

Ordinance No. 122805

Council Bill No. 116335

AN ORDINANCE relating to the City Light Department; authorizing the Superintendent or his designee to enter into a seventeen-year power purchase agreement with the Bonneville Power Administration and related agreements.

CF No. _____

Date Introduced:	<u>9.15.08</u>	
Date 1st Referred:	To:	Energy & Technology (ETC)
Date Re - Referred:	To: (committee)	
Date Re - Referred:	To: (committee)	
Date of Final Passage:	Full Council Vote:	
<u>9-22-08</u>	<u>8-0</u>	
Date Presented to Mayor:	Date Approved:	
<u>9-23-08</u>	<u>9-29-08</u>	
Date Returned to City Clerk:	Date Published:	T.O. <input checked="" type="checkbox"/> F.T. <input type="checkbox"/>
<u>10.2.08</u>	<u>3</u>	
Date Vetoed by Mayor:	Date Veto Published:	
Date Passed Over Veto:	Veto Sustained:	

The City of Seattle - Legislative Department

Council Bill/Ordinance sponsored by: _____

Bruce A. Hunsell

Councilmember

Committee Action:

9/17/2008 BH, JA, RC - Aye

9-22-08 Passed 8-0 (Absent: Rasmussen)

This file is complete and ready for presentation to Full Council.

Committee: _____
(initial/date)

Law Dept. Review

OMP Review

City Clerk Review

Electronic Copy Loaded

Indexed



City of Seattle

Gregory J. Nickels, Mayor

Office of the Mayor

September 2, 2008

Honorable Richard Conlin
President
Seattle City Council
City Hall, 2nd Floor

Dear Council President Conlin:

I am pleased to transmit the attached proposed Council Bill that would authorize the Superintendent of Seattle City Light to execute a new set of long-term contracts with the Bonneville Power Administration ("BPA") for the purchase of power. The proposed contracts will allow City Light to continue purchasing low cost power from BPA to help maintain stable rates and reliable service for City Light's ratepayers, while supporting the City's efforts to meet environmental policy objectives over the course of the next 20 years.

City Light's current agreement with BPA will expire September 30, 2011. The contracts authorized by this Bill, which will run through September 2028, are the result of discussions conducted during the Regional Dialogue Policy process initiated by BPA in 2006 to cover terms and conditions under which BPA offers power to its public preference customers.

In addition to the economic objectives achieved through the contracts authorized by this Bill, City Light's power purchases from BPA help maintain the low carbon foot print of the utility's resources portfolio and further support Seattle's efforts to address climate change in a positive fashion. Additionally, execution of these contracts will give City Light access to Renewable Energy Credits (RECs) through the federal system and new renewable energy sources to meet load growth.

Thank you for your consideration of this legislation. Should you have questions, please contact Ray Camacho at (206) 233-7889.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Nickels", written over a large, faint circular stamp or watermark.

GREG NICKELS
Mayor of Seattle

cc: Honorable Members of the Seattle City Council

600 Fourth Avenue, 7th Floor, P.O. Box 94749, Seattle, WA 98124-4749

Tel: (206) 684-4000, TDD: (206) 615-0476 Fax: (206) 684-5360, Email: mayors.office@seattle.gov

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ORDINANCE 122805

1
2 AN ORDINANCE relating to the City Light Department; authorizing the Superintendent or his
3 designee to enter into a seventeen-year power purchase agreement with the Bonneville
4 Power Administration and related agreements.

5 WHEREAS, for many years, City Light has purchased power from the Bonneville Power
6 Administration ("BPA") to meet a portion of its electric load, and is currently under a
7 2000 power sales contract that will expire September 30, 2011; and

8 WHEREAS, BPA plays a key role in the economy and environment of the Pacific Northwest
9 by providing revenues from the sale of electricity at cost to pay the annual and capital
10 expenses of the Federal Columbia River Power System, including substantial fish and
11 wildlife restoration costs and debt service to the United States Treasury to repay the
12 Federal government's investments in the system; and

13 WHEREAS, BPA initiated its Regional Dialogue Policy implementation process in 2006,
14 which is expected to continue to at least the end of 2008, to discuss the terms and
15 conditions under which it will offer power to its preference customers after the current
16 power supply contracts expire; and

17 WHEREAS, since the total regional electrical load for BPA's public preference customers is
18 expected to exceed the total amount of energy available from the current Federal Power
19 System after FY 2011, BPA's Regional Dialogue Policy includes a tiered power rate
20 design that allocates the lowest cost Federal System energy ("Tier 1") to its public
21 preference customers according to a "High Water Mark" assigned to each utility by
22 BPA; and

23 WHEREAS, City Light staff have recommended that City Light purchase the maximum
24 amount of its High Water Mark (approximately 530 average megawatts of electricity)
25 from BPA under a Regional Dialogue power purchase agreement under BPA's Tier 1
26 rate, as well as, upon a determination of need, some amount of additional power to
27 serve City Light's net power requirements above its High Water Mark at one or more of
28 BPA's Tier 2 rates; and

WHEREAS, BPA intends to offer the proposed Regional Dialogue power purchase agreement
on or around September 1, 2008, with the expectation that its preference customers will
review, analyze, select, execute and return their preferred product contract so that BPA
can execute all customers' Regional Dialogue contracts by December 1, 2008; and

WHEREAS, BPA requires a related creditworthiness agreement with purchasers of the Slice
product; and



1 WHEREAS, City Light recommends continuing to purchase power from BPA, both because it
2 is expected to be less costly than other sources of power and because doing so will help
3 further the City's economic and environmental policy objectives; and

4 WHEREAS, the City has determined that because (a) power purchased from BPA under the
5 agreement will come from existing, operating projects, and (b) that agreement provides
6 protections to the City in the event that no electricity is available for a long period,
7 entering into the agreement is reasonable and necessary to enable the City to gain the
8 advantages of the agreement; and

9 WHEREAS, budget authority and necessary staffing for negotiating and implementing these
10 new agreements will be included in the Mayor's Proposed 2009 – 2010 Budget, as well
11 as the Mayor's subsequent budget proposals; NOW, THEREFORE,

12 **BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:**

13 Section 1. The Superintendent of the City Light Department, or his designee, is hereby
14 authorized to enter into a seventeen-year power purchase agreement and related
15 creditworthiness agreement with BPA. These agreements, which are still under negotiation,
16 may include a Block Power Sales Agreement, or a Block and Slice Power Sales Agreement and
17 a Creditworthiness Agreement similar to the forms attached to this ordinance as Attachments 1,
18 2, and 3, respectively. As BPA's final power products have not yet been defined, and
19 correspondingly, City Light has not yet made a determination regarding which BPA power
20 product, or combination of BPA power products, will best suit the utility's needs, the power
21 sales agreement may include purchases of one or more BPA power products, including the
22 Slice, Shaped Block, Shaped Block with Shaping Capacity, or the annual flat Block.

23 Accordingly, the Superintendent of City Light or his designee is hereby authorized to sign a
24 final Regional Dialogue power purchase agreement with BPA that in his view best meets the
25 needs of City Light, as well as any other related contracts, including but not limited to a
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27
28



1 creditworthiness agreement, that he deems are reasonably necessary to implement the BPA
2 power purchase agreement.

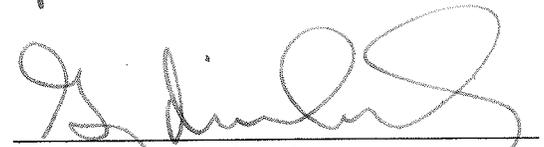
3 Section 2. Any act consistent with the authority of this ordinance that is taken after its
4 passage but prior to its effective date is hereby ratified and confirmed.

6 Section 3. This ordinance shall take effect and be in force thirty (30) days from and
7 after its approval by the Mayor, but if not approved and returned by the Mayor within ten (10)
8 days after presentation, it shall take effect as provided by Municipal Code Section 1.04.020.

10 Passed by the City Council the 22nd day of September, 2008, and
11 signed by me in open session in authentication of its passage this
12 22nd day of September, 2008.

14 
15 _____
16 President _____ of the City Council

17 Approved by me this 29th day of September, 2008.

19 
20 _____
21 Gregory J. Nickels, Mayor

22 Filed by me this 2nd day of October, 2008.

24 
25 _____
26 City Clerk

26 (Seal)



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Attachment 1: Block Regional Dialogue Contract Template

Exhibits to Attachment 1:

- Exhibit A: Net Requirements and Resources
- Exhibit B: High Water Marks and Contract Demand Quantities
- Exhibit C: Purchase Obligations
- Exhibit D: Additional Products and Special Provisions
- Exhibit E: Metering
- Exhibit F: Scheduling
- Exhibit G: Principles of Non-Federal Transfer Service
- Exhibit H: Renewable Energy Certificates and Carbon Attributes

Attachment 2: Regional Dialogue Slice/Block Contract Template

Exhibits to Attachment 2:

- Exhibit A: Net Requirements and Resources
- Exhibit B: High Water Marks and Contract Demand Quantities
- Exhibit C: Purchase Obligations
- Exhibit D: Additional Products and Special Provisions
- Exhibit E: Metering
- Exhibit F: Scheduling
- Exhibit G: Intentionally Left Blank
- Exhibit H: Renewable Energy Certificates and Carbon Attributes
- Exhibit I: Critical Slice Amounts
- Exhibit J: Preliminary Slice Percentage, Initial Slice Percentage, & Slice Percentage
- Exhibit K: Adjustments to Slice Percentage
- Exhibit L: Slice System
- Exhibit M: Slice Computer Application
- Exhibit N: Slice Implementation Procedures
- Exhibit O: Interim Slice Implementation Procedures
- Exhibit P: SCA Development Schedule
- Exhibit Q: Determination of Initial Slice Percentage

Attachment 3: Creditworthiness Agreement with Continuing Credit Review by BPA



Attachment 1

BLOCK REGIONAL DIALOGUE CONTRACT TEMPLATE

This template shows the similarities and differences between individual templates. It contains the clauses that are either identical or nearly identical for all templates (Load Following, Block, Slice/Block, RPSA, and NR Block). It does NOT contain clauses that are unique to the following templates: Slice/Block, RPSA, and NR Block. It does not identify all differences and should be used only as a general guide.

1. Black non-italicized text indicates draft contract language.
2. All text in italics will be deleted before the contracts are finalized.
 - (a) *Pink italicized text indicates notes to BPA AEs and contract staff who will tailor the template for each particular customer within the limits stated. Pink text will be deleted after August 1 when the template is converted to a contract for each particular customer.*
 - (b) *Blue italicized text indicates notes to the reviewers (customers and others.) This blue text will be deleted after the draft template is finalized on August 1.*
 - (c) Red text indicates where a drafter must 'fill-in-the-blank.' Red text will be converted to black text and will become part of the final contract.
3. *Grey shaded text is used to help reviewers of the template understand how different versions of a particular clause are either the same or different, and is most often used to help reviewers understand subtle variations between the Load Following, Block and Slice/Block templates. The shading will be deleted when the templates are finalized*



POWER SALES AGREEMENT
executed by the
BONNEVILLE POWER ADMINISTRATION
and
«FULL NAME OF CUSTOMER»

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5.	This Section Intentionally Left Blank	
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7.	High Water Marks	
8.	Applicable Rates	
	8.1 Priority Firm Power Rates and Contract High Water Mark	
	1. PF Tier 1 and PF Tier 2 Rates	
	2. Contract Demand Quantities	
	8.2 New Resource Firm Power Rate	
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9.	Elections to Purchase Power Priced at PF Tier 2 Rates	
10.	Order of Tier 2 Remarketing and Resource Removal	
11.	One-Time Right to Change Purchase Obligation	
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18.	Conservation and Renewables	
19.	Resource Adequacy	
20.	Notices and Contact Information	
21.	Uncontrollable Forces	
22.	Governing Law and Dispute Resolution	
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- Exhibit A Net Requirements and Resources
- Exhibit B High Water Marks and Contract Demand Quantities
- Exhibit C Purchase Obligations
- Exhibit D Additional Products and Special Provisions
- Exhibit E Metering
- Drafter's Note: Choose title of Exhibit F to reflect scheduling option*
- Exhibit F «Transmission Scheduling Service or Scheduling»
- Exhibit G Principles of Non-Federal Transfer Service
- Option 2: Include for Non-transfer service customers*
- Exhibit G This Exhibit Intentionally Left Blank
- END Option 2*
- Exhibit H Renewable Energy Certificates and Carbon Attributes

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, mutual association tribal utility, 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 (06/05/08 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 Pacific Northwest Electric Power Planning and Conservation Act, P.L. 96-501 of 1980 (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 rates 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 maintain the benefits of the federal system in the future and encourage BPA customers to develop 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. (See Customer Characteristic Spreadsheet or Janet Rickman)

1. **TERM (06/30/08 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:

- (1) section 3, Power Purchase Obligation;
- (2) section 9, Elections to Purchase Power Priced at PF Tier 1 Rates;
- (3) section 17, Information Exchange and Confidentiality;
- (4) section 18, Conservation and Renewables;
- (5) section 19, Resource Adequacy;
- (6) section 22, Governing Law and Dispute Resolution;
- (7) section 26, Termination;
- (8) Exhibit A, Net Requirements and Resources;



- (9) Exhibit B, High Water Marks and Contract Demand Quantities; and,
- (10) Exhibit C, Purchase Obligations.

Section 22, Governing Law and Dispute Resolution will only apply to the extent there is a dispute regarding actions required after the Effective Date in the above referenced sections and exhibits.

END Option 1

2. DEFINITIONS (06/05/08 Version)

Capitalized terms below shall have the meaning stated. Capitalized terms that are not listed below are either defined within the section 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).

- 2.1 "Above-RHWM Load" (06/11/08 Version) means forecasted annual Total Retail Load that is above «Customer Name's RHWM.
- 2.2 "Annexed Load" (05/15/08 Version) means existing load and distribution system, and/or service territory «Customer Name» acquires from another utility, by means of annexation, merger, purchase or trade, and authorized by a final state, regulatory or court action, for which «Customer Name» has the right, or has obtained an ownership interest in the facilities necessary, to serve the load.
- 2.3 "Balancing Authority" (06/10/08 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.
- 2.4 "Balancing Authority Area" (06/10/08 Version) means the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.
- 2.5 "Business Day(s)" (05/13/08 Version) means every Monday through Friday except federal holidays.
- 2.6 "Consumer-Owned Resource" (06/16/08 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, and is operated or applied to load on a sustained basis rather than operated occasionally or intermittently as a back-up energy source at times of maintenance or forced outage.
- 2.7 "Contract Demand Quantities" or "CDQ" (06/11/08 Version) shall have the meaning as defined in section 6.6.1.



- 2.8 “Contract High Water Mark” or “CHWM” (06/11/08 Version) shall have the meaning as defined in section 6.6.1.
- 2.9 “Contract High Water Mark Contract” or “CHWM Contract” (05/15/08 Version) means a Regional Dialogue Contract that contains a CHWM, allowing the customer to purchase power at tiered rates, or as defined in the TRM.
- 2.10 “Contract Resources” (07/02/08 Version) means any sources or amounts of electric power that «Customer Name» acquires from identified or unidentified electricity-producing units by contract purchase from an electricity supplier, and for which the amounts received by «Customer Name» do not depend on the same actual production from an identified Generating Resource.
- 2.11 “Diurnal” (07/01/08 Version) means the distribution of hours of months between Heavy Load Hours (HLH) and Light Load Hours (LLH). HLH and LLH are as defined by the North American Electric Reliability Corporation (NERC) and are subject to change by the NERC.
- 2.12 “Dedicated Resource(s)” (05/28/08 Version) means those Specified Resources and Unspecified Resource Amounts that «Customer Name» obligates itself to provide or is required by statute to provide under this Agreement for use to serve its Total Retail Load.
- 2.13 “Diurnal Distribution Factors” (05/27/08 Version) are as established in section 1.2.2.1 of Exhibit C, Purchase Obligations.
- 2.14 “Diurnal Flattening Service” or “DFS” (06/16/08 Version) means the service that converts the hour to hour output from a resource into a shape that is flat within each of the 24 HLH and LLH periods of a year.
- 2.15 “Due Date” (05/25/08 Version) shall have the meaning as described in section 16.2 of this Agreement.
- 2.16 “Effective Date” (06/05/08 Version) means the date on which this Agreement has been signed by «Customer Name» and BPA.
- 2.17 “Environmental Attribute(s)” (04/04/08 Version) shall have the meaning as defined in Exhibit H, Renewable Energy Certificates and Carbon Attributes.
- 2.18 “Environmentally Preferred Power RECS” or “EPP RECs” (04/01/08 Version) shall have the meaning as defined in Exhibit H, Renewable Energy Certificates and Carbon Attributes.
- 2.19 “Existing Resources” (05/27/08 Version) means those Specified Resources listed in section 2 of Exhibit A that were dedicated to «Customer Name»’s Total Retail Load prior to October 1, 2006.



- 2.20 “Firm Requirements Power” *(06/05/08 Version)* means federal power that BPA sells under this Agreement and makes continuously available to «Customer Name» under this Agreement, except for an Uncontrollable Force, to meet BPA’s obligations to «Customer Name» under section 5(b) of the Northwest Power Act.
- 2.21 “Fiscal Year” or “FY” *(02/28/08 Version)* means the period beginning each October 1 and ending the following September 30.
- 2.22 “Forced Outage Reserve Service” or “FORS” *(06/30/08 Version)* means the service that provides an agreed-to amount of capacity and energy to load during the forced outages of a resource, transmission line, or other asset.
- 2.23 “Forecast Year” *(05/27/08 Version)* means the Fiscal Year ending one full year prior to the commencement of a Rate Period.
- 2.24 “Generating Resources” *(05/28/08 Version)* means any sources or amounts of electric power from identified electricity-producing units, and for which the amounts of power received by «Customer Name» or «Customer Name»’s retail consumer are determined by the actual power production from such identified electricity-producing units. Such units may be owned by «Customer Name» or «Customer Name»’s retail consumer in whole or in part, or the output from such units may be owned for a defined period by contract.
- 2.25 “Integrated Network Segment” *(05/29/08 Version)* shall have the meaning as defined in section 14.1.
- 2.26 “Interchange Points” *(04/01/08 Version)* means the points where Balancing Authority Areas interconnect, and at which the interchange of energy between Balancing Authority Areas is monitored and measured.
- 2.27 “Monthly Distribution Factors” *(05/27/08 Version)* are as established in section 1.2.1.1 of Exhibit C, Purchase Obligations.
- 2.28 “Net Requirement” *(05/15/08 Version)* means the amount of federal power that a customer is entitled to purchase from BPA to serve its Total Retail Load minus its Dedicated Resource amounts as shown in Exhibit A, Net Requirements and Resources, consistent with section 5(b)(1) of the Northwest Power Act.
- 2.29 “Network Integration Transmission Service” *(05/29/08 Version)* shall have the meaning as defined in section 14.1.
- 2.30 “Network Resource” *(05/29/08 Version)* shall have the meaning as defined in section 14.1.
- 2.31 “New Large Single Load” or “NLSL” *(06/05/08 Version)* has the meaning specified in section 3(13) of the Northwest Power Act and in BPA’s NLSL policy.



- 2.32 “New Resources” *(05/27/08 Version)* means those Specified Resources listed in section 2 of Exhibit A that were or are dedicated to «Customer Name»’s Total Retail Load after September 30, 2006, and any Unspecified Resource Amounts listed in section 3.1 of Exhibit A.
- 2.33 “Notice Deadlines” *(05/27/08 Version)* are as established in section 9.1.1 of the body of this Agreement.
- 2.34 “Onsite Consumer Load” *(06/30/08 Version)* means retail consumer electric loads of «Customer Name» that are electrically interconnected directly with a Consumer-Owned Resource, that are entirely within «Customer Name»’s service territory or on an integrated portion of «Customer Name»’s distribution system, that consume energy generated by such Consumer-Owned Resource, and that require no schedule of power from such Consumer-Owned Resource.
- 2.35 “Operating Year” *(03/27/08 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.
- 2.36 “Point of Delivery” or “POD” *(05/15/08 Version)* means the point where power is transferred from a transmission provider to «Customer Name».
- 2.37 “Point of Metering” or “POM” *(05/15/08 Version)* means the point at which power is measured.
- 2.38 “Power Services” *(09/04/07 Version)* means the organization, or its successor organization, within BPA that is responsible for the management and sale of federal power from the Federal Columbia River Power System.
- 2.39 “Primary Points of Receipt” *(05/29/08 Version)* shall have the meaning as defined in section 14.1.
- 2.40 “Purchase Periods” *(05/27/08 Version)* are as established in section 9.1.1 of the body of this Agreement.
- 2.41 “Rate Case Year” *(05/27/08 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 general rate case is conducted.
- 2.42 “Rate Period” *(05/13/08 Version)* means the effective period of a particular rate schedule, generally two years; the period over which a rate is designed to recover costs allocated to it.
- 2.43 “Rate Period High Water Mark” or “RHWM” *(06/11/08 Version)* shall have the meaning as defined in section 6.6.1.



- 2.44 "Region" (*09/04/07 Version*) means the Pacific Northwest as defined in the Northwest Power Act.
- 2.45 "Renewable Energy Certificates" or "RECs" (*05/29/08 Version*) shall have the meaning as defined in Exhibit H, Renewable Energy Certificates and Carbon Attributes.
- 2.46 "Resource Supports Services" or "RSS" (*06/30/08 Version*) means the Diurnal Flattening Service, Forced Outage Reserve Service, and any other related service BPA provides to support resources that are renewable resources and are dedicated to load after September 30, 2006.
- 2.47 "Scheduling Points of Receipt" (*05/29/08 Version*) shall have the meaning as defined in section 14.1.
- 2.48 "Shaping Capacity" (*05/27/08 Version*) is as established in section 1.4 of Exhibit C, Purchase Obligations.
- 2.49 "Specified Resources" (*06/30/08 Version*) means Generating Resources or Contract Resources that have nameplate capabilities or maximum hourly purchase amounts greater than 200 kilowatts, that «Customer Name» has named and that «Customer Name» is required by statute or agrees to dedicate to serve its Total Retail Load. Such resources are identified as specific non-federal resources or as specific contracts with identified parties.
- 2.50 "Statement of Intent" (*05/27/08 Version*) shall have the meaning as defined in section 2.3 of Exhibit C, Purchase Obligations.
- 2.51 "Surplus Firm Power" (*02/28/08 Version*) means firm power that is in excess of BPA's obligations under sections 5(b), 5(c), and 5(d) of the Northwest Power Act, as available.
- 2.52 "Third Party Transmission Provider" (*03/17/08 Version*) means a transmission provider other than BPA that delivers power to «Customer Name».
- 2.53 "Tier 1 RECs" (*05/29/08 Version*) shall have the meaning as defined in Exhibit H, Renewable Energy Certificates and Carbon Attributes.
- 2.54 "Tier 2 RECs" (*05/29/08 Version*) shall have the meaning as defined in Exhibit H, Renewable Energy Certificates and Carbon Attributes.
- 2.55 "Tier 2 Cost Pool" (*06/16/08 Version*) shall have the meaning as defined in Exhibit H, Renewable Energy Certificates and Carbon Attributes.
- 2.56 "Total Retail Load" (*06/05/08 Version*) means all retail electric power consumption, including electric system losses, within «Customer Name»'s electrical system excluding:
- (1) nonfirm or interruptible loads agreed to by the Parties,



- (2) transfer loads of other utilities served by «Customer Name», and
 - (3) any loads not on «Customer Name»'s electrical system that are not specifically agreed to by BPA.
- 2.57 "Transfer Service" (03/17/08 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.
- 2.58 "Transmission Services" (09/04/07 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.
- 2.59 "Uncontrollable Force" (05/25/08 Version) shall have the meaning as defined in section 21.1.
- 2.60 "Unspecified Resource Amounts" (03/21/08 Version) means an amount of firm power «Customer Name» has agreed to supply and dedicate to serve its Total Retail Load and which is not attributed to a particular Generating Resource or Contract Resource.

Option 1: Include if customer does not choose Shaping Capacity:

3. BLOCK POWER PURCHASE OBLIGATION WITHOUT SHAPING CAPACITY (06/30/08 Version)

3.1 Purchase Obligation

From October 1, 2011, and continuing through September 30, 2028, BPA shall sell and make available, and «Customer Name» shall purchase, Firm Requirements Power each hour in specific amounts to serve «Customer Name»'s forecasted Net Requirements, as listed in Exhibit A, Net Requirements and Resources. «Customer Name» shall serve any portion of its Total Retail Load that is not served with Firm Requirements Power with the Dedicated Resources listed in Exhibit A, Net Requirements and Resources. The annual, monthly, and Diurnal amounts of Firm Requirements Power priced at PF Tier 1 rates and PF Tier 2 rates are listed in Exhibit C, Purchase Obligations.

End Option 1

Option 2: Include if customer chooses Shaping Capacity:

Reviewers Note: Shaded text is identical to Block without Shaping Capacity:

3. BLOCK POWER PURCHASE OBLIGATION WITH SHAPING CAPACITY (06/30/08 Version)

3.1 Purchase Obligation

From October 1, 2011, and continuing through September 30, 2028, BPA shall sell and make available, and «Customer Name» shall purchase, Firm Requirements Power each hour in planned amounts, including Shaping



Capacity in accordance with section 1.4 of Exhibit C, Purchase Obligations, to serve «Customer Name»'s forecasted Net Requirements, as listed in Exhibit A, Net Requirements and Resources. «Customer Name» agrees to serve any portion of its Total Retail Load that is not served with Firm Requirements Power with the Dedicated Resources listed in Exhibit A, Net Requirements and Resources. The annual, monthly, and Diurnal amounts of Firm Requirements Power priced at PF Tier 1 rates and PF Tier 2 rates are listed in Exhibit C, Purchase Obligations.

End Option 2

3.2 Take or Pay

«Customer Name» shall pay for the amount of power it has committed to purchase under section 3.1 of this Agreement, at the rates BPA establishes as applicable to such power, whether or not «Customer Name» took actual delivery of such power.

3.3 List and Application of Dedicated Resources

Reviewer's Note: The shaded language below is the same as the Load Following language.

«Customer Name» agrees to dedicate those resources for service to its Total Retail Load that it has listed as Dedicated Resources 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 apply such resources to its Total Retail Load as state below for each specific resource and type:

3.3.1 Specified Resources

«Customer Name» shall apply the output from all Specified Resources listed in section 2 of Exhibit A, Net Requirements and Resources, to serve its Total Retail Load. BPA shall use the amounts listed in Exhibit A, Net Requirements and Resources, to determine «Customer Name»'s Net Requirement under this Agreement; the amounts listed are not intended to interfere with «Customer Name»'s decisions on how to operate its Specified Resources.

3.3.2 Unspecified Resource Amounts

In addition to the resource amounts listed in section 2 of Exhibit A, Net Requirements, «Customer Name» shall serve its Total Retail Load with Unspecified Resource Amounts to meet any power supply obligations «Customer Name» made in Exhibit C, Purchase Obligations, to serve its Above-RHWM Load with Dedicated Resource



amounts. By September 15, 2011, and by each September 15 thereafter, BPA shall calculate, and fill in the table 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, «Customer Name» may discontinue serving its Total Retail Load with all Unspecified Resource Amounts.

3.4 Dedicated Resource Amounts for Specified Resources

3.4.1 Specified Resource Energy Amounts

«Customer Name» shall state firm energy amounts for each Specified Resource, listed in section 2 of Exhibit A, Net Requirements and Resources, for each month and Diurnal period beginning with the later of (1) the date the resource was dedicated to load, as shown in section 2 of Exhibit A, Net Requirements and Resources, or (2) October 1, 2011, through the earlier of (1) the date the resource will be permanently removed, as shown in section 2 of Exhibit A, Net Requirements and Resources, or (2) September 30, 2028.

3.4.1 Specified Resource Peak Amounts

Within 180 days after BPA provides notice that it has adopted a new standard for determining «Customer Name»'s firm resource peaking energy amounts, BPA in consultation with «Customer Name» shall calculate peaking amounts for each Specified Resource listed in section 2 of Exhibit A and BPA shall update the tables in Exhibit A with such peaking amounts. BPA's peaking standard shall be developed in a public process occurring after the Effective Date.

3.5 Changes to Dedicated Resources

3.5.1 Resource Additions for a BPA Insufficiency Notice

If BPA provides «Customer Name» a notice of insufficiency in accordance with section 24.2, Insufficiency and Allocations, of the body of this Agreement, «Customer Name» shall add Dedicated Resources to Exhibit A, Net Requirements and Resources, to replace amounts of Firm Requirements Power BPA will not be providing due to insufficiency.

3.5.2 Decrements for 9(c) Export

If BPA determines (in accordance with section 24.7, Use of Regional Resources, of the body of this Agreement) that an export of a Specified Resource listed in section 2 of Exhibit A, Net Requirements and Resources, requires a reduction in the amount of Firm Requirements Power BPA sells «Customer Name», then BPA shall add Unspecified Resource Amounts to section 3.2 of Exhibit A, Net Requirements and Resources. BPA shall notify «Customer Name» of the amount and duration of the reduction in «Customer Name»'s Firm Requirements Power purchases from BPA.



3.5.3 Temporary Resource Removal

BPA shall remove «Customer Name»'s Dedicated Resource amounts in Exhibit A, Net Requirements and Resources, pursuant to section 10, Order of Tier 2 Remarketing and Resource Removal, of the body of this Agreement. When only a portion of the output of a resource is being removed, BPA shall proportionally remove «Customer Name»'s Dedicated Resource amounts within a Fiscal Year to maintain the same shape the non-federal resource amounts were dedicated in for such Fiscal Year.

3.5.4 Permanent Discontinuance of Resources

The Specified Resources listed in section 2 of Exhibit A, Net Requirements and Resources, may be removed permanently by «Customer Name» consistent with 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, as clarified March 21, 2003 (5(b)/9(c) Policy), on statutory discontinuance for permanent removal. If BPA makes a determination that «Customer Name»'s resource has met BPA's standards for a permanent removal, BPA shall revise Exhibit A accordingly. «Customer Name»'s additional 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 GRSPs.

3.5.5 Resource Additions for Annexed Loads

To serve amounts of Annexed Loads that are added after the Effective Date, «Customer Name» may add Dedicated Resources to Exhibit A, Net Requirements and Resources, pursuant to «Customer Name»'s elections to purchase Firm Requirements Power from BPA, as stated in Exhibit C, Purchase Obligations. «Customer Name»'s additional power purchases under this Agreement, as a result of such Annexed Loads, may be subject to additional rates or charges as established in the GRSPs.

3.5.6 Resource Additions/Removals for NLSLs

To serve NLSLs (established in Exhibit D, Additional Products and Special Provisions) that are added after the Effective Date, «Customer Name» may add Dedicated Resource amounts, in monthly and Diurnal amounts, to section 4 of Exhibit A, Net Requirements and Resources. «Customer Name» may discontinue serving its NLSL with the Dedicated Resource amounts 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.

Reviewer's Note: BPA (acting on behalf of the United States Entity) needs the following information to administer the Columbia River Treaty with Canada. BPA also needs the following information for 9(c) determinations.



3.6 Resources Not Dedicated to Total Retail Load

«Customer Name» shall list in section 6 of Exhibit A, Net Requirements and Resources, any non-federal 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.

3.7 Consumer-Owned Resources

Except for any Consumer-Owned Resources serving an NLSL which «Customer Name» shall apply to load consistent with section 24.3.7, Renewable Resource/Cogeneration Exception, «Customer Name» shall apply the output of its Consumer-Owned Resources as follows:

Reviewer's Note: Prior to contract signing all customers will have to designate, in sections 7.1 or 7.2 of Exhibit A, whether their existing Consumer-Owned Resources will or will not be serving Onsite Consumer Load for the term of this Agreement.

3.7.1 Existing Consumer-Owned Resources

«Customer Name» has designated, in sections 7.1 and 7.2 of Exhibit A, whether each of its existing Consumer-Owned Resources will or will not serve Onsite Consumer Load. Such designation(s) shall apply for the term of this Agreement.

3.7.2 New Consumer-Owned Resources

«Customer Name» shall designate whether each of its new Consumer-Owned Resources will or will not serve Onsite Consumer Load. «Customer Name» shall make such designation(s) to BPA, in writing, within 120 days of the first production of energy by such resource. Such designation(s) shall apply for the term of this Agreement.

Consistent with «Customer Name»'s designation(s), BPA shall list Consumer-Owned Resources serving Onsite Consumer Load in section 7.1 of Exhibit A and Consumer-Owned Resources not serving Onsite Consumer Load in section 7.2 of Exhibit A.

3.7.3 Application of Consumer-Owned Resources Serving Onsite Consumer Load

Power generated from Consumer-Owned Resources listed in section 7.1 of Exhibit A shall serve «Customer Name»'s Onsite Consumer Load. If on any hour, power generated from a Consumer-Owned Resource exceeds Onsite Consumer Load, the amount of such excess power on that hour shall be treated as inadvertent flow for which «Customer Name» shall receive no compensation from BPA.

3.7.4 Application of Consumer-Owned Resources Serving Load Other than Onsite Consumer Load

Power generated from Consumer-Owned Resources listed in section 7.2 of Exhibit A shall be scheduled for delivery and either



- (1) sold to another utility in the Region for use in its Total Retail Load,
- (2) purchased by «Customer Name» for use in its Total Retail Load (consistent with section 3.3 of this Agreement), or
- (3) marketed as an export.

3.7.5 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.

Reviewer's Note: These sections are included in Slice customers' contracts; Load Following and Block customers will have blank sections to maintain consistent numbering among the templates.

4. **THIS SECTION INTENTIONALLY LEFT BLANK (05/29/08 Version)**

5. **THIS SECTION INTENTIONALLY LEFT BLANK (05/29/08 Version)**

6. **TIERED RATE METHODOLOGY (06/13/08 Version)**

Reviewer's Note: The following language in this section 6 is a placeholder for now and is in the process of being updated.

- 6.1 BPA has proposed a Tiered Rate Methodology (TRM) to FERC, for a period up to 20 years (through September 30, 2028), which will establish a rate design for the PF Tier 1 power rate and the PF Tier 2 power rate. The then-effective TRM shall govern 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, 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 through September 30, 2028.
- 6.3 BPA shall not propose any modification to the TRM, except as provided for and pursuant to the procedures set forth in sections 12 and 13 of the TRM that is current as of the Effective Date.
- 6.4 The Parties intend that the TRM will be binding on them in accordance with its terms, but references to rates or the TRM in this Agreement do not make the rates or TRM a matter of contract. This Agreement shall not be construed as causing any rate issue or TRM matter to become a contract issue or matter. Disputes over the meaning and implementation of the TRM shall be resolved exclusively pursuant to the procedures set forth in the TRM.
- 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 implementation of the TRM or establishment of BPA rates pursuant to it, provided however for



purposes of this paragraph a “rate matter” shall not be deemed to include budgetary and revenue requirement issues.

6.6 The Tiered Rate Methodology (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 (CHWM). The amount used to define each customer’s access to Tier 1-priced power, expressed in average megawatts. CHWM is equal to the customer’s Eligible Load (as defined in the TRM), proportionately scaled to the firm critical output of Tier 1 System Resources (as defined in the TRM), and adjusted for credited conservation. The CHWM is specified in each eligible customer’s CHWM Contract. See section 4.2 (of the TRM).

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

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

6.6.2 Rate Period High Water Mark Calculation (from section 4.3.1 of the TRM):

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

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

where:

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

CHWM = Contract High Water Mark

$\sum CHWM$ = sum of all customers’ Contract High Water Marks

TISR = forecast output of Tier 1 System Resources (as defined in the TRM), averaged for the Rate Period



6.6.3 The above-recited, and all other, TRM language may only be changed in accordance with the requirements of the TRM for TRM changes. Reference in this contract to the TRM or recitation in this contract of what the TRM provides with regard to the RHWM or other matters does not make implementation of the TRM, or issues or disputes regarding BPA's implementation of the TRM, matters of contract; rather, they retain their character as administrative matters. However, repudiation by BPA of its obligation here and under the TRM to change the TRM only in accordance with the TRM section 12 and 13 procedures for change would be a matter of contract.

7. HIGH WATER MARKS (06/13/08 Version)

7.1 Contract High Water Mark (CHWM)

BPA shall establish «Customer Name»'s CHWM in the process defined in section 4.2 of the TRM that was current as of the Effective Date. «Customer Name»'s CHWM and the circumstances under which it can change are stated in Exhibit B, High Water Marks and Contract Demand Quantities. BPA shall use «Customer Name»'s CHWM to determine «Customer Name»'s RHWM as prescribed in section 4.3 of the TRM.

Reviewer's Note: See "Timeline for HWMs & Above-RHWM Elections"

7.2 Rate Period High Water Mark (RHWM)

«Customer Name»'s CHWM will 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 a process defined in section 4.3 of the TRM that was current as of the Effective Date. BPA shall designate «Customer Name»'s RHWM in the initial proposal for each general rate case.

8. APPLICABLE RATES (06/13/08 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). Billing determinants for any purchases are included in each rate schedule. Power purchases under this Agreement are subject to BPA's rates, its GRSPs (or their successors), and the TRM.

8.1 Priority Firm Power Rates

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's PF power rates shall include a rate schedule for purchase amounts at PF Tier 1 rates and purchase amounts at PF Tier 2 rates.

8.1.1 PF Tier 1 and PF Tier 2 Rates

«Customer Name»'s purchase of Firm Requirements Power shall be priced as follows:



- (1) Subject to «Customer Name»'s Net Requirement, all amounts of «Customer Name»'s planned annual purchase of Firm Requirements Power that are equal to or less than «Customer Name»'s RHWL shall be priced at PF Tier 1 rates.
- (2) Subject to «Customer Name»'s Net Requirement, all amounts of «Customer Name»'s planned annual purchase of Firm Requirements Power that is above «Customer Name»'s RHWL shall be priced at PF Tier 2 rates elected by «Customer Name» in section 2 of Exhibit C, Purchase Obligations.

8.1.2 Contract Demand Quantities (CDQs)

BPA shall establish «Customer Name»'s CDQs pursuant to the TRM. «Customer Name»'s CDQs are listed in Exhibit B, High Water Marks and Contract Demand Quantities.

8.2 New Resource Firm Power Rate

Any amounts of power provided to «Customer Name» from BPA for service to an NLSL, listed in Exhibit D, Additional Products and Special Provisions, shall be purchased at the NR Rate.

8.3 Firm Power Products and Services Rate

Amounts of power and other services sold to «Customer Name» under the FPS rate, if any, are listed in Exhibit D, Additional Products and Special Provisions.

8.4 Additional Charges

«Customer Name» may incur additional charges or penalty charges as established in the GRSPs, including the Unauthorized Increase (UAI) and the Resource Shaping Charge (RSC), or their successors.

9. ELECTIONS TO PURCHASE POWER PRICED AT PF TIER 2 RATES (06/13/08 Version)

Reviewer's Note: See "Timeline for HWMs & Above-RHWL Elections"

9.1 Determination and Notice to Serve Above-RHWL Load

«Customer Name» shall determine and provide notice, as described below, to BPA whether «Customer Name» shall serve its Above-RHWL Load that is greater than 8,760 megawatt-hours and is not an NLSL, with either: (1) Firm Requirements Power purchased from BPA at a PF 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 PF Tier 2 Rates

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

9.1.3 Elections Not to Purchase at PF Tier 2 Rates

If «Customer Name» elects not to purchase Firm Requirements Power at PF Tier 2 rates for a Purchase Period, BPA shall update section 2.1 of Exhibit C, Purchase Obligations, to indicate such election. Such election shall not eliminate any prior obligation to purchase Firm Requirements Power at PF Tier 2 rates for future rate periods.

9.1.4 Failure to Make an Election

If «Customer Name» makes no election by a Notice Deadline in section 9.1.1 above, for the corresponding Purchase Period «Customer Name» shall be deemed to have elected not to purchase Firm Requirements Power at PF Tier 2 rates, except for any previously obligated PF Tier 2 purchase amounts.

Reviewers Note: Shaded text is identical to Load Following text (absent the Load-Growth Rate Alternative):

9.2 Tier 2 Rate Alternatives

Subject to the requirements stated in Exhibit C, Purchase Obligations, «Customer Name» shall have the right to purchase Firm Requirements Power priced at the following PF Tier 2 Rates:

9.2.1 PF Tier 2 Vintage Rate(s)

Subject to eligibility requirements specified in Exhibit C, Purchase Obligations, «Customer Name» may elect to purchase Firm Requirements Power from BPA at a PF Tier 2 Vintage Rate(s) to serve «Customer Name»'s Above-RHWM Load for a specified term. A PF Tier 2 Vintage Rate(s) is based on the costs of specific resources and is set in each general rate case. «Customer Name» shall make such election(s) in accordance with section 2.3 of Exhibit C, Purchase Obligations.



9.2.2 PF Tier 2 Short-Term Rate

«Customer Name» may elect by a Notice Deadline to purchase Firm Requirements Power from BPA at the PF Tier 2 Short-Term Rate to serve «Customer Name»'s Above-RHWM Load for the corresponding Purchase Period. «Customer Name» shall make such election in accordance with section 2.4 of Exhibit C, Purchase Obligations.

9.3 Obligation to Apply Non-Federal Resources

«Customer Name»'s obligation to apply its Dedicated Resources to serve its Above-RHWM Load is stated in section 3 of the body of this Agreement and Exhibit C, Purchase Obligations.

10. ORDER OF TIER 2 REMARKETING AND RESOURCE REMOVAL (05/27/08 Version)

Reviewer's Note: See "Timeline for HWMs & Above-RHWM Elections"

10.1 Order of Removal – First Fiscal Year of Rate Period

By September 15 of each Rate Case Year, BPA shall remarket «Customer Name»'s PF Tier 2 rate purchase amounts and BPA shall remove «Customer Name»'s New Resources for the first Fiscal Year of the upcoming Rate Period if the sum of «Customer Name»'s PF Tier 2 rate purchase amounts, as established in Exhibit C, Purchase Obligations, plus «Customer Name»'s RHWM exceeds «Customer Name»'s annual Net Requirement forecast established in section 1.2 of Exhibit A, Net Requirements and Resources. The amount of such remarketing and resource removal is established in section 10.3 below. BPA shall remarket the PF Tier 2 rate purchase amounts and remove such New Resource amounts for the first Fiscal Year in the following order:

- (1) Amounts of Firm Requirements Power priced at PF Tier 2 rates listed in Exhibit C, Purchase Obligations, then
- (2) «Customer Name»'s Unspecified Resource Amounts listed in section 3.1 of Exhibit A, Net Requirements and Resources, then
- (3) «Customer Name»'s Specified Resources that are New Resources listed in section 2 of Exhibit A, Net Requirements and Resources. If «Customer Name» has multiple Specified Resources that are New Resources, BPA shall remove such resources in a last added, first removed order based on the order in which «Customer Name» made its resource additions.

10.2 Order of Removal – Second Fiscal Year of Rate Period

By September 15, 2012, and by September 15 of each Forecast Year thereafter, the process established in section 10.1 above shall also apply for the second Fiscal Year of the effective Rate Period and BPA shall remove «Customer Name»'s Existing Resources in the amount established in section 10.4 below. If «Customer Name» has multiple Existing Resources,



BPA shall remove such resources in a last added, first removed order based on the order in which «Customer Name» made its resource additions.

10.3 Extent of Removal for the First Fiscal Year of Each Rate Period

For the first Fiscal Year of a Rate Period BPA shall continue to remarket «Customer Name»'s PF Tier 2 rate purchase amounts and BPA shall continue to remove the amounts of «Customer Name»'s New Resources until:

- (1) the amount of PF Tier 2 rate purchase amounts remarketed by BPA plus the amount of New Resource removals equals the amount that «Customer Name»'s PF Tier 2 rate purchase amounts plus its RHWM exceeds its annual Net Requirement forecast, or
- (2) all of «Customer Name»'s PF Tier 2 rate purchase amounts are remarketed and all of its New Resources are removed.

10.4 Extent of Removal for the Second Fiscal Year of Each Rate Period

For the second Fiscal Year of a Rate Period BPA shall first apply the process established in section 10.3 above. If «Customer Name»'s annual Net Requirement forecast for the second Fiscal Year of a Rate Period is lower than such forecast for the first Fiscal Year of the same Rate Period, then BPA shall then remove «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 annual Net Requirement forecast, or (2) the difference between «Customer Name»'s annual Net Requirement forecasts for the first and second Fiscal Years of the Rate Period. If «Customer Name»'s annual Net Requirement forecast for the second Fiscal Year of a Rate Period is greater than or equal to such forecast for the first Fiscal Year of the same Rate Period, BPA shall remove zero amounts of «Customer Name»'s Existing Resources.

10.5 Rounding of PF Tier 2 Rate Purchase Amounts

To the extent remarketing of PF 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.

10.6 Remarketing of Federal Power Priced at PF Tier 2 Rates

Consistent with rates established under the TRM, «Customer Name» shall be subject to applicable charges or credits associated with BPA's remarketing of amounts of Firm Requirements Power at PF Tier 2 rates. «Customer Name» shall be responsible for remarketing of any amounts of its Dedicated Resources, Specified or Unspecified, that are removed under this section 10, Order of Tier 2 Remarketing and Resource Removal.

11. RIGHT TO CHANGE PURCHASE OBLIGATION (04/04/08 Version)

«Customer Name» shall have a one-time right to change its purchase obligation, identified in section 3 of this Agreement, to another purchase obligation available from BPA, including Load Following or Slice/Block. If «Customer Name» chooses to



change its purchase obligation, «Customer Name» shall first provide notice to BPA of its intent and then confirm its decision as established below. Any elections of rate alternatives, 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 11.2 below.

11.1 Notice to Change

By June 30, 2016, «Customer Name» shall provide written notice to BPA that it is requesting to change its purchase obligation effective October 1, 2019, subject to confirmation described in section 11.3 below. «Customer Name»'s notice shall state the type of service requested, and if requesting a change to the Slice/Block purchase obligation, «Customer Name» shall state a range of Slice amounts between a specified minimum and maximum amount of Slice that «Customer Name» will accept.

