7.5 of Exhibit N. Power Services will provide more detailed planned unit outage information during times of severe weather events or anticipated regional power shortages. The outage information provided will be in terms of megawatts of capacity out of service for the Slice System.

9(a)(11) **Six-Day TOP HLH and TOP LLH Maximum and Minimum Generation**

This estimate will include a forecast of the maximum and minimum Estimated Slice System Generation expected to occur on TOP LLH and on TOP HLH, given unit availability and Operating Constraints for the 6 days after the day to be prescheduled.

9(a)(12) **Pondage Up and Pondage Down Available on the Slice System**

This estimate shall represent the cumulative amount of Pondage Up and Pondage Down available on the Slice System for the next preschedule day.

9(a)(13) **State of the Slice System*(08/08/11 Version)***

Power Services shall provide to «Customer Name» an indication of the expected state of the Slice System for the preschedule day(s). Such indication shall be that the Slice System is in a storage energy state unless there is a specific weekly or daily flow requirement on one of the LCOL projects, or the difference between the uSSSB and the lSSSB would be approximately the same as the potential size of the inflow forecast error. Power Services and «Customer Name» shall review and evaluate the selection of the system state with the operations subcommittee throughout the Operating Year on a case-by-case basis in order to coordinate and plan the timing and transition between Slice System states.

If Power Services declares that the Slice System is operating in a Fixed Flow state, and emergency provisions are enacted through the Northwest Power Pool Emergency Response Team (“NWPP ERT”), the Slice System will transition from a Fixed Flow state to an interim storage energy state. During the period that the NWPP ERT declares an emergency, there will be no assessment by Power Services for gmSpill or gmUAI. The maximum daily ESSG will be determined using the increased right to generation on the system, while the minimum daily ESSG will continue to reflect the system minimum discharge requirements.

Upon suspension of emergency provisions enacted by the NWPP ERT and as appropriate, the Slice System will return to the Fixed Flow state, with the maximum daily ESSG and the minimum daily ESSG set at the same value each day. For purposes of section 3(c)(3) of Exhibit O, the SSDA balance as of the last day of the interim storage energy state will be the SSDA0 that «Customer Name» may use to adjust its Pondage rights for the duration of the subsequent Fixed Flow period.

Power Services shall also declare whether there is an expectation of Elective Spill during TOP LLH and/or Elective Spill during TOP HLH.

9(b) **Operating Constraints**

Power Services shall provide to «Customer Name» changes to current Operating Constraints and the imposition of new Operating Constraints, as they become known to Power Services, which could impact the current and future generating capability of the Slice System. The Operating Constraints may be listed in terms of discharge, energy, or any other unit that is appropriate to convey the constraint.

9(c) **Slice System Actual Information Provided By Power Services**

Power Services shall provide «Customer Name» with the following information at the times specified. In the event that actual information is not available, Power Services shall substitute its best available estimate of such information for such missing data and indicate to «Customer Name» that the data is based on best available information. «Customer Name» shall accept such estimates and the risk of reliance upon such estimates:

9(c)(1) SSSE, SSDA, and the Grand Coulee elevation as of midnight the previous day, as well as the ANSSG for the previous day, assuming no Elective Spill for such calculations, by 0800 hours PPT each day, and

9(c)(2) «Customer Name»’s allocation of Elective Spill, by 1200 hours PPT each Business Day.

9(d) This section intentionally left blank

9(e) This section intentionally left blank

**10. WEEKLY CONSTRAINTS**

10(a) **General**

Some Operating Constraints are expressed in terms of Weekly Constraints. If a Weekly Constraint is in effect, Power Services shall provide «Customer Name» with information pursuant to this subsection. To the extent that Power Services is provided with an error margin for the Weekly Constraint with regard to any Operating Constraints, either before or after the fact, «Customer Name» will be entitled to its Slice Percentage share of such error margin in any computation or accounting in this Exhibit O.

10(b) **Real-Time Changes**

If the nature and/or duration of the flow requirements associated with the Weekly Constraints described above change, Power Services shall provide «Customer Name» with the necessary data for operating, consistent with such revised Weekly Constraints. Power Services shall provide to «Customer Name» such data necessary to calculate the operational limits applicable to «Customer Name». «Customer Name» shall adjust its operation for the remainder of the week to conform to the revised Weekly Constraint.

**11. THIS SECTION INTENTIONALLY LEFT BLANK**

**12. THIS SECTION INTENTIONALLY LEFT BLANK**

**13. SCHEDULING REQUIREMENTS*(08/08/11 Version)***

«Customer Name» shall schedule its Slice Output Energy in accordance with this section 13 and all sections of Exhibit F, except sections 3.2, 3.4, and 4.1.