11.2 Charge to Change Purchase Obligation

«Customer Name» may be subject to charges as a result of «Customer Name»'s request to change its purchase obligation. By October 31, 2016, BPA shall determine and present «Customer Name» with any such charges. In no event shall BPA make payment to «Customer Name» as a result of «Customer Name» changing its purchase obligation.

11.3 Change Confirmation

Within 30 days of BPA's presentation to «Customer Name» of the charges determined in 11.2 above, «Customer Name» shall provide BPA with written confirmation of its decision to change its purchase obligation. If «Customer Name» is requesting a change to the Slice/Block purchase obligation, such confirmation constitutes agreement that «Customer Name» shall purchase an amount of Slice within «Customer Name»'s specified range of acceptable Slice amounts, if made available by BPA.

11.4 Slice Amount

If «Customer Name» requests a change to the Slice/Block purchase obligation, BPA shall determine «Customer Name»'s specific amount of Slice as follows:

- (1) BPA shall determine the total amount of Slice available for purchase by all customers requesting a change to Slice/Block.
- (2) If such amount is sufficient to meet the requested maximum amount of Slice from all customers requesting a change to Slice/Block, BPA shall provide to «Customer Name» its requested maximum amount of Slice as part of the new agreement.
- (3) If such amount is insufficient to meet the requested maximum amount of Slice from all customers requesting a change to Slice/Block, BPA shall reduce individual Slice amounts of customers requesting a change to Slice/Block pro rata based on the requested maximum



amount of Slice. If «Customer Name»'s individual Slice amount is below its specified minimum, «Customer Name» shall retain its current purchase obligation.

11.5 Agreement Amendment

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 amendment shall be effective no later than October 1, 2019.

12. BILLING CREDITS AND RESIDENTIAL EXCHANGE (06/10/08 Version)

12.1 Billing Credits (02/28/08 Version)

If «Customer Name» develops a Generating Resource to serve its retail loads above its RHWM, «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 execution date of this Agreement.

12.2 Residential Exchange (06/16/08 Version)

If «Customer Name» elects to seek residential exchange benefits from BPA pursuant to section 5(c) of the Northwest Power Act, «Customer Name» agrees it will not seek and shall not receive exchange benefits: (1) for Total Retail Load in excess of «Customer Name»'s RHWM load, or (2) based upon the cost of resources in excess of «Customer's Name»'s resource amounts used in calculating its CHWM. The determination of what exchange benefits «Customer Name» shall not receive as a consequence of «Customer Name»'s agreement in the preceding sentence will be made by BPA pursuant to BPA's then-existing ASC Methodology.

The preceding paragraph will also be included in any Residential Purchase and Sale Agreement entered into between «Customer Name» and BPA during the term of this Agreement.

13. SCHEDULING (03/27/08 Version)

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

14. DELIVERY (03/17/08 Version)

14.1 Definitions

14.1.1 "Integrated Network Segment" (03/17/08 Version) 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 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" (03/17/08 Version) 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.

14.1.3 "Scheduling Points of Receipt" (03/17/08 Version) means the points on the Pacific Northwest transmission system where Firm Requirements Power is made available by Power Services to «Customer Name» for purposes of transmission scheduling.

14.2 **Transmission Service (03/17/08 Version)**

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

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, BPA 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, 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, have been met:

- (1) «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,
- (2) This condition only applies 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: «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

- (3) «Customer Name»'s transmission schedule was curtailed due to non-firm status under PTP transmission service or its secondary service status under Network Integration Transmission Service (as defined in BPA's Open Access Transmission Tariff) and «Customer Name» can provide proof of the reimbursable costs incurred to replace the curtailed schedule.

14.3 Liability for Delivery (05/25/08 Version)

«Customer Name» waives any claims against BPA arising under this Agreement for nondelivery of power to any points beyond the applicable Scheduling Points of Receipt, except as described in section 14.2.3 above. 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.

14.4 Real Power Losses (03/14/08 Version)

BPA is responsible for the real power losses necessary to deliver Firm Requirements Power to «Customer Name»'s PODs listed in Exhibit E, Metering.

14.5 Metering Losses (05/14/08 Version)

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, Metering.

15. METERING (06/03/08 Version)

Reviewer's Note: The customer list below is subject to change.

Option 1: Include this subsection for customers that do NOT have meters on all PODs: (See Customer Characteristics Spreadsheet to verify: EWEB, Grant PUD, Okanogan PUD, Seattle, Tacoma, Port of Seattle).

15.1 Requirements for Meters

«Customer Name»'s purchase commitment in section 3 of this Agreement 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, Hourly Total Retail Load Data.



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, «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, Metering used by BPA for forecasting and planning, and for new meters, the following requirements shall apply.

End Option 1

15.1.1 BPA Owned Meters

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 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, BPA shall adjust, repair, or replace the meter to provide accurate metering as soon as practical.

15.1.2 Non-BPA Owned Meters

For all non-BPA owned metering equipment owned by «Customer Name» 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 meters not owned by BPA 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.

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.

«Customer Name» shall operate, maintain, and replace, as necessary at «Customer Name» expense, all non-BPA metering equipment owned by «Customer Name». For non-BPA owned meters listed in Exhibit E, Metering that are not owned by «Customer Name» but are needed by BPA to forecast and plan, «Customer Name» shall arrange for such meters to be operated, maintained and replaced, as necessary.



If, at any time, BPA or «Customer Name» determines that a non-BPA owned meter listed in Exhibit E, Metering is defective or inaccurate, «Customer Name» shall adjust, repair, or replace the meter to provide accurate metering as soon as practical. BPA shall have the right to witness any meter tests conducted by «Customer Name» on non-BPA owned meters listed in Exhibit E, Metering 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.

15.1.3 New Meters

The Parties shall enter into a separate agreement, if such an agreement is not already in place, addressing the ownership, location, access, maintenance, replacement, testing, and liability of the Parties with respect to new and replaced meters. All new 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 (06/13/08 Version)

«Customer Name» shall meter any loads that are monitored by BPA for an NLSL determination and any NLSLs consistent with section 24.3.4, Metering an NLSL.

15.3 Metering Exhibit

«Customer Name» shall provide meter data specified in section 17.3, Information Exchange and Confidentiality, 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, Metering.

16. BILLING AND PAYMENT

16.1 Billing(05/14/08 Version)

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. BPA shall send all bills on the bill's issue date. If electronic transmittal of the entire bill is not practical, BPA shall transmit a summary electronically, and send the entire bill by United States mail.

16.2 Payment(03/26/08 Version)

«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, 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, «Customer Name» shall pay BPA the difference between the estimated bill and final bill by the final bill's Due Date; and
- (2) if the amount of the final bill is less than the amount of the estimated bill, 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 (03/26/08 Version)

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 4 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 (05/14/08 Version)

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

16.5 Disputed Bills (05/14/08 Version)

16.5.1 If «Customer Name» disputes any portion of a charge or credit on «Customer Name»'s bill, «Customer Name» shall provide notice to BPA with a copy of the bill noting the disputed amounts. If any portion of the bill is in dispute, «Customer Name» shall pay the entire bill by the Due Date. 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.

16.5.2 If the Parties agree, or if after dispute resolution «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

17.1 General Requirements *(03/30/08 Version)*

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 to otherwise implement this Agreement. This obligation includes transmission and power scheduling information and load and resource metering information (such as one-line diagrams, metering diagrams, loss factors, etc.).

17.2 Reports *(05/14/08 Version)*

17.2.1 Within 30 days after final approval by the «Customer Name»'s governing body, «Customer Name» shall e-mail its annual financial report and statements to BPA at kself@bpa.gov.

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

17.3 Meter Data *(06/10/08 Version)*

17.3.1 In accordance with section 15, Metering, and Exhibit E, Metering, «Customer Name» shall notify BPA 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. 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 above in section 17.3.1, section 15, Metering, and Exhibit E, Metering, 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 and (2) the contact shown in section 20, Notices and Contact Information, when the following events are planned to occur on «Customer Name»'s system that will affect meters listed in Exhibit E, Metering: (1) installation of a new meter, (2) changes or updates to an existing meter not owned by BPA, (3) any planned line or meter outages, and (4) any planned load shifts.
- 17.3.4 If an unplanned load shift or outage occurs affecting meters listed in Exhibit E, Metering, «Customer Name» shall e-mail BPA at: (1) mdm@bpa.gov, and (2) the contact shown in section 20, Notices and Contact Information, within 72 hours after the event.
- 17.4 **Data for Determining CHWM and CDQs (03/27/08 Version)**
Upon request, «Customer Name» shall provide to BPA any load and resource information that BPA deems necessary to determine «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 (06/10/08 Version)**
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 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 for 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 (03/28/08 Version)**
Reviewer's Note: The data required below will be used by BPA for purposes of calculating Net Requirements and meeting WECC data reporting requirements.
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 10 Fiscal Years. «Customer Name» shall e-mail the forecast to BPA at 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 and Load Forecast Processes (05/27/08 Version)

17.7.1 Transparency for Net Requirements

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 total Dedicated Resource monthly energy amounts and peaking amounts for the upcoming Fiscal Year listed in section 5 of Exhibit A, Net Requirements and Resources.

17.7.2 Transparency for Above-RHWM Load Amounts

By July 31 of each Forecast Year, BPA shall publish the draft Above-RHWM Load amounts that BPA intends to use in the upcoming general rate case for each customer with a CHWM

17.7.3 Waiver of Confidentiality and Comment Process

«Customer Name» waives all claims of confidentiality regarding the data described above in sections 17.3.1 and 17.3.2. «Customer Name» may provide comments regarding the published data to BPA within 10 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 (01/17/08 Version)

Before «Customer Name» provides information that is subject to a privilege of confidentiality or nondisclosure to BPA, «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.

18. CONSERVATION AND RENEWABLES (04/05/08 Version)

18.1 Conservation (05/14/08 Version)

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 Beginning June 1, 2010, and no later than June 1 every two years thereafter, «Customer Name» shall create and submit a 10-year conservation plan stating «Customer Name»'s projection of planned conservation, including biennial conservation targets. If «Customer Name» is required under state law (such as the Washington State Energy Independence Act (RCW 19.285)) to create and submit a conservation plan, «Customer Name» may submit to BPA a copy of such plan to meet the requirements of this section 18.1.2.1 if it includes, or is supplemented by, the information required above. The requirements of this section 18.1.2.1 are waived if «Customer Name» purchases all of its power from BPA to serve its Total Retail Load.

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 (04/05/08 Version)

18.2.1 Renewable Energy Certificates

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

18.2.2 Reporting Requirements (06/04/08 Version)

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

- (1) updated information on power generated by renewable resources 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, Net Requirements and Resources. Such information shall include: project name, fuel type(s), location, date 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 dedicated to serve «Customer Name»'s Total Retail Load for the forthcoming calendar year.
- (2) all purchases of RECs used to meet requirements under state or federal law for the forthcoming calendar year. Such information shall include: quantity, fuel type(s), location and energization date of the RECs producing resource(s), as well as the calendar quarter and the year in which the RECs will be generated.
- (3) an updated long-term renewable resource plan. This shall include «Customer Name»'s 2-year forecast of expected acquisitions of power generated by renewable resources greater than 200 kilowatts. Such forecast shall disclose the expected amount of such power to be purchased, capacity of expected acquisitions by fuel type, and percentage of output dedicated to serve «Customer Name»'s Total Retail Load.



The three preceding renewable resource requirements are waived if «Customer Name» purchases all of its power for service to its Total Retail Load from BPA.

19. RESOURCE ADEQUACY (02/28/08 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, 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 are waived if «Customer Name» purchases all of its power from BPA to serve its Total Retail Load.

20. NOTICES AND CONTACT INFORMATION (06/13/08 Version)

Any notice required under this Agreement 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 (05/14/08 Version)

21.1 ^o The Parties shall not be in breach of their respective obligations to the extent the failure to fulfill any obligation is due to an Uncontrollable Force.

“Uncontrollable Force” means an event beyond the reasonable control of, and without the fault or negligence of, the Party claiming the Uncontrollable Force, that prevents that Party from performing its contractual obligations under this Agreement and which, by exercise of that Party’s reasonable care, diligence and foresight, such Party was unable to avoid. Uncontrollable Forces include, but are not limited to:

- (1) any unplanned curtailment or interruption of firm transmission service used to deliver Firm Requirements Power sold under this Agreement to «Customer Name»;
- (2) any planned curtailment or interruption of long-term firm transmission service used to deliver Firm Requirements Power sold under this Agreement to «Customer Name» if such curtailment or interruption occurs on BPA's or a Third Party Transmission Provider's System;
- (3) any failure of «Customer Name's» distribution or transmission facilities that prevents «Customer Name» from delivering power to end-users;
- (4) strikes or work stoppage;
- (5) floods, earthquakes, other natural disasters, or terrorist acts; and
- (6) final orders or injunctions issued by a court or regulatory body having competent 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 of competent 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 its best 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, Notices and Contact Information.

22. GOVERNING LAW AND DISPUTE RESOLUTION *(05/16/08 Version)*

This Agreement shall be interpreted consistent with and governed by federal law. The Parties shall identify issue(s) in dispute and make a good faith effort to negotiate a resolution of disputes before either Party 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 Parties elect binding arbitration, the Parties reserve their rights to seek judicial resolution of any dispute arising under this Agreement.

22.1 Judicial Resolution

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 Ninth Circuit Court of Appeals. Such final actions include, but are not limited to, the establishment and implementation of rates and rate methodologies. Any dispute regarding any rights of the Parties under any BPA policy, including the implementation of such policy, shall not be subject to arbitration under this Agreement. For purposes of this section 22, Governing Law and Dispute Resolution, 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. If either Party asserts that a dispute is excluded from arbitration under this



section 22, Governing Law and Dispute Resolution then both Parties shall apply to the federal court having jurisdiction for an order determining whether such dispute is subject to arbitration under this section 22, Governing Law and Dispute Resolution.

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.

The Parties may agree to use binding arbitration, consistent with BPA's Binding Arbitration Policy or its successor, to resolve disputes that the Parties agree are strictly issues of fact and that fall within BPA's Binding Arbitration Policy or its successor. 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 that is not excluded by 21.1 above, and is not resolved via binding 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. 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 both 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 arbitrators may be entered by any court having jurisdiction thereof.

22.5.2 In nonbinding arbitration, the arbitration award is not binding on the Parties. Subsequent to nonbinding arbitration, if a Party other than BPA rejects the arbitration award or if BPA rejects the arbitration award, the Party may seek judicial resolution of the dispute.



22.6 Arbitration Costs

Each Party shall be responsible for its own costs of arbitration, including legal fees. 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. NO WARRANTY (03/26/08 Version)

Nothing in this Agreement, or any dispute arising out of this Agreement, shall limit the Administrator's responsibility to establish rates to recover costs and timely repay the U.S. Treasury or to take actions that are effectively required by a court order. It is the Parties' intent to structure a durable commercial relationship that is based on existing statutory requirements and to provide «Customer Name» with protection against change to those guiding statutes as is reasonably possible. However, BPA does not warrant or represent that this Agreement is immune from costs imposed by court order or agency regulations of a general and public nature or is immune from subsequently enacted legislation.

24. STATUTORY PROVISIONS

24.1 Retail Rate Schedules (09/04/07 Version)

«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.

24.2 Insufficiency and Allocations (04/04/08 Version)

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 «Customer Name» is obligated to purchase pursuant to section 3 and Exhibit C of this Agreement shall be reduced to the amounts available under such allocation methodology for restricted service.



24.3 New Large Single Loads and CF/CTs

24.3.1 Determination of an NLSL (05/15/08 Version)

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

24.3.1.1 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, 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 twelve-month period..

24.3.1.2 For the sole purpose of computing the increase in energy consumption between any two consecutive 12-month periods of comparison under this section 24.3.1, reductions in the end-use consumer's load associated with a facility during the first twelve-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.

24.3.1.3 The Parties may agree that the installed production equipment at a facility will exceed 10 average megawatts consumption over any 12 consecutive months and such agreement shall constitute a binding NLSL determination.

24.3.2 Determination of a Facility (09/04/07 Version)

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.

24.3.3 Administrative Obligations and Rights (4/06/08 Version)

24.3.3.1 «Customer Name»'s CF/CT loads and NLSLs are listed in Exhibit D, Additional Products and Special Provisions.

24.3.3.2 «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, Additional Products and Special Provisions. If BPA determines that any load associated with a single facility that is capable of growing 10 average megawatts or more in a consecutive 12-month period, then such load shall be subject to monitoring by BPA.

24.3.3.3 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 also require the end-use consumer to provide BPA physical access to inspect any facility for these purposes.

24.3.3.4 Unless the Parties agree pursuant to section 24.3.1.3 above, BPA shall unilaterally 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, Additional Products and Special Provisions.

24.3.4 Metering an NLSL (03/30/08 Version)

For any loads that are monitored by BPA for an NLSL determination, and at any facility that is determined by BPA to be an NLSL, «Customer Name» agrees to either consent to BPA installing BPA owned meters or «Customer Name» shall 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.



24.3.5 Undetermined NLSLs (04/06/08 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 24.3.4, above, and BPA shall bill «Customer Name» for the increase in load at the applicable PF Rate during any consecutive twelve-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 under sections 24.3.3 and 24.3.4, BPA may determine any load subject to NLSL monitoring to be an NLSL. Such NLSL determination shall be final unless «Customer Name» proves to BPA's satisfaction that the applicable load did not exceed 10 aMW in any 12-month monitoring period.

24.3.6 Service Elections for an NLSL (02/28/08 Version)

«Customer Name» shall serve all NLSLs with non-federal firm resources that are not Dedicated Resources in Exhibit A, Net Requirements and Resource, Exhibit D, Additional Products and Special Provisions, 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, Net Requirements and Resources. Under no circumstances shall BPA be required to acquire firm power for service to such NLSLs.

24.3.7 Renewable Resource/Cogeneration Exception (04/06/08 Version)

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 10 average megawatts 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, the Parties shall: (1) list the Consumer-Owned Resource(s) serving the NLSL in section 7.3 of Exhibit A, Net Requirements and Resources and (2) amend Exhibit D,



Additional Products and Special Provisions to add the onsite renewable resource or cogeneration facility and the requirements for such service.

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 7.3 of Exhibit A, Net Requirements and Resources.

24.4 Priority of Pacific Northwest Customers (09/04/07 Version)

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.

24.5 Prohibition on Resale (09/04/07 Version)

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

24.6 Use of Regional Resources (05/15/08 Version)

24.6.1 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 24.6, "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 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.

24.6.2 «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.



24.6.3 If «Customer Name» fails to report to BPA in accordance with section 24.6.1, 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, for the duration of the export. When applicable such decrements shall be identified in section 3.2 of Exhibit A, Net Requirements and Resources.

24.6.4 For purposes of this section, 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 in a manner that such output is no 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 section 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 Pacific Northwest Coordination Agreement resource planning criteria, or other resource planning criteria generally used for such purposes within the Region.

24.7 BPA Appropriations Refinancing (05/14/08 Version)

The Parties agree that 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 date this Agreement is signed by the Parties, is incorporated by reference and is a material term of this Agreement.

25. STANDARD PROVISIONS

25.1 Amendments (09/04/07 Version)

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 a written instrument signed by authorized representatives of each Party.

25.2 Entire Agreement and Order of Precedence (09/26/07 Version)

This Agreement, including documents expressly incorporated by reference, constitutes the entire agreement between the Parties. 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.



25.3 Assignment (03/28/08 Version)

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.

25.4 No Third-Party Beneficiaries (10/01/07 Version)

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.

25.5 Waivers (10/01/07 Version)

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 any other breach of this Agreement.

25.6 BPA Policies (09/04/07 Version)

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.

25.7 Rate Covenant and Payment Assurance (03/28/08 Version)

«Customer Name» agrees that it shall establish, maintain and collect rates or charges 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, BPA may terminate this Agreement.

26. TERMINATION (07/02/08 Version)

26.1 BPA's Right to Terminate

BPA may terminate this Agreement if:



- (1) «Customer Name» fails to make payment as required by section 16.4, Billing and Payment, or
- (2) «Customer Name» fails to provide payment assurance satisfactory to BPA as required by section 25.7, Rate Covenant and Payment Assurance.

26.2 Customer's Right to Terminate (07/2/08 Version)

«Customer Name» may provide written notice to terminate this Agreement not later than 60 days after a Final FERC Order is issued declining to approve the Tiered Rates Methodology if such approval is required, or a Final FERC Order disapproves rates established consistent with the TRM. The notice shall include a date of termination not later than 90 days after the date of such notice. For purposes of this section 26.3, "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.

27. SIGNATURES (10/01/07 Version)

The signatories represent that they are authorized to enter into this Agreement on behalf of the Party for which they sign.

«FULL NAME OF CUSTOMER»

UNITED STATES OF AMERICA
 Department of Energy
 Bonneville Power Administration

By _____

By _____

Name _____
(Print/Type)

Name _____
(Print/Type)

Title _____

Title _____

Date _____

Date _____

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



Exhibit A
NET REQUIREMENTS AND RESOURCES

1. NET REQUIREMENTS

«Customer Name»'s Net Requirement equals its Total Retail Load minus «Customer Name»'s Dedicated Resource amounts listed in sections 2, 3, and 4 of this exhibit. «Customer Name» shall not add resource amounts to reduce its purchase obligations from BPA under section 3.1 of the body of this Agreement except to meet obligations in section 3.5 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:

Option 1: Include if SLICE/BLOCK or BLOCK customer does NOT take Shaping Capacity.

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, 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.

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

Annual Forecast of Total Retail 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.

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. «Customer Name»'s Net Requirement forecast equals «Customer Name»'s Total Retail Load forecast, shown in section 1.1 above, minus «Customer Name»'s total Dedicated Resource Amounts, shown in section 5 below.

Consistent with section 3 of the body of this Agreement, «Customer Name» shall dedicate additional resource energy amounts to serve any «Customer Name» energy needs above «Customer Name»'s RHW and any PF Tier 2



rate amounts listed in section 2.5 of Exhibit C, Purchase Obligations. «Customer Name» shall also serve any «Customer Name» peak load above the sum of «Customer Name»'s monthly purchase amounts at Tier 1 rates in section 1.3 of Exhibit C, Purchase Obligations, and any purchase amounts at Tier 2 rates in section 2.5 of Exhibit C, Purchase Obligations, with additional resource peak amounts.

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

Annual Forecast of Net Requirements – 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 1

Option 2: Include if BLOCK customer takes Shaping Capacity.

Reviewer's Note: Only the shaded language and the monthly peak tables differ from Option 1.

1.1 Forecast of Total Retail Load

By September 15, 2011, and by each September 15 thereafter, BPA shall fill in the tables 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, BPA will fill in the tables below with a forecast BPA determines to be reasonable by September 15 immediately preceding the start of the Fiscal Year.

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

Annual Forecast of Total Retail 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.									

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

Annual Forecast of Total Retail Load – Peak (MW)												
Fiscal Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
2012												



Annual Forecast of Total Retail Load – Peak (MW)												
Fiscal Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
2013												
2014												
2015												
2016												
2017												
2018												
2019												
2020												
2021												
2022												
2023												
2024												
2025												
2026												
2027												
2028												

Note: Fill in the table above with megawatts rounded to whole megawatt amounts.

1.2 Forecast of Net Requirements

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

Consistent with section 3 of the body of this Agreement, «Customer Name» shall dedicate additional resource energy amounts to serve any «Customer Name» energy needs above «Customer Name»’s RHW and any PF Tier 2 rate amounts listed in section 2.5 of Exhibit C, Purchase Obligations. «Customer Name» shall also serve any «Customer Name» peak load above the sum of «Customer Name»’s monthly purchase amounts at Tier 1 rates in section 1.3 of Exhibit C, Purchase Obligations, any purchase amounts at Tier 2 rates in section 2.5 of Exhibit C, Purchase Obligations, and any Shaping Capacity amounts in section 1.4.1 of Exhibit C, Purchase Obligations, with additional resource peak amounts.



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

Annual Forecast of Net Requirements – 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.

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

Annual Forecast of Total Retail Load – Peak (MW)												
Fiscal Year	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												

Note: Fill in the table above with megawatts rounded to whole megawatt amounts.

End Option 2

2. LIST OF SPECIFIED RESOURCES

Drafter's Note: List each Specified Resource, in the applicable subsection, using the format shown below in section 2.1(1). Determine the Dedicated Resource amounts for Specified Resources per the updated 5(b)/9(c) Policy (which is currently under review). When using PNCA studies to calculate Dedicated Resource amounts use the most current study released as of August 18, 2008. The most current PNCA study will either be the Modified Regulation for 2008-2009 (released in May 2009) or the Final Regulation for 2008-2009 (release forthcoming).

2.1 Generating Resources

All of «Customer Name»'s Generating Resources dedicated to serve its Total Retail Load are listed below.



Drafter's Note: If «Customer Name» does not have any Generating Resources delete sections 2.1(1)(A), (B), and (C) below and leave only the following text in this section:

No Generating Resources at this time.

(1) **«Resource Name»**

Drafter's Note: If «Customer Name» has Generating Resources dedicated to its TRL complete the following steps for each resource: insert the resource name as the title for section 2.1(1), add any special provisions for such resource to section 2.1(1)(A), and fill in the tables in section 2.1(1)(B) and (C). Delete "No Generating Resources at this time" from above.

(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 Dedicated to Load	Nameplate Capability (MW)

Statutory Status		Diurnal Flattening Service?		Dispatchable?		PNCA?		If PNCA, PNCA Updates?	
5b1A	5b1B	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	Total (annual aMW)
Fiscal Year 2012													
Total (MWh)													
HLH (MWh)													
LLH (MWh)													
Peak (MW)													
Fiscal Year 2013													
Total (MWh)													
HLH (MWh)													
LLH (MWh)													
Peak (MW)													



Specified Resource Amounts

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total (annual aMW)
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)													



Specified Resource Amounts													
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total (annual aMW)
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)													

Note: Fill in the table above with megawatt-hours rounded to whole megawatt-hours, with megawatts rounded to whole megawatts, and annual average megawatts rounded to three decimal places.

2.2 Contract Resources

All of «Customer Name»'s Contract Resources dedicated to serve its Total Retail Load are listed in tables below.



Drafter's Note: If «Customer Name» does not have any Contract Resources delete sections 2.2(1) below and leave only the following text in this section:

No Contract Resources at this time.

(1) «Resource Name»

Drafter's Note: If «Customer Name» has Contract Resources dedicated to its TRL list the resources below and complete the following steps for each resource using the format in section 2.1(1): insert the resource name as a title for section 2.2(1), add any special provisions for such resource to section 2.2(1)(A), add a resource profile table to section 2.2(1)(B) using the table format in section 2.1(1)(B), add dedicated resource amounts to section 2.2(1)(C) using the table format in section 2.1(1)(C). Delete "No Contract Resources at this time" from above.

3. UNSPECIFIED RESOURCE AMOUNTS

3.1 Unspecified Resource Amounts Dedicated to Total Retail Load

«Customer Name»'s Unspecified Resource Amounts dedicated to serve its Total Retail Load are listed in the table below.

Drafter's Note: If «Customer Name» does not have any Unspecified Resource Amounts delete the table below and leave only the following text in this section:

No Unspecified Resource Amounts at this time.

Drafter's Note: If «Customer Name» has Unspecified Resource Amounts list them in the table below adding additional years as needed. Delete "No Unspecified Resource Amounts" from above.

Unspecified Resource Amounts													
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total (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.



3.2 Unspecified Resource Amounts for 9(c) Export Decrements

Pursuant to section 3.5.2 of the body of this Agreement, BPA shall insert a table below for any decrements due to export of resources in the shape, duration, and amount of the export.

4. DEDICATED RESOURCE AMOUNTS FOR AN NLSL

«Customer Name»'s Dedicated Resource amounts serving an NLSL are listed in the table(s) below.

Drafter's Note: If «Customer Name» does not have any Dedicated Resource amounts serving an NLSL then leave only the following text in this section:

No Dedicated Resource amounts serving an NLSL at this time.

Drafter's Note: If «Customer Name» has Unspecified Resource Amounts serving an NLSL list the amounts in a table below using the table format above in section 3.1 and adding additional years as needed. Delete "No Dedicated Resource Amounts serving an NLSL at this time" from above.

Drafter's Note: If «Customer Name» has Specified Resources serving an NLSL list the resources below and complete the following steps for each resource using the format in section 2.1(1): insert the resource name as a title for section 4(1), add any special provisions for such resource to section 4(1)(A), add a resource profile table to section 4(1)(B) using the table format in section 2.1(1)(B), add Dedicated Resource amounts to section 4(1)(C) using the table format in section 2.1(1)(C). Delete "No Dedicated Resource amounts serving an NLSL at this time" from above.

5. TOTAL DEDICATED RESOURCES AMOUNTS

The amounts in the table below equal the sum of all resource amounts dedicated to «Customer Name»'s Total Retail Load listed above in sections 2, 3, and 4.

Drafter's Note: If «Customer Name» does not have any Dedicated Resource amounts listed in section 2, 3, or 4 above then leave only the following text in this section:

No Dedicated Resource amounts at this time.

Drafter's Note: If «Customer Name» has any Dedicated Resource amounts listed in section 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. Delete "No Dedicated Resource amounts at this time" from above.

6. LIST OF RESOURCES NOT DEDICATED TO TOTAL RETAIL LOAD

Pursuant to section 3.6 of the body of this Agreement, all of «Customer Name»'s Generating and Contract Resources not dedicated to serve its Total Retail Load that are greater than 200 kilowatts nameplate capability are listed in tables below.

Drafter's Note: If «Customer Name» does not have any resources not dedicated to its TRL then delete sections 6(1), 6(1)(A), and 6(1)(B) and leave only the following text in this section:

No resources at this time.



(1) «Resource Name»

Drafter's Note: If «Customer Name» has resources not dedicated to its TRL complete the following steps for each resource: insert the resource name as the title for section 6(1) and fill in the tables in section 6(1)(A) and (B). Delete "No resources at this time" from above.

(A) Resource Profile

Fuel Type	Type of Resource		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.

7. LIST OF CONSUMER-OWNED RESOURCES

7.1 Consumer-Owned Resources Serving Onsite Consumer Load

Pursuant to section 3.7 of the body of this Agreement, all of «Customer Name»'s Consumer-Owned Resources serving Onsite Consumer Load, except any Consumer-Owned Resources serving an NLSL which are listed below in section 7.3 of this Exhibit, are listed in tables below.

Drafter's Note: If «Customer Name» does not have any Consumer-Owned Resources serving Onsite Consumer Load then delete sections 7.1(1), 7.1(1)(A), and 7.1(1)(B) and leave only the following text in this section: No Consumer-Owned Resources serving Onsite Consumer Load at this time.

(1) «Resource Name»

Drafter's Note: If «Customer Name» has Consumer-Owned Resources serving Onsite Consumer Load complete the following steps for each resource: insert the resource name as the title for section 7.1(1) and fill in the tables in section 7.1(1)(A) and (B). Delete "No Consumer-Owned Resources serving Onsite Consumer Load at this time" from above.



(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.

7.2 Consumer-Owned Resources Serving Load Other than Onsite Consumer Load

Pursuant to section 3.7 of the body of this Agreement, all of «Customer Name»'s Consumer-Owned Resources serving load other than Onsite Consumer Load are listed in tables below.

Drafter's Note: If «Customer Name» does not have any Consumer-Owned Resources serving load other than Onsite Consumer Load then delete sections 7.2(1), 7.2(1)(A), and 7.2(1)(B) and leave only the following text in this section:

No Consumer-Owned Resources serving load other than Onsite Consumer Load at this time.

(1) «Resource Name»

Drafter's Note: If «Customer Name» has Consumer-Owned Resources serving load other than Onsite Consumer Load complete the following steps for each resource: insert the resource name as the title for section 7.2(1) and fill in the tables in section 7.2(1)(A) and (B). Delete "No Consumer-Owned Resources serving load other than Onsite Consumer Load at this time" from above.

(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.

7.3 Consumer-Owned Resources Serving an NLSL

Pursuant to section 24.3.7 of the body of this Agreement, all of «Customer Name»’s Consumer-Owned Resources serving an NLSL are listed in tables below.

Drafter’s Note: If «Customer Name» does not have any Consumer-Owned Resources an NLSL then delete sections 7.3(1), 7.3(1)(A), and 7.3(1)(B) and leave only the following text in this section:

No Consumer-Owned Resources serving an NLSL at this time.

(1) «Resource Name»

Drafter’s Note: If «Customer Name» has Consumer-Owned Resources serving an NLSL complete the following steps for each resource: insert the resource name as the title for section 7.3(1) and fill in the tables in section 7.3(1)(A) and (B). Delete “No Consumer-Owned Resources serving an NLSL at this time” from above.

(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.

8. REVISIONS

BPA shall make adjustments to this exhibit to reflect (1) BPA’s determinations under this Agreement and BPA’s 5(b)/9(c) Policy, and (2) «Customer Name»’s



elections regarding the application and use of all resources listed by «Customer Name» to serve its Total Retail Load, as provided under this Agreement.

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Exhibit B
HIGH WATER MARKS AND CONTRACT DEMAND QUANTITIES

1. CONTRACT HIGH WATER MARK (CHWM) (06/13/08 Version)

Reviewer's Note: See "Timeline for HWMs & Above-RHWM Elections"

1.1 CHWM Amount

By September 15, 2011, BPA shall update 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 below.

Drafter's Note: Leave table blank at contract signing.

CHWM (annual aMW):	
Note: BPA shall round the number in the table above to three decimal places.	

1.2 Changes to CHWM

If a change is made to «Customer Name»'s CHWM pursuant to this section, BPA shall determine and notify «Customer Name» the date such change will be effective.

1.2.1 If a load included in «Customer Name»'s Measured 2010 Load, as defined in the TRM, is later found to be an NLSL, BPA shall reduce «Customer Name»'s CHWM by the amount of the NLSL.

1.2.2 If «Customer Name» acquires an Annexed Load from a utility that has a CHWM, BPA shall increase «Customer Name»'s CHWM by adding part of the other utility's CHWM to «Customer Name»'s CHWM. The amount of the CHWM addition shall equal:

$$\left[\frac{\text{Annexed Load minus any annexed NLSLs}}{\text{Other utility's pre-annexation Total Retail Load minus total NLSLs, if any}} \right] \times \left[\text{Other utility's pre-annexation CHWM} \right]$$

[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 25.8 of the body of this Agreement.]

1.2.3 If another utility with a CHWM annexes load of «Customer Name», BPA shall reduce «Customer Name»'s CHWM by adding part of «Customer Name»'s CHWM to the other utility's CHWM. The amount of the CHWM reduction shall equal:

$$\left[\frac{\text{Annexed Load minus any annexed NLSLs}}{\text{«Customer Name»'s pre-annexation Total Retail Load minus total NLSLs, if any}} \right] \times \left[\text{«Customer Name»'s pre-annexation CHWM} \right]$$



1.2.4 BPA may change «Customer Name»'s CHWM if BPA's Administrator determines that BPA is effectively required by court order to make such changes. BPA shall determine the effective date of such a change and shall update this exhibit with the changed CHWM.

2. CONTRACT DEMAND QUANTITIES (CDQs) (05/27/08 Version)

2.1 CDQ Amounts

By September 15, 2011, BPA shall update the table below with «Customer Name»'s monthly CDQs. Applicability 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: Leave table blank at contract signing.

Monthly Contract Demand Quantities												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
MW												

Note: BPA shall round the megawatt amounts in the table above to three decimal places.

2.2 Changes Due to Annexation

The Parties shall determine when changes to «Customer Name»'s CDQs, as allowed below, will become effective.

- (1) If «Customer Name» acquires an Annexed Load from a utility that has monthly CDQs, BPA shall increase «Customer Name»'s CDQ for each month by adding the portion of the other utility's CDQ that is attributable to such Annexed Load.
- (2) If another utility with monthly CDQs annexes load of «Customer Name», BPA shall reduce «Customer Name»'s CDQ for each month by removing the portion of «Customer Name»'s CDQ that is attributable to the load that was annexed.

3. REVISIONS (03/30/08 Version)

BPA may revise this exhibit to the extent allowed in sections 1 and 2 above. All other changes shall be made by mutual agreement.

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



**Exhibit C
PURCHASE OBLIGATIONS**

1. FIRM REQUIREMENTS POWER AT PF TIER 1 (05/27/08 Version)

1.1 Block Power - Annual Average Amount

The annual average amount of Firm Requirements Power priced at PF Tier 1 rates shall equal the lesser of «Customer Name»'s RHWM, or «Customer Name»'s forecast annual Net Requirement load stated in Exhibit A, Net Requirements and Resources.

Option 1: Include if customer chooses a Flat Block:

1.2 Flat Block

Except for amounts specified in section 1.4 below, amounts of Firm Requirements Power priced at PF Tier 1 rates shall be equal in all hours of the year for the term of this Agreement. The megawatt amounts of such power for each Heavy Load Hour (HLH) and each Light Load Hour (LLH) shall equal the annual average megawatt amount established in section 1.1 above.

End Option 1

Option 2: Include if customer chooses a block shaped to their Monthly Net Requirement:

1.2 Block Shaped to Net Requirement

The amounts of Firm Requirements Power priced at PF Tier 1 rates for each month, and for each Heavy Load Hour (HLH) and each Light Load Hour (LLH) within each month, are established as follows:

1.2.1 Amounts Each Month

1.2.1.1 Determination of Monthly Distribution Factors

BPA shall use «Customer Name»'s Monthly Distribution Factors, to be listed below, to calculate the monthly amount of Firm Requirements Power priced at PF Tier 1 rates. BPA shall establish «Customer Name»'s Monthly Distribution Factors by applying the following formula for each month:

$$\left[\begin{array}{c} \text{Monthly} \\ \text{load in} \\ \text{MWh} \end{array} - \begin{array}{c} \text{Monthly} \\ \text{resources} \\ \text{in MWh} \end{array} \right] \div \left[\begin{array}{c} \text{Sum of the} \\ \text{monthly} \\ \text{loads in} \\ \text{MWh} \end{array} - \begin{array}{c} \text{Sum of the} \\ \text{monthly} \\ \text{resources} \\ \text{in MWh} \end{array} \right]$$

For this calculation:

“Load” means «Customer Name»'s measured FY 2010 Total Retail Load adjusted for use in determining «Customer Name»'s CHWM, pursuant to the TRM, and



“Resources” means «Customer Name»’s Existing Resources as defined in the TRM.

By September 15, 2011, BPA shall update the table below with «Customer Name»’s Monthly Distribution Factors. These Monthly Distribution Factors shall not change for the term of this Agreement.

Drafter’s Note: Leave table blank at contract signing:

Monthly Distribution Factors												
Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
												1.000

Note: Round the factors in the table above to three decimal places.

1.2.1.2 MWh Amounts

The megawatt-hours priced at PF Tier 1 rates each month shall equal:

$$\left[\begin{array}{l} \text{annual aMW} \\ \text{priced at PF} \\ \text{Tier 1 from} \\ \text{section 1.1} \end{array} \right] \times \left[\begin{array}{l} \text{total} \\ \text{number of} \\ \text{hours in} \\ \text{Fiscal} \\ \text{Year} \end{array} \right] \times \left[\begin{array}{l} \text{«Customer Name»’s} \\ \text{Monthly} \\ \text{Distribution Factor} \\ \text{from section 1.2.1.1} \\ \text{for each month} \end{array} \right]$$

Sub-Option 1: Include if customer chooses a flat block within each month:

1.2.2 Amounts Within Each Month

Except for amounts specified in section 1.4 below, amounts of Firm Requirements Power priced at PF Tier 1 rates within each month shall be the same for all hours of the month. The megawatt amount of such power for each HLH and each LLH is the total megawatt-hours in the month as established in section 1.2.1.2 above divided by the number of hours in the month.

End Sub-Option 1

Sub-Option 2: Include if customer chooses a block that is shaped to their Net Requirement up to 60% HLH within each month:

1.2.2 Amounts Within Each Month

1.2.2.1 Determination of Diurnal Distribution Factors

BPA shall use «Customer Name»’s Diurnal Distribution Factors, to be listed below, to calculate the amount of Firm Requirements Power priced at PF Tier 1 rates for each HLH and each LLH within each month. BPA shall establish «Customer Name»’s Diurnal Distribution Factors as follows:

The HLH Distribution Factor for each month shall equal the lesser of 0.6 or:



$$\left[\begin{array}{c} \text{Monthly} \\ \text{HLH} \\ \text{load in} \\ \text{MWh} \end{array} \right] - \left[\begin{array}{c} \text{Monthly} \\ \text{HLH} \\ \text{resources} \\ \text{in MWh} \end{array} \right] \div \left[\begin{array}{c} \text{Monthly} \\ \text{HLH and} \\ \text{LLH load} \\ \text{in MWh} \end{array} \right] - \left[\begin{array}{c} \text{Monthly} \\ \text{HLH and} \\ \text{LLH} \\ \text{resources} \\ \text{in MWh} \end{array} \right]$$

For this calculation:

“Load” means «Customer Name»’s measured FY 2010 Total Retail Load adjusted for use in determining «Customer Name»’s CHWM, pursuant to the TRM, and

“Resources” means «Customer Name»’s Existing Resources as defined in the TRM.

The LLH Distribution Factor for each month shall equal one minus that month’s HLH Distribution Factor. By September 15, 2011, BPA shall update the table below with «Customer Name»’s Diurnal Distribution Factors. These Diurnal Distribution Factors shall not change for the term of this Agreement.

Drafter’s Note: Leave table blank at contract signing:

Diurnal Distribution Factors												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
HLH												
LLH												
Total	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Note: Round the factors in the table above to three decimal places.

1.2.2.2 HLH and LLH Amounts

Except for amounts specified in section 1.4 below, the megawatt amount of Firm Requirements Power for each HLH of each month is:

$$\left[\begin{array}{c} \text{total MWh in} \\ \text{month from} \\ \text{section 1.2.1.2} \end{array} \right] \times \left[\begin{array}{c} \text{HLH Diurnal} \\ \text{Distribution Factor} \\ \text{for month from} \\ \text{section 1.2.2.1} \end{array} \right] \div \left[\begin{array}{c} \text{HLH in} \\ \text{month} \end{array} \right]$$

The megawatt amount of Firm Requirements Power for each LLH of each month is:

$$\left[\begin{array}{c} \text{total MWh in} \\ \text{month from} \\ \text{section 1.2.1.2} \end{array} \right] \times \left[\begin{array}{c} \text{LLH Diurnal} \\ \text{Distribution Factor} \\ \text{for month from} \\ \text{section 1.2.2.1} \end{array} \right] \div \left[\begin{array}{c} \text{LLH} \\ \text{in} \\ \text{month} \end{array} \right]$$

End Sub-Option 2



End Option 2 for Block shaped to Net Requirement

1.3 Current Tier 1 Block

By September 15, 2011, and by September 15 of each Fiscal Year thereafter, BPA shall update the table below with whole megawatt amounts of Firm Requirements Power priced at PF Tier 1 rates for the upcoming Fiscal Year as established according to sections 1.1 and 1.2 above.

Drafter's Note: Leave table blank at signing:

Tier 1 Monthly Block Amounts (MW/hr)													
Fiscal Year	Diurnal Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
2012	HLH												
	LLH												
2013	HLH												
	LLH												
2014	HLH												
	LLH												
2015	HLH												
	LLH												
2016	HLH												
	LLH												
2017	HLH												
	LLH												
2018	HLH												
	LLH												
2019	HLH												
	LLH												
2020	HLH												
	LLH												
2021	HLH												
	LLH												
2022	HLH												
	LLH												
2023	HLH												
	LLH												
2024	HLH												
	LLH												
2025	HLH												
	LLH												
2026	HLH												
	LLH												
2027	HLH												
	LLH												



Tier 1 Monthly Block Amounts (MW/hr)													
Fiscal Year	Diurnal Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
2028	HLH												
	LLH												

Note: Round the megawatt-per-hour amounts in the table above to whole megawatts-per-hour.

Option 1: Include if customer does not purchase Shaping Capacity:

1.4 Shaping Capacity

«Customer Name» is not purchasing any amount of Shaping Capacity.

End Option 1

Option 2: Include if customer is purchasing Shaping Capacity:

1.4 Shaping Capacity (05/27/08 Version)

1.4.1 Amounts

BPA shall establish amounts of Shaping Capacity for each month by applying the following formula for each month:

$$\left[\frac{\text{FY 2010 monthly peak in MW}}{\text{Monthly HLH load in MW} + \text{HLH in month during FY2010}} \right] \times \left[\text{FY 2012 HLH block amount from section 1.3} \right] - \left[\text{FY 2012 HLH block amount from section 1.3} \right]$$

For this calculation:

“Monthly HLH load” means the HLH load portion of «Customer Name»’s measured FY 2010 Total Retail Load adjusted for use in determining «Customer Name»’s CHWM, pursuant to the TRM, and

“FY 2010 monthly peak” means «Customer Name»’s FY 2010 customer system peak for the month.

By September 15, 2011, BPA shall update the table below with «Customer Name»’s amounts of Shaping Capacity in whole megawatts. These amounts shall not change for the term of this Agreement except as specified in section 1.4.3 below. «Customer Name» shall pay for the full amount of Shaping Capacity megawatts listed below whether or not «Customer Name» used such Shaping Capacity.

Drafter’s Note: Leave table blank at contract signing:

Monthly Shaping Capacity Amounts (MW)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
HLH												



Note: Round the megawatt amounts in the table above to whole megawatts.

1.4.2 Scheduling Shaping Capacity

- (1) «Customer Name» may preschedule for any HLH any amount that is greater than or less than the block amount listed above in section 1.3 within the Shaping Capacity amounts listed in section 1.4.1 above. For the HLH period each day, «Customer Name» shall preschedule an average megawatt amount equal to the HLH block megawatt amount stated in section 1.3 above.
- (2) When using Shaping Capacity, «Customer Name» shall preschedule according to Exhibit F, Scheduling.