13(a) **Prescheduling**

Schedules submitted after the Power Services prescheduling timeframe set forth in section 2.1 of Exhibit F will be accepted on a best efforts basis up to the time that the preschedule checkout process has been completed for that preschedule day by Power Services.

13(b) This section intentionally left blank.

13(c) **Scheduling Energy by Resource Groups**

«Customer Name» shall separately distribute its request for energy between the LSN and the rest of the Slice System. «Customer Name»’s request for hourly energy from each resource group shall observe the limits for hourly maximum generation, maximum generation over the TOP HLH, and the hourly rate of change for such resource groups. Such hourly values will then be combined to be «Customer Name»’s request for hourly energy.

13(d) **Preschedule Limits**

Preschedules submitted by «Customer Name» shall comply with all applicable requirements as set forth in this Exhibit O.

**14. Revisions**

Not less than 30 days prior to implementing this Exhibit O, BPA and «Customer Name» shall review and revise, if necessary, the provisions herein using the procedures set forth in section 5.12 of the body of this Agreement.

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

**Exhibit P**

**SLICE COMPUTER APPLICATION DEVELOPMENT SCHEDULE*(09/08/08 Version)***

**1. SLICE COMPUTER APPLICATION DEVELOPMENT SCHEDULE**

The Following table represents milestones and the associated dates by which BPA intends to meet those milestones during development of the Slice Computer Application.

|  |  |
| --- | --- |
| **Milestone Description** | **Date** |
| Publish SCA Requirements Document | 1/30/2009 |
| Project kick-off with Slice Customers | 2/3/2009 |
| Review of SCA Requirements Document Complete | 3/2/2009 |
| Publish Simulator Requirements Document | 6/1/2009 |
| Publish BOS and Reporting module Requirements Document | 8/1/2009 |
| Publish Customer Facing Web Service Design Specification | 10/1/2009 |
| Begin Prototype Simulator Testing | 4/1/2010 |
| Publish Draft Simulator Specification | 6/1/2010 |
| “Performance Test Ready” version of Simulator Complete | 8/1/2010 |
| Performance Test Complete | 10/31/2010 |
| Publish Simulator Specification | 1/15/2011 |
| Begin Customer application integration testing with Customer facing Web Service | 1/15/2011 |
| Publish Functionality Test Procedures | 4/15/2011 |
| Functionality Test Complete | 7/1/2011 |
| Begin Customer Training and Testing of SCA | 7/1/2011 |
| SCA “Go-Live” | 10/1/2011 |

**2. REVISIONS**

The timelines represented in the table above are non-binding, pursuant to section 5.11 of the body of this Agreement, and are subject to change. BPA shall revise this Exhibit P as needed to reflect significant changes.

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*

**Exhibit Q**

**DETERMINATION OF INITIAL SLICE PERCENTAGE *(09/08/08 Version)***

**1.** **DEFINITIONS**

The following definitions apply only to this Exhibit Q.

1.1 “Additional Slice Amount” means the additional portion of the Base Critical Slice Amount that «Customer Name» elects to purchase from BPA as determined in section 3 of this exhibit, rounded to a 5 digit decimal annual aMW value.

1.2 “Base Tier 1 System Capability” means Tier 1 System Capability that is deemed equal to 7,400 aMW.

1.3 “Base Critical Slice Amount”***(10/17/08 Version)*** means 2,000 annual aMW, which represents the Base Slice Percentage multiplied by the Base Tier 1 System Capability.

1.4 “Base Slice Percentage”***(10/17/08 Version)*** means 27.027 percent.

1.5 ”Combined Maximum Additional Slice Amount” means the sum of all of the Maximum Additional Slice Amounts of those Eligible Slice Customers that have notified BPA, in accordance with section 3.2 of this exhibit, of their elections to participate in the allocation of Unsold Slice Amount under section 3.3 of this exhibit.

1.6 “Eligible Slice Customers” means those Initial Slice Customers whose Maximum Additional Slice Amount is equal to or greater than one aMW.

1.7 “Initial Slice Customers” means those Slice Customers that hold an executed Slice/Block Power Sales Agreement as of January 1, 2011.

1.8 “Maximum Additional Slice Amount” means the maximum additional portion of the Base Critical Slice Amount that «Customer Name» may elect to purchase from BPA, as determined in section 3.1 of this exhibit, rounded to an integer annual aMW value.