1.4.3 Additional Provisions

- (1) BPA shall limit the amounts of Shaping Capacity megawatts listed in section 1.4.1 above for any month(s) where «Customer Name»'s monthly peaking Net Requirement listed in section 1.2 of Exhibit A, Net Requirements and Resources, is less than the sum of:
 - (A) «Customer Name»'s monthly HLH PF Tier 1 rate purchase amount listed in section 1.3 above,
 - (B) «Customer Name»'s monthly PF Tier 2 rate purchase amount established in section 2 below, and
 - (C) the monthly Shaping Capacity amounts listed in section 1.4.1 above.
- (2) If BPA determines that the Shaping Capacity amount for all customers purchasing Shaping Capacity exceeds 200 aMW in any month, BPA may unilaterally amend this exhibit to add limits for such months to the amounts that prescheduled megawatts can vary from one hour to the next.

End Option 2 for Shaping Capacity

2. FIRM REQUIREMENTS POWER AT PF TIER 2 (06/13/08 Version)

2.1 Notice to Purchase Zero Amounts at PF Tier 2 Rates

If «Customer Name» elects not to purchase Firm Requirements Power at PF Tier 2 rates for a Purchase Period as established in section 9 of the body of this Agreement, 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 PF Tier 2 rates, and (2) apply



its Dedicated Resources to serve all of «Customer Name»'s Above-RHWM Load.

Drafter's Note: Leave table blank at contract signing:

Zero PF Tier 2	Purchase Period
	FY 2012 - FY 2014
	FY 2015 - FY 2019
	FY 2020 - FY 2024
	FY 2025 - FY 2028
Indicate Election with an "X"	

2.2 PF Tier 2 Load-Growth Rate

«Customer Name» shall not have the right to purchase Firm Requirements Power at the Load-Growth Rate for the term of this Agreement.

2.3 PF Tier 2 Vintage Rate(s)

Reviewers Note: Shaded text is identical to Load Following (absent the first sentence)

2.3.1 If BPA makes Firm Requirements Power available at one or more PF Tier 2 Vintage Rates, «Customer Name» may purchase amounts of such power, subject to section 2.4.2 below, only if and up to the megawatt amount that «Customer Name» has purchased Firm Requirements Power from BPA at the PF Tier 2 Short-Term Rate. If «Customer Name» elects to purchase Firm Requirements Power from BPA at a PF Tier 2 Vintage Rate, «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 «Customer Name» shall purchase Firm Requirements Power at a specific rate, subject to section 2.3.2 below, based on the costs of a resource to be acquired by BPA as set in each general rate case. A signed Statement of Intent from «Customer Name» specifying the amount and term of the purchase is necessary before BPA will acquire any cost-effective resource on a long-term basis to serve load under a PF Tier 2 Vintage Rate.

2.3.2 If BPA establishes the PF Tier 2 Vintage Rate consistent with the Statement of Intent, «Customer Name» agrees to have the portion of its PF Tier 2 rate power purchase specified in the Statement of Intent, priced at that rate. If BPA is unable to establish the PF Tier 2 Vintage Rate, «Customer Name» agrees to purchase such amount of Firm Requirements Power at the PF Tier 2 Short-Term Rate.

2.3.3 If «Customer Name» purchases Firm Requirements Power at a PF Tier 2 Vintage Rate, BPA shall insert applicable tables, terms, and conditions for each Vintage rate here.



2.4 PF Tier 2 Short-Term Rate

2.4.1 Short-Term Rate Purchases

If «Customer Name» elects by a Notice Deadline to purchase Firm Requirements Power at the PF Tier 2 Short-Term Rate for a Purchase Period, 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 to show «Customer Name»'s purchase amounts, if any, at the PF Tier 2 Short-Term Rate for the corresponding Purchase Period.

Drafter's Note: Leave table blank at contract signing:

PF 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.					

2.4.2 Conversion to PF Tier 2 Vintage Rates

Reviewers Note: Shaded text is identical to Load Following text:

2.4.2.1 Right to Convert

Subject to the amounts of power available under PF Tier 2 Vintage Rates offered by BPA, «Customer Name» shall have the right to convert only those amounts of Firm Requirements Power it purchases at the PF Tier 2 Short-Term Rate to an equivalent purchase amount at a PF Tier 2 Vintage Rate.

2.4.2.2 Conversion Costs

Upon establishment of a Vintage Rate for which «Customer Name» signed a Statement of Intent, «Customer Name» shall be liable for payment of any outstanding costs under the PF Tier 2 Short-Term Rate that apply to «Customer Name». BPA shall determine such costs, if any, in the first general rate case that establishes the applicable PF Tier 2 Vintage Rate(s). In no event shall BPA make payment to «Customer Name» as a result of «Customer Name»'s conversion of



purchase amounts at the PF Short-Term Rate to purchase amounts at a PF Tier 2 Vintage Rate(s).

2.4.2.3 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 PF Tier 2 Vintage Rate purchase amounts and remove «Customer Name»'s PF Tier 2 Short-Term Rate purchases by the amounts purchased at the PF Tier 2 Vintage Rate.

Reviewer's Note: See "Timeline for HWMs & Above-RHWM Elections"

2.5 Amounts of Power to be Billed at Tier 2 Rates

Prior to each Fiscal Year BPA shall determine the amounts, if any, of Firm Requirements Power at PF 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 PF Tier 2 rate, (2) any remarketed PF Tier 2 rate purchase amounts, and (3) the total amount of Firm Requirements Power priced at PF Tier 2 rates, net of remarketed amounts.

Drafter's Note: Leave table blank at contract signing:

Annual Amounts Priced at PF 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, 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.									



2.6 **Flat Block**

Amounts of Firm Requirements Power priced at PF Tier 2 rates shall be equal in all hours of the year.

3. **MONTHLY PF RATES (04/06/08 Version)**

Applicable monthly PF Tier 1 and PF Tier 2 rates are specified in BPA rate schedules.

4. **REVISIONS (05/27/08 Version)**

BPA shall revise this exhibit to reflect Customer Name's elections regarding service to its Above-RHWM Load and BPA's determinations under this Agreement.

(PS«X/LOC»- «File Name with Path».DOC) «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 (05/25/08 Version)

Option 1: Include the following if customer has no CF/CT loads.

1.1 CF/CT Loads

«Customer Name» has no loads 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 1: Include the following if customer has no POTENTIAL NLSLs.

1.2 Potential NLSLs

«Customer Name» has no 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:

Potential load size:

Date load anticipated:

Description of potential NLSL:

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 NLSLs

«Customer Name» has an NLSL and agrees to serve the NLSL with a firm resource that is not already dedicated to serve its other firm end-use consumer loads. The Parties shall list such Dedicated Resources in Exhibit A, Net Requirements and Resources. The Parties shall administer service to the following NLSL consistent with section 24.3 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 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 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 2.3.1 above.

End Option 2

2. RESOURCE SUPPORT SERVICES (06/16/08 Version)

BPA shall develop the RSS products to support applicable Specified Resources listed in section 2 of Exhibit A for the FY 2012-2014 Purchase Period and offer such as a revision to this exhibit by August 1, 2009. 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. If «Customer Name» requests that BPA provide such service, the Parties shall execute a revision to this exhibit by the November 1, 2009 Notice Deadline.

By each Notice Deadline thereafter, «Customer Name» may purchase RSS from BPA to support applicable Specified Resources listed in section 2 of Exhibit A for the corresponding Purchase Period. If «Customer Name» dedicates a new Specified Resource to its Total Retail Load to meet its obligations to serve Above-RHWM Load with Dedicated Resource amounts, consistent with section 2 of Exhibit C, «Customer Name» may purchase RSS from BPA to support such resource. Such purchase shall be for the remainder of the Purchase Period and for the following Purchase Period. «Customer Name» shall notify BPA of its decision to purchase RSS for a new Specified Resource prior to October 31 of a Rate Case Year and the elected RSS will be effective at the start of the next Rate Period.



Option: Include the following for customers who are eligible to receive irrigation rate mitigation; delete this section if not applicable.

3. IRRIGATION RATE MITIGATION (05/15/08 Version)

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 PF Tier 1 amount purchased in the month or the energy amount in the table below:

Irrigation Amounts (kWh)					
	May	Jun	Jul	Aug	Sept
HLH Energy	000,000,000	000,000,000	000,000,000	000,000,000	000,000,000
LLH Energy	000,000,000	000,000,000	000,000,000	000,000,000	000,000,000

Total Irrigation Amount (kWh): _____

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 (kWh) 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 19.1.2 of the body of this Agreement.

End IRM Option

#. «PLACEHOLDER FOR SPECIAL PROVISIONS» (06/17/08 Version)

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.

#. REVISIONS (09/04/07 Version)

This exhibit shall be revised by mutual agreement of the Parties to reflect additional products «Customer Name» purchases during the term of this Agreement.

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



Option 2: for Customers who operate their own Balancing Authority Areas.

Exhibit E
METERING (06/11/08 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 and assist both Parties in administration of this Agreement. This information will also help BPA review its forecasting assumptions.

Drafter's Note: If there is only one Point of Interchange, remove the numbering "(a)" from this section, move indent appropriately to line up, and renumber the metering to start with "1.1".

1.1 Name of Interchange Point: «NAME» INTERCHANGE

Owner: «Owner»;

Metering:

Drafter's Note: List all meters for this Interchange Point. If there is only one meter, remove the numbering "(A)" from this section and move indent appropriately to line up.

- (1) in «Owner's Name»'s «Substation Name» Substation in the «##» kV circuit«s» over which such electric power flows.
- (2) in «Owner's Name»'s «Substation Name» Substation in the «##» kV circuit«s» over which such electric power flows.

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».DOC) «mm/dd/yy» *{Drafter's Note: Insert date of finalized contract here}*
End option 2 for Customers who operate their own Balancing Authority Areas.



EXHIBIT F
SCHEDULING (4/25/08 version)

1. SCHEDULING FEDERAL RESOURCES

«Customer Name» is responsible for creating E-Tags for all deliveries of federal power purchased under this Agreement.

Option: Include if customer is purchasing Shaping Capacity:

«Customer Name» shall submit its hourly megawatt schedule to Power Services by 1100 hours Pacific Prevailing Time (PPT) as follows:

Day Before Preschedule:		
Friday	For	Tuesday
Monday	For	Wednesday
Tuesday	For	Thursday
Wednesday	For	Friday, Saturday
Thursday	For	Sunday, Monday

For non-standard scheduling days specified by WECC (e.g. holidays), «Customer Name» shall preschedule at least 24 hours earlier than as specified by WECC. «Customer Name» shall not have the right to change planned amounts of Firm Requirements Power on a shorter timeline than as stated above.

With written notice, BPA may require «Customer Name», when using Shaping Capacity, to submit its hourly megawatt schedule to Power Services by 0900 hours PPT instead of 1100 hours PPT.

End Option

2. AFTER THE FACT

BPA 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). BPA and «Customer Name» will verify all transactions per this Agreement, as to product or type of service, hourly amounts, daily and monthly totals, and related charges

3. REVISIONS

BPA may unilaterally revise this exhibit: (1) to implement changes that are applicable to all customers who are subject to this exhibit and that BPA determines are reasonably necessary to meet its power and scheduling obligations under this Agreement or (2) to comply with requirements of the WECC, NAESB, or NERC, or their successors or assigns.

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.



Option 1: Include the following for non-Transfer Service customers.

Exhibit G (05/25/08 Version)

THIS EXHIBIT INTENTIONALLY LEFT BLANK

(PS«X/LOC»- «File Name with Path».DOC) «mm/dd/yy» *{Drafter's Note: Insert date of finalized contract here}*
End Option 1



Exhibit H (06/17/08 Version)
RENEWABLE ENERGY CERTIFICATES AND CARBON ATTRIBUTES

1. DEFINITIONS

- 1.1 “Environmental Attribute(s)” (04/04/08 Version) means the current or future credits, benefits, emission reductions, offsets and allowances attributable to the generation of energy from a specific renewable resources. One megawatt hour of energy generation from such renewable resource is associated with 1 megawatt hour of Environmental Attributes.
- 1.2 “Renewable Energy Certificates” or “RECs” (03/20/08 Version) means the certificates that document the ownership of Environmental Attributes.
- 1.3 “Tier 1 RECs” (04/04/08 Version) means the Environmental Attributes composed of a blend, by fuel source, based on annual generation of the specified renewable resources listed in section 2 below.
- 1.4 “Tier 2 Cost Pools” (06/16/08 Version) means the collection of Tier 2 costs, to be recovered by means of the application of Tier 2 Rates, or as defined in the TRM. Each Tier 2 Rate will be based on a corresponding Tier 2 Cost Pool.
- 1.5 “Tier 2 RECs” (03/27/08 Version) means the Environmental Attributes generated by specified renewable resources whose costs are recovered in a Tier 2 Cost Pool.
- 1.6 “Environmentally Preferred Power RECS” or “EPP RECs” (04/01/08 Version) means the portion of BPA’s Tier 1 RECs that is equal to an amount up to 130 percent of the annual average of 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.

2. BPA’S TIER 1 REC INVENTORY

BPA shall use its share of generation from the following renewable resources to establish the Tier 1 REC inventory: Foote Creek I, Foote Creek II, Stateline, Condon, Klondike I, Klondike III, and Ashland Solar. BPA shall maintain a current list of renewable resources BPA uses to establish its Tier 1 REC inventory on a publicly accessible BPA website. BPA may update this list at any time. BPA shall calculate its inventory of Tier 1 RECs annually and after-the-fact based on energy generated by listed resources during the previous calendar year.

3. «CUSTOMER NAME»’S SHARE OF TIER 1 RECS (05/14/08 Version)

Beginning April 15, 2012, and by April 15 every year thereafter over the duration of this Agreement, BPA shall:

- (1) transfer to «Customer Name», or manage in accordance with section 5 below, at no additional charge or premium, a pro rata share of Tier 1 RECs based on



«Customer Name»'s RHEM divided by the total RHEMs of all holders of
CHWM Contracts; and,

- (2) for transferred RECs, provide «Customer Name» with a letter assigning title of such Tier 1 RECs to «Customer Name».

The amount of Tier 1 RECs available to BPA to transfer or manage shall be subject to the amount of available Tier 1 REC inventory, excluding amounts of Tier 1 REC inventory used to provide EPP RECs.

4. TIER 2 RECS (06/16/08 Version)

If «Customer Name» chooses to purchase Firm Requirements Power at a PF Tier 2 Rate, and such power includes RECs, then beginning April 15, 2012 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 below, transfer to or manage for «Customer Name», a pro rata share of applicable Tier 2 RECs generated during the previous calendar year. The pro rata share of Tier 2 RECs BPA transfers to «Customer Name» shall be the ratio of RECs associated with «Customer Name»'s PF Tier 2 purchase obligation to the RECs associated with the purchase obligation of all other customers from the respective Tier 2 Cost Pool.

5. TRANSFER, TRACKING, AND MANAGEMENT OF RECS (06/16/08 Version)

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 Tier 1 RECs, and Tier 2 RECs if applicable, to «Customer Name» via WREGIS. If, over the term of this Agreement, BPA determines 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 RECs.

Starting on July 15, 2011, and by July 15 prior to each Rate Period through the duration 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 Tier 1 RECs, and Tier 2 RECs if applicable, for each upcoming Rate Period:

- (1) BPA shall transfer «Customer Name»'s RECs into «Customer Name»'s own WREGIS account, which shall be established by «Customer Name»; or
- (2) BPA shall transfer «Customer Name»'s 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 RECs on «Customer Name»'s behalf. BPA shall annually credit



«Customer Name» for «Customer Name»'s pro rata share of revenues generated by such sales 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, BPA shall market «Customer Name»'s RECs and annually credit «Customer Name» for «Customer Name»'s pro rata share of revenues generated by such marketing on «Customer Name»'s April bill issued by BPA in May.

Any 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 (06/16/08 Version)

BPA shall pay any reasonable fees associated with (1) the provision of «Customer Name»'s RECs and (2) the establishment of any subaccounts in «Customer Name»'s name pursuant to sections 5(1) and 5(2) above. «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 ATTRIBUTES (06/17/08 Version)

In the absence of carbon regulations or legislation directly affecting BPA, BPA intends to convey the value of any future carbon emission credits, or similar carbon instruments, associated with resources whose costs are recovered in PF Tier 1 or PF Tier 2 rates to «Customer Name» on a pro rata basis. This value may be conveyed as: (1) the carbon emission credit, or similar carbon instrument, itself; (2) a revenue credit after BPA markets such carbon emission credits, or similar carbon instruments; or, (3) the ability to claim that power purchases at the applicable PF rate are derived from specific federal resources.

The value of carbon emission credits, or similar carbon instruments, associated with resources whose costs are recovered in a Tier 1 rate will be shared on a pro rata basis among all holders of CHWM Contracts. The value of carbon emission credits, or similar carbon instruments, associated with resources whose costs are recovered in a PF Tier 2 rate will be shared on a pro rata basis among customers within the same respective Tier 2 Cost Pool.

8. BPA'S RIGHT TO TERMINATE «CUSTOMER NAME»'S RECS (05/29/08 Version)

Consistent with any federal regulation or legislation addressing carbon emission credits, or similar carbon instruments, or any form of renewable energy attribute(s) applicable to BPA which includes compliance costs, BPA may, upon 5 years' notice to «Customer Name», terminate «Customer Name»'s contract rights to Tier 1 RECs under section 3 above.

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



Attachment 2

SLICE/BLOCK REGIONAL DIALOGUE CONTRACT TEMPLATE

This template shows the similarities and differences between individual templates. It contains the clauses that are either identical or nearly identical for all templates (Load Following, Block, Slice/Block, RPSA, and NR Block). It does NOT contain clauses that are unique to the following templates: Slice/Block, RPSA, and NR Block. It does not identify all differences and should be used only as a general guide.

1. Black non-italicized text indicates draft contract language.
2. *All text in italics will be deleted* before the contracts are finalized.
 - (a) *Pink italicized text indicates notes to BPA AEs and contract staff who will tailor the template for each particular customer within the limits stated. Pink text will be deleted after August 1 when the template is converted to a contract for each particular customer.*
 - (b) *Blue italicized text indicates notes to the reviewers (customers and others.) This blue text will be deleted after the draft template is finalized on August 1.*
 - (c) Red text indicates where a drafter must 'fill-in-the-blank.' Red text will be converted to black text and will become part of the final contract.
3. *Grey shaded text is used to help reviewers of the template understand how different versions of a particular clause are either the same or different, and is most often used to help reviewers understand subtle variations between the Load Following, Block and Slice/Block templates. The shading will be deleted when the templates are finalized*



Reviewer's Note: This version of the Slice/Block template represents a work in progress and an update to the template published on April 14, 2008. Sections which are common with the Load Following template have not been kept up to date with all changes from discussions regarding the Load Following template or the TRM. As such, reviewers are advised to focus on the Slice specific sections only.

POWER SALES AGREEMENT
executed by the
BONNEVILLE POWER ADMINISTRATION
and
«FULL NAME OF CUSTOMER»

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- Exhibit A Net Requirements and Resources
- Exhibit B High Water Marks and Contract Demand Quantities
- Exhibit C Purchase Obligations
- Exhibit D Additional Products and Special Provisions
- Exhibit E Metering

Drafter's Note: Choose title of Exhibit F to reflect scheduling option

Exhibit F «Transmission Scheduling Service or Scheduling»

Option 1: Include for customer served by Transfer Service

Exhibit G Principles of Non-Federal Transfer Service

END Option 1

Option 2: Include for Non-transfer service customers

Exhibit G This Exhibit Intentionally Left Blank

END Option 2

Exhibit H Renewable Energy Certificates and Carbon Attributes

Include in SLICE/BLOCK templates:

- Exhibit I Critical Slice Amounts
- Exhibit J Preliminary Slice Percentage, Initial Slice Percentage, and Slice Percentage
- Exhibit K Adjustments to Slice Percentage
- Exhibit L Slice System Resources
- Exhibit M Slice Computer Application
- Exhibit N Slice Implementation Procedures
- Exhibit O Interim Slice Operating Procedures
- Exhibit P SCA Development Schedule



Exhibit Q Determination of Initial Slice Percentage

END SLICE/BLOCK templates.

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, mutual association tribal utility, 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 (06/05/08 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 Pacific Northwest Electric Power Planning and Conservation Act, P.L. 96-501 of 1980 (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 rates 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 maintain the benefits of the federal system in the future and encourage BPA customers to develop 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. (See Customer Characteristic Spreadsheet or Janet Rickman)

1. TERM (06/30/08 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:

- (1) section 3, Power Purchase Obligation;
- (2) section 9, Elections to Purchase Power Priced at PF Tier 1 Rates;
- (3) section 17, Information Exchange and Confidentiality;
- (4) section 18, Conservation and Renewables;
- (5) section 19, Resource Adequacy;
- (6) section 22, Governing Law and Dispute Resolution;
- (7) section 26, Termination;
- (8) Exhibit A, Net Requirements and Resources;
- (9) Exhibit B, High Water Marks and Contract Demand Quantities; and,
- (10) Exhibit C, Purchase Obligations.

Section 22, Governing Law and Dispute Resolution will only apply to the extent there is a dispute regarding actions required after the Effective Date in the above referenced sections and exhibits.

END Option 1

2. DEFINITIONS (06/05/08 Version)

Capitalized terms below shall have the meaning stated. Capitalized terms that are not listed below are either defined within the section 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).

2.1 "Above-RHWM Load" (06/11/08 Version) means forecasted annual Total Retail Load that is above «Customer Name»'s RHWM.

2.2 "Annexed Load" (05/15/08 Version) means existing load and distribution system, and/or service territory «Customer Name» acquires from another utility, by means of annexation, merger, purchase or trade, and authorized by a final state, regulatory or court action, for which «Customer Name» has the right, or has obtained an ownership interest in the facilities necessary, to serve the load.



- 2.3 “Balancing Authority” (06/10/08 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.
- 2.4 “Balancing Authority Area” (06/10/08 Version) means the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.
- 2.5 “Business Day(s)” (05/13/08 Version) means every Monday through Friday except federal holidays.
- 2.6 “Consumer-Owned Resource” (06/16/08 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, and is operated or applied to load on a sustained basis rather than operated occasionally or intermittently as a back-up energy source at times of maintenance or forced outage.
- 2.7 “Contract Demand Quantities” or “CDQ” (06/11/08 Version) shall have the meaning as defined in section 6.6.1.
- 2.8 “Contract High Water Mark” or “CHWM” (06/11/08 Version) shall have the meaning as defined in section 6.6.1.
- 2.9 “Contract High Water Mark Contract” or “CHWM Contract” (05/15/08 Version) means a Regional Dialogue Contract that contains a CHWM, allowing the customer to purchase power at tiered rates, or as defined in the TRM.
- 2.10 “Contract Resources” (07/02/08 Version) means any sources or amounts of electric power that «Customer Name» acquires from identified or unidentified electricity-producing units by contract purchase from an electricity supplier, and for which the amounts received by «Customer Name» do not depend on the same actual production from an identified Generating Resource.
- 2.11 “Diurnal” (07/01/08 Version) means the distribution of hours of months between Heavy Load Hours (HLH) and Light Load Hours (LLH). HLH and LLH are as defined by the North American Electric Reliability Corporation (NERC) and are subject to change by the NERC.
- 2.12 “Dedicated Resource(s)” (05/28/08 Version) means those Specified Resources and Unspecified Resource Amounts that «Customer Name» obligates itself to provide or is required by statute to provide under this Agreement for use to serve its Total Retail Load.

- 2.13 “Diurnal Flattening Service” or “DFS” (06/16/08 Version) means the service that converts the hour to hour output from a resource into a shape that is flat within each of the 24 HLH and LLH periods of a year.
- 2.14 “Due Date” (05/25/08 Version) shall have the meaning as described in section 16.2 of this Agreement.
- 2.15 “Effective Date” (06/05/08 Version) means the date on which this Agreement has been signed by «Customer Name» and BPA.
- 2.16 “Environmental Attribute(s)” (04/04/08 Version) shall have the meaning as defined in Exhibit H, Renewable Energy Certificates and Carbon Attributes.
- 2.17 “Environmentally Preferred Power RECS” or “EPP RECs” (04/01/08 Version) shall have the meaning as defined in Exhibit H, Renewable Energy Certificates and Carbon Attributes.
- 2.18 “Existing Resources” (05/27/08 Version) means those Specified Resources listed in section 2 of Exhibit A that were dedicated to «Customer Name»’s Total Retail Load prior to October 1, 2006.
- 2.19 “Firm Requirements Power” (06/05/08 Version) means federal power that BPA sells under this Agreement and makes continuously available to «Customer Name» under this Agreement, except for an Uncontrollable Force, to meet BPA’s obligations to «Customer Name» under section 5(b) of the Northwest Power Act.
- 2.20 “Fiscal Year” or “FY” (02/28/08 Version) means the period beginning each October 1 and ending the following September 30.
- 2.21 “Forced Outage Reserve Service” or “FORS” (06/30/08 Version) means the service that provides an agreed-to amount of capacity and energy to load during the forced outages of a resource, transmission line, or other asset.
- 2.22 “Forecast Year” (05/27/08 Version) means the Fiscal Year ending one full year prior to the commencement of a Rate Period.
- 2.23 “Generating Resources” (05/28/08 Version) means any sources or amounts of electric power from identified electricity-producing units, and for which the amounts of power received by «Customer Name» or «Customer Name»’s retail consumer are determined by the actual power production from such identified electricity-producing units. Such units may be owned by «Customer Name» or «Customer Name»’s retail consumer in whole or in part, or the output from such units may be owned for a defined period by contract.
- 2.24 “Integrated Network Segment” (05/29/08 Version) shall have the meaning as defined in section 14.1.



- 2.25 “Interchange Points” (04/01/08 Version) means the points where Balancing Authority Areas interconnect, and at which the interchange of energy between Balancing Authority Areas is monitored and measured.
- 2.26 “Net Requirement” (05/15/08 Version) means the amount of federal power that a customer is entitled to purchase from BPA to serve its Total Retail Load minus its Dedicated Resource amounts as shown in Exhibit A, Net Requirements and Resources, consistent with section 5(b)(1) of the Northwest Power Act.
- 2.27 “Network Integration Transmission Service” (05/29/08 Version) shall have the meaning as defined in section 14.1.
- 2.28 “Network Resource” (05/29/08 Version) shall have the meaning as defined in section 14.1.
- 2.29 “New Large Single Load” or “NLSL” (06/05/08 Version) has the meaning specified in section 3(13) of the Northwest Power Act and in BPA’s NLSL policy.
- 2.30 “New Resources” (05/27/08 Version) means those Specified Resources listed in section 2 of Exhibit A that were or are dedicated to «Customer Name»’s Total Retail Load after September 30, 2006, and any Unspecified Resource Amounts listed in section 3.1 of Exhibit A.
- 2.31 “Notice Deadlines” (05/27/08 Version) are as established in section 9.1.1 of the body of this Agreement.
- 2.32 “Onsite Consumer Load” (06/30/08 Version) means retail consumer electric loads of «Customer Name» that are electrically interconnected directly with a Consumer-Owned Resource, that are entirely within «Customer Name»’s service territory or on an integrated portion of «Customer Name»’s distribution system, that consume energy generated by such Consumer-Owned Resource, and that require no schedule of power from such Consumer-Owned Resource.
- 2.33 “Operating Year” (03/27/08 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.
- 2.34 “Point of Delivery” or “POD” (05/15/08 Version) means the point where power is transferred from a transmission provider to «Customer Name».
- 2.35 “Point of Metering” or “POM” (05/15/08 Version) means the point at which power is measured.

- 2.36 “Power Services” (09/04/07 Version) means the organization, or its successor organization, within BPA that is responsible for the management and sale of federal power from the Federal Columbia River Power System.
- 2.37 “Primary Points of Receipt” (05/29/08 Version) shall have the meaning as defined in section 14.1.
- 2.38 “Purchase Periods” (05/27/08 Version) are as established in section 9.1.1 of the body of this Agreement.
- 2.39 “Rate Case Year” (05/27/08 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 general rate case is conducted.
- 2.40 “Rate Period” (05/13/08 Version) means the effective period of a particular rate schedule, generally two years; the period over which a rate is designed to recover costs allocated to it.
- 2.41 “Rate Period High Water Mark” or “RHWM” (06/11/08 Version) shall have the meaning as defined in section 6.6.1.
- 2.42 “Region” (09/04/07 Version) means the Pacific Northwest as defined in the Northwest Power Act.
- 2.43 “Renewable Energy Certificates” or “RECs” (05/29/08 Version) shall have the meaning as defined in Exhibit H, Renewable Energy Certificates and Carbon Attributes.
- 2.44 “Resource Supports Services” or “RSS” (06/30/08 Version) means the Diurnal Flattening Service, Forced Outage Reserve Service, and any other related service BPA provides to support resources that are renewable resources and are dedicated to load after September 30, 2006.
- 2.45 “Scheduling Points of Receipt” (05/29/08 Version) shall have the meaning as defined in section 14.1.
- 2.46 “Specified Resources” (06/30/08 Version) means Generating Resources or Contract Resources that have nameplate capabilities or maximum hourly purchase amounts greater than 200 kilowatts, that «Customer Name» has named and that «Customer Name» is required by statute or agrees to dedicate to serve its Total Retail Load. Such resources are identified as specific non-federal resources or as specific contracts with identified parties.
- 2.47 “Statement of Intent” (05/27/08 Version) shall have the meaning as defined in section 2.3 of Exhibit C, Purchase Obligations.



- 2.48 “Surplus Firm Power” (02/28/08 Version) means firm power that is in excess of BPA’s obligations under sections 5(b), 5(c), and 5(d) of the Northwest Power Act, as available.
- 2.49 “Third Party Transmission Provider” (03/17/08 Version) means a transmission provider other than BPA that delivers power to «Customer Name».
- 2.50 “Tier 1 RECs” (05/29/08 Version) shall have the meaning as defined in Exhibit H, Renewable Energy Certificates and Carbon Attributes.
- 2.51 “Tier 2 RECs” (05/29/08 Version) shall have the meaning as defined in Exhibit H, Renewable Energy Certificates and Carbon Attributes.
- 2.52 “Tier 2 Cost Pool” (06/16/08 Version) shall have the meaning as defined in Exhibit H, Renewable Energy Certificates and Carbon Attributes.
- 2.53 “Total Retail Load” (06/05/08 Version) means all retail electric power consumption, including electric system losses, within «Customer Name»’s electrical system excluding:
- (1) nonfirm or interruptible loads agreed to by the Parties,
 - (2) transfer loads of other utilities served by «Customer Name», and
 - (3) any loads not on «Customer Name»’s electrical system that are not specifically agreed to by BPA.
- 2.54 “Transfer Service” (03/17/08 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.
- 2.55 “Transmission Services” (09/04/07 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.
- 2.56 “Uncontrollable Force” (05/25/08 Version) shall have the meaning as defined in section 21.1.
- 2.57 “Unspecified Resource Amounts” (03/21/08 Version) means an amount of firm power «Customer Name» has agreed to supply and dedicate to serve its Total Retail Load and which is not attributed to a particular Generating Resource or Contract Resource.

Include in SLICE/BLOCK templates:

Reviewer’s Note: The definitions below apply to the Slice/Block product only and will be combined with the definitions above, which are common among

Slice/Block, Block and Load Following agreements. Definitions included in Slice/Block Exhibit O have been intentionally omitted from the list below.

- 2.x “Absolute Operating Constraint” is as defined in section 2 of Exhibit M.
- 2.x “Actual Energy Slice Output” or “AESO” means the amount of «Customer Name»’s Slice Output scheduled and delivered at the Point of Delivery during a given period of time.
- 2.x “Actual Slice System Generation” or “ASSG” is as defined in section 2 of Exhibit M.
- 2.x “Additional Augmentation” (07/16/08 version) means augmentation that is included in the Tier 1 System Resources for use in meeting DOE Richland or new public customer load, as described in the TRM.
- 2.x “Additional CHWM Amount” is as defined in section 1.1 of Exhibit K
- 2.x “Additional Energy” is as defined in section 5.10.1 of this Agreement.
- 2.x “Algorithm Tuning Parameters” is as defined in section 2 of Exhibit M.
- 2.x “Augmentation” (07/16/08 version) means augmentation that is included in the Tier 1 System Resources for use in meeting existing public customer load, as described in the TRM.
- 2.x “Average Megawatts” or “aMW” 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.x “Balance of Slice System Complex” or “BOSS Complex” means the Slice System generating resources that are not included in the Coulee-Chief Complex or Lower Columbia Complex.
- 2.x “Base Critical Inventory Amount” means a Critical Inventory Amount that is deemed equal to 7,400 aMW and is used to calculate Initial Slice Percentages, and Slice Percentage Adjustment Factors.
- 2.x “Base Critical Slice Amount” is as defined in section 1 of Exhibit Q.
- 2.x “Base Slice Percentage” is as defined in section 1 of Exhibit Q.
- 2.x “Block Product” means BPA’s power product sold to «Customer Name» on terms described in section 4 of this Agreement.
- 2.x “BOSS Base” is as defined in section 2 of Exhibit M.
- 2.x “BOSS Deviation Account” is as defined in section 2 of Exhibit M.



- 2.x “BOSS Deviation Return” is as defined in section 2 of Exhibit M.
- 2.x “BOSS Flex” is as defined in section 2 of Exhibit M.
- 2.x “BOSS Module” means the Slice Computer Application module used to determine each Slice purchaser’s available Slice Output and Delivery Limits associated with the BOSS Complex.
- 2.x “Business Day(s)” means every Monday through Friday except Federal Holidays.
- 2.x “Bypass Spill” is as defined in section 2 of Exhibit M.
- 2.x “Calibrated Simulator Discharge” is as defined in section 2 of Exhibit M.
- 2.x “CGS Displacement” is as defined in section 5.10.1 of this Agreement.
- 2.x “Coulee-Chief Complex” means the two hydroelectric projects located in the middle reach of the Columbia River, consisting of Grand Coulee and Chief Joseph.
- 2.x “Creditworthiness Agreement” means Contract No. 09PB-XXXXX between BPA and «Customer Name».
- 2.x “Critical Inventory Amount” means, for each Fiscal Year, BPA’s forecast of the firm energy to be produced by the Slice System resources based upon Critical Water Conditions, as adjusted for transmission losses, and System Obligations.
- 2.x “Critical Slice Amount” means the forecasted amount of Slice Output that «Customer Name» is expected to receive for service to its Net Requirement assuming the recurrence of Critical Water Conditions, and is equal to the product of «Customer Name»’s Slice Percentage and the Critical Inventory Amount.
- 2.x “Critical Water Conditions” means the historical stream flows on the Columbia River and its tributaries that BPA uses to make determinations of the following: the firm energy capability of the FCRPS, the Tier 1 System Resources, and the Rate Period High Water Marks (RHWM).
- 2.x “Customer Inputs” is as defined in section 2 of Exhibit M.
- 2.x “Default User Interface,” or “DUI,” is as defined in section 5.12.1 of this Agreement.
- 2.x “Delivery Limits” means the limits that govern the availability and scheduling of Slice Output by «Customer Name» as determined by the Slice Computer Application.

- 2.x “Delivery Request” is as defined in section 2 of Exhibit M.
- 2.x “Election Year”. is as defined in section 5.10.1 of this Agreement.
- 2.x “Elective Spill” is as defined in section 2 of Exhibit M.
- 2.x “Federal Operating Decisions” (*07/16/08 version*) means decisions made by the Corps, Reclamation, BPA, or the United States Entity of the Columbia River Treaty that establish for any period the permissible range of operations for any project or projects that are part of the FCRPS, and which are necessary to meet the multipurpose uses of the FCRPS in accordance with the Federal entities’ authority.
- 2.x “FERC” means the Federal Energy Regulatory Commission, or its successor.
- 2.x “Fish Spill” is as defined in section 2 of Exhibit M.
- 2.x “Forced Spill” is as defined in section 2 of Exhibit M.
- 2.x “Generation Benchmark” is as defined in section 5.10.1 of this Agreement.
- 2.x “H/K” is as defined in section 2 of Exhibit M.
- 2.x “Hard Operating Constraint” is as defined in section 2 of Exhibit M.
- 2.x “Hydraulic Link Adjustment” is as defined in section 2 of Exhibit M.
- 2.x “Incremental Cost” is as defined in section 5.10.1 of this Agreement.
- 2.x “Initial Slice Percentage” means the initial Slice Percentage that «Customer Name» states is will purchase from BPA at the time it signs this Agreement, as determined pursuant to Exhibit J, Initial Slice Percentage.
- 2.x “Interim Critical Slice Amount” is as defined in section 1.1 of Exhibit K
- 2.x “Interim Firm Power at Tier 1 Rates” is as defined in section 1.1 of Exhibit K
- 2.x “Interim Slice Implementation Procedures” is as defined in section 5.12.1 of this Agreement.
- 2.x “Logic Control Parameters” is as defined in section 2 of Exhibit M.
- 2.x “Lower Columbia Complex” or “LCOL Complex” means the four hydroelectric projects located on the lower reach of the Columbia River, consisting of McNary, John Day, The Dalles, and Bonneville.



- 2.x “Lower Snake Complex” or “LSN Complex” is as defined in section 2 of Exhibit M.
- 2.x “Majority” is as defined in section 5.14.1 of this Agreement.
- 2.x “Maximum Critical Slice Amount” is as defined in section 1 of Exhibit Q.
- 2.x “Megawatt-day” or “MWd” is as defined in section 2 of Exhibit M.
- 2.x “Multiyear Hydroregulation Study” is as defined in section 2 of Exhibit M.
- 2.x “Net Generation” is as defined in section 2 of Exhibit M.
- 2.x “Obligations to Balancing Authority” means the obligations, if any, of PS to provide to the Balancing Authority generation inputs that are required by the Balancing Authority to reliably operate the transmission facilities of the FCRPS. These generation inputs may include, but shall not be limited to, the energy and/or capacity utilized or reserved to provide spinning and non-spinning reserves, reactive power and voltage control, regulation and frequency response, remedial action schemes, substation service and energy imbalance.
- 2.x “Operating Constraints” (*07/16/08 version*) means operating limits, project operating requirements, and non-power constraints that are the result of implementing Federal Operating Decisions and Prudent Operating Decisions (either on a planning basis or in real-time).
- 2.x “Operating Plan” is as defined in section 5.10.1 of this Agreement.
- 2.x “Operating Rule Curves” or “ORC” is as defined in section 2 of Exhibit M.
- 2.x “Peak Net Requirement” (*07/16/08 version*) means [to be completed].
- 2.x “Power Services Slice Scheduler” or “PS Slice Scheduler” is as defined in section 2 of Exhibit M.
- 2.x “Preference Act” means the act of August 31, 1964, P.L. 88-552, 16 U.S.C. §837-837h, as amended.
- 2.x “Project Storage Bounds” or “PSB” is as defined in section 2 of Exhibit M.
- 2.x “Project(s)” is as defined in section 2 of Exhibit M.
- 2.x “Prudent Operating Decision” (*07/16/08 version*) means a decision that establishes a limitation on the permissible operating range of any FCRPS project (or projects) applicable to BPA and which affects the amount of power available to «Customer Name» and other Slice/Block customers for a finite period of time. Prudent Operating Decisions are made by BPA PS operations staff who, in their exercise of reasonable judgment, determine such

limitations are necessary for maintaining reliable service to BPA's total requirements load obligation [needs further consideration] and meeting the authorized multipurpose uses of the FCRPS.

- 2.x "Requirements Power Products" means those firm power products that BPA offers to serve the Net Requirement of public agency utilities, cooperative utilities, and other qualified entities under section 5(b)(1) of the Northwest Power Act.
- 2.x "Requirements Slice Output" means in each month the portion of Slice Output energy that is equal to the lesser of: (1) the Critical Slice Amount, as calculated in Exhibit I, Critical Slice Amounts; (2) the forecasted Net Requirement determined pursuant to Exhibit A, less the T1BP and T2BP amounts specified in Exhibit C; or (3) the actual Net Requirement in such month less the T1BP and T2BP amounts specified in Exhibit C.
- 2.x "SCA Development Schedule" is as defined in section 5.13.1 of this Agreement.
- 2.x "SCA Functionality Test" is as defined in section 5.12.1 of this Agreement.
- 2.x "SCA Implementation Date" is as defined in section 5.12.1 of this Agreement.
- 2.x "SCA Pass Date" is as defined in section 5.12.1 of this Agreement.
- 2.x "Selected Critical Slice Amount" is as defined in section 1 of Exhibit Q.
- 2.x "Simulated Output Energy Schedule(s)" is as defined in section 2 of Exhibit M.
- 2.x "Simulator Parameters" is as defined in section 2 of Exhibit M.
- 2.x "Simulator Pass Date" is as defined in section 5.12.1 of this Agreement..
- 2.x "Simulator Project(s)" 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.x "Slice Computer Application" means the BPA proprietary computer hardware, software and related processes developed and maintained by BPA for the purposes of (i) determining each Slice purchaser's available Slice Output and Delivery Limits (ii) maintaining Slice accounting, and (iii) implementing electronic scheduling, tagging and communications, all as described in Exhibit M, Slice Computer Application, and Exhibit N, Slice Implementation Procedures.
- 2.x "Slice Implementation Group" or "SIG" means the group that includes representatives from BPA, «Customer Name», and all other customers that



have executed a Slice/Block Power Sales Agreement, which meets to discuss implementation of the Slice Product as described in section 5.14 of this Agreement.

- 2.x “Slice Output” means the amount of energy «Customer Name» is entitled to purchase under the provisions of the Slice Product, including Requirements Slice Output and Surplus Slice Output.
- 2.x “Slice Parties” is as defined in section 1 of Exhibit Q.
- 2.x “Slice Percentage Adjustment Ratio” or “SPAR” is as defined in section 1.1 of Exhibit K.
- 2.x “Slice Percentage” means the percentage that represents the amount of the Slice Product «Customer Name» shall purchase, as established pursuant to Exhibit K.
- 2.x “Slice Product” means BPA’s power product sold to «Customer Name» on terms described in section 5 of this Agreement.
- 2.x “Slice Storage Account” or “SSA” is as defined in section 2 of Exhibit M.
- 2.x “Slice Subsystem” is as defined in section 2 of Exhibit M.
- 2.x “Slice System” means those Federal generating resources that support the sale of Slice Output, as specified in Exhibit L, Slice System Resources.
- 2.x “Slice Water Routing Simulator” or “Simulator” means the Slice Computer Application module used to determine each Slice purchaser’s available Slice Output and Delivery Limits associated with the Coulee-Chief Complex and LCOL Complex.
- 2.x “Slice/Block Power Sales Agreement” means this Agreement and all other agreements that provide for the combined sale of BPA’s Slice Product and BPA’s Block Product.
- 2.x “Soft Operating Constraint” is as defined in section 2 of Exhibit M.
- 2.x “Spill” is as defined in section 2 of Exhibit M.
- 2.x “Storage Content” is as defined in section 2 of Exhibit M.
- 2.x “Storage Offset Account” or “SOA” is as defined in section 2 of Exhibit M.
- 2.x “Storage” means the ability of the Slice System to alter energy production among hours, days, and months by impounding water or releasing impounded water.

- 2.x "Super Majority" is as defined in section 5.14.1 of this Agreement.
- 2.x "Surplus Slice Output" means, for any month, the amount of Slice Output that is made available to «Customer Name» under section 5 of this Agreement that exceeds «Customer Name»'s Requirements Slice Output.
- 2.x "System Obligations" means those obligations imposed on BPA by statutes, treaties and contracts which require the generation or delivery of power, or forbearance from generating power, in order to support the operation of the FCRPS, including any Obligations to Balancing Authority and other BPA contractual obligations that generate revenues and will exist in FY 2012 and beyond. System Obligations affect the amount of power available from the FCRPS and the amount of power available at the Tier 1 rate.
- 2.x "Tier 1 Block Power," or "T1BP" means the amount of Firm Requirements Power available to «Customer Name» under the Block Product to which Tier 1 rates apply and which is within «Customer Name»'s Rate Period High Water Mark.
- 2.x "Tier 2 Block Power," or "T2BP" means the amount of Firm Requirements Power available to «Customer Name» under the Block Product to which Tier 2 rates apply and which is above «Customer Name»'s Rate Period High Water Mark.
- 2.x "Unsold Slice Amount" is as defined in section 1 of Exhibit Q.
- 2.x "Unsold Slice Percentage" is as defined in section 1 of Exhibit Q.

END SLICE/BLOCK templates.

Include in SLICE/BLOCK templates:

3. SLICE/BLOCK POWER PURCHASE OBLIGATION

3.1 Slice/Block Product A Combined Sale of Two Distinct Requirements Power Products

The Slice/Block Product provides Firm Requirements Power for «Customer Name»'s Net Requirement load and Surplus Slice Output in certain periods of the year. The Slice/Block Product is a combined sale of two distinct Requirements Power Products for service to «Customer Name»'s forecasted Net Requirement: the Slice Product and the Block Product. Since the Block Product and the Slice Product have their own unique terms and conditions, each product shall be described separately. The Block Product shall be as described in section 4 below, and the Slice Product shall be as described in section 5 below.

END SLICE/BLOCK templates.

3.2 Take or Pay

«Customer Name» shall pay for the amount of power it has committed to purchase under sections 4.1 and 5.1 of this Agreement, at the rates BPA



establishes as applicable to such power, whether or not «Customer Name» took actual delivery of such power.

3.3 List and Application of Dedicated Resources

Reviewer's Note: The shaded language below is the same as the Load Following language.

«Customer Name» agrees to dedicate those resources for service to its Total Retail Load that it has listed as Dedicated Resources 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 apply such resources to its Total Retail Load as state below for each specific resource and type:

3.3.1 Specified Resources

«Customer Name» shall apply the output from all Specified Resources listed in section 2 of Exhibit A, Net Requirements and Resources, to serve its Total Retail Load. BPA shall use the amounts listed in Exhibit A, Net Requirements and Resources, to determine «Customer Name»'s Net Requirement under this Agreement; the amounts listed are not intended to interfere with «Customer Name»'s decisions on how to operate its Specified Resources.

3.3.2 Unspecified Resource Amounts

In addition to the resource amounts listed in section 2 of Exhibit A, Net Requirements, «Customer Name» shall serve its Total Retail Load with Unspecified Resource Amounts to meet any power supply obligations «Customer Name» made in Exhibit C, Purchase Obligations, to serve its Above-RHWM Load with Dedicated Resource amounts. By September 15, 2011, and by each September 15 thereafter, BPA shall calculate, and fill in the table 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, «Customer Name» may discontinue serving its Total Retail Load with all Unspecified Resource Amounts.

3.4 Dedicated Resource Amounts for Specified Resources

3.4.1 Specified Resource Energy Amounts

«Customer Name» shall state firm energy amounts for each Specified Resource, listed in section 2 of Exhibit A, Net Requirements and

Resources, for each month and Diurnal period beginning with the later of (1) the date the resource was dedicated to load, as shown in section 2 of Exhibit A, Net Requirements and Resources, or (2) October 1, 2011, through the earlier of (1) the date the resource will be permanently removed, as shown in section 2 of Exhibit A, Net Requirements and Resources, or (2) September 30, 2028.

3.4.1 Specified Resource Peak Amounts

Within 180 days after BPA provides notice that it has adopted a new standard for determining «Customer Name»'s firm resource peaking energy amounts, BPA in consultation with «Customer Name» shall calculate peaking amounts for each Specified Resource listed in section 2 of Exhibit A and BPA shall update the tables in Exhibit A with such peaking amounts. BPA's peaking standard shall be developed in a public process occurring after the Effective Date.

3.5 Changes to Dedicated Resources

3.5.1 Resource Additions for a BPA Insufficiency Notice

If BPA provides «Customer Name» a notice of insufficiency in accordance with section 24.2, Insufficiency and Allocations, of the body of this Agreement, «Customer Name» shall add Dedicated Resources to Exhibit A, Net Requirements and Resources, to replace amounts of Firm Requirements Power BPA will not be providing due to insufficiency.

3.5.2 Decrements for 9(c) Export

If BPA determines (in accordance with section 24.7, Use of Regional Resources, of the body of this Agreement) that an export of a Specified Resource listed in section 2 of Exhibit A, Net Requirements and Resources, requires a reduction in the amount of Firm Requirements Power BPA sells «Customer Name», then BPA shall add Unspecified Resource Amounts to section 3.2 of Exhibit A, Net Requirements and Resources. BPA shall notify «Customer Name» of the amount and duration of the reduction in «Customer Name»'s Firm Requirements Power purchases from BPA.

3.5.3 Temporary Resource Removal

BPA shall remove «Customer Name»'s Dedicated Resource amounts in Exhibit A, Net Requirements and Resources, pursuant to section 10, Order of Tier 2 Remarketing and Resource Removal, of the body of this Agreement.

3.5.4 Permanent Discontinuance of Resources

The Specified Resources listed in section 2 of Exhibit A, Net Requirements and Resources, may be removed permanently by «Customer Name» consistent with 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, as clarified March 21, 2003 (5(b)/9(c) Policy), on statutory discontinuance for permanent removal. If BPA makes a determination that «Customer Name»'s resource has met BPA's standards for a permanent removal, BPA shall revise Exhibit A accordingly. «Customer Name»'s additional 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 GRSPs.

3.5.5 Resource Additions for Annexed Loads

To serve amounts of Annexed Loads that are added after the Effective Date, «Customer Name» may add Dedicated Resources to Exhibit A, Net Requirements and Resources, pursuant to «Customer Name»'s elections to purchase Firm Requirements Power from BPA, as stated in Exhibit C, Purchase Obligations. «Customer Name»'s additional power purchases under this Agreement, as a result of such Annexed Loads, may be subject to additional rates or charges as established in the GRSPs.

3.5.6 Resource Additions/Removals for NLSLs

To serve NLSLs (established in Exhibit D, Additional Products and Special Provisions) that are added after the Effective Date, «Customer Name» may add Dedicated Resource amounts, in monthly and Diurnal amounts, to section 4 of Exhibit A, Net Requirements and Resources. «Customer Name» may discontinue serving its NLSL with the Dedicated Resource amounts 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.

Reviewer's Note: BPA (acting on behalf of the United States Entity) needs the following information to administer the Columbia River Treaty with Canada. BPA also needs the following information for 9(c) determinations.

3.6 Resources Not Dedicated to Total Retail Load

«Customer Name» shall list in section 6 of Exhibit A, Net Requirements and Resources, any non-federal 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.

3.7 Consumer-Owned Resources

Except for any Consumer-Owned Resources serving an NLSL which «Customer Name» shall apply to load consistent with section 24.3.7, Renewable Resource/Cogeneration Exception, «Customer Name» shall apply the output of its Consumer-Owned Resources as follows:

Reviewer's Note: Prior to contract signing all customers will have to designate, in sections 7.1 or 7.2 of Exhibit A, whether their existing

Consumer-Owned Resources will or will not be serving Onsite Consumer Load for the term of this Agreement.

3.7.1 Existing Consumer-Owned Resources

«Customer Name» has designated, in sections 7.1 and 7.2 of Exhibit A, whether each of its existing Consumer-Owned Resources will or will not serve Onsite Consumer Load. Such designation(s) shall apply for the term of this Agreement.

3.7.2 New Consumer-Owned Resources

«Customer Name» shall designate whether each of its new Consumer-Owned Resources will or will not serve Onsite Consumer Load. «Customer Name» shall make such designation(s) to BPA, in writing, within 120 days of the first production of energy by such resource. Such designation(s) shall apply for the term of this Agreement.

Consistent with «Customer Name»'s designation(s), BPA shall list Consumer-Owned Resources serving Onsite Consumer Load in section 7.1 of Exhibit A and Consumer-Owned Resources not serving Onsite Consumer Load in section 7.2 of Exhibit A.

3.7.3 Application of Consumer-Owned Resources Serving Onsite Consumer Load

Power generated from Consumer-Owned Resources listed in section 7.1 of Exhibit A shall serve «Customer Name»'s Onsite Consumer Load. If on any hour, power generated from a Consumer-Owned Resource exceeds Onsite Consumer Load, the amount of such excess power on that hour shall be treated as inadvertent flow for which «Customer Name» shall receive no compensation from BPA.

3.7.4 Application of Consumer-Owned Resources Serving Load Other than Onsite Consumer Load

Power generated from Consumer-Owned Resources listed in section 7.2 of Exhibit A shall be scheduled for delivery and either (1) sold to another utility in the Region for use in its Total Retail Load, (2) purchased by «Customer Name» for use in its Total Retail Load (consistent with section 3.3 of this Agreement), or (3) marketed as an export.

3.7.5 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.



Include in SLICE/BLOCK templates:

4. BLOCK PRODUCT

4.1 Purchase and Sale of Block Product

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, a planned amount of Requirements Firm Power under the Block Product.

4.2 Block Product General Description

The Block Product shall provide a planned amount of Firm Requirements Power to serve a portion of «Customer Name»'s forecasted annual Net Requirement. Firm Requirements Power sold as the Block Product is made available in equal hourly amounts during each month.

4.3 Block Product Shapes

4.3.1 Tier 1 Block Power Shapes

«Customer Name» shall select (how and when?) one of the following shapes for deliveries of Tier 1 Block Power: (1) a flat annual block, which delivers an equal amount of power in all hours during each FY, or (2) flat monthly blocks, which delivers an equal amount of power in all hours of each month and is shaped to «Customer Name»'s monthly Net Requirement. The shape selected by «Customer Name» shall be specified in section 2 of Exhibit C, Purchase Obligations, and shall not be changed during the term of this Agreement.

4.3.2 Tier 2 Block Power Shape

The only shape available for deliveries of Tier 2 Block Power is a flat annual block, which delivers an equal amount of power in all hours during each FY.

4.3.3 Shaping Restrictions

No shaping options for deliveries of «Customer Name»'s Tier 1 Block Power or Tier 2 Block Power shall be permitted other than those described in sections 4.3.1 and 4.3.2 above.

4.4 Annual and Monthly Amounts of Tier 1 Block Power

The annual and monthly amounts of Tier 1 Block Power «Customer Name» shall purchase from BPA shall be determined as follows:

4.4.1 Determination of Annual Tier 1 Block Power Amount

No later than 30 days prior to the beginning of FY 2012, and no later than 30 days prior to the beginning of each Fiscal Year thereafter, BPA shall determine «Customer Name»'s annual Tier 1 Block Power amount as follows:

- 4.4.1.1 Determine «Customer Name»'s Net Requirement from Exhibit A, Net Requirements and Resources, expressed in annual aMW.
- 4.4.1.2 Determine «Customer Name»'s RHW, expressed in annual aMW.
- 4.4.1.3 Determine the lesser of the amounts determined in section 4.4.1.1 or section 4.4.1.2, expressed in annual aMW.
- 4.4.1.4 Determine «Customer Name»'s annual Critical Slice Amount from Exhibit I, Critical Slice Amounts, expressed in annual aMW.
- 4.4.1.5 Subtract the amount determined in section 4.4.1.4 from the amount determined in section 4.4.1.3 to determine «Customer Name»'s annual Tier 1 Block Amount for the Fiscal Year, expressed in annual aMW.

4.4.2 Determination of Monthly Tier 1 Block Power Amounts
«Customer Name»'s Tier 1 Block Power amounts for each month of the Fiscal Year shall be determined by multiplying the annual Tier 1 Block Power amount determined in section 4.4.1 above, expressed in aMW, by the Monthly Distribution Factors specified in section 2 of Exhibit C, Purchase Obligations.

4.4.3 Annual and Monthly Tier 1 Block Power Amounts Specified in Exhibit C
«Customer Name»'s annual and monthly amounts of Tier 1 Block Power determined pursuant to this section 4.4 for each Fiscal Year shall be specified in section 2 of Exhibit C, Purchase Obligations.

4.5 Annual Amounts of Tier 2 Block Power
The annual amounts of Tier 2 Block Power «Customer Name» shall purchase from BPA shall be as specified in section 3 of Exhibit C, Purchase Obligations.

5. SLICE PRODUCT

5.1 Purchase and Sale of Slice Product
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, Requirements Slice Output and Surplus Slice Output under the Slice Product and in accordance with this Agreement.

5.2 Slice Product General Description



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 Slice System, and to the extent such capability is available to PS after System Obligations and Operating Constraints are met. These capabilities are accessed by «Customer Name» through the Slice Computer Application, which will reasonably represent and calculate the capabilities available to PS from such FCRPS resources after System Obligations and Operating Constraints are met, including energy production, peaking, storage and ramping capability, and which 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 Slice System resources, Slice System resource capability, or a transfer of control of such Slice System resources.

There is no guarantee that the amount of Slice Output made available, combined with Firm Requirements Power made available under the Block Product, shall be sufficient to meet «Customer Name»'s load obligation, be it hourly, daily, weekly, monthly, or annually.

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

The Slice Product does not provide «Customer Name» any rights to utilize Slice System resources for within-hour services, including but not limited to dynamic scheduling, self-supply of operating reserves, and self-supply of energy imbalance. Slice Output 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 Slice System.

5.3 Determination of Amounts of Slice Output and Hourly Scheduling Rights Available to «Customer Name»

The amount of Slice Output available under this Agreement is primarily based on water flows through the FCRPS resources comprising the Slice System and not on the actual energy output of such resources. Consequently, the amount of Slice Output received by «Customer Name» during the term of the Agreement may not precisely equal the result of its Slice Percentage multiplied by the Actual Slice System Generation.

The amounts of Slice Output and hourly scheduling rights available to «Customer Name» shall be established as described in Exhibit M, Slice Computer Application. Implementation procedures related to the Slice Computer Application shall be as described in Exhibit N, Slice Implementation Procedures.

5.4 Preliminary Slice Percentage, Initial Slice Percentage, and Slice Percentage

5.4.1 Preliminary Slice Percentage

The Preliminary Slice Percentage shall be as specified in section 1 of Exhibit J.

5.4.2 Initial Slice Percentage

The Initial Slice Percentage shall be determined in accordance with the procedure described in Exhibit Q. Following such determination, Exhibit J shall be revised by BPA to include the Initial Slice Percentage in section 2 of such Exhibit J.

5.4.3 Slice Percentage

No later than ____ days prior to the beginning of FY 2012, and for each FY thereafter, section 3 of Exhibit J shall be revised by BPA to include the Slice Percentage for each such FY. The Slice Percentage may be adjusted pursuant to the provisions of Exhibit K.

5.5 Critical Slice Amount

«Customer Name»'s Critical Slice Amount shall be determined prior to FY 2012, and for each FY thereafter, using the procedure described in Exhibit I, Critical Slice Amounts.

5.6 Disposition of Surplus Slice Output

5.6.1 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. 75-320, the Preference Act, Federal Columbia River Transmission System Act, and the Northwest Power Act, as amended.

5.6.2 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 Preference Act and section 9(c) of the Northwest Power Act, and BPA and «Customer Name» acknowledge their respective responsibilities thereunder.

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

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



- 5.6.3.2 An exchanging of Surplus Slice Output with another utility customer in the Region, or a statutorily enumerated type of exchange with a utility outside the Region;
- 5.6.3.3 Using Surplus Slice Output to displace «Customer Name»'s nonfederal resources identified in Exhibit A, Net Requirement, or «Customer Name»'s market purchases that would have been made for serving its Total Retail Load; and
- 5.6.3.4 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.

- 5.6.4 Pursuant to the Preference Act, BPA shall have the right to curtail all or a portion of (1) «Customer Name»'s Surplus Slice Output capacity upon 60 months written notice to «Customer Name», and (2) the Surplus Slice Output upon 60 days written notice to «Customer Name». Any such notice shall specify the amounts and duration of the curtailment, and if 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 projected needs within the Region. Such curtailments are subject to sections 5.6.5 and 5.6.6 below.
- 5.6.5 If BPA issues a notice of curtailment pursuant to section 3(b)(6)(D) above, it shall concurrently issue notices of curtailment, recall, or termination to all other purchasers to whom BPA has sold surplus power for durations longer than specified in the notice, provided that such sales agreements contain provisions allowing recall, curtailment or termination.
- 5.6.6 Following each month that Surplus Slice Output is curtailed pursuant to section 5.6.5 above, PS shall include a line item credit on «Customer Name»'s monthly customer bill issued equal to the product of the amount of Surplus Slice Output energy and capacity curtailed for the month preceding the month in which the bill was rendered multiplied by the applicable Index Rate for all days (or portions thereof) in such month during which the curtailment was in effect.

5.6.7 For the purposes of this section 5.6, "Index Rate" means [to be determined].

5.7 Disposition of Requirements Slice Output and Monthly Slice to Load Test

5.7.1 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 Net Requirement. «Customer Name» shall maintain monthly documentation establishing the delivery of RSO to serve its Net Requirement, such as by schedule or by tag for each such month. «Customer Name» shall make such documentation available to BPA upon request.

5.7.2 «Customer Name»'s Slice Output energy delivered for service to Total Retail Load (Slice-to-Load energy delivery) during each month must be greater than or equal to the RSO energy amount for each such month, all as determined below.

5.7.2.1 «Customer Name»'s monthly Slice-to-Load energy delivery shall be equal to the sum of (1) «Customer Name»'s delivery schedules tagged and delivered to its Total Retail Load service area, and (2) «Customer Name»'s delivery schedules submitted to TS as loss return schedules.

5.7.2.2 «Customer Name»'s RSO energy amount for each month shall be equal to the lesser of:

1. «Customer Name»'s Critical Slice Amount (CSA);
2. «Customer Name»'s forecasted Net Requirement, less the sum of the Tier 1 Block Amount and Tier 2 Block Amount; or
3. «Customer Name»'s actual Net Requirement, less the sum of the Tier 1 Block Amount and Tier 2 Block Amount.

5.7.3 If «Customer Name»'s monthly Slice-to-Load energy delivery is greater than or equal to its RSO energy amount, then «Customer Name» shall have satisfied the requirements of the RSO Test (the "Test") for such month.

5.7.4 If «Customer Name»'s monthly Slice-to-Load energy delivery is less than its RSO energy amount, and «Customer Name»'s Actual Energy Slice Output (AESO) for the month is less than 105 percent of its RSO energy amount, then «Customer Name» shall be deemed by BPA to have satisfied the Test, provided that «Customer Name»'s monthly



Slice-to-Load energy delivery is greater than 95 percent of its AESO for such month.

5.7.5 If «Customer Name» does not satisfy the Test per section 5.7.3 and is not deemed to have satisfied the Test per section 5.7.4, BPA may deem «Customer Name» to have satisfied the Test if «Customer Name» provides BPA with sufficient data to demonstrate «Customer Name» took reasonable and prudent actions to otherwise satisfy the Test. BPA shall have the sole discretion to determine whether «Customer Name» shall be deemed to have satisfied the Test.

5.7.6 If «Customer Name» does not satisfy the Test per section 5.7.3 and is not deemed to have satisfied the Test per section 5.7.4 or 5.7.5 for any month, then a penalty charge shall be assessed to «Customer Name» based on its monthly under-delivery amount.

5.7.6.1 «Customer Name»'s monthly under-delivery amount shall be equal to the lesser of the amount «Customer Name»'s monthly Slice-to-Load energy delivery is less than
(1) «Customer Name»'s RSO energy amount for the month, or
(2) if section 5.7.4 is applicable, then 95 percent of «Customer Name»'s AESO for the month.

5.7.6.2 The penalty charge shall be the product of «Customer Name»'s monthly under-delivery amount and the Unauthorized Increase rate for each such month.

5.7.7 Implementation procedures related to this section 5.7 are described in section 9 of Exhibit N, Slice Implementation Procedures.

5.8 Changes to Slice Percentage

5.8.1 Adjustment to Slice Percentage Due to Additional CHWM Amount

If, for any FY, there is an Additional CHWM Amount due to the addition of a New Public and/or DOE Richland, then the Slice Percentage shall be adjusted pursuant to the procedure set forth in section 1 of Exhibit K.

5.8.2 Adjustment to Slice Percentage Due to Load Loss

If, for any FY, «Customer Name»'s annual Net Requirement forecast, as determined pursuant to section ___ of Exhibit A, is less than «Customer Name»'s RHW, then the load loss procedure described in section 2 of Exhibit K shall apply. Depending upon the extent of the load loss, an adjustment to the Slice Percentage may be required.

5.9 Slice System Resource Adjustments, Acquisitions, and Replacements

5.9.1 **Resource Acquisitions Under Section 6(m) of the Northwest Power Act**
«Customer Name» retains all rights to participate in any BPA resource acquisitions pursuant to section 6(m) of the Northwest Power Act.

5.9.2 **Columbia Generating Station Displacement Election**
«Customer Name» may elect to participate in the displacement of Columbia Generating Station (CGS), as described in section 5.10 below.

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

5.10.1 **Definitions**

5.10.1.1 “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.

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

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

5.10.1.4 “Generation Benchmark” means the level at which PS reasonably expects CGS to operate, absent any CGS Displacement, typically about 1,130 MWh per hour.

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

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

5.10.2 **CGS Displacement Election**

No later than January 31, 2011, and no later than January 31 of each calendar year thereafter during the term of this Agreement, «Customer Name» shall provide PS 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 PS during such Election Year.



5.10.3 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.

5.10.4 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 5.10.4.

5.10.4.1 «Customer Name» shall take delivery of Additional Energy associated with each CGS Displacement as described in section 10 of Exhibit N. PS shall make such Additional Energy available to «Customer Name» at the Scheduling Points of Receipt.

5.10.4.2 PS shall maintain for «Customer Name» an account that will indicate the accumulated amount of Additional Energy that was delivered to «Customer Name» during each CGS Displacement.

5.10.4.3 Following the end of each Election Year, «Customer Name» shall pay an amount equal to «Customer Name»'s balance in the accumulated Additional Energy account multiplied by the Incremental Cost and such account balance shall be set to zero for the beginning of the subsequent Election Year. Such amount shall be included on the next power bill immediately after the end of the Election Year.

5.10.5 Operating Plan and Incremental Rate

Within 30 days following the date that the Operating Plan for the upcoming Fiscal Year is adopted, PS shall provide «Customer Name» such Operating Plan and the actual Incremental Cost associated with the immediately preceding Fiscal Year.

5.10.6 Implementation procedures related to this section 5.10 are described in section 10 of Exhibit N, Slice Implementation Procedures.

5.11 Treatment of Augmentation

5.11.1 Entitlement to Augmentation

Existing Public Augmentation and Other Augmentation shall be included in the Slice System, and «Customer Name» shall be entitled to receive a share of such Augmentation in an amount equal to its Slice Percentage multiplied by the sum of Existing Public Augmentation and Other Augmentation, all as described in Exhibit L, Slice System Resources.

5.11.2 Adjustment of Slice Percentage for Other Augmentation

For each Rate Period that BPA augments the Tier 1 System Resources as described in the TRM for Other Augmentation, «Customer Name»'s Slice Percentage shall be adjusted according to the procedure defined in Exhibit K, Slice Percentage.

5.11.3 Slice Percentage Not Adjusted for Existing Public Augmentation

After the Slice Percentage is determined pursuant to Exhibit J, Determination of Initial Slice Percentage, the Slice Percentage shall not be adjusted for changes in Existing Public Augmentation amounts.

5.12 SCA Functionality Test

5.12.1 Definitions

5.12.1.1 "Default User Interface," or "DUI," means the basic interface that is developed by BPA and made available to «Customer Name» that allows «Customer Name» access to the SCA.

5.12.1.2 "Interim Slice Implementation Procedures" means the implementation procedures that will be used by the Parties on an interim basis in the event that the SCA Functionality Test fails pursuant to section 5.12.4 below. Such procedures are as described in Exhibit O.

5.12.1.3 "SCA Implementation Date" means the date that BPA is ready to commence implementation of the SCA.

5.12.1.4 "SCA Functionality Test" means the test, as described in section 5.12.3.2 below, that is conducted by BPA in order to determine whether the SCA is complete, functional, and ready for daily implementation.

5.12.1.5 "SCA Pass Date" means the date that the SCA passes the SCA Functionality Test.

5.12.1.6 "Simulator Pass Date" means the date that the Simulator passes the Simulator Performance Test.

5.12.2 Simulator Fails Simulator Performance Test

If, as of October 15, 2010, the Simulator has failed one or more of the three tests that comprise the Simulator Performance Test, as described in section 11.2.1 below, then the Simulator Performance Test shall be conducted as many times as needed until such time as the Simulator Pass Date is achieved.



5.12.3 SCA Functionality Test

5.12.3.1 SCA Functionality Test Conducted No Later Than July 1, 2011

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

5.12.3.2 Description of SCA Functionality Test

BPA, with input from «Customer Name» and other members of the SIG, shall develop a detailed description of the procedures that will be included in the SCA Functionality Test. Such procedures shall include, but shall not be limited to, the following:

- Validation Procedures for the DUI
The DUI must have the capability to (1) accept «Customer Name» Customer Inputs and provide feedback, (2) approve schedules posted to the BPA scheduling system and associated E-tags, and (3) provide reports.
- Validation Procedures for the Simulator
- Validation Procedures for the BOSS Module
- Validation Procedures for BPA data feed inputs and quality assurance.

BPA, with input from «Customer Name» and other members of the SIG, shall develop the SCA Functionality Test to include an objective standard that will be used to determine passage or failure.

The SCA Functionality Test shall be developed no later than April 15, 2011. The SCA Functionality Test shall not include testing of any systems or custom interfaces that are developed by «Customer Name» to utilize the SCA.

5.12.4 SCA Passes SCA Functionality Test

5.12.4.1 SCA Pass Date and Simulator Pass Date Occur On Or Before July 1, 2011

If the SCA Pass Date and the Simulator Pass Date occur on or before July 1, 2011, then both Parties shall work cooperatively to assure they are prepared to commence implementation of the SCA beginning October 1, 2011, which is the SCA Implementation Date.

5.12.4.2 SCA Pass Date or Simulator Pass Date Occur After July 1, 2011

If either the SCA Pass Date or the Simulator Pass Date occur after July 1, 2011, then, effective on October 1, 2011, the Parties shall implement deliveries of Slice Output under the Interim Slice Implementation Procedures, as described in Exhibit O. The Parties shall continue to operate under the Interim Slice Implementation procedures until 90 days following the later of the SCA Pass Date or the Simulator Pass Date, at which time BPA will begin implementation of the SCA. Only the portion(s) of the SCA Functionality Test that failed shall continue to be conducted as many times as needed until the SCA Pass Date is achieved.

5.12.5 «Customer Name» Unable to Utilize DUI

If, as of the SCA Implementation Date, «Customer Name» is unable to access and utilize the DUI, then «Customer Name» and BPA will implement deliveries of Slice Output in accordance with the following procedures until 30 days after «Customer Name» provides BPA with written notice that it is prepared to utilize the DUI:

5.12.5.1 Establishment of Preschedules

- Grand Coulee and Chief Joseph: BPA shall set «Customer Name»'s generation request equal to its Slice Percentage multiplied by BPA's expected hourly generation;
- McNary through Bonneville: BPA shall set «Customer Name»'s discharge request to Pass Inflow; and
- BOSS Module: BPA shall set «Customer Name»'s BOSS schedule equal to its Slice Percentage multiplied by BPA's expected BOSS Base Amount (no BOSS Flex allowed).
- BPA shall communicate the above values to «Customer Name» via [To be completed.]

5.12.5.2 Delivery Limit Penalties

Except as described in section 5.12.5.4 below, Delivery Limit penalties established in Exhibit N shall not be assessed for the first 90 days the provisions described in this section 5.12.5 are in effect.

5.12.5.3 Preschedule Updates

- The preschedules established pursuant to section 5.12.5.1 above shall be revised by BPA (1) by 1800 hours on the day prior to delivery, and (2) by



60 minutes prior to the beginning of each hour of delivery.

5.12.5.4 Submission of E-Tags

- «Customer Name» shall submit E-Tags on preschedule and real time to comply with hourly delivery amounts established under this section 5.12.5.
- UAI penalties shall apply to E-Tag amounts that exceed hourly delivery amounts.
- If E-Tag amounts are less than the hourly delivery amounts, «Customer Name» shall only receive the E-Tag amounts (remaining hourly delivery amount is forfeited.)

5.13 SCA Development Schedule

5.13.1 Definitions

5.13.1.1 “SCA Development Schedule” means a schedule developed by BPA that identifies certain tasks associated with the development of the SCA and the timelines associated with such tasks.

5.13.2 SCA Development Schedule

The SCA Development Schedule is attached hereto as Exhibit P. «Customer Name» and BPA understand and agrees that (i) the timelines specified in the SCA Development schedule are non-binding and are for information purposes only, and (ii) the timelines set forth in this section 5 are binding. BPA agrees to coordinate with «Customer Name» and other members of the SIG to discuss the status of the various tasks identified in the SCA Development Schedule and their associated timelines.

5.14 Slice Implementation Group

5.14.1 Definitions

5.14.1.1 “Majority” means at least 51 percent.

5.14.1.2 “Super Majority” means at least 66 percent.

5.14.2 Slice Implementation Group

5.14.2.1 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 making decisions that will affect BPA and the customers that have executed Slice/Block Power Sales Agreements ("Slice Customers"). The Slice Implementation Group (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 Slice 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 under 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.

5.14.2.2 BPA, «Customer Name», and all other Slice Customers 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 or decision of the SIG, except as otherwise provided herein, shall be made by Majority vote of the members, or alternates, 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 days in advance of such meeting, setting forth the date, location, and subject matter of such meeting. The SIG will meet at least once each calendar year.

5.14.2.3 The Slice Computer Application is a BPA proprietary computer application. Subject to the limitations below, any Slice Customer may request changes to the Slice Computer Application. BPA may propose changes to the Slice Computer Application and shall confer with the SIG consistent with this section. Any such request shall be made in writing and be provided to all members of SIG. The request shall state the change or changes proposed, the reasons for such proposed change or changes, the expected



impacts or benefits, and the estimated costs and time frame of implementation.

- 5.14.2.4 BPA shall have the sole right to change, upgrade or replace the Slice Computer Application as necessary to produce results that reasonably represent the energy, peaking, Storage, or ramping capability of the Slice System or any Slice System project.
- 5.14.2.5 BPA shall have the sole right to change, upgrade or replace the Slice Computer Application as necessary to maintain functionality with BPA's internal business processes and systems.
- 5.14.2.6 BPA shall have the sole right to determine how Operating Constraints are translated into Simulator Parameters for application within the Slice Computer Application, and shall do so in a manner that reflects in the Slice Computer Application the impacts of such Operating Constraints on the FCRPS.
- 5.14.2.7 Prior to their implementation, proposed Slice Computer Application changes, upgrades or replacements described in sections 5.14.2.4 through 5.14.2.6 shall be reviewed and discussed by the SIG but shall not be subject to approval or revision by the SIG.
- 5.14.2.8 Following receipt of written notice requesting a change to the SCA pursuant to section 5.14.2.3, 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) are worthy of further consideration.
- 5.14.2.9 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 forty-five (45) days to permit BPA to conduct a public comment process.
- 5.14.2.10 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), the proposed change(s) will be implemented by BPA unless:

- the BPA SIG member opposes the proposed change(s), in which case the proposed change(s) shall not be adopted and Slice Computer Application shall not be revised; or
- 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) requests in writing to all SIG members, within 10 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, then implementation shall be deferred until such second vote is taken. If a Super Majority of the Slice Customer SIG members affirm 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.

5.15 Creditworthiness

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

5.16 True-Up Adjustment Charge

5.16.1 Overview

Pursuant to section 9.5 of the TRM, a Slice True-Up Adjustment shall be calculated by BPA for each FY. Such Slice True-Up Adjustment shall compare certain forecast expenses and revenue credits with actual expenses and revenue credits that are subject to the Slice True-Up Adjustment, as specified in (1) the Composite Cost Pool, as set forth in Table 2.1 of the TRM, section B, and (2) the Slice Cost Pool, as set forth in Table 2.1 of the TRM, section C.

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

5.16.2.1 Determination of Interest Rate

Interest shall be computed upon and added to the True-Up Adjustment Charge. The period for computing interest shall



begin with the first day of the FY in which the True-Up Adjustment Charge is calculated. Daily simple interest shall be computed during such period and such period shall end on the date specified below. The daily 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 True-Up Adjustment Charge is calculated, divided by 365.

5.16.2.2 Time Periods During Which Interest is Applied

Interest determined pursuant to section 5.16.2.1 above 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 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 Charge is calculated.

5.16.3 Other Slice True-Up Adjustment Provisions

All other Slice True-Up Adjustment provisions, including, but not limited to, treatment of new costs and revenues, costs and revenues not subject to Slice True-Up, the cost verification process, and adjustments, if any, to the Slice True-Up Adjustment Charge, shall be as described in section 9.5 and Attachment ___ of the TRM.

End SLICE/BLOCK templates

6. TIERED RATE METHODOLOGY (06/13/08 Version)

Reviewer's Note: The following language in this section 6 is a placeholder for now and is in the process of being updated.

- 6.1 BPA has proposed a Tiered Rate Methodology (TRM) to FERC, for a period up to 20 years (through September 30, 2028), which will establish a rate design for the PF Tier 1 power rate and the PF Tier 2 power rate. The then-effective TRM shall govern 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, 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 through September 30, 2028.
- 6.3 BPA shall not propose any modification to the TRM, except as provided for and pursuant to the procedures set forth in sections 12 and 13 of the TRM that is current as of the Effective Date.
- 6.4 The Parties intend that the TRM will be binding on them in accordance with its terms, but references to rates or the TRM in this Agreement do not make the rates or TRM a matter of contract. This Agreement shall not be construed as causing any rate issue or TRM matter to become a contract issue or matter. Disputes over the meaning and implementation of the TRM shall be resolved exclusively pursuant to the procedures set forth in the TRM.
- 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 implementation of the TRM or establishment of BPA rates pursuant to it, provided however for purposes of this paragraph a "rate matter" shall not be deemed to include budgetary and revenue requirement issues.
- 6.6 The Tiered Rate Methodology (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 (CHWM). The amount used to define each customer's access to Tier 1-priced power, expressed in average megawatts. CHWM is equal to the customer's Eligible Load (as defined in the TRM), proportionately scaled to the firm critical output of Tier 1 System Resources (as defined in the TRM), and adjusted for credited conservation. The CHWM is specified in each eligible customer's CHWM Contract. See section 4.2 (of the TRM).

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



The RHW is determined for each eligible customer in the RHW Process (as defined in the TRM) preceding each rate case. See section 4.3 (of the TRM).

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

6.6.2 Rate Period High Water Mark Calculation (from section 4.3.1 of the TRM):

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

$$RHW = \frac{CHWM}{\sum CHWM} \times TISR$$

where:

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

CHWM = Contract High Water Mark

$\sum CHWM$ = sum of all customers' Contract High Water Marks

TISR = forecast output of Tier 1 System Resources (as defined in the TRM), averaged for the Rate Period

6.6.3 The above-recited, and all other, TRM language may only be changed in accordance with the requirements of the TRM for TRM changes. Reference in this contract to the TRM or recitation in this contract of what the TRM provides with regard to the RHW or other matters does not make implementation of the TRM, or issues or disputes regarding BPA's implementation of the TRM, matters of contract; rather, they retain their character as administrative matters. However, repudiation by BPA of its obligation here and under the TRM to change the TRM only in accordance with the TRM section 12 and 13 procedures for change would be a matter of contract.

7. HIGH WATER MARKS (06/13/08 Version)

7.1 Contract High Water Mark (CHWM)

BPA shall establish «Customer Name's CHWM in the process defined in section 4.2 of the TRM that was current as of the Effective Date. «Customer Name's CHWM and the circumstances under which it can change are stated in Exhibit B, High Water Marks and Contract Demand Quantities. BPA shall use «Customer Name's CHWM to determine «Customer Name's RHW as prescribed in section 4.3 of the TRM.

Reviewer's Note: See "Timeline for HWMs & Above-RHWM Elections"

7.2 Rate Period High Water Mark (RHWM)

«Customer Name»'s CHWM will 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 a process defined in section 4.3 of the TRM that was current as of the Effective Date. BPA shall designate «Customer Name»'s RHWM in the initial proposal for each general rate case.

8. APPLICABLE RATES (06/13/08 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). Billing determinants for any purchases are included in each rate schedule. Power purchases under this Agreement are subject to BPA's rates, its GRSPs (or their successors), and the TRM.

8.1 Priority Firm Power Rates

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's PF power rates shall include a rate schedule for purchase amounts at PF Tier 1 rates and purchase amounts at PF Tier 2 rates.

Reviewer's Note: The Slice Template probably needs additional language here that includes more specifics about Tier 1 and Tier 2 applicability (similar to LF and Block) and that is synched up with the Slice Exhibit C.

8.1.1 PF Tier 1 and PF Tier 2 Rates

8.1.2 Contract Demand Quantities (CDQs)

BPA shall establish «Customer Name»'s CDQs pursuant to the TRM. «Customer Name»'s CDQs are listed in Exhibit B, High Water Marks and Contract Demand Quantities.

8.2 New Resource Firm Power Rate

Any amounts of power provided to «Customer Name» from BPA for service to an NLSL, listed in Exhibit D, Additional Products and Special Provisions, shall be purchased at the NR Rate.

8.3 Firm Power Products and Services Rate

Amounts of power and other services sold to «Customer Name» under the FPS rate, if any, are listed in Exhibit D, Additional Products and Special Provisions.



8.4 Additional Charges

«Customer Name» may incur additional charges or penalty charges as established in the GRSPs, including the Unauthorized Increase (UAI) and the Resource Shaping Charge (RSC), or their successors.

9. ELECTIONS TO PURCHASE POWER PRICED AT PF TIER 2 RATES (06/13/08 Version)

Reviewer’s Note: See “Timeline for HWMs & Above-RHWM Elections”

9.1 Determination and Notice to Serve Above-RHWM Load

«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 8,760 megawatt-hours and is not an NLSL, with either: (1) Firm Requirements Power purchased from BPA at a PF 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 PF Tier 2 Rates

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

9.1.3 Elections Not to Purchase at PF Tier 2 Rates

If «Customer Name» elects not to purchase Firm Requirements Power at PF Tier 2 rates for a Purchase Period, BPA shall update section 2.1 of Exhibit C, Purchase Obligations, to indicate such election. Such election shall not eliminate any prior obligation to purchase Firm Requirements Power at PF Tier 2 rates for future rate periods.

9.1.4 Failure to Make an Election

If «Customer Name» makes no election by a Notice Deadline in section 9.1.1 above, for the corresponding Purchase Period «Customer Name» shall be deemed to have elected not to purchase Firm Requirements

Power at PF Tier 2 rates, except for any previously obligated PF Tier 2 purchase amounts.

Reviewers Note: Shaded text is identical to Load Following text (absent the Load-Growth Rate Alternative):

9.2 Tier 2 Rate Alternatives

Subject to the requirements stated in Exhibit C, Purchase Obligations, «Customer Name» shall have the right to purchase Firm Requirements Power priced at the following PF Tier 2 Rates:

9.2.1 PF Tier 2 Vintage Rate(s)

Subject to eligibility requirements specified in Exhibit C, Purchase Obligations, «Customer Name» may elect to purchase Firm Requirements Power from BPA at a PF Tier 2 Vintage Rate(s) to serve «Customer Name»'s Above-RHWM Load for a specified term. A PF Tier 2 Vintage Rate(s) is based on the costs of specific resources and is set in each general rate case. «Customer Name» shall make such election(s) in accordance with section 2.3 of Exhibit C, Purchase Obligations.

9.2.2 PF Tier 2 Short-Term Rate

«Customer Name» may elect by a Notice Deadline to purchase Firm Requirements Power from BPA at the PF Tier 2 Short-Term Rate to serve «Customer Name»'s Above-RHWM Load for the corresponding Purchase Period. «Customer Name» shall make such election in accordance with section 2.4 of Exhibit C, Purchase Obligations.

9.3 Obligation to Apply Non-Federal Resources

«Customer Name»'s obligation to apply its Dedicated Resources to serve its Above-RHWM Load is stated in section 3 of the body of this Agreement and Exhibit C, Purchase Obligations.

10. ORDER OF TIER 2 REMARKETING AND RESOURCE REMOVAL (05/27/08 Version)

Reviewer's Note: See "Timeline for HWMs & Above-RHWM Elections"

10.1 Order of Removal – First Fiscal Year of Rate Period

By September 15 of each Rate Case Year, BPA shall remarket «Customer Name»'s PF Tier 2 rate purchase amounts and BPA shall remove «Customer Name»'s New Resources for the first Fiscal Year of the upcoming Rate Period if the sum of «Customer Name»'s PF Tier 2 rate purchase amounts, as established in Exhibit C, Purchase Obligations, plus «Customer Name»'s RHWM exceeds «Customer Name»'s annual Net Requirement forecast established in section 1.2 of Exhibit A, Net Requirements and Resources. The amount of such remarketing and resource removal is established in section 10.3 below. BPA shall remarket the PF Tier 2 rate purchase amounts and remove such New Resource amounts for the first Fiscal Year in the following order:



- (1) Amounts of Firm Requirements Power priced at PF Tier 2 rates listed in Exhibit C, Purchase Obligations, then
- (2) «Customer Name»'s Unspecified Resource Amounts listed in section 3.1 of Exhibit A, Net Requirements and Resources, then
- (3) «Customer Name»'s Specified Resources that are New Resources listed in section 2 of Exhibit A, Net Requirements and Resources. If «Customer Name» has multiple Specified Resources that are New Resources, BPA shall remove such resources in a last added, first removed order based on the order in which «Customer Name» made its resource additions.

10.2 Order of Removal – Second Fiscal Year of Rate Period

By September 15, 2012, and by September 15 of each Forecast Year thereafter, the process established in section 10.1 above shall also apply for the second Fiscal Year of the effective Rate Period and BPA shall remove «Customer Name»'s Existing Resources in the amount established in section 10.4 below. If «Customer Name» has multiple Existing Resources, BPA shall remove such resources in a last added, first removed order based on the order in which «Customer Name» made its resource additions.

10.3 Extent of Removal for the First Fiscal Year of Each Rate Period

For the first Fiscal Year of a Rate Period BPA shall continue to remarket «Customer Name»'s PF Tier 2 rate purchase amounts and BPA shall continue to remove the amounts of «Customer Name»'s New Resources until:

- (1) the amount of PF Tier 2 rate purchase amounts remarketed by BPA plus the amount of New Resource removals equals the amount that «Customer Name»'s PF Tier 2 rate purchase amounts plus its RHWM exceeds its annual Net Requirement forecast, or
- (2) all of «Customer Name»'s PF Tier 2 rate purchase amounts are remarketed and all of its New Resources are removed.

10.4 Extent of Removal for the Second Fiscal Year of Each Rate Period

For the second Fiscal Year of a Rate Period BPA shall first apply the process established in section 10.3 above. If «Customer Name»'s annual Net Requirement forecast for the second Fiscal Year of a Rate Period is lower than such forecast for the first Fiscal Year of the same Rate Period, then BPA shall then remove «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 annual Net Requirement forecast, or (2) the difference between «Customer Name»'s annual Net Requirement forecasts for the first and second Fiscal Years of the Rate Period. If «Customer Name»'s annual Net Requirement forecast for the second Fiscal Year of a Rate Period

is greater than or equal to such forecast for the first Fiscal Year of the same Rate Period, BPA shall remove zero amounts of «Customer Name»'s Existing Resources.

10.5 Rounding of PF Tier 2 Rate Purchase Amounts

To the extent remarketing of PF 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.

10.6 Remarketing of Federal Power Priced at PF Tier 2 Rates

Consistent with rates established under the TRM, «Customer Name» shall be subject to applicable charges or credits associated with BPA's remarketing of amounts of Firm Requirements Power at PF Tier 2 rates. «Customer Name» shall be responsible for remarketing of any amounts of its Dedicated Resources, Specified or Unspecified, that are removed under this section 10, Order of Tier 2 Remarketing and Resource Removal.

11. RIGHT TO CHANGE PURCHASE OBLIGATION (04/04/08 Version)

11.1 One-Time Right to Change Purchase Obligation

Reviewers Note: Shaded text is identical to Load Following and Block text:

«Customer Name» shall have a one-time right to change its purchase obligation, identified in section 3 of this Agreement, 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, «Customer Name» shall first provide notice to BPA of its intent and then confirm its decision as established below. Any elections of rate alternatives, 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 11.2 below.

11.1.1 Notice to Change

By May 31, 2016, «Customer Name» shall provide written notice to BPA that it is requesting to change its purchase obligation effective October 1, 2019, subject to confirmation described in section 11.3 below. «Customer Name»'s notice shall state the type of service requested.

11.1.2 Charge to Change Purchase Obligation

«Customer Name» may be subject to charges as a result of «Customer Name»'s request to change its purchase obligation. By September 30, 2016, BPA shall determine and present «Customer Name» with any such charges. In no event shall BPA make payment to «Customer



Name» as a result of «Customer Name» changing its purchase obligation.

11.1.3 Change Confirmation

Within 30 days of BPA's presentation to «Customer Name» of the charges determined in 11.2 above, «Customer Name» shall provide BPA with written confirmation of its decision to change its purchase obligation.

11.1.4 Agreement Amendment

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 amendment shall be effective no later than October 1, 2019.

Include in SLICE/BLOCK templates:

11.2 Additional Rights to Change Purchase Obligation (07/02/08 Version)

In addition to the opportunity to change its purchase obligation provided in section 11.1 above, «Customer Name» may elect to change its purchase obligation to that stated in section 11.2.4 below after the occurrence of any of the events listed in sections 11.2.1 through 11.2.3 below by providing BPA with written notice by the dates shown below. The notice shall state an effective date for the contingent contract amendment as established in 11.2.4 below, of not later than 90 days after the date of such notice.

11.2.1 Simulator Fails Simulator Performance Test

11.2.1.1 Definition

“Simulator Performance Test” means a three (3) part test, as described in section 11.2.1.3, that is conducted by BPA to assess the (1) energy, (2) peaking, and (3) ramp down capabilities of the Simulator.

11.2.1.2 Simulator Performance Test To Be Completed No Later than October 15, 2010

No later than August 1, 2010, BPA shall provide «Customer Name» access to the version of 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 15, 2010.

11.2.1.3 Description of Simulator Performance Test

The Simulator Performance Test shall be conducted by BPA and will consist of three separate tests: an energy test, a peaking test, and a ramp down test. Each test is described separately in section 2.1.5.3 of Exhibit M.

11.2.1.4 Simulator Fails Simulator Performance Test

If, as of October 15, 2010, the Simulator has failed one or more of the three tests that comprise the Simulator Performance Test, then «Customer Name» may change its purchase obligation to that stated in 11.2.4 below by providing written notice to BPA. Such written notice must be received by BPA no later than December 15, 2010. The Simulator Performance Test shall continue to be conducted by BPA after October 15, 2010, until such time as it passes, pursuant to section 5.12.2 above.

11.2.1.5 Simulator Passes Simulator Performance Test

If, as of October 15, 2010, the Simulator has passed the Simulator Performance Test, then «Customer Name» shall not have the option to change its purchase obligation pursuant to this section 11.2.1.

11.2.2 No Slice Output Available on a Forecasted Basis

«Customer Name» may change its purchase obligation to that stated in 11.2.4 below not later than 60 days after BPA forecasts prior to the first day of any FY that there will be no Slice Output available for delivery to «Customer Name» during such FY and the immediately following FY, or in the event there is no Slice Output available to «Customer Name» during any two consecutive FYs.

11.2.3 Transmission Conversion (05/25/08 Version)

«Customer Name» may change its purchase obligation to that stated in 11.2.4 below not later than 60 days after FERC has issued a final order approving rates, terms and conditions, or the Balancing Authority or a regulatory authority with jurisdiction over the Balancing Authority, adopts standards, rules, practices or procedures that require «Customer Name» to declare a Point of Receipt and a energy amount (in megawatts) for each of the Slice System resources from which «Customer Name» may receive Slice Output under this Agreement.