1.9 “Maximum Slice Amount” means the maximum portion of the Base Critical Slice Amount that «Customer Name» may request from BPA as part of the Initial Slice Percentage computation, and is equal to «Customer Name»’s Slice Percentage Determination Requirements Load multiplied by 0.7, expressed as an integer annual aMW value. «Customer Name»’s Maximum Slice Amount is: «x,xxx» aMW

Drafter’s Note: The Maximum Slice Amount will be entered before BPA offers this agreement.

1.10 “Preliminary Slice Amount” means the integer annual aMW value that is equal to «Customer Name»’s Preliminary Slice Percentage, as set forth in Exhibit J section 1, multiplied by the Base Tier 1 System Capability.

1.11 “Slice Percentage Determination Requirements Load” means a forecast amount of «Customer Name»’s requirements load that is used only in the determination of «Customer Name»’s Preliminary Slice Percentage and Initial Slice Percentage. «Customer Name»’s Slice Percentage Determination Requirements Load is: «x,xxx» aMW

Drafter’s Note: The Slice Percentage Determination Requirements Load will be entered before BPA offers this agreement.

1.12 “Unsold Slice Amount” means that portion of the Base Critical Slice Amount that remains unsold, as computed in section 2.2 of this exhibit, rounded to an integer annual aMW value.

1.13 “Unsold Slice Percentage” means the percentage, if any, determined pursuant section 2.1 of this exhibit, expressed as a three decimal digit percentage.

**2. DETERMINATION OF UNSOLD SLICE AMOUNT**

No later than January 30, 2011, BPA shall determine the Unsold Slice Amount, using the procedure below.

2.1 **Compute Unsold Slice Percentage**

The Unsold Slice Percentage shall be equal to: (1) the Base Slice Percentage minus (2) the sum of the Preliminary Slice Percentages for all Initial Slice Customers.

2.2 **Compute Unsold Slice Amount**

The Unsold Slice Amount shall be equal to the Base Tier 1 System Capability multiplied by the Unsold Slice Percentage, expressed as an integer aMW value.

2.3 **Unsold Slice Amount Less Than One aMW**

If the Unsold Slice Amount is less than one aMW, then BPA shall notify «Customer Name» no later than January 30, 2011, that there shall be no allocation of the Unsold Slice Amount and that «Customer Name»’s Initial Slice Percentage shall be as determined pursuant to section 4.1 of this exhibit.

2.4 **Unsold Slice Amount Equal To or Greater Than One aMW**

If the Unsold Slice Amount is equal to or greater than one aMW, then BPA shall provide written notice to «Customer Name» no later than January 30, 2011 of the Unsold Slice Amount available for allocation. The Unsold Slice Amount shall be allocated pursuant to section 3 of this exhibit.

**3. ALLOCATION PROCEDURES FOR UNSOLD AMOUNTS OF SLICE**

No later than February 15, 2011, BPA shall make available to Initial Slice Customers the Unsold Slice Amount using the procedure below.

3.1 **Compute Maximum Additional Slice Amount**

«Customer Name»’s Maximum Additional Slice Amount shall be equal to its Maximum Slice Amount minus its Preliminary Slice Amount, rounded to an integer annual aMW value.

3.1.1 **Maximum Additional Slice Amount Less Than One aMW**

If «Customer Name»’s Maximum Additional Slice Amount is less than one aMW, then «Customer Name» shall receive no allocation of the Unsold Slice Amount, and «Customer Name»’s Initial Slice Percentage shall be determined pursuant to section 4.2 of this exhibit.

3.1.2 **Maximum Additional Slice Amount Equal To or Greater Than One aMW**

If «Customer Name»’s Maximum Additional Slice Amount is equal to or greater than one aMW, «Customer Name» shall be eligible to participate in the allocation of any Unsold Slice Amount as set forth in sections 3.2 and 3.3 of this exhibit.

3.2 **Slice Customers Determine Allocation of Unsold Slice Amounts Among Themselves**

«Customer Name», if it is an Eligible Slice Customer, shall make a good faith effort, working with the other Eligible Slice Customers, to determine, no later than March 1, 2011, an allocation of the Unsold Slice Amount, such that the sum of all Eligible Slice Customers’ Additional Slice Amounts is less than or equal to the Unsold Slice Amount.

If the Eligible Slice Customers agree upon an allocation of the Unsold Slice Amount that conforms with the above limitation, then they shall submit the Additional Slice Amounts in a letter to BPA no later than March 1, 2011, signed by all Eligible Slice Customers, that sets out the name and Additional Slice Amount for each Eligible Slice Customer. «Customer Name»’s Initial Slice Percentage shall then be determined pursuant to section 4.5 of this exhibit.