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 11.2.3 above

«Customer Name» selects the «Load Following Purchase Obligation or Block Without Shaping Capacity Purchase Obligation or Block With Shaping Capacity Purchase Obligation» 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 above. No later than June 30, 2009, the Parties shall execute a contingent contract amendment for the selected purchase obligation. Such contingent 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 purchase obligation selected by «Customer Name». Such contingent contract amendment shall become effective on the date provided in «Customer Name»'s notice under section 11.2 above.

11.2.5 Waiver of Certain Claims for Damages

In the event that «Customer Name» changes its purchase obligation in accordance with this section 11.2, «Customer Name» agrees not to seek and hereby waives the right 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 11.2. This waiver has no application to, and «Customer Name» hereby expressly preserves, any claims for damages arising under any other section of this Agreement including, without limitation, section «#».

END SLICE/BLOCK templates.

12. BILLING CREDITS AND RESIDENTIAL EXCHANGE (06/10/08 Version)

12.1 Billing Credits (02/28/08 Version)

If «Customer Name» develops a Generating Resource to serve its retail loads above its RHWM, «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 execution date of this Agreement.

12.2 Residential Exchange (06/16/08 Version)

If «Customer Name» elects to seek residential exchange benefits from BPA pursuant to section 5(c) of the Northwest Power Act, «Customer Name» agrees it will not seek and shall not receive exchange benefits: (1) for Total Retail Load in excess of «Customer Name»'s RHWM load, or (2) based upon the cost of resources in excess of «Customer's Name»'s resource amounts used in calculating its CHWM. The determination of what exchange benefits «Customer Name» shall not receive as a consequence of «Customer Name»'s agreement in the preceding sentence will be made by BPA pursuant to BPA's then-existing ASC Methodology.

The preceding paragraph will also be included in any Residential Purchase and Sale Agreement entered into between «Customer Name» and BPA during the term of this Agreement.

13. SCHEDULING (03/27/08 Version)

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

14. DELIVERY (03/17/08 Version)

14.1 Definitions

14.1.1 "Integrated Network Segment" (03/17/08 Version) 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 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" (03/17/08 Version) 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.

14.1.3 "Scheduling Points of Receipt" (03/17/08 Version) means the points on the Pacific Northwest transmission system where Firm Requirements Power is made available by Power Services to «Customer Name» for purposes of transmission scheduling.

14.2 Transmission Service (03/17/08 Version)

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

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, BPA 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, 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, have been met:

- (1) «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,
- (2) This condition only applies 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: «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
- (3) «Customer Name»'s transmission schedule was curtailed due to non-firm status under PTP transmission service or its secondary service status under Network Integration Transmission Service (as defined in BPA's Open Access Transmission Tariff) and «Customer Name» can provide proof of the reimbursable costs incurred to replace the curtailed schedule.

14.3 Liability for Delivery (05/25/08 Version)

«Customer Name» waives any claims against BPA arising under this Agreement for nondelivery of power to any points beyond the applicable Scheduling Points of Receipt, except as described in section 14.2.3 above. 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.

14.4 Real Power Losses (03/14/08 Version)

BPA is responsible for the real power losses necessary to deliver Firm Requirements Power under the Block power product to «Customer Name»'s PODs listed in Exhibit E, Metering. «Customer Name» shall be responsible for all real power losses associated with the delivery of power under the Slice power product.

End Option 1

14.5 **Metering Losses (05/14/08 Version)**

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, Metering.

15. **METERING (06/03/08 Version)**

Reviewer's Note: The customer list below is subject to change.

Option 1: Include this subsection for customers that do NOT have meters on all PODs: (See Customer Characteristics Spreadsheet to verify: EWEB, Grant PUD, Okanogan PUD, Seattle, Tacoma, Port of Seattle).

15.1 **Requirements for Meters**

«Customer Name»'s purchase commitment in section 3 of this Agreement 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, Hourly Total Retail Load Data.

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, «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, Metering used by BPA for forecasting and planning, and for new meters, the following requirements shall apply.

End Option 1

15.1.1 **BPA Owned Meters**

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 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, BPA shall adjust, repair, or replace the meter to provide accurate metering as soon as practical.

15.1.2 **Non-BPA Owned Meters**

For all non-BPA owned metering equipment owned by «Customer Name» 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 meters not owned by BPA 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.

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.

«Customer Name» shall operate, maintain, and replace, as necessary at «Customer Name» expense, all non-BPA metering equipment owned by «Customer Name». For non-BPA owned meters listed in Exhibit E, Metering that are not owned by «Customer Name» but are needed by BPA to forecast and plan, «Customer Name» shall arrange for such meters to be operated, maintained and replaced, as necessary.

If, at any time, BPA or «Customer Name» determines that a non-BPA owned meter listed in Exhibit E, Metering is defective or inaccurate, «Customer Name» shall adjust, repair, or replace the meter to provide accurate metering as soon as practical. BPA shall have the right to witness any meter tests conducted by «Customer Name» on non-BPA owned meters listed in Exhibit E, Metering 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.

15.1.3 New Meters

The Parties shall enter into a separate agreement, if such an agreement is not already in place, addressing the ownership, location, access, maintenance, replacement, testing, and liability of the Parties with respect to new and replaced meters. All new 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 (06/13/08 Version)

«Customer Name» shall meter any loads that are monitored by BPA for an NLSL determination and any NLSLs consistent with section 24.3.4, Metering an NLSL.

15.3 Metering Exhibit

«Customer Name» shall provide meter data specified in section 17.3, Information Exchange and Confidentiality, 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, Metering.

16. BILLING AND PAYMENT

16.1 Billing(05/14/08 Version)

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. BPA shall send all bills on the bill's issue date. If electronic transmittal of the entire bill is not practical, BPA shall transmit a summary electronically, and send the entire bill by United States mail.

16.2 Payment(03/26/08 Version)

«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, 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, «Customer Name» shall pay BPA the difference between the estimated bill and final bill by the final bill's Due Date; and
- (2) if the amount of the final bill is less than the amount of the estimated bill, 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(03/26/08 Version)

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 4 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(05/14/08 Version)

If «Customer Name» has not paid its bill in full by the Due Date, it shall have 45 days to cure its nonpayment. If «Customer Name» is more than 45 days late in paying its bill, BPA may require additional forms of payment assurance acceptable to BPA. If «Customer Name» does not provide such



payment assurance within three Business Days after receipt of written notice from BPA, and BPA determines in its sole discretion that «Customer Name» is unable to make the payments owed, BPA may terminate this Agreement. Written notices sent under this section must comply with section 20, Notices and Contact Information.

16.5 Disputed Bills *(05/14/08 Version)*

16.5.1 If «Customer Name» disputes any portion of a charge or credit on «Customer Name»'s bill, «Customer Name» shall provide notice to BPA with a copy of the bill noting the disputed amounts. If any portion of the bill is in dispute, «Customer Name» shall pay the entire bill by the Due Date. 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.

16.5.2 If the Parties agree, or if after dispute resolution «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

17.1 General Requirements *(03/30/08 Version)*

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 to otherwise implement this Agreement. This obligation includes transmission and power scheduling information and load and resource metering information (such as one-line diagrams, metering diagrams, loss factors, etc.).

17.2 Reports *(05/14/08 Version)*

17.2.1 Within 30 days after final approval by the «Customer Name»'s governing body, «Customer Name» shall e-mail its annual financial report and statements to BPA at kslf@bpa.gov.

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

17.3 Meter Data (06/10/08 Version)

17.3.1 In accordance with section 15, Metering, and Exhibit E, Metering, «Customer Name» shall notify BPA 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. 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 above in section 17.3.1, section 15, Metering, and Exhibit E, Metering, 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 and (2) the contact shown in section 20, Notices and Contact Information, when the following events are planned to occur on «Customer Name»'s system that will affect meters listed in Exhibit E, Metering: (1) installation of a new meter, (2) changes or updates to an existing meter not owned by BPA, (3) any planned line or meter outages, and (4) any planned load shifts.

17.3.4 If an unplanned load shift or outage occurs affecting meters listed in Exhibit E, Metering, «Customer Name» shall e-mail BPA at: (1) mdm@bpa.gov, and (2) the contact shown in section 20, Notices and Contact Information, within 72 hours after the event.

17.4 Data for Determining CHWM and CDQs (03/27/08 Version)

Upon request, «Customer Name» shall provide to BPA any load and resource information that BPA deems necessary to determine «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 (06/10/08 Version)

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 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 for 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 (03/28/08 Version)

Reviewer's Note: The data required below will be used by BPA for purposes of calculating Net Requirements and meeting WECC data reporting requirements.

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 10 Fiscal Years. «Customer Name» shall e-mail the forecast to BPA at kself@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 and Load Forecast Processes (05/27/08 Version)

17.7.1 Transparency for Net Requirements

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 total Dedicated Resource monthly energy amounts and peaking amounts for the upcoming Fiscal Year listed in section 5 of Exhibit A, Net Requirements and Resources.

17.7.2 Transparency for Above-RHWM Load Amounts

By July 31 of each Forecast Year, BPA shall publish the draft Above-RHWM Load amounts that BPA intends to use in the upcoming general rate case for each customer with a CHWM

17.7.3 Waiver of Confidentiality and Comment Process

«Customer Name» waives all claims of confidentiality regarding the data described above in sections 17.3.1 and 17.3.2. «Customer Name» may provide comments regarding the published data to BPA within 10 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 (01/17/08 Version)

Before «Customer Name» provides information that is subject to a privilege of confidentiality or nondisclosure to BPA, «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.

18. CONSERVATION AND RENEWABLES (04/05/08 Version)

18.1 Conservation (05/14/08 Version)

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 Beginning June 1, 2010, and no later than June 1 every two years thereafter, «Customer Name» shall create and submit a 10-year conservation plan stating «Customer Name»'s projection of planned conservation, including biennial conservation targets. If «Customer Name» is required under state law (such as the Washington State Energy Independence Act (RCW 19.285)) to create and submit a conservation plan, «Customer Name» may submit to BPA a copy of such plan to meet the requirements of this section 18.1.2.1 if it includes, or is supplemented by, the information required above. The requirements of this section 18.1.2.1 are waived if «Customer Name» purchases all of its power from BPA to serve its Total Retail Load.

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 (04/05/08 Version)

18.2.1 Renewable Energy Certificates

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

18.2.2 Reporting Requirements (06/04/08 Version)

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

- (1) updated information on power generated by renewable resources 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, Net Requirements and Resources. Such information shall include: project name, fuel type(s), location, date 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 dedicated to serve «Customer Name»'s Total Retail Load for the forthcoming calendar year.

- (2) all purchases of RECs used to meet requirements under state or federal law for the forthcoming calendar year. Such information shall include: quantity, fuel type(s), location and energization date of the RECs producing resource(s), as well as the calendar quarter and the year in which the RECs will be generated.
- (3) an updated long-term renewable resource plan. This shall include «Customer Name»'s 2-year forecast of expected acquisitions of power generated by renewable resources greater than 200 kilowatts. Such forecast shall disclose the expected amount of such power to be purchased, capacity of expected acquisitions by fuel type, and percentage of output dedicated to serve «Customer Name»'s Total Retail Load.

The three preceding renewable resource requirements are waived if «Customer Name» purchases all of its power for service to its Total Retail Load from BPA.

19. RESOURCE ADEQUACY (02/28/08 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, 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 are waived if «Customer Name» purchases all of its power from BPA to serve its Total Retail Load.

20. NOTICES AND CONTACT INFORMATION (06/13/08 Version)

Any notice required under this Agreement 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»:

If to BPA:

«Utility Name»

Bonneville Power Administration

«Street Address»

«Street Address»

«P.O. Box »

«P.O. Box»

«City, State, Zip»

«City, State, Zip»

Attn: «Contact Name»

Attn: «AE Name - Routing»

«Contact Title»

«Senior »Account Executive

Phone: «###-###-####»

Phone: «###-###-####»

FAX: «###-###-####»

FAX: «###-###-####»

E-Mail: «E-mail address»

E-Mail: «E-mail address»

21. UNCONTROLLABLE FORCES (05/14/08 Version)

21.1 The Parties shall not be in breach of their respective obligations to the extent the failure to fulfill any obligation is due to an Uncontrollable Force.

“Uncontrollable Force” means an event beyond the reasonable control of, and without the fault or negligence of, the Party claiming the Uncontrollable Force, that prevents that Party from performing its contractual obligations under this Agreement and which, by exercise of that Party’s reasonable care, diligence and foresight, such Party was unable to avoid. Uncontrollable Forces include, but are not limited to:

- (1) any unplanned curtailment or interruption of firm transmission service used to deliver Firm Requirements Power sold under this Agreement to «Customer Name»;
- (2) any planned curtailment or interruption of long-term firm transmission service used to deliver Firm Requirements Power sold under this Agreement to «Customer Name» if such curtailment or interruption occurs on BPA's or a Third Party Transmission Provider's System;

- (3) any failure of «Customer Name»'s distribution or transmission facilities that prevents «Customer Name» from delivering power to end-users;
- (4) strikes or work stoppage;
- (5) floods, earthquakes, other natural disasters, or terrorist acts; and
- (6) final orders or injunctions issued by a court or regulatory body having competent 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 of competent 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 its best 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, Notices and Contact Information.

22. GOVERNING LAW AND DISPUTE RESOLUTION (05/16/08 Version)

This Agreement shall be interpreted consistent with and governed by federal law. The Parties shall identify issue(s) in dispute and make a good faith effort to negotiate a resolution of disputes before either Party 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 Parties



elect binding arbitration, the Parties reserve their rights to seek judicial resolution of any dispute arising under this Agreement.

22.1 Judicial Resolution

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 Ninth Circuit Court of Appeals. Such final actions include, but are not limited to, the establishment and implementation of rates and rate methodologies. Any dispute regarding any rights of the Parties under any BPA policy, including the implementation of such policy, shall not be subject to arbitration under this Agreement. For purposes of this section 22, Governing Law and Dispute Resolution, 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. If either Party asserts that a dispute is excluded from arbitration under this section 22, Governing Law and Dispute Resolution then both Parties shall apply to the federal court having jurisdiction for an order determining whether such dispute is subject to arbitration under this section 22, Governing Law and Dispute Resolution.

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.

The Parties may agree to use binding arbitration, consistent with BPA's Binding Arbitration Policy or its successor, to resolve disputes that the Parties agree are strictly issues of fact and that fall within BPA's Binding Arbitration Policy or its successor. 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 that is not excluded by 21.1 above, and is not resolved via binding 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. 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 both 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 arbitrators may be entered by any court having jurisdiction thereof.

22.5.2 In nonbinding arbitration, the arbitration award is not binding on the Parties. Subsequent to nonbinding arbitration, if a Party other than BPA rejects the arbitration award or if BPA rejects the arbitration award, the Party may seek judicial resolution of the dispute.

22.6 Arbitration Costs

Each Party shall be responsible for its own costs of arbitration, including legal fees. 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. NO WARRANTY (03/26/08 Version)

Nothing in this Agreement, or any dispute arising out of this Agreement, shall limit the Administrator's responsibility to establish rates to recover costs and timely repay the U.S. Treasury or to take actions that are effectively required by a court order. It is the Parties' intent to structure a durable commercial relationship that is based on existing statutory requirements and to provide «Customer Name» with protection against change to those guiding statutes as is reasonably possible. However, BPA does not warrant or represent that this Agreement is immune from costs imposed by court order or agency regulations of a general and public nature or is immune from subsequently enacted legislation.

24. STATUTORY PROVISIONS

24.1 Retail Rate Schedules (09/04/07 Version)

«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.

24.2 Insufficiency and Allocations (04/04/08 Version)

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 «Customer Name» is obligated to purchase pursuant to section 3 and Exhibit C of this Agreement shall be reduced to the amounts available under such allocation methodology for restricted service.

24.3 New Large Single Loads and CF/CTs

24.3.1 Determination of an NLSL (05/15/08 Version)

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

24.3.1.1 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, 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 twelve-month period..

24.3.1.2 For the sole purpose of computing the increase in energy consumption between any two consecutive 12-month periods of comparison under this section 24.3.1, reductions in the end-use consumer's load associated with a facility during the first twelve-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.

24.3.1.3 The Parties may agree that the installed production equipment at a facility will exceed 10 average megawatts consumption over any 12 consecutive months and such agreement shall constitute a binding NLSL determination.

24.3.2 Determination of a Facility (09/04/07 Version)

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.

24.3.3 Administrative Obligations and Rights (4/06/08 Version)

24.3.3.1 «Customer Name»'s CF/CT loads and NLSLs are listed in Exhibit D, Additional Products and Special Provisions.

24.3.3.2 «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, Additional Products and Special Provisions. If BPA determines that any load associated with a single facility that is capable of growing 10 average megawatts or more in a consecutive 12-month period, then such load shall be subject to monitoring by BPA.

24.3.3.3 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 also require the end-use consumer to provide BPA physical access to inspect any facility for these purposes.

24.3.3.4 Unless the Parties agree pursuant to section 24.3.1.3 above, BPA shall unilaterally 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, Additional Products and Special Provisions.

24.3.4 Metering an NLSL (03/30/08 Version)

For any loads that are monitored by BPA for an NLSL determination, and at any facility that is determined by BPA to be an NLSL, «Customer Name» agrees to either consent to BPA installing BPA owned meters or «Customer Name» shall 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.

24.3.5 Undetermined NLSLs (04/06/08 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 24.3.4, above, and BPA shall bill «Customer Name» for the increase in load at the applicable PF Rate during any consecutive twelve-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 under sections 24.3.3 and 24.3.4, BPA may determine any load subject to NLSL monitoring to be an NLSL. Such NLSL determination shall be final unless «Customer Name» proves to BPA's satisfaction that the applicable load did not exceed 10 aMW in any 12-month monitoring period.

24.3.6 Service Elections for an NLSL (02/28/08 Version)

«Customer Name» shall serve all NLSLs with non-federal firm resources that are not Dedicated Resources in Exhibit A, Net Requirements and Resource, Exhibit D, Additional Products and Special Provisions, 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, Net Requirements and Resources. Under no circumstances shall BPA be required to acquire firm power for service to such NLSLs.

24.3.7 Renewable Resource/Cogeneration Exception (04/06/08 Version)

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 10 average megawatts 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, the Parties shall: (1) list the Consumer-Owned Resource(s) serving the NLSL in section 7.3 of Exhibit A, Net Requirements and Resources and (2) amend Exhibit D, Additional Products and Special Provisions to add the onsite renewable resource or cogeneration facility and the requirements for such service.

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 7.3 of Exhibit A, Net Requirements and Resources.

24.4 Priority of Pacific Northwest Customers (09/04/07 Version)

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.

24.5 Prohibition on Resale (09/04/07 Version)

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

24.6 Use of Regional Resources (05/15/08 Version)

24.6.1 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 24.6, “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 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.

24.6.2 «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.

24.6.3 If «Customer Name» fails to report to BPA in accordance with section 24.6.1, 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, for the duration of the export. When applicable such decrements shall be identified in section 3.2 of Exhibit A, Net Requirements and Resources.

24.6.4 For purposes of this section, 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 in a manner that such output is no 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 section 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 Pacific Northwest Coordination Agreement resource planning criteria, or other resource planning criteria generally used for such purposes within the Region.

24.7 BPA Appropriations Refinancing (05/14/08 Version)

The Parties agree that 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 date this Agreement is signed by the Parties, is incorporated by reference and is a material term of this Agreement.

25. STANDARD PROVISIONS

25.1 Amendments (09/04/07 Version)

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 a written instrument signed by authorized representatives of each Party.

25.2 Entire Agreement and Order of Precedence (09/26/07 Version)

This Agreement, including documents expressly incorporated by reference, constitutes the entire agreement between the Parties. 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.

25.3 Assignment (03/28/08 Version)

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.

25.4 No Third-Party Beneficiaries (10/01/07 Version)

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.

25.5 Waivers (10/01/07 Version)

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 any other breach of this Agreement.



25.6 BPA Policies (09/04/07 Version)

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.

25.7 Rate Covenant and Payment Assurance (03/28/08 Version)

«Customer Name» agrees that it shall establish, maintain and collect rates or charges 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, BPA may terminate this Agreement.

26. TERMINATION (07/02/08 Version)

26.1 BPA's Right to Terminate

BPA may terminate this Agreement if:

- (1) «Customer Name» fails to make payment as required by section 16.4, Billing and Payment, or
- (2) «Customer Name» fails to provide payment assurance satisfactory to BPA as required by section 25.7, Rate Covenant and Payment Assurance.

26.2 Customer's Right to Terminate (07/2/08 Version)

«Customer Name» may provide written notice to terminate this Agreement not later than 60 days after a Final FERC Order is issued declining to approve the Tiered Rates Methodology if such approval is required, or a Final FERC Order disapproves rates established consistent with the TRM. The notice shall include a date of termination not later than 90 days after the date of such notice. For purposes of this section 26.3, "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.

27. SIGNATURES (10/01/07 Version)

The signatories represent that they are authorized to enter into this Agreement on behalf of the Party for which they sign.

«FULL NAME OF CUSTOMER»

UNITED STATES OF AMERICA
Department of Energy
Bonneville Power Administration

By _____

By _____

Name _____
(Print/Type)

Name _____
(Print/Type)

Title _____

Title _____

Date _____

Date _____

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



Exhibit A

NET REQUIREMENTS AND RESOURCES

1. NET REQUIREMENTS

«Customer Name»'s Net Requirement equals its Total Retail Load minus «Customer Name»'s Dedicated Resource amounts listed in sections 2, 3, and 4 of this exhibit. «Customer Name» shall not add resource amounts to reduce its purchase obligations from BPA under section 3.1 of the body of this Agreement except to meet obligations in section 3.5 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:

Option 1: Include if SLICE/BLOCK or BLOCK customer does NOT take Shaping Capacity.

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, 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.

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	Total (annual aMW)
Fiscal Year 2012													
Total (MWh)													



Annual Forecast of Monthly Total Retail Load

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total (annual aMW)
Fiscal Year 2013													
Total (MWh)													
Fiscal Year 2014													
Total (MWh)													
Fiscal Year 2015													
Total (MWh)													
Fiscal Year 2016													
Total (MWh)													
Fiscal Year 2017													
Total (MWh)													
Fiscal Year 2018													
Total (MWh)													
Fiscal Year 2019													
Total (MWh)													
Fiscal Year 2020													
Total (MWh)													
Fiscal Year 2021													
Total (MWh)													
Fiscal Year 2022													
Total (MWh)													
Fiscal Year 2023													
Total (MWh)													
Fiscal Year 2024													
Total (MWh)													
Fiscal Year 2025													
Total (MWh)													
Fiscal Year 2026													
Total (MWh)													
Fiscal Year 2027													
Total (MWh)													
Fiscal Year 2028													
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.

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. «Customer Name»'s Net

Requirement forecast equals «Customer Name»'s Total Retail Load forecast, shown in section 1.1 above, minus «Customer Name»'s total Dedicated Resource Amounts, shown in section 5 below.

Consistent with section 3 of the body of this Agreement, «Customer Name» shall dedicate additional resource energy amounts to serve any «Customer Name» energy needs above «Customer Name»'s RHW and any PF Tier 2 rate amounts listed in section 2.5 of Exhibit C, Purchase Obligations. «Customer Name» shall also serve any «Customer Name» peak load above the sum of «Customer Name»'s monthly purchase amounts at Tier 1 rates in section 1.3 of Exhibit C, Purchase Obligations, and any purchase amounts at Tier 2 rates in section 2.5 of Exhibit C, Purchase Obligations, with additional resource peak amounts.

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

Annual Forecast of Monthly Net Requirements – Energy (aMW)													
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total (annual aMW)
Fiscal Year 2012													
Total (MWh)													



Annual Forecast of Monthly Net Requirements – Energy (aMW)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total (annual aMW)
Fiscal Year 2013													
Total (MWh)													
Fiscal Year 2014													
Total (MWh)													
Fiscal Year 2015													
Total (MWh)													
Fiscal Year 2016													
Total (MWh)													
Fiscal Year 2017													
Total (MWh)													
Fiscal Year 2018													
Total (MWh)													
Fiscal Year 2019													
Total (MWh)													
Fiscal Year 2020													
Total (MWh)													
Fiscal Year 2021													
Total (MWh)													
Fiscal Year 2022													
Total (MWh)													
Fiscal Year 2023													
Total (MWh)													
Fiscal Year 2024													
Total (MWh)													
Fiscal Year 2025													
Total (MWh)													
Fiscal Year 2026													
Total (MWh)													
Fiscal Year 2027													
Total (MWh)													
Fiscal Year 2028													
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.

Reviewer's Note: The concept of the below provision is to develop a method by which BPA can limit deliveries of Slice to amounts equal to a customer's Forecast Peak Net Requirement at times when BPA has no surplus capacity available. BPA believes Load Following and Block products inherently limit deliveries of peaking energy to amounts equal to a customer's peak Net Requirement.

1.3 Forecast of Peak Net Requirement

BPA and «Customer Name» acknowledge that section 5(b)(1) of the Northwest Power Act, P.L. 96-501, contains a provision for determining limitation on the amount of peaking energy a preference customer may purchase from BPA to serve its general requirements. BPA has not adopted a methodology for determining the peaking energy limitation (if any) applicable to the peaking energy sales by BPA under section 5(b)(1) because it has historically had an energy limited system rather than a capacity limited system. BPA and «Customer Name» agree that at any time during the term of this Agreement, BPA may adopt a methodology for calculating and applying the limitation on the amount of peaking energy that can be purchased under this Agreement by «Customer Name» to serve their general requirements pursuant to section 5(b)(1). BPA will employ its rulemaking process for the review, evaluation and adoption of such a methodology, including without limitation a formal public comment process and record of decision. If BPA adopts such a methodology that is applicable to «Customer Name», the methodology so adopted will not be applied to peaking energy sold under this Agreement until one calendar year after the date the record of decision adopting such methodology is issued.

End Option 1

2. LIST OF SPECIFIED RESOURCES

Drafter's Note: List each Specified Resource, in the applicable subsection, using the format shown below in section 2.1(1). Determine the Dedicated Resource amounts for Specified Resources per the updated 5(b)/9(c) Policy (which is currently under review). When using PNCA studies to calculate Dedicated Resource amounts use the most current study released as of August 18, 2008. The most current PNCA study will either be the Modified Regulation for 2008-2009 (released in May 2009) or the Final Regulation for 2008-2009 (release forthcoming).

2.1 Generating Resources

All of «Customer Name»'s Generating Resources dedicated to serve its Total Retail Load are listed below.

Drafter's Note: If «Customer Name» does not have any Generating Resources delete sections 2.1(1)(A), (B), and (C) below and leave only the following text in this section:

No Generating Resources at this time.

(1) «Resource Name»

Drafter's Note: If «Customer Name» has Generating Resources dedicated to its TRL complete the following steps for each resource: insert the resource name as the title for section 2.1(1), add any special



provisions for such resource to section 2.1(1)(A), and fill in the tables in section 2.1(1)(B) and (C). Delete "No Generating Resources at this time" from above.

(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 Dedicated to Load	Nameplate Capability (MW)

Statutory Status		Diurnal Flattening Service?		Dispatchable?		PNCA?		If PNCA, PNCA Updates?	
5b1A	5b1B	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	Total (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)													

Specified Resource Amounts													
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total (annual aMW)
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)													



Specified Resource Amounts

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total (annual aMW)
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)													
Note: Fill in the table above with megawatt-hours rounded to whole megawatt-hours, with megawatts rounded to whole megawatts, and annual average megawatts rounded to three decimal places.													

2.2 Contract Resources

All of «Customer Name»’s Contract Resources dedicated to serve its Total Retail Load are listed in tables below.

Drafter’s Note: If «Customer Name» does not have any Contract Resources delete sections 2.2(1) below and leave only the following text in this section:

No Contract Resources at this time.

(1) «Resource Name»

Drafter’s Note: If «Customer Name» has Contract Resources dedicated to its TRL list the resources below and complete the following steps for each resource using the format in section 2.1(1): insert the resource name as a title for section 2.2(1), add any special provisions for such resource to section 2.2(1)(A), add a resource profile table to section 2.2(1)(B) using the table format in section 2.1(1)(B), add dedicated resource amounts to section 2.2(1)(C) using the table format in section 2.1(1) (C). Delete “No Contract Resources at this time” from above.

3. UNSPECIFIED RESOURCE AMOUNTS

3.1 Unspecified Resource Amounts Dedicated to Total Retail Load

«Customer Name»’s Unspecified Resource Amounts dedicated to serve its Total Retail Load are listed in the table below.

Drafter’s Note: If «Customer Name» does not have any Unspecified Resource Amounts delete the table below and leave only the following text in this section:

No Unspecified Resource Amounts at this time.

Drafter’s Note: If «Customer Name» has Unspecified Resource Amounts list them in the table below adding additional years as needed. Delete “No Unspecified Resource Amounts” from above.

Unspecified Resource Amounts													
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total (annual aMW)
Fiscal Year 2012													
Total (MWh)													
HLH (MWh)													
LLH (MWh)													



Unspecified Resource Amounts													
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total (annual aMW)
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.

3.2 Unspecified Resource Amounts for 9(c) Export Decrements

Pursuant to section 3.5.2 of the body of this Agreement, BPA shall insert a table below for any decrements due to export of resources in the shape, duration, and amount of the export.

4. DEDICATED RESOURCE AMOUNTS FOR AN NLSL

«Customer Name»'s Dedicated Resource amounts serving an NLSL are listed in the table(s) below.

Drafter's Note: If «Customer Name» does not have any Dedicated Resource amounts serving an NLSL then leave only the following text in this section:

No Dedicated Resource amounts serving an NLSL at this time.

Drafter's Note: If «Customer Name» has Unspecified Resource Amounts serving an NLSL list the amounts in a table below using the table format above in section 3.1 and adding additional years as needed. Delete "No Dedicated Resource Amounts serving an NLSL at this time" from above.

Drafter's Note: If «Customer Name» has Specified Resources serving an NLSL list the resources below and complete the following steps for each resource using the format in section 2.1(1): insert the resource name as a title for section 4(1), add any special provisions for such resource to section 4(1)(A), add a resource profile table to section 4(1)(B) using the table format in section 2.1(1)(B), add Dedicated Resource amounts to section 4(1)(C) using the table format in section 2.1(1)(C). Delete "No Dedicated Resource amounts serving an NLSL at this time" from above.

5. TOTAL DEDICATED RESOURCES AMOUNTS

The amounts in the table below equal the sum of all resource amounts dedicated to «Customer Name»'s Total Retail Load listed above in sections 2, 3, and 4.

Drafter's Note: If «Customer Name» does not have any Dedicated Resource amounts listed in section 2, 3, or 4 above then leave only the following text in this section:

No Dedicated Resource amounts at this time.

Drafter's Note: If «Customer Name» has any Dedicated Resource amounts listed in section 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. Delete "No Dedicated Resource amounts at this time from above.

6. LIST OF RESOURCES NOT DEDICATED TO TOTAL RETAIL LOAD

Pursuant to section 3.6 of the body of this Agreement, all of «Customer Name»'s Generating and Contract Resources not dedicated to serve its Total Retail Load that are greater than 200 kilowatts nameplate capability are listed in tables below.

Drafter's Note: If «Customer Name» does not have any resources not dedicated to its TRL then delete sections 6(1), 6(1)(A), and 6(1)(B) and leave only the following text in this section:

No resources at this time.

(1) «Resource Name»

Drafter's Note: If «Customer Name» has resources not dedicated to its TRL complete the following steps for each resource: insert the resource name as the title for section 6(1) and fill in the tables in section 6(1)(A) and (B). Delete "No resources at this time" from above.

(A) Resource Profile

Fuel Type	Type of Resource		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.

7. LIST OF CONSUMER-OWNED RESOURCES

7.1 Consumer-Owned Resources Serving Onsite Consumer Load

Pursuant to section 3.7 of the body of this Agreement, all of «Customer Name»'s Consumer-Owned Resources serving Onsite Consumer Load, except any Consumer-Owned Resources serving an NLSL which are listed below in section 7.3 of this Exhibit, are listed in tables below.



Drafter's Note: If «Customer Name» does not have any Consumer-Owned Resources serving Onsite Consumer Load then delete sections 7.1(1), 7.1(1)(A), and 7.1(1)(B) and leave only the following text in this section:
No Consumer-Owned Resources serving Onsite Consumer Load at this time.

(1) **«Resource Name»**

Drafter's Note: If «Customer Name» has Consumer-Owned Resources serving Onsite Consumer Load complete the following steps for each resource: insert the resource name as the title for section 7.1(1) and fill in the tables in section 7.1(1)(A) and (B). Delete "No Consumer-Owned Resources serving Onsite Consumer Load at this time" from above.

(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.

7.2 Consumer-Owned Resources Serving Load Other than Onsite Consumer Load

Pursuant to section 3.7 of the body of this Agreement, all of «Customer Name»'s Consumer-Owned Resources serving load other than Onsite Consumer Load are listed in tables below.

Drafter's Note: If «Customer Name» does not have any Consumer-Owned Resources serving load other than Onsite Consumer Load then delete sections 7.2(1), 7.2(1)(A), and 7.2(1)(B) and leave only the following text in this section:

No Consumer-Owned Resources serving load other than Onsite Consumer Load at this time.

(1) **«Resource Name»**

Drafter's Note: If «Customer Name» has Consumer-Owned Resources serving load other than Onsite Consumer Load complete the following steps for each resource: insert the resource name as the title for

section 7.2(1) and fill in the tables in section 7.2(1)(A) and (B). Delete “No Consumer-Owned Resources serving load other than Onsite Consumer Load at this time” from above.

(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.

7.3 Consumer-Owned Resources Serving an NLSL

Pursuant to section 24.3.7 of the body of this Agreement, all of «Customer Name»’s Consumer-Owned Resources serving an NLSL are listed in tables below.

Drafter’s Note: If «Customer Name» does not have any Consumer-Owned Resources an NLSL then delete sections 7.3(1), 7.3(1)(A), and 7.3(1)(B) and leave only the following text in this section:

No Consumer-Owned Resources serving an NLSL at this time.

(1) «Resource Name»

Drafter’s Note: If «Customer Name» has Consumer-Owned Resources serving an NLSL complete the following steps for each resource: insert the resource name as the title for section 7.3(1) and fill in the tables in section 7.3(1)(A) and (B). Delete “No Consumer-Owned Resources serving an NLSL at this time” from above.

(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.

8. REVISIONS

BPA shall make adjustments to this exhibit to reflect (1) BPA’s determinations under this Agreement and BPA’s 5(b)/9(c) Policy, and (2) «Customer Name»’s elections regarding the application and use of all resources listed by «Customer Name» to serve its Total Retail Load, as provided under this Agreement.

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

«Customer Name»'s pre-annexation Total
Retail Load minus total NLSLs, if any

pre-annexation
CHWM

1.2.4 BPA may change «Customer Name»'s CHWM if BPA's Administrator determines that BPA is effectively required by court order to make such changes. BPA shall determine the effective date of such a change and shall update this exhibit with the changed CHWM.

2. **CONTRACT DEMAND QUANTITIES (CDQs) (05/27/08 Version)**

2.1 **CDQ Amounts**

By September 15, 2011, BPA shall update the table below with «Customer Name»'s monthly CDQs. Applicability 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: Leave table blank at contract signing.

Monthly Contract Demand Quantities												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
MW												
Note: BPA shall round the megawatt amounts in the table above to three decimal places.												

2.2 **Changes Due to Annexation**

The Parties shall determine when changes to «Customer Name»'s CDQs, as allowed below, will become effective.

- (1) If «Customer Name» acquires an Annexed Load from a utility that has monthly CDQs, BPA shall increase «Customer Name»'s CDQ for each month by adding the portion of the other utility's CDQ that is attributable to such Annexed Load.
- (2) If another utility with monthly CDQs annexes load of «Customer Name», BPA shall reduce «Customer Name»'s CDQ for each month by removing the portion of «Customer Name»'s CDQ that is attributable to the load that was annexed.

3. **REVISIONS (03/30/08 Version)**

BPA may revise this exhibit to the extent allowed in sections 1 and 2 above. All other changes shall be made by mutual agreement.

(PS«X/LOC» «File Name with Path».DOC) «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) (06/13/08 Version)

Reviewer's Note: See "Timeline for HWMs & Above-RHWM Elections"

1.1 CHWM Amount

By September 15, 2011, BPA shall update 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 below.

Drafter's Note: Leave table blank at contract signing.

CHWM (annual aMW):	
Note: BPA shall round the number in the table above to three decimal places.	

1.2 Changes to CHWM

If a change is made to «Customer Name»'s CHWM pursuant to this section, BPA shall determine and notify «Customer Name» the date such change will be effective.

1.2.1 If a load included in «Customer Name»'s Measured 2010 Load, as defined in the TRM, is later found to be an NLSL, BPA shall reduce «Customer Name»'s CHWM by the amount of the NLSL.

1.2.2 If «Customer Name» acquires an Annexed Load from a utility that has a CHWM, BPA shall increase «Customer Name»'s CHWM by adding part of the other utility's CHWM to «Customer Name»'s CHWM. The amount of the CHWM addition shall equal:

$$\left[\frac{\text{Annexed Load minus any annexed NLSLs}}{\text{Other utility's pre-annexation Total Retail Load minus total NLSLs, if any}} \right] \times \left[\text{Other utility's pre-annexation CHWM} \right]$$

[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 25.8 of the body of this Agreement.]

1.2.3 If another utility with a CHWM annexes load of «Customer Name», BPA shall reduce «Customer Name»'s CHWM by adding part of «Customer Name»'s CHWM to the other utility's CHWM. The amount of the CHWM reduction shall equal:

$$\left[\frac{\text{Annexed Load minus any annexed NLSLs}}{\text{«Customer Name»'s CHWM}} \right] \times \left[\text{«Customer Name»'s CHWM} \right]$$

Exhibit C

PURCHASE OBLIGATIONS

- 1. FIRM REQUIREMENTS POWER AT PF TIER 1
[To be completed]
- 2. FIRM REQUIREMENTS POWER AT PF TIER 2(06/13/08 Version)

2.1 Notice to Purchase Zero Amounts at PF Tier 2 Rates

If «Customer Name» elects not to purchase Firm Requirements Power at PF Tier 2 rates for a Purchase Period as established in section 9 of the body of this Agreement, 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 PF Tier 2 rates, and (2) apply its Dedicated Resources to serve all of «Customer Name»'s Above-RHWM Load.

Drafter's Note: Leave table blank at contract signing:

Zero PF Tier 2	Purchase Period
	FY 2012 - FY 2014
	FY 2015 - FY 2019
	FY 2020 - FY 2024
	FY 2025 - FY 2028
Indicate Election with an "X"	

2.2 PF Tier 2 Load-Growth Rate

«Customer Name» shall not have the right to purchase Firm Requirements Power at the Load-Growth Rate for the term of this Agreement.

2.3 PF Tier 2 Vintage Rate(s)

Reviewers Note: Shaded text is identical to Load Following (absent the first sentence)

2.3.1 If BPA makes Firm Requirements Power available at one or more PF Tier 2 Vintage Rates, «Customer Name» may purchase amounts of such power, subject to section 2.4.2 below, only if and up to the megawatt amount that «Customer Name» has purchased Firm Requirements Power from BPA at the PF Tier 2 Short-Term Rate. If «Customer Name» elects to purchase Firm Requirements Power from BPA at a PF Tier 2 Vintage Rate, «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 «Customer Name» shall purchase Firm Requirements Power at a specific rate, subject to section 2.3.2 below, based on the costs of a



resource to be acquired by BPA as set in each general rate case. A signed Statement of Intent from «Customer Name» specifying the amount and term of the purchase is necessary before BPA will acquire any cost-effective resource on a long-term basis to serve load under a PF Tier 2 Vintage Rate.

- 2.3.2 If BPA establishes the PF Tier 2 Vintage Rate consistent with the Statement of Intent, «Customer Name» agrees to have the portion of its PF Tier 2 rate power purchase specified in the Statement of Intent, priced at that rate. If BPA is unable to establish the PF Tier 2 Vintage Rate, «Customer Name» agrees to purchase such amount of Firm Requirements Power at the PF Tier 2 Short-Term Rate.
- 2.3.3 If «Customer Name» purchases Firm Requirements Power at a PF Tier 2 Vintage Rate, BPA shall insert applicable tables, terms, and conditions for each Vintage rate here.

2.4 PF Tier 2 Short-Term Rate

2.4.1 Short-Term Rate Purchases

If «Customer Name» elects by a Notice Deadline to purchase Firm Requirements Power at the PF Tier 2 Short-Term Rate for a Purchase Period, 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 to show «Customer Name»’s purchase amounts, if any, at the PF Tier 2 Short-Term Rate for the corresponding Purchase Period.

Drafter’s Note: Leave table blank at contract signing:

PF 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.					

2.4.2 Conversion to PF Tier 2 Vintage Rates

Reviewers Note: Shaded text is identical to Load Following text:

2.4.2.1 Right to Convert

Subject to the amounts of power available under PF Tier 2 Vintage Rates offered by BPA, «Customer Name» shall have the right to convert only those amounts of Firm Requirements Power it purchases at the PF Tier 2 Short-Term Rate to an equivalent purchase amount at a PF Tier 2 Vintage Rate.

2.4.2.2 Conversion Costs

Upon establishment of a Vintage Rate for which «Customer Name» signed a Statement of Intent, «Customer Name» shall be liable for payment of any outstanding costs under the PF Tier 2 Short-Term Rate that apply to «Customer Name». BPA shall determine such costs, if any, in the first general rate case that establishes the applicable PF Tier 2 Vintage Rate(s). In no event shall BPA make payment to «Customer Name» as a result of «Customer Name»'s conversion of purchase amounts at the PF Short-Term Rate to purchase amounts at a PF Tier 2 Vintage Rate(s).

2.4.2.3 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 PF Tier 2 Vintage Rate purchase amounts and remove «Customer Name»'s PF Tier 2 Short-Term Rate purchases by the amounts purchased at the PF Tier 2 Vintage Rate.

Reviewer's Note: See "Timeline for HWMs & Above-RHWM Elections"

2.5 Amounts of Power to be Billed at Tier 2 Rates

Prior to each Fiscal Year BPA shall determine the amounts, if any, of Firm Requirements Power at PF 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 PF Tier 2 rate, (2) any remarketed PF Tier 2 rate purchase amounts, and (3) the total amount of Firm Requirements Power priced at PF Tier 2 rates, net of remarketed amounts.



Drafter's Note: Leave table blank at contract signing:

Annual Amounts Priced at PF 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									
Annual Amounts Priced at PF Tier 2 Rates (aMW)									
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, 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.									

2.6 Flat Block

Amounts of Firm Requirements Power priced at PF Tier 2 rates shall be equal in all hours of the year.

3. MONTHLY PF RATES (04/06/08 Version)

Applicable monthly PF Tier 1 and PF Tier 2 rates are specified in BPA rate schedules.

4. REVISIONS (05/27/08 Version)

BPA shall revise this exhibit to reflect Customer Name's elections regarding service to its Above-RHWM Load and BPA's determinations under this Agreement.

(PS«X/LOC»- «File Name with Path».DOC) «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(05/25/08 Version)

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 the applicable cost-based rate for the rest of «Customer Name»'s load:

End-use consumer's name:

Facility name:

Facility location:

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 potential NLSLs.

End Option 1

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 1: Include the following if customer 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 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 2.3.1 above.

End Option 2

2. RESOURCE SUPPORT SERVICES (06/16/08 Version)

BPA shall develop the RSS products to support applicable Specified Resources listed in section 2 of Exhibit A for the FY 2012-2014 Purchase Period and offer such as a revision to this exhibit by August 1, 2009. 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. If «Customer Name» requests that BPA provide such service, the Parties shall execute a revision to this exhibit by the November 1, 2009 Notice Deadline.

By each Notice Deadline thereafter, «Customer Name» may purchase RSS from BPA to support applicable Specified Resources listed in section 2 of Exhibit A for the corresponding Purchase Period. If «Customer Name» dedicates a new Specified Resource to its Total Retail Load to meet its obligations to serve Above-RHWM Load with Dedicated Resource amounts, consistent with section 2 of Exhibit C, «Customer Name» may purchase RSS from BPA to support such resource. Such purchase shall be for the remainder of the Purchase Period and for the following Purchase Period. «Customer Name» shall notify BPA of its decision to purchase RSS for a new Specified Resource prior to October 31 of a Rate Case Year and the elected RSS will be effective at the start of the next Rate Period.

#. «PLACEHOLDER FOR SPECIAL PROVISIONS» (06/17/08 Version)

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.

#. REVISIONS (09/04/07 Version)

This exhibit shall be revised by mutual agreement of the Parties to reflect additional products «Customer Name» purchases during the term of this Agreement.

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

Option 2: for Customers who operate their own Balancing Authority Areas.

Exhibit E

METERING (06/11/08 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 and assist both Parties in administration of this Agreement. This information will also help BPA review its forecasting assumptions.

Drafter's Note: If there is only one Point of Interchange, remove the numbering "(a)" from this section, move indent appropriately to line up, and renumber the metering to start with "1.1".

1.1 Name of Interchange Point: «NAME» INTERCHANGE

Owner: «Owner»;

Metering:

Drafter's Note: List all meters for this Interchange Point. If there is only one meter, remove the numbering "(A)" from this section and move indent appropriately to line up.

(1) in «Owner's Name»'s «Substation Name» Substation in the «##» kV circuit«s» over which such electric power flows.

(2) in «Owner's Name»'s «Substation Name» Substation in the «##» kV circuit«s» over which such electric power flows.

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».DOC) «mm/dd/yy» *{Drafter's Note: Insert date of finalized contract here}*
End option 2 for Customers who operate their own Balancing Authority Areas.