If the Eligible Slice Customers are unable to agree by March 1, 2011 on an allocation of the Unsold Slice Amount, then «Customer Name» shall provide written notification to BPA no later than March 8, 2011 that it elects to, or elects not to, participate in BPA’s determination of Additional Slice Amounts, pursuant to section 3.3 of this exhibit. If «Customer Name» elects not to participate in BPA’s allocation of the Unsold Slice Amount, or fails to provide written notification to BPA of its election no later than March 8, 2011, then «Customer Name»’s Initial Slice Percentage shall be determined pursuant to section 4.4 of this exhibit.

3.3 **BPA’s Allocation of Unsold Slice Amount**

BPA shall allocate the Unsold Slice Amount, as set forth in the procedure below, for each Eligible Slice Customer that has provided written notice on or before March 8, 2011 of its election to participate in such allocation.

3.3.1 **Compute Additional Slice Amount**

«Customer Name»’s Additional Slice Amount shall be equal to its Maximum Additional Slice Amount multiplied by the ratio determined by dividing: (1) the Unsold Slice Amount by (2) the Combined Maximum Additional Slice Amount.

3.3.2 **Additional Slice Amount is Less Than or Equal to Zero**

If «Customer Name»’s Additional Slice Amount is less than or equal to zero, then «Customer Name» shall receive no allocation of Unsold Slice Amount under this section 3.3, and «Customer Name»’s Initial Slice Percentage shall be determined pursuant to section 4.3 of this exhibit.

3.3.3 **Additional Slice Amount is Greater Than Zero**

If «Customer Name»’s Additional Slice Amount is greater than zero then «Customer Name»’s Initial Slice Percentage shall be determined pursuant to section 4.5 of this exhibit.

**4.** **DETERMINATION OF INITIAL SLICE PERCENTAGE**

No later than April 15, 2011, BPA shall determine «Customer Name»’s Initial Slice Percentage pursuant to the applicable procedure below. «Customer Name»’s Initial Slice Percentage so determined, shall be entered into section 2 of Exhibit J.

4.1 **Determination of Initial Slice Percentage when Unsold Slice Amount Less Than One**

If the Unsold Slice Amount is less than one aMW, then BPA shall set «Customer Name»’s Initial Slice Percentage equal to «Customer Name»’s Preliminary Slice Percentage.

4.2 **Determination of Initial Slice Percentage when Maximum Additional Slice Amount Less Than One**

If «Customer Name»’s Maximum Additional Slice Amount is less than one aMW, then BPA shall set «Customer Name»’s Initial Slice Percentage equal to «Customer Name»’s Preliminary Slice Percentage.

4.3 **Determination of Initial Slice Percentage when Additional Slice Amount Less Than or Equal To Zero**

If «Customer Name»’s Additional Slice Amount is less than or equal to zero, then BPA shall set «Customer Name»’s Initial Slice Percentage equal to «Customer Name»’s Preliminary Slice Percentage.

4.4 **Determination of Initial Slice Percentage when «Customer Name» Elects Not to Participate in Allocation of Unsold Slice Amount**

If «Customer Name» elects, or is deemed under section 3.2 of this exhibit to have elected, not to participate in an allocation of Unsold Slice Amounts, then BPA shall set «Customer Name»’s Initial Slice Percentage equal to «Customer Name»’s Preliminary Slice Percentage.

4.5 **Determination of Initial Slice Percentage when Eligible Slice Customers Agree on Allocation of Unsold Slice Amount**

If the Eligible Slice Customers deliver a letter to BPA on or before March 1, 2011, in accordance with section 3.2 of this exhibit, then «Customer Name»’s Initial Slice Percentage shall be equal to: (1) the sum of «Customer Name»’s Preliminary Slice Amount plus «Customer Name»’s Additional Slice Amount as specified in the letter, divided by (2) the Base Tier 1 System Capability, expressed as a five decimal percentage.

4.6 **Determination of Initial Slice Percentage when BPA Allocates Additional Slice Amounts Greater Than Zero**

If «Customer Name»’s Additional Slice Amount, as determined by BPA pursuant to section 3.3 of this exhibit, is greater than zero, then «Customer Name»’s Initial Slice Percentage shall be equal to: (1) the sum of «Customer Name»’s Preliminary Slice Amount plus «Customer Name»’s Additional Slice Amount, divided by (2) the Base Tier 1 System Capability, expressed as a five decimal percentage.

**5. REVISIONS**

Revisions to this Exhibit Q shall be by mutual agreement of the Parties.

(PS«X/LOC»- «File Name with Path».docx) «mm/dd/yy» *{Drafter’s Note: Insert date of finalized contract here}*