EXHIBIT F

SCHEDULING (7/16/08 Version)

Include in Slice/Block template

1. SCHEDULING FEDERAL POWER

«Customer Name» is responsible for scheduling all deliveries of Firm Requirements Power and Surplus Firm Power purchased under this Agreement from the Scheduling Points of Receipt to its ultimate destination, and for creating associated E-tags. «Customer Name» shall provide copies of such E-tags to Power Services consistent with the requirements of this Exhibit F.

2. COORDINATION REQUIREMENTS

2.1 Prescheduling

«Customer Name» shall submit delivery schedules of Firm Requirements Power and Surplus Firm Power to Power Services by 1100 Pacific Prevailing Time the day(s) on which prescheduling occurs, as specified by WECC. Preschedule E-Tags are due to Power Services in accordance with the parameters specified in Section 4 below.

2.2 Real-Time Scheduling

«Customer Name» shall have the right to submit new or modified schedules and E-tags in real-time for the Slice portion of their schedules in accordance with the parameters specified in Section 4 below.

2.3 After the Fact

BPA 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). BPA 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 SCHEDULING REQUIREMENTS

3.1 Schedule submissions to Power Services will primarily be via Power Services approved electronic methods, which may include Slice 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 meet the same requirements as Power Services scheduling arrangements.

3.2 Schedules of Slice Output submitted to Power Services by «Customer Name» for preschedule shall comply with period-average and period ending Delivery Limits or operating limits established in the Simulator, which may include



Project Storage Bounds, Project discharge amounts, or Project generation values.

- 3.3 The timeline within which Power Services shall approve or deny «Customer Name»'s Delivery Requests, as represented by «Customer Name»'s E-tags, shall conform to Power Services then current preschedule and real-time scheduling guidelines as specified in Section 4 below.
- 3.3.1 For the purpose of approving requests for deliveries of Slice Output, Power Services shall approve valid E-tags, as described in section 3.3.2 below, «Customer Name» submits to Power Services prior to the Power Services scheduling deadline, as specified in Section 4 below.
- 3.3.2 Valid Power Service E-tags shall (1) identify BPA-Power Service as the generation providing entity, (2) identify «Customer Name» as first downstream PSE, (3) reflect total E-tag MW amounts that are less than or equal to «Customer Name»'s Delivery Requests. Valid Balancing Authority E-tags have different standards (such as valid OASIS numbers, etc.) than valid Power Service E-tags.
- 3.3.3 The Power Services Slice Scheduler shall have the sole, unilateral discretion to accept or deny E-tags «Customer Name» submits to Power Services after the Power Services scheduling deadline, regardless of the reason for the late submission, and irrelevant of submission method (electronic, verbal, fax, etc.)
- 3.3.4 Changes to tagged energy amounts required by the Balancing Authority for reliability purposes shall be accommodated 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 tagged and non-tagged energy schedules (e.g., transmission loss schedules, etc., that are not tagged) is equal to its Delivery Request for each delivery hour.
- 3.4.1 «Customer Name» shall be have the right to submit adjusted Input Variables to PS, pursuant to section 4(a) below, in order to alter the associated Simulated Output Energy Schedules within established Delivery Limits, such that «Customer Name»'s Delivery Request is equal to the sum of its tagged and non-tagged energy amounts for each delivery hour.
- 3.4.2 For each delivery 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, and the amount «Customer Name»'s hourly tagged and non-tagged energy amount is less than its Delivery Request shall be forfeited.

4. SCHEDULING DEADLINES

4.1 Customer Input Submission Deadline

«Customer Name» shall have until 15 minutes prior to the start of each delivery hour to submit revised Customer Inputs to PS in order to affect the associated Simulated Output Energy Schedules for each such delivery hour. The PS Slice Scheduler shall have the sole, unilateral discretion to reject for any reason «Customer Name»'s Customer Inputs associated with the upcoming delivery hour that are submitted to PS after 15 minutes prior to the start of the start of each such delivery hour. (Yellow-highlighted sections may be moved to Ex N)

4.2 Real-Time E-Tag Submission Deadline

Power Service shall approve valid E-tags, as described in section 3.3.2 above, that affect each delivery hour and are submitted to PS by «Customer Name» prior to the Power Service E-tag scheduling deadline, which is 30 minutes prior to the start of each delivery hour. The PS Slice Scheduler shall have the sole, unilateral discretion to accept or deny E-tags «Customer Name» submits for each delivery hour after the Power Service E-tag scheduling deadline for that delivery hour, regardless of the reason for the late submission, and irrelevant of submission method (electronic, verbal, fax, etc.) Tag changes mandated by the Balancing Authority for reliability reasons will be managed pursuant to Section 3.3.4 above.

4.3 Preschedule E-Tag Submissions

Unless otherwise mutually agreed, all «Customer Name» preschedule E-Tags will be submitted to Power Services according to NERC instructions and deadlines for E-tagging, as specified or modified by the BA and WECC.

5. SCHEDULING OF NON-FEDERAL RESOURCES

«Customer Name» shall electrically copy BPA Power Services on all preschedule and real-time E-Tags associated with the delivery of «Customer Name»'s non-federal resource, if any, listed in Exhibit A, Net Requirements and Resources.

6. REVISIONS

BPA may unilaterally revise this exhibit:

- (1) to implement changes that BPA determines are necessary to allow it to meet its power and scheduling obligations under this Agreement, or
- (2) to comply with requirements of the WECC, NAESB, or NERC, or their successors or assigns.

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 Slice/Block Template

Option 1: Include the following for non-Transfer Service customers.

Exhibit G (05/25/08 Version)

THIS EXHIBIT INTENTIONALLY LEFT BLANK

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

End Option 1



Exhibit H(06/17/08 Version)

RENEWABLE ENERGY CERTIFICATES AND CARBON ATTRIBUTES

1. DEFINITIONS

- 1.1 “Environmental Attribute(s)” (04/04/08 Version) means the current or future credits, benefits, emission reductions, offsets and allowances attributable to the generation of energy from a specific renewable resources. One megawatt hour of energy generation from such renewable resource is associated with 1 megawatt hour of Environmental Attributes.
- 1.2 “Renewable Energy Certificates” or “RECs” (03/20/08 Version) means the certificates that document the ownership of Environmental Attributes.
- 1.3 “Tier 1 RECs” (04/04/08 Version) means the Environmental Attributes composed of a blend, by fuel source, based on annual generation of the specified renewable resources listed in section 2 below.
- 1.4 “Tier 2 Cost Pools” (06/16/08 Version) means the collection of Tier 2 costs, to be recovered by means of the application of Tier 2 Rates, or as defined in the TRM. Each Tier 2 Rate will be based on a corresponding Tier 2 Cost Pool.
- 1.5 “Tier 2 RECs” (03/27/08 Version) means the Environmental Attributes generated by specified renewable resources whose costs are recovered in a Tier 2 Cost Pool.
- 1.6 “Environmentally Preferred Power RECS” or “EPP RECs” (04/01/08 Version) means the portion of BPA’s Tier 1 RECs that is equal to an amount up to 130 percent of the annual average of 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.

2. BPA’S TIER 1 REC INVENTORY

BPA shall use its share of generation from the following renewable resources to establish the Tier 1 REC inventory: Foote Creek I, Foote Creek II, Stateline, Condon, Klondike I, Klondike III, and Ashland Solar. BPA shall maintain a current list of renewable resources BPA uses to establish its Tier 1 REC inventory on a publicly accessible BPA website. BPA may update this list at any time. BPA shall calculate its inventory of Tier 1 RECs annually and after-the-fact based on energy generated by listed resources during the previous calendar year.

3. «CUSTOMER NAME»’S SHARE OF TIER 1 RECS (05/14/08 Version)

Beginning April 15, 2012, and by April 15 every year thereafter over the duration of this Agreement, BPA shall:



- (1) transfer to «Customer Name», or manage in accordance with section 5 below, at no additional charge or premium, a pro rata share of Tier 1 RECs based on «Customer Name»'s RHWMs divided by the total RHWMs of all holders of CHWM Contracts; and,
- (2) for transferred RECs, provide «Customer Name» with a letter assigning title of such Tier 1 RECs to «Customer Name».

The amount of Tier 1 RECs available to BPA to transfer or manage shall be subject to the amount of available Tier 1 REC inventory, excluding amounts of Tier 1 REC inventory used to provide EPP RECs.

4. TIER 2 RECS (06/16/08 Version)

If «Customer Name» chooses to purchase Firm Requirements Power at a PF Tier 2 Rate, and such power includes RECs, then beginning April 15, 2012 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 below, transfer to or manage for «Customer Name», a pro rata share of applicable Tier 2 RECs generated during the previous calendar year. The pro rata share of Tier 2 RECs BPA transfers to «Customer Name» shall be the ratio of RECs associated with «Customer Name»'s PF Tier 2 purchase obligation to the RECs associated with the purchase obligation of all other customers from the respective Tier 2 Cost Pool.

5. TRANSFER, TRACKING, AND MANAGEMENT OF RECS (06/16/08 Version)

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 Tier 1 RECs, and Tier 2 RECs if applicable, to «Customer Name» via WREGIS. If, over the term of this Agreement, BPA determines 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 RECs.

Starting on July 15, 2011, and by July 15 prior to each Rate Period through the duration 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 Tier 1 RECs, and Tier 2 RECs if applicable, for each upcoming Rate Period:

- (1) BPA shall transfer «Customer Name»'s RECs into «Customer Name»'s own WREGIS account, which shall be established by «Customer Name»; or
- (2) BPA shall transfer «Customer Name»'s 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 RECs on «Customer Name»'s behalf. BPA shall annually credit «Customer Name» for «Customer Name»'s pro rata share of revenues generated by such sales 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, BPA shall market «Customer Name»'s RECs and annually credit «Customer Name» for «Customer Name»'s pro rata share of revenues generated by such marketing on «Customer Name»'s April bill issued by BPA in May.

Any 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 (06/16/08 Version)

BPA shall pay any reasonable fees associated with (1) the provision of «Customer Name»'s RECs and (2) the establishment of any subaccounts in «Customer Name»'s name pursuant to sections 5(1) and 5(2) above. «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 ATTRIBUTES (06/17/08 Version)

In the absence of carbon regulations or legislation directly affecting BPA, BPA intends to convey the value of any future carbon emission credits, or similar carbon instruments, associated with resources whose costs are recovered in PF Tier 1 or PF Tier 2 rates to «Customer Name» on a pro rata basis. This value may be conveyed as: (1) the carbon emission credit, or similar carbon instrument, itself; (2) a revenue credit after BPA markets such carbon emission credits, or similar carbon instruments; or, (3) the ability to claim that power purchases at the applicable PF rate are derived from specific federal resources.

The value of carbon emission credits, or similar carbon instruments, associated with resources whose costs are recovered in a Tier 1 rate will be shared on a pro rata basis among all holders of CHWM Contracts. The value of carbon emission credits, or similar carbon instruments, associated with resources whose costs are recovered in a PF Tier 2 rate will be shared on a pro rata basis among customers within the same respective Tier 2 Cost Pool.

8. BPA'S RIGHT TO TERMINATE «CUSTOMER NAME»'S RECS (05/29/08 Version)

Consistent with any federal regulation or legislation addressing carbon emission credits, or similar carbon instruments, or any form of renewable energy attribute(s) applicable to BPA which includes compliance costs, BPA may, upon 5 years' notice to «Customer Name», terminate «Customer Name»'s contract rights to Tier 1 RECs under section 3 above.

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



Exhibit I

CRITICAL SLICE AMOUNTS

1. ESTABLISHING CRITICAL INVENTORY AMOUNT (4/2/08 Version)

No later than 30 days prior to the start of each Fiscal Year, beginning with FY 2012, and no later than 30 days prior to each Fiscal Year thereafter, BPA shall determine the annual and monthly Critical Inventory Amounts for each such Fiscal Year. Such amounts shall be as specified in the table below. The monthly Critical Inventory Amounts expressed as megawatt-hours shall be computed as the product of the monthly Critical Inventory Amount in average megawatts multiplied by the number of hours in the month. Pursuant to section 3 below, BPA shall revise this Exhibit I to include a new table, as shown below, for each Fiscal Year.

FY: XXXX

Critical Inventory Amount: X,XXX annual aMW(rounded to an integer value)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy (aMW)												
Energy (MWh)												

Note: Fill in the table above with average megawatt and megawatt-hour values rounded to an integer.

2. ESTABLISHING CRITICAL SLICE AMOUNTS (4/2/08 Version)

No later than thirty (30) days prior to the start of each Fiscal Year, beginning with FY 2012, and no later than 30 days prior to each Fiscal Year thereafter, the annual average megawatt and monthly average megawatt Critical Inventory Amounts determined in section 1 above shall be multiplied by the Slice Percentage as stated in Exhibit K, Slice Percentage in order to determine the annual average megawatt and monthly average megawatt Critical Slice Amounts, as specified in the table below. The monthly Critical Slice Amounts expressed as megawatt-hours shall be computed as the product of the monthly Critical Slice Amount in average megawatts multiplied by the number of hours in the month. Pursuant to section 3 below, BPA shall revise this Exhibit I to include a new table, as shown below, for each Fiscal Year.

FY: XXXX

Critical Slice Amount: XXX.XXX annual aMW (rounded to the third decimal digit)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Energy (aMW)												
Energy (MWh)												

Note: Fill in the table above with average megawatt values rounded to 3 decimal digits and megawatt-hour values rounded to an integer.

3. **REVISIONS** *(4/2/08 Version)*

This Exhibit I shall be revised unilaterally by BPA no later than 30 days prior to the start of each Fiscal Year beginning with FY 2012.



Exhibit J

PRELIMINARY SLICE PERCENTAGE, INITIAL SLICE PERCENTAGE, AND SLICE PERCENTAGE

- 1. **PRELIMINARY SLICE PERCENTAGE**
Preliminary Slice Percentage = xx.xxxxxx%
- 2. **INITIAL SLICE PERCENTAGE**
Initial Slice Percentage = xx.xxxxxx%
- 3. **SLICE PERCENTAGE**

Fiscal Year	Slice Percentage
FY 2012	xx.xxxxxx %
FY 2013	xx.xxxxxx %
FY 2014	xx.xxxxxx %
FY 2015	xx.xxxxxx %
FY 2016	xx.xxxxxx %
FY 2017	xx.xxxxxx %
FY 2018	xx.xxxxxx %
FY 2019	xx.xxxxxx %
FY 2020	xx.xxxxxx %
FY 2021	xx.xxxxxx %
FY 2022	xx.xxxxxx %
FY 2023	xx.xxxxxx %
FY 2024	xx.xxxxxx %
FY 2025	xx.xxxxxx %
FY 2026	xx.xxxxxx %
FY 2027	xx.xxxxxx %
FY 2028	xx.xxxxxx %

- 4. **REVISIONS**
[To be completed.]



Exhibit K

ADJUSTMENTS TO SLICE PERCENTAGE

1. ADJUSTMENT TO SLICE PERCENTAGE DUE TO ADDITIONAL CHWM AMOUNT

1.1 Definitions

The following term definitions apply only to this Exhibit K, Slice Percentage.

- 1.1.1 "Additional CHWM Amount" means, for each FY beginning with FY 2012, the sum of additional CHWM amounts for New Public Utility Customers and DOE Richland, if any, as determined in the applicable Rate Case and rounded to a whole number, expressed in aMW.
- 1.1.2 "Interim Critical Slice Amount" means, for any FY, an amount equal to «Customer Name»'s Initial Slice Percentage multiplied by the annual Critical Inventory Amount as stated in Exhibit I, rounded to three decimal digits, expressed in annual aMW.
- 1.1.3 "Interim Firm Power at Tier 1 Rates" means, for any FY, the lesser of (1) «Customer Name»'s RHWM or (2) «Customer Name»'s Net Requirement as determined in Exhibit A, Net Requirements, expressed in annual aMW.
- 1.1.4 "Slice Percentage Adjustment Ratio" or "SPAR" means the ratio that is determined by dividing the sum of Existing Customer CHWM amounts by the sum of the Existing Customer CHWM amounts plus the Additional CHWM Amount. The SPAR shall be expressed as a five-digit decimal number and entered into the table in section 1.3 below.

1.2 Initial Slice Percentage

The Initial Slice Percentage is as specified in section 2 of Exhibit Q.

1.3 Establishing SPAR Amounts

No later than 30 days prior to the beginning of each FY, beginning with FY 2012, the SPAR shall be computed by BPA and entered into the table below.

Fiscal Year	Slice Percentage Adjustment Ratio
FY 2012	X.XXXXX
FY 2013	X.XXXXX
FY 2014	X.XXXXX
FY 2015	X.XXXXX



Fiscal Year	Slice Percentage Adjustment Ratio
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

1.4 Adjustment To Slice Percentage

No later than 30 days prior to the beginning of each Fiscal Year, beginning with FY 2012, BPA shall adjust «Customer Name»'s Slice Percentage if there is an Additional CHWM Amount using the procedure described below.

1.4.1 Adjustment To Slice Percentage when Interim Firm Power at Tier 1 Rates is Greater Than or Equal To Interim Critical Slice Amount
 If the Interim Firm Power at Tier 1 Rates is greater than or equal to the Interim Critical Slice Amount, then «Customer Name»'s Slice Percentage shall be set equal to the Initial Slice Percentage multiplied by the SPAR. «Customer Name»'s Slice Percentage so computed will be entered into the table in section 3 of Exhibit J as a percentage rounded to the fifth digit.

1.4.2 Adjustment To Slice Percentage when Interim Firm Power at Tier 1 Rates is Less Than Interim Critical Slice Amount
 If the Interim Firm Power at Tier 1 Rates is less than the Interim Critical Slice Amount, then «Customer Name»'s Interim Firm Power at Tier 1 Rates shall be divided by the annual Critical Inventory Amount as stated in Exhibit I. This amount shall then be multiplied by the SPAR to compute the adjusted Slice Percentage. «Customer Name»'s Slice Percentage so computed will be entered into the table in section 3 of Exhibit J as a percentage rounded to the fifth digit.

2. ADJUSTMENT TO SLICE PERCENTAGE DUE TO LOAD LOSS

If, for any FY, «Customer Name»'s annual Net Requirement forecast, as determined pursuant to section ___ of Exhibit A, is less than «Customer Name»'s RHW, then the following provisions shall apply.

2.1 Remarketing of Tier 2 Purchase Amounts, If Any, and Removal of Dedicated Resources

Pursuant to section 10 of the body of this Agreement, «Customer Name»'s Tier 2 purchase amounts, if any, shall be remarketed by BPA and Dedicated Resources shall be removed in accordance with such section 10.

2.2 Reduction of Tier 1 Block Amount

If, after implementation of the provisions of section 2.1 above, «Customer Name»'s annual Net Requirement forecast remains less than «Customer Name»'s RHW, then BPA shall reduce the annual Tier 1 Block Amount, as specified in section 1 of Exhibit C.

2.3 Reduction of Critical Slice Amount

If, after implementation of the provisions of sections 2.1 and 2.2 above, «Customer Name»'s annual Net Requirement forecast remains below «Customer Name»'s RHW, then BPA shall reduce the annual Critical Slice Amount, as specified in Exhibit I, and the provisions of section 2.4 below shall apply.

**2.4 Adjustment to Slice Percentage Due to Reduction of Critical Slice Amount
[To be completed.]**

3. REVISIONS

[To be completed.]



Exhibit L

SLICE SYSTEM

(07/16/08 Version)

1. SLICE SYSTEM RESOURCES

The Slice System Resources shall be the same as the Tier 1 System Resources as stated in the TRM in Table 3.1.

2. AUGMENTATION OF SLICE SYSTEM RESOURCES

Generating resources listed in the TRM under the section titled "Augmentation" are not included in the Slice System Resources as named or listed resources. As such, the amounts of Augmentation and Additional Augmentation shall be determined for each FY of the Rate Period using the procedures below.

2.1 Total Augmentation

As part of the RHWM process performed prior to each Rate Period, the total amount of Augmentation and Additional Augmentation shall, for each FY of the Rate Period, be determined pursuant to the TRM. The sum of such Augmentation and Additional Augmentation amounts shall be entered into the table below for each FY of the Rate Period, expressed as an integer value in aMW.

Fiscal Year	Total 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

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 augmentation for existing publics, enter this amount into table above. The table will be left blank until the CHWM/RHWM process for FY2012 & FY2013 is completed.



2. REVISIONS

This Exhibit L shall be revised by BPA prior to the beginning of each Rate Period.

Exhibit M - Revised 7/15/08

SLICE COMPUTER APPLICATION

In the event Exhibit O, Interim Slice Implementation Procedures, is implemented pursuant to section 5.12 of this Agreement, only sections 3.5 and 5 of this Exhibit M shall be in effect as long as Exhibit O remains in effect.

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1. SLICE COMPUTER APPLICATION – GENERAL DESCRIPTION

The Slice Computer Application 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 Slice 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.

2. DEFINITIONS

The following definitions apply only to this Exhibit M and Exhibit N, Slice Implementation Procedures.

- 2.1 “Absolute Operating Constraint” means an Operating Constraint that cannot be exceeded under any condition.
- 2.3 “Actual Slice System Generation” or “ASSG” means the actual generation produced by the Slice System, or any Slice Subsystem, as adjusted to reflect energy received or delivered as System Obligations, as applicable, during a given period of time.
- 2.4 “Algorithm Tuning Parameters” means factors, coefficients, or variables that are embedded within Simulator algorithms or formulas and are adjusted by BPA as necessary to maintain Simulator outputs that are in compliance with the accuracy criteria defined in section 3.5.3 of this Exhibit M.
- 2.5 “BOSS Base” means the forecast generation amounts available from the BOSS Complex, as adjusted by BPA for forecast energy amounts associated with System Obligations, Existing Public Augmentation, and Other Augmentation, during a given period of time.
- 2.6 “BOSS Deviation Account” means the account BPA maintains that quantifies the cumulative amount, expressed in MWd, by which «Customer Name»’s hourly BOSS Base schedules deviate from the amount determined by multiplying «Customer Name»’s Slice Percentage by the hourly BOSS Complex ASSG.
- 2.x “BOSS Deviation Return” means the energy amounts associated with the reduction of «Customer Name»’s BOSS Deviation Account balance.
- 2.7 “BOSS Flex” means the amount by which the BOSS Base can reasonably be reshaped within a given calendar day by utilizing the flexibility available in the Lower Snake Complex.
- 2.x “Bypass Spill” means Spill that occurs at a hydroelectric Project associated with lock operations, leakage and fish bypass systems.

- 2.8 “Calibrated Simulator Discharge” means, for each Simulator Project, «Customer Name»’s simulated discharge as adjusted to reflect such Project’s actual H/K, actual Bypass Spill, and actual required Fish Spill, pursuant to section 3.6 below.
- 2.x “Customer Inputs” means the Simulator Project discharge, elevation, or generation requests «Customer Name» develops as inputs to the Simulator pursuant section 3.3 below.
- 2.9 “Delivery Request” means the amount of Slice Output «Customer Name» requests that BPA make available for delivery for any given hour, and shall be equal to the sum of «Customer Name»’s Simulated Output Energy Schedules, BOSS Base schedule, BOSS Flex schedule, (BOSS Deviation schedule) and Additional Energy schedule for each such hour.
- 2.10 “Elective Spill” means Spill other than Fish Spill that occurs at a hydroelectric Project when such Project has available turbine capacity such that the Spill could be utilized to produce energy.
- 2.xx “Fish Spill” means Spill that occurs at a hydroelectric Project in order to maintain compliance with established fish passage criteria.
- 2.11 “Forced Spill”, means Spill other than Fish Spill that occurs at a hydroelectric Project in order to maintain compliance with Operating Constraints.
- 2.12 “H/K” means, prospectively, a hydroelectric Project’s water-to-energy conversion factor used to forecast such Project’s potential energy production, expressed in MW, per unit of turbine discharge, expressed in kcfs, or retrospectively, for any given period of time, the value equal to a hydroelectric Project’s average Net Generation, expressed in MW, divided by such Project’s average turbine discharge, expressed in kcfs.
- 2.13 “Hard Operating Constraint” 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.
- 2.14 “Hydraulic Link Adjustment” 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 below.
- 2.17 “Logic Control Parameters” means flags or toggles that are embedded within the Slice Computer Application logic and are set by BPA as needed to appropriately implement provisions of this Agreement.



- 2.18 “Lower Snake Complex” or “LSN Complex” 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.
- 2.19 “Megawatt-day” or “MWd” means a unit of electrical energy equal to 24 megawatt-hours.
- 2.20 “Multiyear Hydroregulation Study” means a hydroregulation study that simulates the prospective monthly operation of the Slice System, typically for a 12 month period, given a range of stream flow sequences.
- 2.21 “Net Generation” means the total electric energy produced at a hydroelectric Project as reduced by the electric energy consumed by such Project for station service purposes.
- 2.22 “Operating Rule Curves” or “ORC” 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 the lower forebay operating limit (lower ORC).
- 2.23 “Power Services Slice Scheduler” or “PS Slice Scheduler” means the BPA Power Services employee who manages real-time Slice schedules and E-tag submittals, Simulator Parameters, and related Slice communications.
- 2.24 “Project(s)” means one or more of the Slice System generating resources.
- 2.25 “Project Storage Bounds” or “PSB” means the Storage Content amounts associated with the upper ORC and lower ORC in effect at any specified hydroelectric Project.
- 2.27 “Simulated Output Energy Schedule(s)” means the amount of energy that is calculated by the Simulator as «Customer Name»’s simulated generation amount associated with each Simulator Project.
- 2.xx “Simulator Parameters” means the Simulator Project operating parameters BPA develops as inputs to the Simulator, pursuant to section 3.2 below.
- 2.28 “Slice Storage Account” or “SSA” means the account maintained by BPA that records the sum of (1) «Customer Name»’s Grand Coulee Storage Offset Account balance, and (2) the product of «Customer Name»’s Slice Percentage and the Grand Coulee actual Storage Content.
- 2.29 “Slice Subsystem” means the Coulee-Chief Complex, the LCOL Complex, the LSN Complex, or the BOSS Complex.

- 2.30 “Soft Operating Constraint” means an 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.
- 2.31 “Spill” means water that passes a hydroelectric Project without producing energy, including Bypass Spill, Elective Spill, Fish Spill, and Forced Spill.
- 2.32 “Storage Content” 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, accomplished through the use of an established elevation-to-content conversion table.
- 2.33 “Storage Offset Account” or “SOA” means the account BPA maintains that records the cumulative amount by which «Customer Name»’s simulated Storage Content associated with each Simulator Project deviates from the actual Storage Content for each such Simulator Project.

3. SLICE WATER ROUTING SIMULATOR

3.1 General Description

The Slice Water Routing Simulator (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 similar to how BPA actually manages available stream flow through the Simulator Projects within established Operating Constraints. BPA is responsible for establishing and managing Simulator Parameters within the Simulator, pursuant to section 3.2 below, and «Customer Name» is responsible for establishing and managing Customer Inputs within the Simulator, pursuant to section 3.3 below.

- 3.1.1 The official version of the Simulator will be managed and maintained by BPA and accessed by «Customer Name». «Customer Name» shall also have access to copies of the Simulator for the purpose of running various simulated operating scenarios.
- 3.1.2 The Simulator shall be designed to produce simulated Project operations in one-hour time increments for up to a 48-hour period, and multiple-hour increments for up to an additional 10 days. As an example, if the Simulator is initialized as of HE1400 of the current day it shall produce results in one-hour time increments beginning with HE1500 of the current day through and including no later than HE1400 of the second day following the current day, then shall produce simulated Project operations in multiple-hour increments,



such as 8-hour increments, for an additional 10 days beyond the one-hour time increments.

- 3.1.3 The Simulator shall incorporate approximate hydraulic time lags between Simulator Projects.
- 3.1.4 The Simulator shall reflect all applicable Operating Constraints in effect for each Simulator Project, including operating requirements necessary to satisfy Operating Constraints in effect at downstream Projects.
- 3.1.5 The Simulator shall calculate simulated inflows to Grand Coulee based upon measured 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 as adjusted for forecast Chief Joseph incremental side flows.
- 3.1.7 The Simulator shall calculate simulated inflows to McNary based upon measured 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 below 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 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 a like manner.
- 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 their planning processes but must translate such aggregated Customer Inputs into individual Simulator Project Customer Inputs to enable the Slice Computer Application to validate «Customer Name»'s

simulated operation of individual Simulator Projects against Operating Constraints.

3.2 Simulator Parameters

BPA shall establish, monitor and update the Simulator Parameters specified in this section 3.2 for each Simulator Project for the duration of the Simulator modeling period, including forecasted stream flows and Operating Constraints that are in effect at any given time. BPA 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 at the Simulator Projects resulting from the Simulator Parameters shall reasonably represent the actual operating capability available at the Simulator Projects resulting from the associated Operating Constraints. To the maximum extent practicable, the PS Slice Scheduler shall monitor the operating conditions that affect the Simulator Projects and shall make modifications to the Simulator Parameters as necessary to reflect changes.

3.2.1 BPA shall have the right to change Simulator Parameters affecting HE(X) up to one hour prior to the beginning of HE(X-1). For example, BPA shall have the right to change Simulator Parameters affecting HE 1300 up until 11:00 a.m.

3.2.2 The Simulator Parameters shall include, but are not limited to:

- Hourly regulated inflows (Grand Coulee and McNary only);
- Hourly incremental stream flows;
- Initial forebay elevations;
- Water to energy conversion factors (H/Ks);
- Content to elevation conversion tables;
- Project turbine capacities;
- Spill limitations and requirements, including bypass Spill quantities;
- Generation limitations and requirements;
- Discharge limitations and requirements as needed to meet both discharge and tailwater elevation requirements;
- Forebay limitations and requirements;



- System wide requirements that affect the Simulator Projects (e.g. Vernita Bar, Chum, Reserves, Regulating room above minimum generation);
- Algorithm Tuning Parameters; and
- Logic Control Parameters that affect the Simulator Projects (e.g. CGS Displacement election, PSB enforcement flag, etc.).

3.3 «Customer Name»'s Customer Inputs and Use of the Simulator

«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 and multiple-hour time increment for the duration of the Simulator modeling period.

3.3.1 Customer Inputs shall include, but are not limited to the following:

- Generation requests;
- Elevation requests; or,
- Discharge requests.

3.3.2 Generation requests shall be stated in terms of «Customer Name»'s Slice Percentage of the available Project generation, rounded to the nearest whole number. Elevation and discharge requests shall be in terms of Project elevation and discharge values, rather than «Customer Name»'s Slice Percentage of Project elevation and discharge values.

3.3.3 Based on prioritization rules, once established, «Customer Name»'s Customer Inputs submitted to the Simulator shall be used to produce a simulated operational scenario. A simulated operational scenario produces simulated discharges, elevations, and generation values for each Simulator Project in accordance with applicable Simulator Parameters.

3.3.4 The resulting simulated generation values shall provide to «Customer Name» a potential Simulated Output Energy Schedule for each Simulator Project.

3.3.5 «Customer Name» shall have access to input fields within the Simulator that allow «Customer Name» to test various operational scenarios for the purpose of determining if Delivery Limits are exceeded, prior to «Customer Name»'s submittal of its official Customer Inputs to BPA.

- 3.3.6 «Customer Name»'s Customer Inputs and associated Simulated Output Energy Schedules shall be revised and submitted to BPA by «Customer Name» within scheduling timelines established in section 4.1 of Exhibit F, Scheduling.
- 3.3.7 In the event «Customer Name» submits a Customer Input that is in violation of an Absolute or Hard Operating Constraint the Simulator shall create and return to «Customer Name» an error message. The Simulator shall attempt to meet such Customer Input to the extent Operating Constraints are not violated.
- 3.3.8 At least once per day, «Customer Name» shall be required to produce an official Simulator run that demonstrates all Simulator Projects are in compliance with all applicable Operating Constraints for the duration of the Simulator modeling period.

3.4 Simulator Output and Feedback

Based on the Simulator Parameters set by BPA and Customer Inputs set by «Customer Name» the Simulator shall produce the following results for each one-hour and multiple-hour time increment for the entire Simulator modeling period:

- 3.4.1 «Customer Name»'s Simulated Output Energy Schedules, simulated discharge, and simulated forebay elevation associated with each Simulator Project. The Simulated Output Energy Schedules shall be in terms of «Customer Name»'s Slice Percentage of the available project generation, rounded to the nearest whole number, whereas the simulated discharge and forebay values shall be normalized.
- 3.4.2 A list of Customer Inputs submitted by «Customer Name» that were in violation of Operating Constraints pursuant to section 3.3.7 above, or that were not achieved by the Simulator, for each Simulator Project.
- 3.4.3 A list of Operating Constraints that were not achieved within «Customer Name»'s simulated operation for each Simulator Project.
- 3.4.4 An explanation for each occurrence from section 3.4.2 and 3.4.3 above.
- 3.4.5 «Customer Name»'s Hydraulic Link Adjustment amounts as established pursuant to section 3.7 below.

3.5 Simulator Documentation, Performance Test, Accuracy, and Upgrades

3.5.1 Simulator Documentation

BPA, with «Customer Name»'s input, shall develop a 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 Simulator specification manual shall include the following:

- A list of specific BPA databases or other sources that are accessed by the Simulator to automatically import data;
- Full documentation, excluding computer code, of the processes by which the Simulator computes and produces output values;
- Full documentation, excluding computer code, of the Simulator functions available to «Customer Name», including access and controls of the Simulator; and
- Full documentation of the data output/display processes and communication protocols associated with «Customer Name»'s computer systems.

3.5.2 If requested, BPA may also provide «Customer Name» assistance in developing an operational manual to explain how the Simulator is to be operated by «Customer Name» and other Slice customers.

3.5.3 Simulator Performance Test

BPA shall conduct the following Simulator Performance Test pursuant to section 26.3.3 of this Agreement, and as described in section 3.5.4.3 below.

3.5.3.1 Energy Test

Using actual stream flows, operating constraints, initial project elevations, and project generation values for the months of January through September, 2010, as input parameters, a separate Simulator run shall be performed for each month of that period. The energy test will be deemed to have passed for a specific project and month if the month-end simulated project storage content deviates from the actual project storage content by no more than 2 percent of the total available storage for such project. The energy test will be deemed to have failed if one or more of the following occurs:

- Grand Coulee fails to meet the 2 percent storage content deviation test in any single month;
- More than 25 percent of the combined 54 monthly tests (six projects over 9 months) fail to meet the 2 percent storage content deviation test;
- There is any single month in which four or more of the projects fail to meet the 2 percent storage content deviation test; or

- Any of the six projects fails to meet the 2 percent storage content deviation test in all 9 months of the test period.

3.5.3.2 Peaking Test

Separate Simulator runs shall be performed as specified below for the following two 3-day periods; the hottest consecutive 3-day period and the coldest consecutive 3-day period that occurred during the period January through September 2010.

Each 3-day test period will be selected using 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:

- Each city's daily maximum and daily minimum temperature will be averaged;
- The resulting day-average temperature from each city will be weighted by applying load center percentage weightings, which will be determined by BPA and will sum to 100 percent for the three cities; and
- 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 Simulator will be run using actual stream flows, operating constraints, and initial project elevations from the representative test periods as input parameters. Each project's hourly generation request will be set equal to the actual project generation values from the representative test period. The Simulator will compute the resulting hourly simulated discharge and forebay elevation for each project. The peaking test will be deemed to have failed if either of the following occurs:

- the Simulator forebay elevation for any project exceeds the project's elevation limit (either upper or lower) on any hour for either test period; or
- the sum of the generation values produced by the Simulator deviates from the sum of the requested



generation values by more than 100 MW on any of the 6 peak hours on any of the test days. The 6 peak hours are the 6 hours with the highest total generation request each day, regardless of whether the hours are consecutive or not.

3.5.3.3 Ramp Down Test

Using actual stream flows, operating constraints, initial project elevations, and project generation values from the dates specified below as input parameters, separate Simulator runs shall be performed for each specified date. Each Simulator run will test the simulated hourly ramp down capability for Grand Coulee and Chief Joseph combined for each two consecutive hours between HE 2000 and HE 0200. The ramp down test will be deemed to have failed if one or more of the following occurs:

- The combined simulated generation values for Grand Coulee and Chief Joseph deviates from the combined actual generation values for Grand Coulee and Chief Joseph by more than 100 MW on any hour, including HE 2100 through HE 0200 on any study day;
- The 6-hour average of the combined simulated generation values for Grand Coulee and Chief Joseph deviates from the 6-hour average of the combined actual generation values for Grand Coulee and Chief Joseph by more than 25 aMW for HE 2100 through 0200 on any given study day.
- The down ramp test dates will be:
January 7-8 (W-Th) and 16-17 (F-Sa), 2010,
February 4-5 (W-Th) and 24-25 (Tu-W), 2010,
March 10-11 (Tu-W) and 22-23 (Su-M), 2010,
April 2-3 (Th-F) and 19-20 (Su-M), 2010,
May 6-7 (W-Th) and 27-28 (W-Th), 2010,
June 9-10 (Tu-W) and 21-22 (Su-M), 2010,
July 1-2 (W-Th) and 30-31 (Th-F), 2010,
August 12-13 (W-Th) and 20-21 (Th-F), 2010,
September 6-7 (Tu-W) and 16-17 (Th-F), 2010.

3.5.4 Simulator Accuracy

In any model process, there are two predominant sources of error. These are input accuracy errors and model process errors.

- #### 3.5.4.1
- To minimize such errors BPA shall ensure Simulator Parameters established for the Simulator reflect the correct values for forecasted inflows and Operating Constraints and that the Simulator reasonably represents the operational

attributes of the Simulator Projects. BPA 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 «Customer Name» and BPA acknowledge that model errors are inevitable, and the consequences from such errors can be either beneficial or detrimental and will likely be inconsequential. No cumulative accounting of model error impacts shall be required or established. The Parties may consider such impacts on a case-by-case basis.
- 3.5.4.3 As an ongoing check of the Simulator's accuracy, BPA shall run a retrospective Simulator Performance Test as described in section 2.1.5.3 above, by October 15 of each year calendar 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. The specific study dates for each Simulator Performance test shall be as agreed by the Parties. Additional study criteria may be added to the annual Simulator Performance Test 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.
- 3.5.4.4 If any annual Simulator Performance Test results are not within the established accuracy criteria, BPA, with input from «Customer Name» and other members of the SIG, shall establish upgrades necessary to bring the Simulator output in compliance with such established accuracy criteria.

3.5.5 Simulator Upgrades

Updates, upgrades, or replacements to the Simulator shall be proposed, developed, and tested by BPA, with input from «Customer Name» and other members of the SIG. Any such updates, upgrades, or replacements to the Simulator shall be reviewed by the SIG in a process set out in section 5.14 of this Agreement prior to their implementation. At least 30 days prior to BPA implementing any updates, upgrades, or replacements to the Simulator, the Simulator



specifications manual described in section 3.5.1 above shall be revised by BPA and distributed to «Customer Name»'s SIG representative.

3.6 Calculation and Application of the Calibrated Simulator Discharge

3.6.1 BPA shall calculate «Customer Name»'s Calibrated Simulator Discharge for each Simulator Project by summing the following components for each hour.

- The value produced by dividing «Customer Name»'s Simulated Output Energy Schedule by «Customer Name»'s Slice Percentage, then dividing the result by the actual H/K associated with each such Simulator Project (previous day average or hourly?);
- The actual Bypass Spill associated with each such Simulator Project;
- The actual required Fish Spill associated with each such Simulator Project;
- «Customer Name»'s simulated Elective Spill associated with each such Simulator Project, and;
- «Customer Name»'s simulated Forced Spill associated with each such Simulator Project

3.6.2 «Customer Name»'s Calibrated Simulator Discharge for each Simulator Project shall be entered into the Simulator as «Customer Name»'s established simulated hourly discharge.

3.7 Calculation and Application of the Hydraulic Link Adjustment

3.7.1 «Customer Name»'s Hydraulic Link Adjustment values shall be determined for the following periods of each day of this Agreement, beginning October 1, 2011.

- The period including hours ending 2300 through 0600;
- The period including hours ending 0700 through 1400; and
- The period including hours ending 1500 through 2200.

3.7.2 «Customer Name»'s Hydraulic Link Adjustment values shall be equal to «Customer Name»'s average Chief Joseph Calibrated Simulator Discharge for each period above, minus the average Chief Joseph measured discharge for the same period.

3.7.3 «Customer Name»'s Hydraulic Link Adjustment values shall be applied as an adjustment to «Customer Name»'s simulated inflow to McNary in an equivalent amount for each hour of the same period for the following day.

4. **BALANCE OF SLICE SYSTEM MODULE**

The BOSS Module will include processes that compute (1) the BOSS Base amounts, (2) the BOSS Flex amounts, (3) «Customer Name»'s BOSS Deviation Return amounts, and (4) «Customer Name»'s Additional Energy amounts, all as specified below.

4.1 **BOSS Base Amount**

Consistent with the following provisions, the BOSS Base amount shall be determined by BPA and made available to «Customer Name».

4.1.1 The BOSS Base amount, for each hour, shall be equal to the sum of (1) BPA's latest planned or scheduled generation amounts associated with the BOSS Complex Projects, (2) the amount of Elective Spill BPA implements on the BOSS Complex Projects, (3) the energy associated with Total Augmentation, as described in Exhibit L, Slice System Resources, and (4) the forecast amount of energy associated with System Obligations. System Obligation commitments will be netted against BOSS Complex generation and System Obligation resources will be added to BOSS Complex generation. Energy associated with Total Augmentation included in the BOSS Base amount shall be applied in equal amounts each hour of each FY.

4.1.2 «Customer Name»'s hourly BOSS Base schedules shall be equal to the hourly BOSS Base amounts multiplied by «Customer Name»'s Slice Percentage, after rounding the result to the nearest integer.

4.2 **BOSS Flex Amount**

Consistent with the following provisions, the BOSS Flex amount shall be determined by BPA and made available to «Customer Name» on an as available basis.

4.2.1 The BOSS 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 BOSS Base amount, and if so, (2) provide as output the resulting amount by which the BOSS Base amount can be increased or decreased on any given hour. The BOSS Module will specify the BOSS Flex amounts that are available for preschedule as well as adjusted BOSS Flex amounts that are available for real-time.



- 4.2.2 Such BOSS Flex amounts shall reflect, in the judgment of BPA, the amount by which the BOSS 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 BOSS Flex and submit to BPA as part of the preschedule process, positive and negative hourly BOSS Flex schedules that sum to zero for each day. A positive hourly BOSS Flex schedule shall reflect an increase relative to the BOSS Base amount and a negative hourly schedule shall reflect a decrease relative to the BOSS Base amount.
- 4.2.4 In real-time, «Customer Name» shall update its hourly BOSS Flex schedules to comply with revised BOSS Flex amounts. If a mid-day change to the BOSS Flex amounts prohibits «Customer Name» from scheduling its net day-total BOSS Flex energy to equal zero, then «Customer Name» shall adjust its BOSS Flex schedules to bring its net day total BOSS Flex schedule as close to zero as possible within the revised BOSS Flex amounts. Any non-zero day-total BOSS Flex scheduled for any calendar day shall be added to «Customer Name»'s BOSS Deviation Account balance.
- 4.2.5 The BOSS Flex available to «Customer Name» shall be equal to the BOSS Flex determined pursuant to sections 4.2.2 and 4.2.3 above multiplied by «Customer Name»'s Slice Percentage, after rounding the result to the nearest integer.
- 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 the PS Slice Scheduler, as time permits and based on his/her professional judgment, assess the ability to modify the established BOSS Flex amounts within applicable Operating Constraints. If the PS Slice Scheduler alters such BOSS Flex amounts, such updated values shall apply to all purchasers of the Slice Product. «Customer Name» acknowledges such assessment by the PS Slice Scheduler may result in an increase, decrease or no change to any of the remaining hourly BOSS Flex amounts.
- 4.3 **BOSS Deviation Return Amounts**
The BOSS Module will compute and establish «Customer Name»'s BOSS Deviation Return amounts as established in section 3.4.1 of Exhibit N.
- 4.4 **Additional Energy Amounts**
The BOSS Module will compute and establish «Customer Name»'s Additional Energy schedules as established in sections 9.2 and 9.3 of Exhibit N.

5. DEFAULT USER INTERFACE

BPA 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, but shall be required maintain back-up functionality through the DUI in the event «Customer Name»'s in-house interface, should it choose to develop one, is unavailable. The DUI shall include the functional capabilities listed below.

- 5.1 Provide «Customer Name» access to the Simulator for submittal of Customer Inputs and to run simulator studies.
- 5.2 Provide «Customer Name» feedback from the Simulator and BOSS Module.
- 5.3 Provide «Customer Name» input/output displays related to the Simulator and BOSS Module.

6. SCA Reports

6.1 No later than 5 minutes following the end of each delivery hour, the SCA shall provide «Customer Name» a detailed report that specifies (1) «Customer Name»'s Calibrated Simulator Discharges as specified in section 3.6 of this Exhibit M, (2) «Customer Name»'s SOA balances as specified in section 3 of Exhibit N, (3) «Customer Name»'s adjusted forebay elevations for the Simulator Projects as specified in section 3.3 of this Exhibit M, and (4) the after-the-fact Project data «Customer Name» shall use to verify its hourly SOA balances.

2.2 BPA shall make available an automated report «Customer Name» may access upon remote request, which shall present all changes to Simulator Parameters that have been made by BPA since the time of «Customer Name»'s previous remote request. BPA shall include brief, concise explanatory statements coincidental with significant Simulator Parameter changes.

7. TOTAL SLICE OUTPUT AMOUNTS

«Customer Name»'s total Slice Output amount for any given hour shall be equal to the sum of «Customer Name»'s total Simulated Output Energy Schedule and «Customer Name»'s total BOSS schedule for each such hour. «Customer Name»'s total Simulated Output Energy Schedule shall be equal to the sum of «Customer Name»'s Simulated Output Energy Schedules for each of the Simulator Projects. «Customer Name»'s total BOSS schedule shall be equal to the sum of «Customer Name»'s BOSS Base amount, BOSS Flex schedule, BOSS Deviation Return amount, and Additional Energy amount.

8. REVISIONS

To be completed.



Exhibit N - Revised 7/17/08

SLICE IMPLEMENTATION PROCEDURES

In the event Exhibit O, Interim Slice Implementation Procedures, is implemented pursuant to section 5.12 of this Agreement and provisions of this Exhibit N are in conflict with provisions of Exhibit O, provisions of Exhibit O shall prevail.

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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, Slice Computer Application, to implement deliveries of energy under the Slice Product.

2. **DATA PROVIDED BY BPA**
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, BPA shall provide «Customer Name» the following information.
 - 2.1 Slice System operational information as described in sections 6, 7 and 8 below.
 - 2.2 «Customer Name»'s daily BOSS deviation account balance as described in section 3.4 below.

3. **STORAGE AND DEVIATION ACCOUNTING**
As described below, BPA shall determine and make available to «Customer Name» separate storage deviation account balances (Storage Offset Accounts) for each Simulator Project. The Storage Offset Accounts shall use measured Project discharges, H/Ks, and forebay elevations as benchmarks. BPA shall also determine and make available to «Customer Name» an energy deviation account balance for the BOSS Complex. The BOSS Deviation Accounting benchmark shall be the BOSS ASSG.
 - 3.1 «Customer Name»'s Storage Offset Account balances shall be established for each Simulator Project each hour in terms of the cumulative difference, expressed in ksfd, between «Customer Name»'s simulated Project Storage Contents and actual Project Storage Contents, based on the sum of the following components:
 - 3.1.1 For each Simulator Project except Grand Coulee and McNary, «Customer Name»'s Calibrated Simulator Discharge, as described in section 3.6 of Exhibit M, from the next-upstream Simulator Project minus such next-upstream Simulator Project's measured discharge;
 - 3.1.2 The measured discharge from each Simulator Project minus «Customer Name»'s Calibrated Simulator Discharge from such Simulator Project;
 - 3.1.3 For McNary only, «Customer Name»'s Hydraulic Link Adjustment, as described in section 3.7 of Exhibit M, and;
 - 3.1.4 «Customer Name»'s prior-hour SOA balance for each Simulator Project.

- 3.2 BPA shall initialize «Customer Name»'s September 30, 2011, SOA balance for each Simulator Project at zero.
- 3.3 For purposes of initializing «Customer Name»'s official hourly simulated forebay elevations in the Simulator, «Customer Name»'s SOA balance for each Simulator Project shall be added to the associated Project's actual Storage Content and the result shall be converted to an equivalent forebay elevation using content-to-elevation tables established by Project owners.
- 3.4 «Customer Name»'s BOSS Deviation Account shall be equal to the cumulative difference, expressed in MWd, between «Customer Name»'s BOSS Base amount for each delivery hour and the product of the BOSS ASSG and «Customer Name»'s Slice Percentage for each such hour. «Customer Name»'s BOSS Deviation Account balance shall be adjusted based on the following procedures:
- 3.4.1 Anytime the absolute value of «Customer Name»'s midnight BOSS Deviation Account balance is greater than 2 MWd per «Customer Name»'s Slice Percentage (Slice Percentage * 2 * 100), «Customer Name» shall schedule BOSS Deviation Return energy each hour the following preschedule day in an amount equal to 1 MW per «Customer Name»'s Slice Percentage, rounded to the nearest whole number. Such BOSS Deviation Return energy shall be scheduled as positive or negative values, as appropriate to reduce «Customer Name»'s BOSS Deviation Account balance toward zero.
- 3.4.2 On or before the 15th day of each month BPA shall determine and provide to «Customer Name» the results of a BOSS ASSG calculation for the previous month that incorporates updated actual Project generation and System Obligation values for each hour of such month. Based on the monthly BOSS ASSG calculation, BPA shall determine a monthly BOSS deviation, expressed in MWd, relative to the hourly BOSS Base amounts. On the 20th day of each month BPA shall adjust «Customer Name»'s BOSS Deviation Account balance by an amount equal to «Customer Name»'s Slice Percentage multiplied by the monthly BOSS deviation associated with such previous month.
- 3.5 «Customer Name» shall make reasonable efforts to adjust its requests for deliveries of Slice Output to reduce its SOA balances to zero by 2400 hours PPT on September 30, 2028, or the date of termination of this Agreement, whichever occurs earlier. Any balances in «Customer Name»'s SOAs as of the earlier of 2400 hours on September 30, 2028, or the date of termination of this Agreement shall be converted to energy amounts by multiplying such SOA balances by the associated federal downstream water-to-energy conversion factors. These resulting energy amounts shall be summed with «Customer Name»'s BOSS Deviation Account balance as of the earlier of 2400 hours on September 30, 2008, or the date of termination of this



Agreement . The resulting amount of energy, expressed in MWh, if positive, shall be delivered by BPA to «Customer Name», or if negative, delivered by «Customer Name» to BPA, within the next 30 days after the termination of this Agreement.

4. OPERATING CONSTRAINT VALIDATIONS, VIOLATIONS, AND PENALTY ASSESSMENT

«Customer Name»'s Simulated Output Energy Schedules, simulated discharges and simulated forebay elevations shall be validated against Operating Constraints in effect at each Simulator Project to determine any violations. Penalties shall be applied to «Customer Name»'s violations of Hard Operating Constraints and Absolute Operating Constraints. BPA and «Customer Name» anticipate that conditions may occur at times under which «Customer Name» is unable to simulate the operation of the Simulator Projects within all Operating Constraints. In an effort to minimize the likelihood of this condition occurring BPA shall establish prudent operational guidance criteria that, if utilized by «Customer Name», will result in non-assessment of certain penalties. BPA, with input from «Customer Name» and other members of the SIG, shall develop such prudent operational guidance criteria.

- 4.1 «Customer Name» shall be responsible for monitoring and anticipating potential Operating Constraint violations on a prospective basis and adjusting Customer Inputs as needed to avoid such violations.
- 4.2 Hourly Operating Constraint validations and violations associated with the Simulator Projects shall be based on Customer Inputs established by «Customer Name» and submitted to BPA within the PS real-time scheduling deadline pursuant to section 4.1 of Exhibit F, Scheduling.
- 4.3 Hourly Delivery Limit validations and violations associated with BOSS Flex schedules shall be based on «Customer Name»'s BOSS Flex schedules established as of the PS e-tag scheduling deadline pursuant to section 4.2 of Exhibit F, Scheduling.
- 4.4 For all Simulator Projects except Grand Coulee, Project Storage Bound validations shall be applied each hour.
- 4.5 For Grand Coulee, Project Storage Bound validations shall be applied once per day, based upon HE 0500 values for the upper PSB and HE 2200 values for the lower PSB, except when the upper ORC is 1290.0 feet. When Grand Coulee's upper ORC is 1290.0 feet, Grand Coulee upper PSB validations shall be applied each hour. BPA may establish other conditions under which Grand Coulee's PSB are validated each hour.
- 4.6 The amount by which Simulated Output Energy Schedules exceed hourly maximum generating capability shall be subject to penalty charge at the UAI rate.

- 4.7 Additional Operating Constraint violations shall be subject to penalty charges based on either the UAI rate or a market proxy rate such as the ICE Day Ahead Power Mid-C Firm Index.
- 4.8 Operating Constraint violations resulting from within-hour Balancing Authority reliability required actions shall not be subject to penalties.
- 4.9 BPA reserves the right to determine whether additional Operating Constraint violations and associated penalties are warranted as the Simulator and its specification manual are developed.

5. Grand Coulee Project Storage Bounds (PSB) and Exceedences

5.1 Determination of Grand Coulee PSB

BPA shall estimate the upper and lower Grand Coulee PSB associated with each day of the following 3 months as part of each 90-day submittal pursuant to section 7.2 below, and shall update such Grand Coulee PSB as conditions change and as needed to reflect updated Operating Constraints. To determine Grand Coulee's PSBs, BPA shall calculate the Storage Content associated with the Grand Coulee upper and lower ORCs as established by Operating Constraints in effect. BPA 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. BPA may specify other conditions under which this ½-foot difference does not apply.

5.2 Application of the Grand Coulee PSB

BPA shall designate each Grand Coulee PSB as either a Hard Operating Constraint or a Soft Operating Constraint. Typically, 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 Slice Storage Account balance within the upper and lower Grand Coulee PSB that are designated as Hard Operating Constraints, or be subject to penalties as established in section 5.4 below. «Customer Name»'s Slice Storage Account balance may exceed the upper or lower Grand Coulee PSB designated as Soft Operating Constraints without penalty. However, «Customer Name» recognizes that maintaining an SSA that is not within the upper and lower Grand Coulee PSB increases «Customer Name»'s risk of violating the Grand Coulee PSB designated as Hard Operating Constraints and incurring the associated penalties.

5.3 Determination of «Customer Name»'s Grand Coulee PSB Exceedence

«Customer Name»'s Grand Coulee PSB exceedence shall be equal to the Storage Content by which «Customer Name»'s Slice Storage Account balance



is (1) in excess of the value determined by multiplying «Customer Name»'s Slice Percentage by the upper Grand Coulee Project Storage Bound or (2) less than the value determined by multiplying «Customer Name»'s Slice Percentage by the lower Grand Coulee Project Storage Bound. An upper Grand Coulee PSB exceedence is denoted as a positive value, while a lower Grand Coulee PSB exceedence is denoted as negative value.

5.4 Grand Coulee PSB Exceedences, «Customer Name»'s Actions, and Penalties

5.4.1 «Customer Name» shall be responsible for monitoring its Grand Coulee SSA balance and Grand Coulee PSB exceedence. If «Customer Name»'s Grand Coulee PSB exceedence is positive, denoting an exceedence of 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.

5.4.1.1 «Customer Name» shall immediately modify its simulated operation of Grand Coulee such that the most restrictive maximum discharge constraint in effect at the Simulator Projects is achieved. «Customer Name» shall maintain such simulated operation until such time as «Customer Name»'s SSA balance is within Grand Coulee's upper and lower PSB.

5.4.1.2 If «Customer Name» fails to take the action specified in section 5.4.1.1 above, a penalty shall be applied equal to Grand Coulee's at-site Storage Energy amount, expressed in MWh, associated with the Grand Coulee PSB exceedence described in section 5.4.1 above, multiplied by the UAI Rate.

5.4.2 If «Customer Name»'s Grand Coulee PSB exceedence is negative, denoting an exceedence of 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.

5.4.2.1 «Customer Name» shall immediately modify its simulated operation of Grand Coulee such that the most restrictive minimum discharge constraint in effect at the Simulator Projects is achieved. «Customer Name» shall maintain such simulated operation until such time as «Customer Name»'s SSA balance is within Grand Coulee's upper and lower PSB.

5.4.2.2 If «Customer Name» fails to take the action specified in section 5.4.2.1 above, a penalty shall be applied equal to Grand Coulee's at-site Storage Energy amount, expressed in MWh, associated with the absolute value of the Grand Coulee PSB exceedence described in section 5.4.2 above, multiplied by the UAI Rate.

6. COMMUNICATIONS

- 6.1 «Customer Name» shall be solely responsible for its internal dissemination of information provided by BPA pursuant to Exhibit M and this Exhibit N.
- 6.2 «Customer Name» shall be able to utilize the Default User Interface to access the Simulator Parameters established by PS pursuant to section 5 of Exhibit M.
- 6.3 BPA shall provide «Customer Name» a daily written summary of Operating Constraints PS establishes as the Simulator Parameters.
- 6.4 BPA shall make reasonable efforts to 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 6.7 below.
- 6.5 BPA shall communicate Federal Operating Decisions to «Customer Name» in the following manner:
 - 6.5.1 An initial listing and description of Federal Operating Decisions in effect as of September 30, 2011;
 - 6.5.2 An immediate notification via confirmed delivery and receipt electronic messaging systems in place between BPA and «Customer Name»; and
 - 6.5.3 A verbal report to the attendees during the next scheduled daily conference call as described in section 6.7 below.
- 6.6 Beginning September 28, 2011, and on each Business Day after that, BPA shall initiate an informational conference call with «Customer Name» and the other Slice purchasers 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 PS, «Customer Name», and the other SIG members. «Customer Name» shall receive notice from BPA via e-mail at least three Business Days prior to any such change.
- 6.7 PS, «Customer Name», and other Slice purchasers shall establish a forum, through the SIG or a subcommittee thereof, to discuss Operating Constraints and their application, but the SIG or SIG subcommittee shall not have the right to vote on the establishment of Operating Constraints or their application.



7. 90-DAY FORECAST OF SLICE OUTPUT

- 7.1 Prior to midnight on the 23rd day of each month, BPA shall provide «Customer Name» with the results of a 90-day forecast, pursuant to section 7.2 below. BPA 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.
- 7.2 PS, 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 increments. 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 to Grand Coulee as needed 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 Slice System Projects and non-federal projects. BPA 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, BPA 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 BOSS projects, excluding CGS; the weekly CGS generation forecast; and the weekly forecast of the individual System Obligations. BPA shall also provide a summary of weekly aggregated planned generator maintenance outages for all Slice System Projects, expressed in total MW, as well as the estimated daily Grand Coulee upper and lower PSB for the study period.

8. 12-MONTH FORECAST OF SLICE OUTPUT

- 8.1 Prior to July 15, 2011, and prior to each July 15 thereafter during the term of this Agreement, BPA, «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 7.4 below.
- 8.2 Prior to August 1, 2011, and prior to each August 1 thereafter during the term of this Agreement, BPA shall provide «Customer Name» with results from the 12-month forecast, pursuant to section 7.4 below.
- 8.3 Prior to August 15, 2011, and prior to each August 15 thereafter during the term of this Agreement, BPA, «Customer Name», and other Slice purchasers

shall meet to discuss the results of the 12-month forecast described in section 7.4 below.

- 8.4 BPA, consistent with its internal study processes, shall perform a single Multiyear Hydroregulation Study for the upcoming October through September period representing a range of at least 43 stream flow traces. 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 Slice System Projects and non-federal projects. BPA 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, BPA 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 BOSS projects, excluding CGS; the monthly CGS generation forecast; and the monthly forecast of the individual System Obligations. BPA shall also provide a summary of monthly aggregated planned generator maintenance outages, expressed in total MW, for all Slice System Projects.

9. MONTHLY RSO SLICE TO LOAD TEST IMPLEMENTATION

- 9.1 On or before the 10th Business Day of each calendar month, «Customer Name» shall submit to BPA its Total Retail Load for the preceding calendar month, expressed in MWh.
- 9.2 On or before the 20th Business Day of each calendar month, BPA shall compute and provide «Customer Name» the results of the monthly RSO Slice to load test (Test), as described in section 5.7 of the body of this Agreement.
- 9.3 «Customer Name» shall have 14 days from the day BPA provides «Customer Name» the results of Test to provide BPA supporting data BPA shall use to determine whether «Customer Name» shall be deemed to have satisfied the Test, as described in section 5.7.5 of the body of this Agreement.
- 9.4 BPA shall have 14 days from the day «Customer Name» provides BPA such supporting data to notify «Customer Name» of BPA's decision whether «Customer Name» shall be deemed to have satisfied the Test. If BPA decides not to deem «Customer Name» as having satisfied the Test, BPA shall provide «Customer Name» written explanation for its decision.



9.5 If recurring conditions exist in one or more particular months of each year that result in BPA repeatedly deeming, for such particular month or months, «Customer Name» to have satisfied the Test pursuant to section 5.7.5 of this Agreement, BPA and «Customer Name» agree to collaboratively develop documentation, such as a letter agreement, that establishes for a specified prospective time period that BPA shall deem «Customer Name» to pass the Test for such particular month or months if similar conditions exist.

10. DISPLACEMENT OF CGS IMPLEMENTATION

10.1 BPA will notify «Customer Name» of any potential CGS Displacement, pursuant to section 5.10 of the body of this Agreement, as soon as BPA determines such CGS Displacement is likely to occur.

10.2 If a CGS Displacement occurs during a period when «Customer Name» has elected not to participate in such CGS Displacement, pursuant to section 5.10 of the body of this Agreement, BPA will develop and submit to «Customer Name» hourly schedules of Additional Energy as described in section 9.3 below.

10.3 «Customer Name»'s hourly Additional Energy amounts shall be equal to «Customer Name»'s Slice Percentage multiplied by the difference between the CGS Generation Benchmark and the expected CGS hourly generation, after rounding the result to the nearest whole number.

10.4 Such Additional Energy amounts shall be computed within the BOSS Module and shall be scheduled by «Customer Name» as a separate, stand alone schedule.

11. CONGESTION MANAGEMENT (PLACEHOLDER)

If there are congestion management requirements placed on the BPA by the Balancing Authority, BPA shall adhere to the operational requirements of such congestion management requirements and shall apply the operational impacts of such requirements proportionally to «Customer Name».

12. CONFIDENTIALITY

BPA considers all prospective operational information associated with the Slice System or any Slice System Project 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. 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 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.

13. REVISIONS
[To be completed.]



Exhibit O

INTERIM SLICE IMPLEMENTATION PROCEDURES – Updated 7/15/08

This Exhibit O shall be implemented only if, as of July 1, 2011, the Simulator fails the Simulator Performance Test as described in section 26.3.3 of this Agreement, and/or the SCA fails the SCA Functionality Test as described in section 5.12 of this Agreement. This exhibit shall be in effect no earlier than October 1, 2011 and shall remain in effect no longer than 90 days after the later of the Simulator Pass Date or the SCA Pass Date.

If this Exhibit O is implemented, any provisions of this Exhibit O that are in conflict with provisions of Exhibit N, Slice Operating Procedures, 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.

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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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.

- 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 Energy Slice Output (AESO)" means the energy portion of «Customer Name»'s Slice Output scheduled and delivered at the Point of Receipt for a day.
- 1(c) "Actual Net Slice System Generation (ANSSG)" means the sum of the ASSG in megawatt-hours (MWh) and the gross Elective Spill used in the calculation of net Elective Spill in section 7(g)(2) below, in MWh.
- 1(d) "Dispatchable Projects" means those projects 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(e) "Estimated Slice System Generation (ESSG)" means the sum of the estimated generation produced at all the projects in the Slice System after adjustment for Operational Constraints and System Obligations over a given period of time.
- 1(f) "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 Operational Constraints that restrict the ability to utilize the capability of the Slice System to store or draft water on different days.
- 1(g) "Grace Margin" means the amount by which «Customer Name» may exceed its SSSB without incurring penalties.
- 1(h) "Grace Margin Spill Account (GMSA)" means the account which PS maintains that reflects the total amount of energy subtracted from the Slice purchasers' SSDAs each day as a result of the Slice purchasers accruing Slice Storage Account balances that exceed their individual upper SSSB limit and their individual Grace Margin.

- 1(i) "Non-Dispatchable Projects" means all of the Slice System projects that are not Dispatchable Projects.
- 1(j) "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 throughout the CY 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(k) "Ramp Rate" means the maximum rate of change in the level of generation for a specified period within all applicable Operational Constraints.
- 1(l) "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(m) "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 SSSE, expressed in megawatt-days (MW-days).
- 1(n) "Slice System Deviation Account (SSDA)" means the amount of energy, in MW-days, that «Customer Name»'s AESO deviates from the product of the ANSSG and «Customer Name»'s Slice Percentage, as described in section 7(d).
- 1(o) "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(p) "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(q) "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 (KSF), by such reservoir's at-site and downstream federal water-to-energy conversion factor (H/K).
- 1(r) "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(s) "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(t) "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(u) "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**

If, after the day, it is determined that «Customer Name» has scheduled AESO in excess of «Customer Name»'s Slice Percentage of (1) the one-hour maximum ESSG, (2) the one-hour maximum ESSG for 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, «Customer Name» may be charged at the Unauthorized Increase Rate for the amount of such exceedence.

If, after the day, it is determined that «Customer Name» has scheduled AESO 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 AESO when computing «Customer Name»'s Pondage and SSDA balances for that day.

Penalties assessed by PS pursuant to this Exhibit O may be waived by PS in accordance with section 16(g) of the body of this Agreement.

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

PS shall calculate the SSSE, as defined in section 1(p), by summing the Storage Energy of the project(s) listed in section 1(p).

3(b) Calculating the SSSB

Prior to midnight on the 23rd day of each month, PS shall provide «Customer Name» with a forecast of the upper and lower SSSB for the subsequent three months. To determine the SSSB, PS 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

To calculate the Pondage limits PS will reflect the estimated effective H/Ks, 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, PS 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 Operational Constraints in effect, and PS 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, 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(u), 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 $.303 * 24 * H/K_{GCL} * \text{weekly flow target}$

For Saturday: Increase Pondage Up by the product of $.75 * .303 * 24 * H/K_{GCL} * \text{weekly flow target}$

For Sunday: Increase Pondage Up by 0

Where:

H/K_{GCL} 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 operations under Fixed Flow, «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

$$\text{UpAdj}_I = \text{Greater of 0 or } [(\text{SSDA}_{I-2} - \text{SSDA}_0) * 24 - (\text{SSP} * \text{K})]$$

Formula 2

$$\text{DownAdj}_I = \text{Lesser of 0 or } [(\text{SSDA}_{I-2} - \text{SSDA}_0) * 24 + (\text{SSP} * \text{K})]$$

Where:

UpAdj_I is the amount of additional Pondage Up which «Customer Name» shall have a right to on day I.

DownAdj_I is the amount of additional Pondage Down which «Customer Name» shall have a right to utilize on day I.

SSDA_{I-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, PS 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, PS 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, PS 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 Operational Constraints. PS 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 Exhibit L under the headings including Independent Hydro Projects and Designated Non-Federally Owned Resources.

4(c) This section intentionally left blank

4(d) This section intentionally left blank



4(e) Calculating the Maximum and Minimum Daily ESSG

Beginning on September 30, 2011, and on each Business Day thereafter for as long as this exhibit is in effect, PS 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, PS shall perform two hydroregulation studies, one operating Coulee as needed to achieve the maximum flow constraint in effect, and one operating Coulee as needed to achieve the minimum flow constraint in effect. For such studies, PS shall initialize the starting reservoir Storage Contents to the previous day's actual elevations. PS shall incorporate forecasted probable regulated inflows for each project, forecasted unit outages, and all applicable Operational Constraints. For such studies, PS shall reflect the expected project operation of the LSN Complex, Hungry Horse, Libby, Dworshak and all non-federal projects. PS shall reflect a pass inflow operation of LCOL Complex to the extent allowed by such projects' Operational Constraints.

During periods of Fixed Flow operations, PS 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, PS 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

Beginning on September 30, 2011, and on each Business Day thereafter as long as this exhibit is in effect, PS 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, PS 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 Operational Constraints, and will not accurately reflect Slice Output actually available.

4(g) Calculating the Hourly Maximum ESSG

PS shall calculate the hourly maximum ESSG separately for the LSN Complex and for the rest of the Slice System. For such maximums, PS 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 Operational Constraints.

PS 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 Operational 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, PS shall calculate the ESSG that would result from a minimum flow operation, while observing all Operational Constraints.

4(i) Adjustments By PS Duty Scheduler

On an hourly basis, the PS Duty Scheduler 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 the PS Duty Scheduler of such adjustment will be necessary except as noted in section 13(f) below. The PS Duty Scheduler shall have the authority to make any such changes based on the conditions listed below.

4(i)(1) Corrections of Errors, Omissions, or Assumptions

PS's estimates of daily maximum ESSG, the hourly maximum ESSG, and Absolute Minimum ESSG may be adjusted in real-time by PS 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

PS may adjust information and Slice Output Limits previously provided by PS to reflect new Federal Operating Decisions, the termination or suspension of a Federal Operating Decision already reflected in the estimates, or if PS 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

The PS Duty Scheduler shall notify «Customer Name» of Elective Spill for TOP HLH and/or TOP LLH as soon as practicable after PS 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, the PS Duty Scheduler 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

The PS Duty Scheduler 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:

$$\text{MRR} + \text{NDG}_N - \text{NDG}_{N-1}$$

Where:

MRR = the maximum rate of increase in generation for the Dispatchable Projects between 2 hours.

NDG_N/NDG_{N-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

$$[\text{RG}_N - \text{RG}_{N-1}]$$

Where:

RG_N/RG_{N-1} = The lesser of the System Hourly Maximum times the SSP, or the requested Genfor 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, and such

exceedence amount will be subtracted from «Customer Name»'s daily AESO 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 * (RG_{N-1} - HM_N)

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 * (RG_{N-2} - HM_{N-1}))], and
- 4(j)(2)(ii) The greater of {(SSP * C) or A * (RG_{N-2} - the greater of [(SSP * C) or (A * (RG_{N-2} - HM_{N-1}) - HM_N])}

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

RG_N/RG_{N-2} = The greater of the Absolute Minimum ESSG times the SSP for hour N, or the requested Gen (other than for ancillary services) for schedule hour N and schedule hour N-2

HM_N/HM_{N-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:

$$[(RG_N - SSP * (NDG_N + SO_N)) - (RG_{N-x} - SSP * (NDG_{N-x} + SO_{N-x}))]$$



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 (1) for calculating «Customer Name»'s schedule decrease for the 1-hour Ramp Rate Down test and shall be set to the value two (2) 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 AESO 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 is in effect, PS 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. PS 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, PS 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) below.

5(b) Calculation of ANSSG and AESO

Beginning October 1, 2001, and on each day thereafter as long as this exhibit is in effect, PS shall calculate and provide «Customer Name» with a daily

accounting of the ANSSG produced on the previous day, as measured in MWh. PS 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) below.

To determine «Customer Name»'s daily individual AESO, PS 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 AESO 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 AESO 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 AESO 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 PS'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 penalty 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) below. It is recognized that unusual events may require «Customer Name» and PS 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) below) beginning on the day that such transition was commenced to bring their SSA balance within its individual SSSB by utilizing the procedure described in section 6(e) below without penalty or charge. If, within such 7-day period, «Customer Name» brings their SSA balance within their 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 their SSA balance within their individual SSSB, «Customer Name» shall be subject to the penalties



described in this section 6 for any amount their 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, PS 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 ESSG Pass-Inflow Forecast error on that day times «Customer Name»'s Slice Percentage.

6(c) Calculation of SSSB Exceedence

PS shall determine the exceedence of «Customer Name»'s Slice Storage Account relative to «Customer Name»'s individual SSSB, by using Formula 3 below. PS shall also determine the quantity of «Customer Name»'s SSDA that is subject to forfeiture and transfer out of their SSA, if any, using Formula 4 below, and the quantity of Unauthorized Increase, if any, by using Formula 5 below.

Formula 3

$$E = (\text{Greater of } 0 \text{ or } (SSSE_I - uSSSB)) + (\text{Lesser of } 0 \text{ or } (SSSE_I - lSSSB))$$

Where:

E is the amount by which «Customer Name»'s SSSE exceeds the Slice System Storage Bounds in MW-days.

SSSE_I 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

$$gmSPILL = \text{Greater of } \{0, \text{ or the Lesser of } [(0.99 * D_{maxGen} - AESO/24), \text{ or } (E - GM_I)]\}$$

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.

GM_I 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 [(AESO/24 – 1.01*DminGen), or (E + GM_I)]}}

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.

GM_I 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)

PS shall establish a GMSA that shall be initialized each day to zero and maintained in MW-days. PS shall calculate the GMSA pursuant to section 6(e)(3) below and shall utilize the GMSA to calculate net Elective Spill pursuant to section 7(g)(2) below.

6(e) Application of The Grace Margin

Any time that gmSpill and gmUAI as calculated in Formulae 4 and 5 above 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 their Slice Storage Account balance to a condition that is within their Grace Margin to avoid the penalties below. If «Customer Name»'s exceedence as calculated in Formula 3 above 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) below 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 AESO in compliance with one of the following two requirements:



6(e)(2)(A) «Customer Name»'s exceedance as calculated in Formulae 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 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 exceedance.

If «Customer Name» fails to schedule its AESO or make a SSDA transfer as specified in section 6(e)(2), such exceedance, if positive, will be treated as gmSPILL pursuant to section 6(e)(3) below; if negative, such amount shall be treated as gmUAI pursuant to section 6(e)(4) below.

«Customer Name» may elect to schedule its AESO in a manner to reduce the exceedance 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) above. If «Customer Name» does so, «Customer Name» shall not be required to adjust its AESO as specified in this section 6(e)(2).

6(e)(3) Applied gmSpill and the Grace Margin Spill Account

PS 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) herein. In addition, PS 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

PS 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) herein at the UAI charge. In addition, PS 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

PS shall establish and maintain an accounting of the daily SSSE based upon the Slice System reservoirs' actual Storage Contents (actual SSSE). PS shall establish and maintain an accounting the daily deviation of Slice Storage (SSDA) for «Customer Name» as specified below. PS 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 as needed 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 above shall apply.

7(a) This section intentionally left blank.

7(b) **Initial Balances**

PS 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. PS 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 is in effect, PS 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 below.

Formula 7

$$\text{SSDA}_{-1} = \text{SSDA}_{-2} + \text{dSSDA}_{-1} \cdot \text{eSPILL}_I$$

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.

eSPILL_I 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

$$\text{dSSDA}_{-1} = [(\text{SSP} * \text{ANSSG}_{-1}) - \text{AESO}_{-1} + \text{iTSSDA}_{-1}] / 24$$

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.

AESO₋₁ is «Customer Name»'s individual AESO for day -1 as measured in MWh.

iTSSDA₋₁ is the adjustment to «Customer Name»'s SSDA for day -1 as determined pursuant to section 8, measured in MWh.

7(e) **Termination of the Interim Operating Procedures and Slice Participant's SSDA Balance**



Any balance remaining in «Customer Name»'s SSDA on the date these Interim Operating Procedures are terminated and Exhibit M is implemented shall be transferred to «Customer Name»'s BOSS Deviation Account as the initial balance.

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 their 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 PS due to the delivery of Elective Spill energy will be allocated to «Customer Name» by multiplying the amount of such expenses incurred by PS on such day by «Customer Name»'s Slice Percentage.

7(f)(4) Daily Maximum ESSG

The customer 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

The customer 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

The customer 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 subsection 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

PS may need to reduce the actual Elective Spill by delivering energy as Immediate Spill energy or by paying other parties to take energy that would otherwise be implemented as Elective Spill. PS 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. PS shall use Formula 9 below to calculate the net Elective Spill for the Slice System.

Formula 9

$$\mathbf{eSPILL_{NET} = \text{Greater of 0 or } (eSPILL_{GROSS} - GMSA \cdot \text{HourlySpill})}$$

Where:

eSPILL_{NET} is the net Elective Spill for the Slice System to be allocated to the Slice Purchasers in MW-days.

eSPILL_{GROSS} 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) above 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, PS shall calculate for «Customer Name», all other Slice Purchasers, and PS, the net Elective Spill to be allocated to each Party, using Formulae 10, 11, and 12 below. When requested, PS shall make available to «Customer Name» the calculations and all data necessary to verify the calculation of the allocated net Elective Spill.

Formula 10

$$\mathbf{llhMINGEN = (llhASSG_{ADO} + eSPILL_{NET} * 24) / TOP LLH}$$

Where:

llhMINGEN is the minimum TOP LLH Slice System generation needed to avoid Elective Spill for the day, expressed in average MW.

llhASSG_{ADO} 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 PS paid other parties to take during such TOP LLH, expressed in MWh.



eSPILL_{NET} is the net Elective Spill for the Slice System, to be allocated to the Slice Purchasers, as calculated in Formula 9 above and expressed in MW-days.

TOP LLH is the number of TOP LLH in the day.

Formula 11

llhADDGEN_I = the greater of
((llhMINGEN * SSP) – llhAESO_I/TOP LLH) or 0

Where:

llhADDGEN_I is «Customer Name»'s additional individual AESO 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 above, expressed in average MW.

SSP is «Customer Name»'s Slice Percentage.

llhAESO_I is the portion of «Customer Name»'s daily individual AESO 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

eSPILL_I = **eSPILL_{NET} * llhADDGEN_I / llhADDGEN_{TOT}**

Where:

eSPILL_I is «Customer Name»'s allocated share of the net Elective Spill for the Slice System, expressed in MW-days.

eSPILL_{NET} is the net Elective Spill for the Slice System to be allocated to the Slice Purchasers, as determined in Formula 9 above, expressed in MW-days.

llhADDGEN_I is «Customer Name»'s minimum TOP LLH Slice System Generation needed to avoid Elective Spill for the day, as determined in Formula 11 above, expressed in average MW.

llhADDGEN_{TOT} is the minimum TOP LLH Slice System Generation needed to avoid Elective Spill for the day, as determined in Formula 11 above, summed for all Slice Purchasers, and expressed in average MW.

7(h) Pondage Account and Daily/Weekly Use of Pondage

PS shall establish and maintain daily accounting of the Pondage limits on the Slice System, calculated pursuant to Section 3(c) of this Exhibit.

PS shall also establish and maintain an accounting of the daily use of Pondage for «Customer Name» as specified below. PS shall measure or

calculate such account balances in whole megawatt-hours (MWh) as of midnight 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 sum of the following items:

7(h)(1)(A) The energy amount by which «Customer Name»'s AESO exceeds the daily maximum ESSG shall be subtracted from «Customer Name»'s Pondage account balance and the amount by which the AESO 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 (i) the amount of the Pondage account balance for the prior day, or (ii) the amount that «Customer Name»'s AESO 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 (i) the amount of the Pondage account balance for the prior day, or (ii) the amount that «Customer Name»'s AESO 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 PS for the Pondage account balance to be used for Pondage operations, including taking and returning of energy from the Pondage account, then PS shall include such amounts in the calculation.

7(h)(2) If «Customer Name» schedules AESO such that their Pondage account balance does not exceed, in a positive amount, their Slice Percentage times the Pondage Down limit (note: a negative number), and does not exceed in a negative amount, their 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 their 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, «Customer Name» shall schedule AESO such that «Customer Name»'s Pondage account balance is within their 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 PS

9(a) **Slice System Estimates Provided Each Business Day By PS**

PS 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. All estimates will be provided net of expected Operational Constraints and in MWh except where noted. PS 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 PS that in providing this estimate, a Slice Output 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) above.

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) above. This will provide «Customer Name» with an estimated amount of Slice Output to schedule in order to maintain their 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 9(d). PS will provide more detailed planned unit outage information during times of severe weather events or 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 Forecasted Slice System Generation expected to occur on TOP LLH and on TOP HLH, given unit availability and Operational 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

PS 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. PS 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 PS 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 PS 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 the last day of the interim storage energy state will be the SSDA₀ that «Customer Name» may use to adjust their Pondage rights for the duration of the subsequent Fixed Flow period.

PS shall also declare whether there is an expectation of Elective Spill during TOP LLH and/or Elective Spill during TOP HLH.

9(b) Operational Constraints

PS shall provide to «Customer Name» changes to current Operational Constraints and the imposition of new Operational Constraints, as they become known to PS, which could impact the current and future generating capability of the Slice System. The Operational 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 PS

PS shall provide «Customer Name» with the following information at the times specified. In the event that actual information is not available, PS 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 Operational Constraints are expressed in terms of Weekly Constraints. If a Weekly Constraint is in effect, PS shall provide «Customer Name» with information pursuant to this subsection. To the extent that PS is provided with an error margin for the Weekly Constraint with regard to any Operational 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, PS shall provide «Customer Name» with the necessary data for operating, consistent with such revised Weekly Constraints. PS 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

«Customer Name» shall schedule its Slice Output in accordance with the following:

13(a) Preschedule Times

«Customer Name» shall submit hourly preschedules through the next Preschedule Day to PS consistent with PS's prescheduling timeframe, which currently closes at 1100 hours PPT. This preschedule shall be in hourly values and in whole MW. Schedules submitted after the PS prescheduling timeframe 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 PS.

13(b) Estimates of Energy Schedules

If requested by PS, «Customer Name» shall also provide an estimate of the energy they will schedule for the 6 consecutive days following the prescheduled day. Such estimate shall be provided for each day in terms of average TOP HLH and average TOP LLH values for total energy. «Customer Name» and the other Slice Purchasers may provide to PS aggregated estimates of TOP HLH and TOP LLH energy schedules for the next 6 days to satisfy such request. The estimates are provided for information only.

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.

13(e) Real-Time Changes

«Customer Name» shall have the right to adjust its preschedule for any reason up to 30 minutes prior to the delivery hour to the extent such adjusted amount is within the applicable Ramp Rates and Hourly Maximum as established by this exhibit. «Customer Name» shall communicate such preschedule adjustment to the PS Duty Scheduler.

13(e)(1) This section intentionally left blank.

13(e)(2) This section intentionally left blank.

13(e)(3) This section intentionally left blank.

13(f) Limits on Real-time Changes that are Less Than 30 Minutes Before the Hour

The PS Slice Scheduler shall have the sole discretion to accept or deny «Customer Name»'s requests to adjust preschedule quantities less than 30 minutes prior to the start of each delivery hour. Changes required by the BA for reliability purposes that occur less than 30 minutes prior to the start of each delivery hour shall be accommodated by BPA and «Customer Name» at the time such requests are made.

13(g) This section intentionally left blank

13(h) This section intentionally left blank

13(i) This section intentionally left blank

14. REVISIONS AND AD-HOC OPERATIONAL DECISIONS

Revisions to this exhibit and/or ad-hoc operational decisions shall be implemented by BPA after discussion among the Slice Implementation Group, as described in section 5.14.2 of this Agreement.

Exhibit P

SCA DEVELOPMENT SCHEDULE

[To be completed.]



Exhibit Q (Revised 7/18/08)

DETERMINATION OF INITIAL SLICE PERCENTAGE

Reviewer's Note: This exhibit may need to be revised to reflect processes set out in BPA's Good Faith Estimate letter.

1. DEFINITIONS

The following definitions apply only to this Exhibit Q.

- 1.1 "Base Critical Slice Amount" means 1,850 annual aMW which represents the Base Slice Percentage multiplied by a deemed 7,400 annual aMW Tier 1 System Capability.
- 1.2 "Base Slice Percentage" means 25 percent.
- 1.3 "Maximum Critical Slice Amount" means the maximum Critical Slice Amount that «Customer Name» may request to purchase from BPA, and is calculated based upon «Customer Name»'s Net Requirement forecast, pursuant to section 2.1 below, expressed as an integer annual aMW value.
- 1.4 "Selected Critical Slice Amount" means the Critical Slice Amount that «Customer Name» may request to purchase from BPA, and is used only to determine the Initial Slice Percentage, expressed as an integer annual aMW value. «Customer Name»'s Selected Critical Slice Amount shall not exceed the Maximum Critical Slice Amount.
- 1.5 "Slice Parties" means «Customer Name» and all other Slice/Block purchasers.
- 1.6 "Unsold Slice Amount" means that portion of the Base Critical Slice Amount that remains unsold, as computed in section 3.2 below, rounded to an integer annual aMW value.
- 1.7 "Unsold Slice Percentage" means the Unsold Slice Amount, if any, converted to a three decimal digit percentage (xx.xxx percent).

2. DETERMINATION OF INITIAL SLICE PERCENTAGE

The following procedure shall be used to determine the Initial Slice Percentage.

2.1 Maximum Critical Slice Amount

No later than August 1, 2008, BPA shall provide to «Customer Name» a forecast of «Customer Name»'s FY 2012 Net Requirement. The forecasted FY 2012 Net Requirement is xx.xxx aMW. The Maximum Critical Slice Amount is equal to:

$$(\text{Forecasted FY 2012 Net Requirement}) \times (0.70) = \text{xxx aMW.}$$



- 2.2 Good Faith Estimate of Selected Critical Slice Amount**
No later than August 15, 2008, «Customer Name» shall provide written notification to BPA of its good faith estimate of its Selected Critical Slice Amount.
- 2.3 Total Good Faith Estimates of Selected Critical Slice Amounts**
No later than September 1, 2008, BPA shall sum the good faith estimates of the Selected Critical Slice Amounts for all Slice Parties.
- 2.4 Total Good Faith Estimates of Selected Critical Slice Amounts Less Than or Equal To Base Critical Slice Amount**
If the sum of the good faith estimates of the Selected Critical Slice Amounts is less than or equal to the Base Critical Slice Amount, then BPA shall notify «Customer Name» no later than September 15, 2008, that no adjustment to its good faith estimate of its Selected Critical Slice Amount will be needed. In this event, «Customer Name»'s good faith estimate of its Selected Critical Slice Amount shall be used to calculate its Initial Slice Percentage pursuant to section 2.7 below, and the terms of section 2.6 below shall not apply.
- 2.5 Total Good Faith Estimates of Selected Critical Slice Amount Greater Than Base Critical Slice Amount**
If the sum of the good faith estimates of the Selected Critical Slice Amounts is greater than the Base Critical Slice Amount, then BPA shall notify «Customer Name» in writing no later than September 15, 2008 of the amount by which the sum of the good faith estimates exceeds the Base Critical Slice Amount ("Oversubscribed Amount"), and that an adjustment to its Selected Critical Slice Amount and the Selected Critical Slice Amounts requested by other Slice Parties is needed.
- 2.6 Allocation Procedures to Adjust Selected Critical Slice Amounts**
If the Oversubscribed Amount pursuant to section 2.5 above is greater than zero then «Customer Name» and other Slice Parties shall use reasonable efforts to adjust their Selected Critical Slice Amounts such that the Oversubscribed Amount is reduced to zero, as described in section 2.6.1 below. In the event «Customer Name» and other purchasers of the Slice/Block Product are unable to agree on such adjustment, then BPA shall make an adjustment using the procedure in section 2.6.2 below.
- 2.6.1 Slice Parties Allocate Among Themselves**
The Slice Parties that have submitted good faith estimates of their Selected Critical Slice Amounts shall have thirty (30) days from the date of BPA's written notice pursuant to section 2.5 to determine an adjustment of the Oversubscribed Amount that results in Selected Critical Slice Amounts that sum to no more than the Base Critical Slice Amount and results in each Slice Party having a Selected Critical Slice Amount that is less than or equal to its Maximum Critical Slice Amount. If the Slice Parties agree upon an adjustment

that conforms with the above limitations, they shall submit their adjusted amounts to BPA no later than October 15, 2008, in writing, signed by all Slice Parties, specifying the Selected Critical Slice Amount for «Customer Name» and all other Slice Parties. If the Slice Parties are unable to agree on an adjustment before October 15, 2008, then they shall inform BPA in writing by that date and BPA shall make an adjustment pursuant to section 2.6.2 below.

2.6.2 BPA Allocation Procedures for Oversubscribed Amount

BPA shall calculate an Adjustment Percentage (“AP”) by dividing the Base Critical Slice Amount by the sum of the good faith estimates of the Selected Critical Slice Amounts submitted the Slice Parties pursuant to section 2.2 above. BPA shall then multiply «Customer Name»’s good faith estimate of its Selected Critical Slice Amount by the AP to determine «Customer Name»’s Selected Critical Slice Amount.

2.7 Calculation of Initial Slice Percentage

Following the determination of «Customer Name»’s Selected Critical Slice Amount pursuant to section 2.4, 2.6.1, or 2.6.2 above, «Customer Name»’s Initial Slice Percentage shall be rounded to the seven digit decimal quotient obtained by dividing its Selected Critical Slice Amount by the Base Critical Inventory Amount, and expressed as a percentage. The Initial Slice Percentage shall be set forth in a revision to Exhibit J, Preliminary Slice Percentage, Initial Slice Percentage, and Slice Percentage.

3. ADJUSTMENT PROCEDURES FOR UNSOLD AMOUNTS OF SLICE

No later than January 30, 2011, BPA shall make available to Slice Parties that have a Slice/Block Power Sales Agreement in effect as of January 1, 2011, any Unsold Slice Amount using the procedure below.

3.1 Compute Unsold Slice Percentage

The Unsold Slice Percentage shall be computed by subtracting the sum of all Initial Slice Percentage values of all Slice Parties that have an executed Slice/Block Power Sales Agreement as of January 1, 2011 from the Base Slice Percentage.

3.2 Compute Unsold Slice Amount

BPA shall compute the Unsold Slice Amount, expressed as an integer aMW value, by multiplying the forecasted FY 2012 Critical Inventory Amount by the Unsold Slice Percentage.

3.3 Unsold Slice Amount Less Than or Equal To Zero

If the Unsold Slice Amount is less than or equal to zero, then BPA shall notify «Customer Name» no later than January 15, 2011, that no adjustment for Unsold Slice Amount shall occur under this section 3, and the Initial Slice Percentage will remain as set forth in Exhibit K, Slice Percentage.



3.4 Unsold Slice Amount Greater Than Zero

If the Unsold Slice Amount is greater than zero, then BPA shall provide written notice to «Customer Name» no later than January 15, 2011 of the Unsold Slice Amount available.

3.4.1 Slice Parties Determine any Adjustment Themselves

«Customer Name» and the other Slice Parties shall no later than February 15, 2011, determine an adjustment of the Unsold Slice Amount that, when added to the Selected Critical Slice Amounts of all Slice Parties with an executed Slice/Block Power Sales Agreement as of January 1, 2011, sums to no more than the product of the Base Slice Percentage multiplied by the forecasted FY 2012 Critical Inventory Amount and results in each Slice Party having a Selected Critical Slice Amount that is no more than «Customer Name» Maximum Critical Slice Amount. If the Slice Parties agree upon adjustments that conform with the above limitations, they shall submit the adjustments in writing to BPA no later than February 15, 2011, signed by all Slice Parties, that sets out the name and Selected Critical Slice Amount for each Slice Party. If the Slice Parties are unable to agree on adjustments on or before February 15, 2011, then «Customer Name» shall then provide written notification to BPA no later than February 22, 2011 if it elects to participate in BPA's adjustment of the Unsold Slice Amount or not, pursuant to section 3.4.2 below. BPA shall then adjust the Unsold Slice Amount pursuant to section 3.4.2 below.

3.4.2 BPA's Adjustment Procedure for Unsold Slice Amounts

BPA shall adjust the Selected Critical Slice Amount of each Slice Party providing written notice of its election to participate in an adjustment by adding the Unsold Slice Amount to each such Slice Parties Selected Critical Slice Amount on a pro rata basis, in increments of at least 1 aMW per participating Slice Party, based on their respective Selected Critical Slice Amounts established pursuant to section 2 above.

3.5 Determination of Adjusted Initial Slice Percentage

If «Customer Name»'s Selected Critical Slice Amount has been increased pursuant to section 3.4.1 or 3.4.2 above, «Customer Name»'s Initial Slice Percentage shall be equal to the seven digit decimal quotient obtained by dividing its increased Selected Critical Slice Amount by the Base Critical Inventory Amount, expressed as a percentage, and set forth in a revision to Exhibit J.

If «Customer Name»'s Selected Critical Slice Amount is not adjusted pursuant to section 3.4.1 or 3.4.2 above, «Customer Name»'s Initial Slice Percentage shall be remain as set forth in Exhibit J.

4. REVISIONS
[To be completed.]



Attachment 3

Department of Energy

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

POWER SERVICES

In reply refer to: PSW-6

Date

Contract No. 09PB-XXXX
CREDITWORTHINESS AGREEMENT
WITH CONTINUING CREDIT REVIEW
BY BPA

Dear <<CUSTOMER NAME>> :

The Bonneville Power Administration (BPA) and <<Customer Name>> intend to enter into Contract No. 09PB-XXXX, Slice/Bock Power Sales Agreement (Slice Agreement).

In recognition of the unique features of the Slice Agreement and as an accommodation to BPA, <<CUSTOMER NAME>> hereby agrees to enter into this Letter Agreement (Agreement).

At least prior to the execution of the Slice Agreement, BPA and <<CUSTOMER NAME>> will execute this Agreement. BPA and <<CUSTOMER NAME>> are sometimes referred to individually as "Party" and jointly as "Parties".

Accordingly, BPA and <<CUSTOMER NAME>> agree as follows:

1. **TERM.** This Agreement takes effect on the date signed by BPA and <<CUSTOMER NAME>> , and shall continue in effect until the earlier of the following:
 - (a) Either BPA or <<CUSTOMER NAME>> has not executed the Slice Agreement before <<Date>>.
 - (b) The date, after termination or expiration of the Slice Agreement, on which all payment obligations of <<CUSTOMER NAME>> to BPA in connection with the purchase of electric power by <<CUSTOMER NAME>> under section 5 of the Slice Agreement have been satisfied.
2. **DEFINITIONS.**
 - (a) "Acceptable Credit Support" means the following, as reasonably determined by BPA, provided that BPA may in its discretion agree that other arrangements qualify as Acceptable Credit Support:



(1) The deposit of cash by <<CUSTOMER NAME>> in an escrow or trust account managed by a bank; provided, that, such deposit shall qualify as Acceptable Credit Support only if the amounts required under this Agreement have been deposited in such account for a minimum of six continuous months (or such other continuous period as shall defeat a voidable preference under Federal bankruptcy law then in effect);

(2) An irrevocable standby letter of credit ("LOC") issued by: (A) a federally insured bank having at least \$1 billion in deposits and whose senior unsecured debt is rated "A" or better by at least two Major Credit Rating Companies; (B) the National Rural Utilities Cooperative Finance Corporation, so long as its senior unsecured debt is rated "A" or better by at least two Major Credit Rating Companies; or (C) an institution of equivalent creditworthiness, as reasonably determined by BPA. The terms and conditions of the LOC shall provide that:

(A) It must be payable in full solely to BPA not later than three Business Days after written demand by BPA and without further conditions;

(B) It must guarantee payment and not performance;

(C) It must waive diligence, presentment, demand, protest, notice of acceptance or any other notice;

(D) It must not be terminable by <<CUSTOMER NAME>> without BPA's approval;

(E) It must be subject to amendment only with BPA's approval;

(F) It must be non-transferable and the issuer of the LOC must be obligated to notify BPA of any assumption or assignment thereof;

(G) Except as otherwise stated herein section 2(a)(2)(A)-(F), this letter of credit is subject to International Standby Practices 1998, International Chamber of Commerce Publication No. 590 (ISP98), and as to matters not addressed by the ISP98 this letter of credit shall be governed by, and construed in accordance with, the laws of the State of New York, without regard to principles of conflicts of laws, except that to the extent the parties' rights and obligations are required to be governed by United States Federal law, then such rights and obligations shall be governed by United States Federal law.

No. 09PB-XXXXX, <<Customer Name>>

From time-to-time, the Parties may agree to attach hereto a form of LOC to be used by <<CUSTOMER NAME>> if Acceptable Credit Support must be posted pursuant to this Agreement.

(b) "Business Day" means any day that is normally observed by <<CUSTOMER NAME>> as a workday. If the last day of a period during which an action is to be taken under this Agreement falls on a day that is not a Business Day, the last day of such period shall be the next Business Day.

(c) "Major Credit Rating Companies" means Standard & Poor's, Moody's Investors Services, Inc., Fitch Ratings, or their respective affiliates and successors.

(d) "Maximum Annual Power Billing" means the Slice Payment, as specified in the Slice Agreement, multiplied by 12.

(e) "Unenhanced" means, with respect to debt of <<CUSTOMER NAME>>, that such debt is secured by the revenues of <<CUSTOMER NAME>> only and is not supported by another entity whether through bond insurance, guarantee, or another financial product. In addition, the term is meant to exclude project financed debt and debt that is outstanding but defeased or escrowed to maturity.

3. COMPREHENSIVE CREDIT REVIEW AND ACCEPTABLE CREDIT SUPPORT.

(b) **Comprehensive Credit Review.** BPA will conduct an **Comprehensive** credit review of <<CUSTOMER NAME>> to determine the amount of Acceptable Credit Support, if any, that <<CUSTOMER NAME>> must post on or before the date power deliveries by BPA commence under the Slice Agreement.

(c) **When Acceptable Credit Support Will Not Be Initially Required.** If, as of <<Date>>, <<CUSTOMER NAME>>'s senior, unenhanced debt, if any, is rated by one or more of the Major Credit Rating Companies; and: (1) none have rated such debt below investment grade (BBB- or its equivalent); and (2) in the case of any such debt having a rating at the lowest investment grade (BBB- or its equivalent), <<CUSTOMER NAME>> is not on negative credit watch, then <<CUSTOMER NAME>> will have no obligation to post Acceptable Credit Support at the time power deliveries by BPA commence under the Slice Agreement; or after completion of a Comprehensive Creditworthiness Evaluation by BPA internally rates the <<CUSTOMER NAME>> BBB- or greater.

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(d) **When Acceptable Credit Support May Be Required.** If BPA determines that <<CUSTOMER NAME>> does not meet the criteria outlined in 3(c) then Acceptable Credit Support is required to be posted by <<CUSTOMER NAME>> at the time power deliveries by BPA commence under the Slice Agreement, assuming timely provision of information by <<CUSTOMER NAME>> under section 3(a), BPA will notify <<CUSTOMER NAME>> of the result of such a determination no later than August 1, 2011. If BPA timely notifies <<CUSTOMER NAME>> that Acceptable Credit Support is required at the time power deliveries by BPA commence under the Slice Agreement, <<CUSTOMER NAME>> must post Acceptable Credit Support on or before the time power deliveries by BPA commence under the Slice Agreement in the amount, if any, determined by BPA, **provided, however,** that the amount of Acceptable Credit Support may not at any time exceed the product of 0.120 and the Maximum Annual Power Billing

(e) **<<CUSTOMER NAME>>'s Failure to Submit Credit Application and Related Information.** If BPA has not received a completed credit application and other information to BPA's satisfaction by April 1, 2011, BPA, without any credit review, may require that <<CUSTOMER NAME>> post Acceptable Credit Support in an amount equal to the product of the Maximum Annual Power Billing and 0.120 at the time power deliveries by BPA commence under the Slice Agreement. In such event, <<CUSTOMER NAME>>, must maintain that amount of Acceptable Credit Support until such time as BPA determines otherwise; **provided, however,** that BPA will complete the comprehensive credit review of <<CUSTOMER NAME>> as soon as practicable after the receipt of the information described in subsection 3(a).

4. **CONTINUING CREDIT REVIEW.** From the time power deliveries by BPA commence under the Slice Agreement until the termination or expiration of this Agreement, <<CUSTOMER NAME>> will be subject to continuing credit review by BPA. BPA may periodically review <<CUSTOMER NAME>>'s creditworthiness and determine, consistent with the terms of this Agreement, the amount, if any, of Acceptable Credit Support that <<CUSTOMER NAME>> must post and maintain; **provided, however,** that <<CUSTOMER NAME>> will not be required to post or maintain Acceptable Credit Support in excess of the product of 0.120 and the Maximum Annual Power Billing. Within three Business Days of receipt by <<CUSTOMER NAME>> of notice by BPA to post or increase the amount of Acceptable Credit Support, <<CUSTOMER NAME>> shall post or increase the amount of Acceptable Credit Support to the amount determined and provided in the notice by BPA. BPA will promptly review any Acceptable Credit Support proposed by <<CUSTOMER NAME>> to determine whether it satisfies the requirements of this Agreement. From time-to-time during the term of this Letter Agreement, BPA may request and <<CUSTOMER NAME>> shall provide updated information of the type described in section 3(a), **provided, however,** that such information must be reasonably necessary to BPA's evaluation of <<CUSTOMER NAME>>'s

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creditworthiness, and, provided further, that <<CUSTOMER NAME>> shall have no obligation to provide BPA with any confidential or business sensitive information.

The following events or conditions are grounds for BPA to determine that <<CUSTOMER NAME>> post or increase the amount of Acceptable Credit Support under this section 4:

- (a) BPA has knowledge that <<CUSTOMER NAME>> has defaulted on or is not performing its payment obligations under power marketing contracts, or loans, notes, bonds, or other evidences of indebtedness;
- (b) <<CUSTOMER NAME>> has senior, unenhanced debt that is rated by at least one Major Credit Rating Company below investment grade (BBB- or its equivalent), or is rated by at least one Major Credit Rating Company below investment grade at the lowest investment grade (BBB- or its equivalent) and <<CUSTOMER NAME>> is on negative credit watch by that Major Credit Rating Company;
- (c) The enactment, by any legislative body with competent jurisdiction over <<CUSTOMER NAME>>, of legislation that would render unlawful: (1) the performance by <<CUSTOMER NAME>> of any absolute or contingent obligation to make a payment or to receive delivery in respect of the Slice Agreement, or of any other material provision of the Slice Agreement; or (2) the performance by <<CUSTOMER NAME>> of any material contingent or other obligation that <<CUSTOMER NAME>> has under this Agreement, the Slice Agreement or any Acceptable Credit Support relating to this Agreement;
- (d) <<CUSTOMER NAME>> takes an official position in any legal proceeding to which it is a party that its performance under the Slice Agreement is unlawful or unauthorized;
- (e) Any litigation filed against <<CUSTOMER NAME>>, or the filing by <<CUSTOMER NAME>> of litigation, contesting: (1) the enforceability of <<CUSTOMER NAME>>'s obligations to make payments under the Slice Agreement; (2) the obligation to obtain Acceptable Credit Support under this Agreement; and (3) or to comply with any other material provision of this Agreement or the Slice Agreement;
- (f) Substantial changes in market prices occur that materially and adversely impact <<CUSTOMER NAME>>'s ability to make payments under the Slice Agreement;
- (g) Other material changes in <<CUSTOMER NAME>>'s financial condition have occurred that may adversely impact <<CUSTOMER NAME>>'s ability to make payments under the Slice Agreement; and

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(h) Failure of <<CUSTOMER NAME>> to provide BPA with information requested by BPA and to the extent that <<CUSTOMER NAME>> does not provide the requested information, BPA is free to draw any conclusion about the creditworthiness of <<CUSTOMER NAME>> with respect to the subject matter of the request.

5. OBLIGATION TO PROVIDE EVIDENCE OF ACCEPTABLE CREDIT SUPPORT. <<CUSTOMER NAME>> must provide BPA with copies of any Acceptable Credit Support provided hereunder immediately upon execution of such Acceptable Credit Support and must provide to BPA within two Business Days of notice by BPA reasonably reliable evidence that Acceptable Credit Support is in effect in the amount provided hereunder.

6. DISPUTES.

(a) <<CUSTOMER NAME>> may dispute BPA's determinations for the posting of or an increase in the amount of Acceptable Credit Support under this Agreement only if <<CUSTOMER NAME>> timely posts the amount so determined by BPA, not to exceed the product of 0.120 and the Maximum Annual Power Billing. <<CUSTOMER NAME>> will maintain such Acceptable Credit Support until the dispute is finally resolved or BPA agrees otherwise.

(b) <<CUSTOMER NAME>> may dispute whether BPA's requests for information are consistent with the terms of this Agreement only if <<CUSTOMER NAME>> posts Acceptable Credit Support in an amount determined by BPA, not to exceed the product of 0.120 and the Maximum Annual Power Billing. <<CUSTOMER NAME>> must maintain such Acceptable Credit Support until the dispute is finally resolved or BPA agrees otherwise.

(c) <<CUSTOMER NAME>> may dispute a determination by BPA whether a LOC or other form of security meets the requirements of an Acceptable Credit Support only if <<CUSTOMER NAME>> posts or maintains security acceptable to BPA and in an amount determined by BPA, not to exceed the product 0.120 and the Maximum Annual Power Billing.

(d) In the event of a dispute arising under this section, the dispute resolution procedures of the Slice Agreement will apply.

7. REQUESTS TO REEVALUATE CREDITWORTHINESS.

<<CUSTOMER NAME>> may request, at any time during the term of this Agreement, that BPA reevaluate <<CUSTOMER NAME>>'s creditworthiness. Upon such request, BPA shall determine, consistent with the provisions of this Agreement, whether to reduce the amount of Acceptable Credit Support then required to be posted or maintained by <<CUSTOMER NAME>> .

No. 09PB-XXXXX, <<Customer Name>>

8. FAILURE TO POST OR MAINTAIN SECURITY. In the event <<CUSTOMER NAME>> does not: (a) post or maintain Acceptable Credit Support in the amount required hereunder; or (b) provide reasonably reliable evidence thereof, in each case as provided in this Agreement, <<CUSTOMER NAME>> is in default of this Agreement. <<CUSTOMER NAME>> has three Business Days from the date of receipt by <<CUSTOMER NAME>> of notification by BPA of such default to cure such default by posting Acceptable Credit Support in the amount required hereunder, or, as the case may be, by providing BPA with reasonably reliable evidence thereof. If the default is not so cured within such period, <<CUSTOMER NAME>> is in material breach of this Agreement and the Slice Agreement and BPA may terminate its obligation to deliver electric power under section the Slice Agreement as provided in section [26.1] thereof.

9. ACCESS TO AND USE OF FUNDS.

(a) **Access to Funds Available Under Acceptable Credit Support.** BPA is entitled under this Agreement to draw on or receive the funds available under an Acceptable Credit Support only if <<CUSTOMER NAME>> has been billed under section 16.1 of the Slice Agreement, and the amount so billed remains unpaid, in whole or in part, after the End of the Cure Period outlined in section 16.4. This section shall not be interpreted to require that BPA meet any condition of demand, satisfaction, presentment or other notice prior to drawing on or receiving the funds provided under any credit support provided under this Agreement.

(b) **Use of Funds Available Under Acceptable Credit Support.** If BPA draws on or receives the funds available under an Acceptable Credit Support, such funds shall be used by BPA first to satisfy all liabilities due and owing from <<CUSTOMER NAME>> to BPA pursuant to the terms of the Slice Agreement arising from or related to the delivery of power to <<CUSTOMER NAME>> under section 5 of the Slice Agreement, and second to any other amounts that are due and owing BPA, but that are unpaid under the Slice Agreement including without limitation amounts billed to <<CUSTOMER NAME>> thereunder, any interest thereon, and any True-Up Adjustment Charge (as that term is defined in the Slice Agreement). If the amount of the funds provided to BPA exceeds the sum of all such liabilities, the amount remaining after all such liabilities are satisfied will be promptly returned by BPA to <<CUSTOMER NAME>> , with interest on the excess funds from the date BPA took possession of those funds to the date the excess funds are returned to <<CUSTOMER NAME>> . Such interest shall be calculated by dividing the Prime Rate for Large Banks as reported in the Wall Street Journal on the date BPA took possession of those funds by 365, and applying the resulting interest rate to the excess funds returned to <<CUSTOMER NAME>> for each day of the period for which interest is due under this section.

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10. FORM OF NOTICE. Unless otherwise specified, notice under this Agreement shall be in writing and shall be effective when received. Notice may be transmitted by hand delivery or by mail. Notice may also be transmitted by facsimile or electronic mail, provided that such transmission shall have been followed by hand or mail delivery of the original notice.

No. 09PB-XXXXX, <<Customer Name>>

If the foregoing is acceptable to <<CUSTOMER NAME>> , please sign and date all three originals of this Agreement and return two sets to me. The remaining original is for your files.

Sincerely,

Account Executive

Name
(Print/Type)

ACCEPTED:

By _____

Name _____
(Print/Type)

Title _____

Date _____

No. 09PB-XXXXX, <<Customer Name>>



FISCAL NOTE FOR NON-CAPITAL PROJECTS

Department:	Contact Person/Phone:	DOF Analyst/Phone:
City Light	Ray Camacho 233-7889	Karl Stickel, 684-8085

Legislation Title:

AN ORDINANCE relating to the City Light Department; authorizing the Superintendent or his designee to enter into a seventeen-year power purchase agreement with the Bonneville Power Administration and related agreements.

• **Summary of the Legislation:**

The proposed Ordinance authorizes the Superintendent of the City Light, or his designee, to execute those agreements necessary to ensure that City Light can purchase its portion of the Federal Columbia River Power System managed by the Bonneville Power Administration (“BPA”) during the seventeen-year contract delivery period, October 1, 2011 through September 30, 2028.

BPA’s Regional Dialogue power purchase agreement will provide for City Light to purchase one or more of the following BPA products: annual Flat Block, Shaped Block, Slice, and/or Shaped Block with Shaping Capacity at one or more power rates. City Light may also enter into other supporting agreements, including but not limited to a related creditworthiness agreement.

• **Background:**

In recent years City Light has purchased annually from BPA 3.5 – 3.6 million MWh of the Slice product (firm and surplus energy) and about 2.1 million MWh of the Block product (all firm), for a total of approximately 5.5 – 5.6 million MWh of Federal power. Under a new Regional Dialogue power purchase agreement, City Light expects to purchase its maximum allocation of one or more Block products, or a combination of Block and Slice products, but the amount of annual firm energy City Light will receive is expected to be slightly lower than in the past. Below is a table showing the average annual amounts of Block and Slice purchased under City Light’s current BPA contract:

Year	Block (aMW)	average Block rate (\$/MWh)	Slice (aMW)	average Slice rate (\$/MWh)
2002	152.3	27.35	379.6	29.63
2003	147.1	29.49	390.9	34.75
2004	137.8	27.84	392.8	30.01
2005	109.4	26.94	385.1	31.24
2006	174.4	29.47	451.1	27.75
2007	242.2	27.92	411.3	32.34



The exact amount of BPA power that City Light will be allowed to buy from BPA under a Regional Dialogue contract at a Tier 1 (BPA's lowest) rate depends on City Light's actual retail load during the Federal fiscal year (FY) 2010 (October 2009 – September 2010), as well as the forecasted capability of the Federal Columbia River Power System during each year of the new contract. City Light's total retail load forecast indicates that its load is expected to increase from approximately 1182 aMW to 1375 aMW during the 17-year delivery period.

At this time, City Light expects to be offered a High Water Mark of approximately 530 aMW of firm power that it can purchase at BPA's Tier 1 rate. This represents an amount of power that is 20 – 30 aMW less than under City Light's current BPA contract and reflects an entitlement reduction directly attributable to retail load lost during 2000-2001 Energy Crisis after City Light had already established the amounts of power it would buy from BPA under the current contract during the FY 2001 – FY 2011 time period.

The amount of power City Light will be able to buy from BPA at Tier 2 rates to meet City Light's net retail load requirement above its High Water Mark will depend on the difference between City Light's retail load forecast for FY 2012 and its declared resources used to serve retail load in the same time period. At this time, City Light expects to be offered an option to purchase 5 – 20 aMW of annual Flat Block at a Tier 2 rate during the first three years of the contract. This product may be from a renewable energy source, depending on BPA's resource acquisition activities during the next several years. This Tier 2 purchase right is expected to grow over the period of contract deliveries in proportion to City Light's retail load to roughly 190 aMW by FY 2028.

Negotiations between BPA and its customers with respect to the Regional Dialogue power purchase agreements and tiered rate design are on-going and many variables that can materially affect the final product offerings and prices are yet to be determined. Despite this, BPA is requiring that customers execute contracts no later than December 1, 2008 in order to allow for BPA's internal and external reviews to be complete by the end of this year. The BPA Administrator has been firm in requiring that contracts be finalized prior to the end of the year. As a result of this goal there will still be certain matters unresolved at the time City Light must execute its contracts.

BPA's power rates change periodically through rate cases. During the new contract period, BPA is expected to conduct two-year rate cases in alternate years, beginning in FY 2011 for the FY 2012 – FY 2013 rate period. Historically, combined power and transmission rates have ranged between \$25 and \$35 per MWh since 1984 in real dollars. BPA's current wholesale power rates average about \$27 per MWh.

Under the proposed Regional Dialogue policy, BPA intends to tier its rates between products supplied from its existing Federal Power System and products supplied from new resource acquisitions that it will acquire to service its customers' net retail load requirements above their respective High Water Marks. Tier 1 power rates will be based on the costs of existing Federal resources, but are expected to rise faster than inflation over the next several years due

to a number of factors, including catching up on long-deferred maintenance and replacement of components of an aging hydroelectric system and nuclear power plant (Columbia Generating Station); meeting customer load growth in a carbon-constrained world; increasing regulatory requirements (including environmental, reliability, and financial constraints); and global competition for commodities and equipment, such as steel. Tier 2 power rates will be based on BPA's costs to acquire and manage new resources that it purchases to serve load above High Water Marks after FY 2011.

City Light has initiated a number of analyses examining the possible product combinations and options that are likely to be available to City Light as a BPA customer after FY 2011. Staff have concluded that City Light is in a far better position overall as a BPA customer, than not. The Power Management Division's market analysts have determined that market purchases for a five-year forward block product roughly equivalent to BPA's Block product would likely cost three times the cost of BPA's product. This is because long-term power contracts do not constitute a very "liquid" market. For example, City Light was recently offered a five-year flat Mid-C energy product beginning in 2012 at \$90.50/MWh, a price that is more than three times the current BPA rate, while current long-term forecasts of Northwest energy prices are in the \$50 to low \$60s/MWh range. If the forecasted price range is correct, an average market price of \$55/MWh would still be significantly above the probable BPA costs. Finally, with respect to new, renewable resources, such energy is likely to be priced in excess of \$100/MWh.

Under a Regional Dialogue contract, City Light may purchase any of the following products: (1) the Slice product which provides a percentage of BPA's actual annual power output, or "Slice of the System", in exchange for paying that percentage of BPA's actual annual costs; (2) a Shaped Block product that is roughly sized to City Light's monthly net power requirements; (3) a Shaped Block with Shaping Capacity product that allows some limited hourly shaping capability in addition to monthly shaping; (3) or an annual flat Block product at a Tier 2 Rate. City Light has begun to study the pros and cons of purchasing different BPA products, but due to a number of variables yet-to-be determined, no recommendation as to which product to choose has been made at this time.

A preliminary comparative analysis conducted by Power Management staff in May 2008 concluded that City Light would be better off taking a combination of Slice and Block products rather than Block only (see Attachment 1). However, since the regional negotiations on product and rate design are still underway, City Light staff intends to rerun the comparative product analysis after the final contract templates, product descriptions and Tiered Rate Methodology have been released by BPA later this summer. The Superintendent will make the best financial decision regarding choice of BPA products after additional information becomes available, which may be quite close to the contract signing deadline of December 1, 2008.

- *Please check one of the following:*

This legislation does not have any financial implications. (Stop here and delete the remainder of this document prior to saving and printing.)

 X **This legislation has financial implications.** (Please complete all relevant sections that follow.)

***Appropriations:** This table should reflect appropriations that are a direct result of this legislation. In the event that the project/ programs associated with this ordinance have appropriations that were, or will be, received because of previous or future legislation or budget actions, please provide details in the Notes section below.*

Fund Name and Number	Department	Budget Control Level*	2008 Appropriation	2009 Anticipated Appropriation
Light Fund #41000	Light	SCL701	\$179,714,000	\$168,958,000
TOTAL			\$179,714,000	\$168,958,000

**See budget book to obtain the appropriate Budget Control Level for your department.*

Notes: The figures above represent City Light's appropriations under the current BPA contract. This Ordinance will actually not affect City Light's appropriations until October 1, 2011 when power deliveries begin under the new BPA power purchase contracts.



Anticipated Revenue/Reimbursement: Resulting From This Legislation: *This table should reflect revenues/reimbursements that are a direct result of this legislation. In the event that the issues/projects associated with this ordinance/resolution have revenues or reimbursements that were, or will be, received because of previous or future legislation or budget actions, please provide details in the Notes section below the table.*

Fund Name and Number	Department	Revenue Source	2008 Revenue	2009 Revenue
TOTAL				

Notes: Not applicable

Total Regular Positions Created, Modified, Or Abrogated Through This Legislation, Including FTE Impact: *This table should only reflect the actual number of positions created by this legislation. In the event that positions have been, or will be, created as a result of previous or future legislation or budget actions, please provide details in the Notes section below the table.*

Position Title and Department*	Position Number for Existing Positions	Fund Name and Number	Part-Time/ Full Time	2008 Positions	2008 FTE	2009 Positions **	2009 FTE* *
TOTAL							
	0	0	0	0	0	0	0

* List each position separately

** 2009 positions and FTE are total 2009 position changes resulting from this legislation, not incremental changes. Therefore, under 2009, please be sure to include any continuing positions from 2008.

Notes: Since City Light already employees staff to implement its current BPA power sales contract, no new hires will be necessary to implement the Regional Dialogue power purchase agreement.

- **Do positions sunset in the future?** (If yes, identify sunset date):
Not applicable



Spending/Cash Flow: This table should be completed only in those cases where part or all of the funds authorized by this legislation will be spent in a different year than when they were appropriated (e.g., as in the case of certain grants and capital projects). Details surrounding spending that will occur in future years should be provided in the Notes section below the table.

Fund Name and Number	Department	Budget Control Level*	2008 Expenditures	2009 Anticipated Expenditures
TOTAL				

* See budget book to obtain the appropriate Budget Control Level for your department.

Notes: Not applicable.

- **What is the financial cost of not implementing the legislation?** (Estimate the costs to the City of not implementing the legislation, including estimated costs to maintain or expand an existing facility or the cost avoidance due to replacement of an existing facility, potential conflicts with regulatory requirements, or other potential costs if the legislation is not implemented.)

Failing to implement this legislation would require City Light to purchase replacement power (in the amount of approximately 530 aMW) beginning October 1, 2011 from other power sources that Power Management Division predicts will cost two to three times the cost of BPA power. This would have a significant, negative rate impact on our ratepayers. Similarly, developing new, renewable generation of equivalent magnitude would be very expensive.

- **What are the possible alternatives to the legislation that could achieve the same or similar objectives?** (Include any potential alternatives to the proposed legislation, such as reducing fee-supported activities, identifying outside funding sources for fee-supported activities, etc.)

The only alternatives would be purchase of energy through alternative long-term contracts or development of new, renewable resources by City Light.

- **Is the legislation subject to public hearing requirements:** (If yes, what public hearings have been held to date, and/or what plans are in place to hold a public hearing(s) in the future.)

No.

- **Other Issues** (including long-term implications of the legislation):

The Department's continuing involvement as one of BPA's largest public power customers ensures that Seattle has opportunities to influence BPA's activities in the Northwest,



Cindy Wright/cw
SCL BPA 2012 FISC
June 2, 2008
Version # 1

including development of public policy with respect to energy efficiency; renewable resource research and development; fish and wildlife mitigation; power planning and resource acquisition.

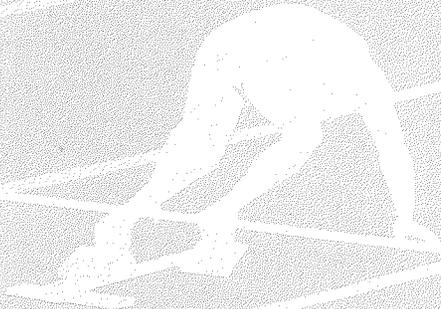
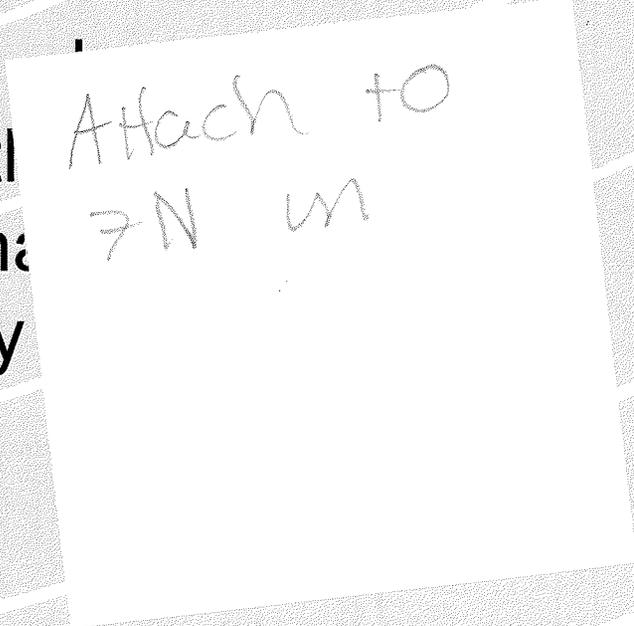
Please list attachments to the fiscal note below:

Attachment 1: Block vs. Slice Analysis



Block vs. Slice Analysis

Seattle
Power Man
May



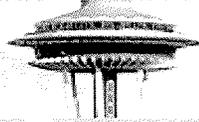


Block vs. Slice Analysis

- Base Case – Current Block/Slice
 - 2008 Net Requirement 562 aMW
 - 2008 Product Mix(58% Slice/42% Block)
 - 2008 Block Shape per Exhibit C of existing Slice/Block Agreement
 - Rate Design per 2007-2009 Wholesale Power Rates

- Case 1 – Current Mix of Block/Slice
 - 2010 HWM 531 aMW (Latest SCL Estimate)
 - 2008 Product Mix(58% Slice/42% Block)
 - 2008 Block Shape - revised Declared Resource assumptions
 - Rate Design proposed Tiered Rate Methodology

- Case 2 – 100% Block
 - 2010 HWM 531 aMW
 - Product Mix (100% Block/0%Slice)
 - 2008 Block Shape - revised Declared Resource assumptions
 - Rate Design proposed Tiered Rate Methodology



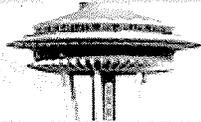
Block vs. Slice Analysis

• Analytical Tools

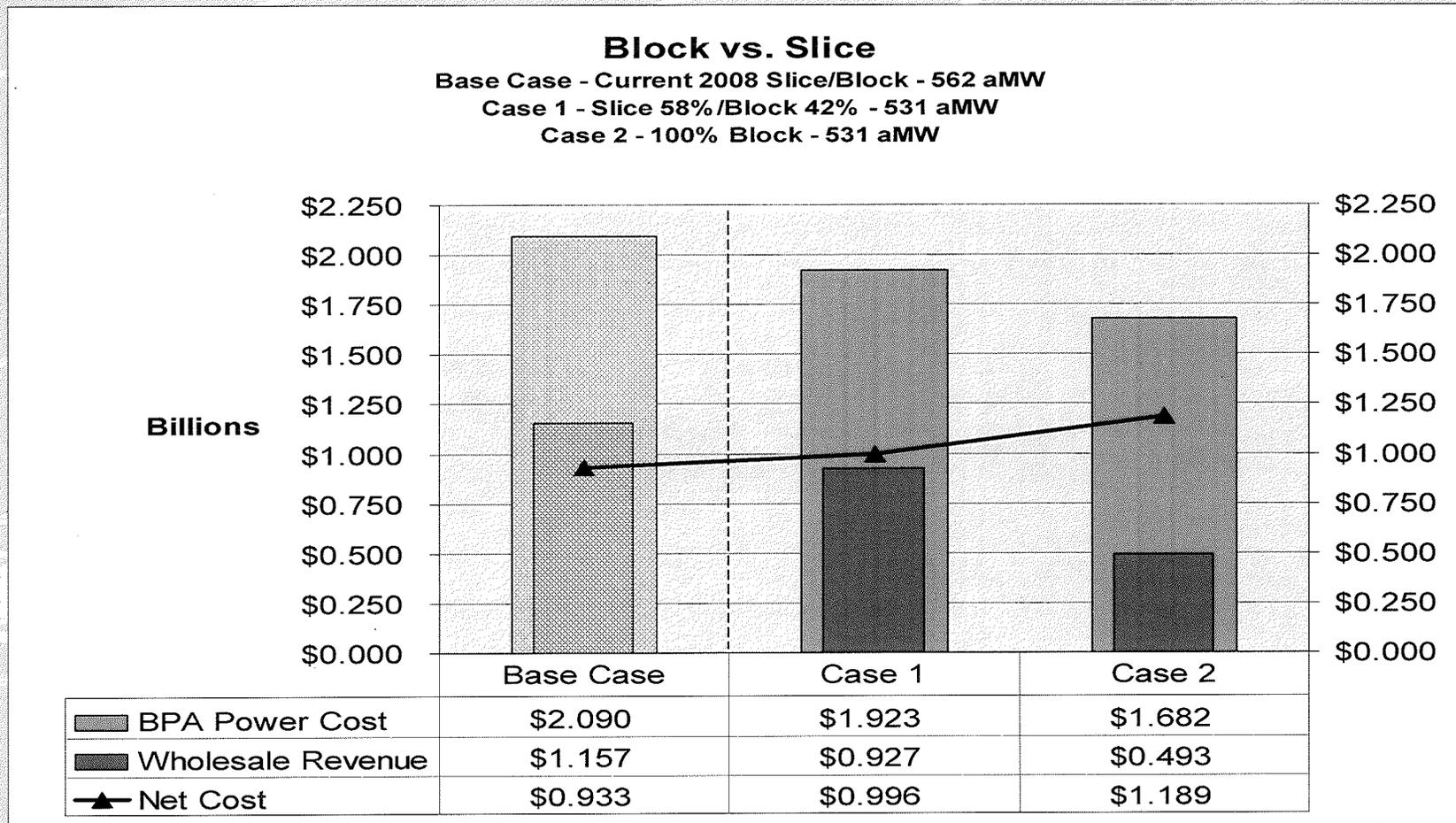
- Hedge Evaluation and Risk Assessment Model
- Finance's Wholesale Revenue Model
- HWM Calculator
- BPA Power Cost Calculator

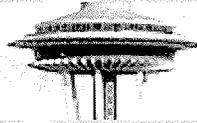
• Analysis Method

- Calculate BPA Power Costs for each case
- Calculate Seattle's Wholesale Power Revenues for each case
- Calculate the Net Cost for each case
 - Net Cost = Difference between BPA Power Costs and Seattle's Wholesale Power Revenues
- Compare the Net Cost of each case
- Analysis Period
 - 2012-2028
- Results
 - Expressed as 2008 Real NPV (over 2012-2028 period)



Results – 2008 Real NPV (2012-2028 period)



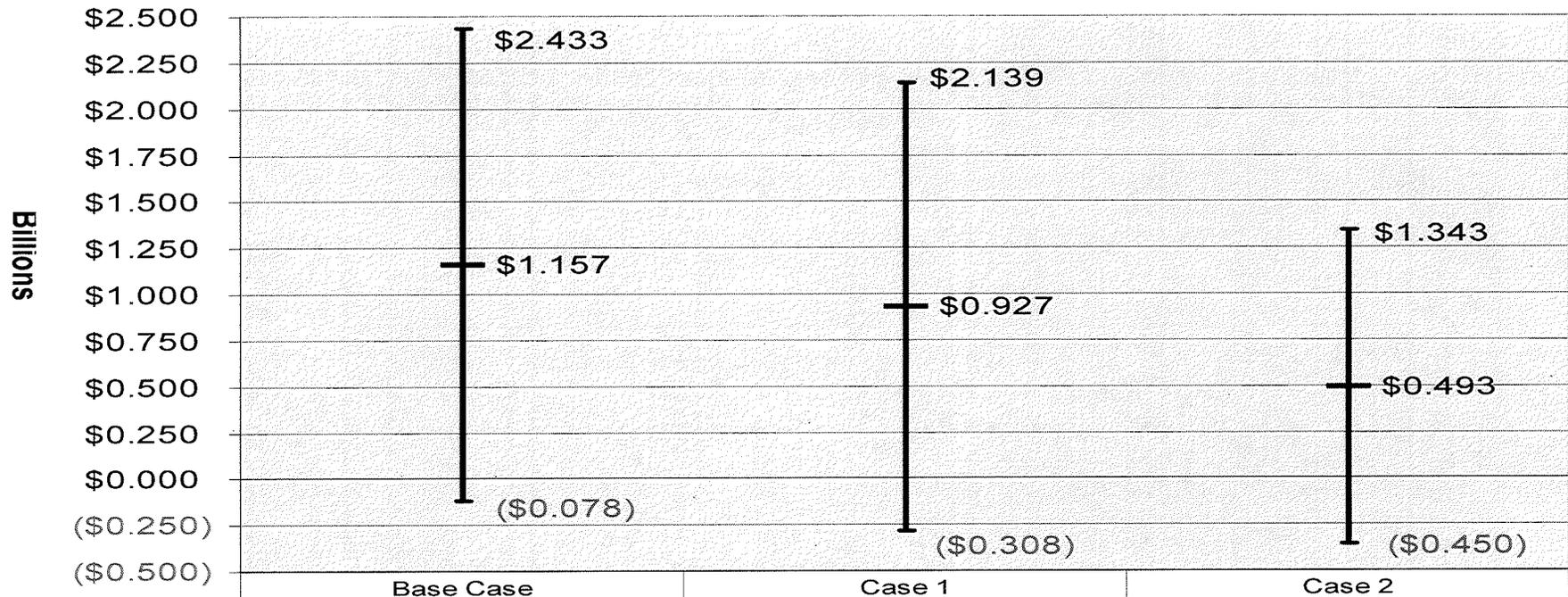


Results Con't - 2008 Real NPV (2012-2028 period)

- Variation in Wholesale Revenues

Block vs. Slice Variation in Wholesale Revenues

Base Case - Current 2008 Slice/Block - 562 aMW
 Case 1 - Slice 58%/Block 42% - 531 aMW
 Case 2 - 100% Block - 531 aMW



Avg Wholesale Revenues

Base Case

Case 1

Case 2

\$1.157

\$0.927

\$0.493





Block vs. Slice Analysis - Key Uncertainties

- Resource Uncertainty
 - Quantity of HWM Allocated to Seattle
 - Depends on Seattle's Actual 2010 Loads
 - Depends on Treatment of Declared Resources
 - Quantity of Slice Allocated to Seattle
 - Impacts of New Slice Customers on Seattle's Share
 - Seattle's Final Allocation of Slice may be Reduced if more than 25% of BPA's Customer Load wishes to Purchase Slice
- Market Price Forecasts
- BPA Power Costs



Block vs. Slice Analysis

➤ Benefits Not Quantified

– Capacity

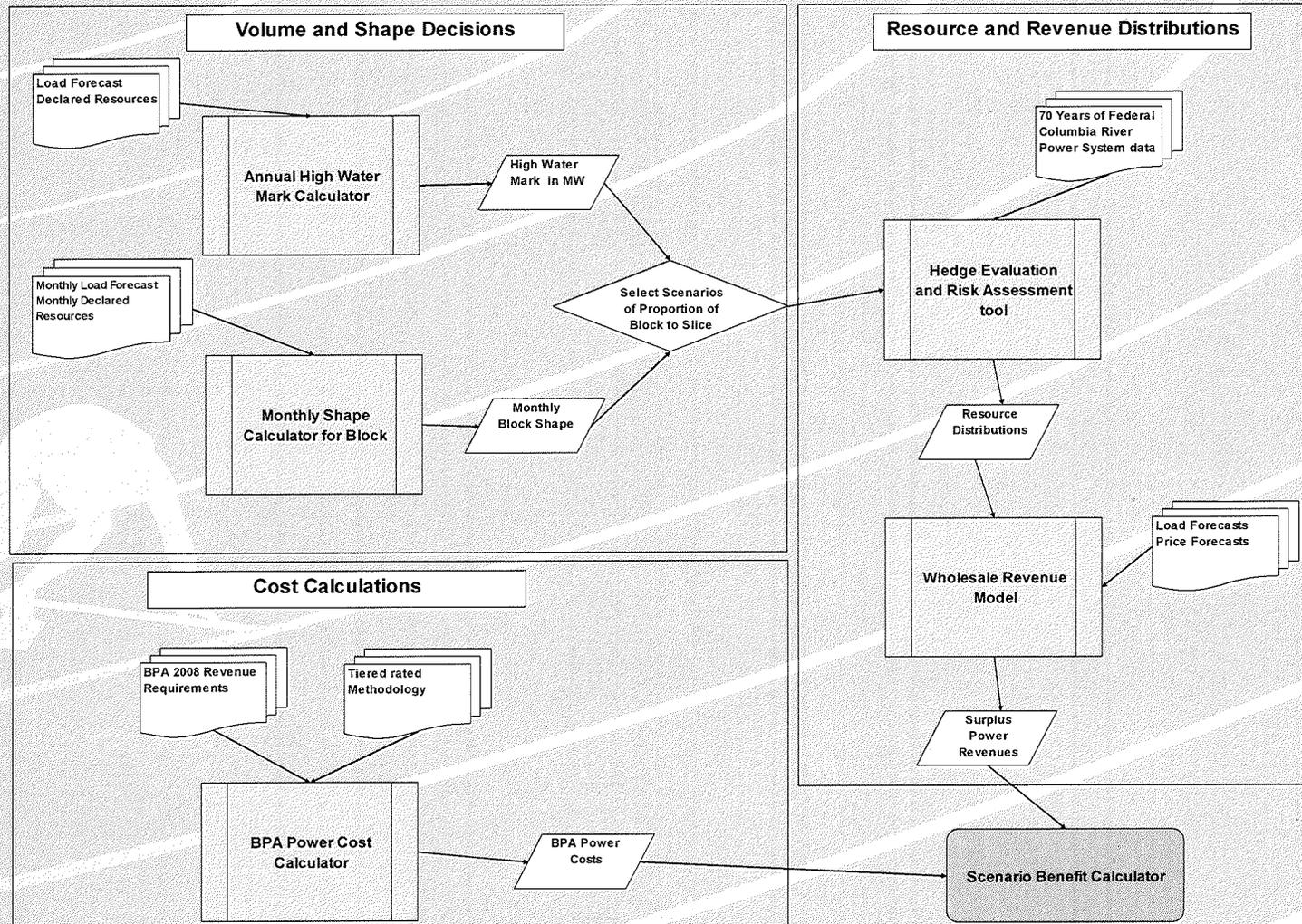
- Due to potential decrease of available capacity that may result from a Peak Net Requirement determination, capacity benefits were not included

– Shaping within Day (Pondage)

- Shaping Energy between HLH and LLH periods



Net Cost Analysis Method Flowchart



STATE OF WASHINGTON – KING COUNTY

--ss.

229958
CITY OF SEATTLE, CLERKS OFFICE

No. 122788-122812

Affidavit of Publication

The undersigned, on oath states that he is an authorized representative of The Daily Journal of Commerce, a daily newspaper, which newspaper is a legal newspaper of general circulation and it is now and has been for more than six months prior to the date of publication hereinafter referred to, published in the English language continuously as a daily newspaper in Seattle, King County, Washington, and it is now and during all of said time was printed in an office maintained at the aforesaid place of publication of this newspaper. The Daily Journal of Commerce was on the 12th day of June, 1941, approved as a legal newspaper by the Superior Court of King County.

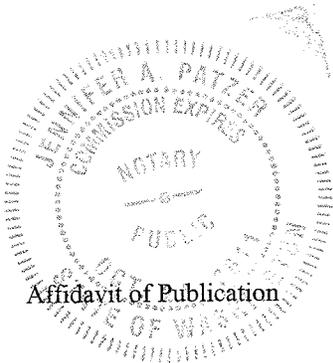
The notice in the exact form annexed, was published in regular issues of The Daily Journal of Commerce, which was regularly distributed to its subscribers during the below stated period. The annexed notice, a

CT:TITLEONLY ORDINANCE

was published on

10/07/08

The amount of the fee charged for the foregoing publication is the sum of \$ 196.70, which amount has been paid in full.



Affidavit of Publication

[Signature]

Subscribed and sworn to before me on
10/07/08 *[Signature]*

Notary public for the State of Washington,
residing in Seattle

State of Washington, King County

City of Seattle

TITLE-ONLY PUBLICATION

The full text of the following ordinances, passed by the City Council

on September 22, 2008, and published here by title only, will be

mailed, at no cost, on request for two months after this publication.

For further information, contact the Seattle City Clerk at 684-8344.

ORDINANCE NO. 122788

AN ORDINANCE approving and confirming the plat of "Bitterlake Townhomes Addition to the City of Seattle" in a portion of Section 19, Township 26 North, Range 4 East, W.M. in King County, Washington.

ORDINANCE NO. 122797

AN ORDINANCE relating to the municipal water system of The City of Seattle; adopting a system or plan of additions or betterments to or extensions of the existing municipal water system; authorizing the issuance and sale of water system revenue bonds, in one or more series, for the purposes of paying part of the cost of carrying out that system or plan, providing a bond reserve and paying the costs of issuing and selling the bonds; providing for the terms, conditions, covenants and manner of sale of those bonds; describing the lien of the bonds; and creating certain accounts of the City relating to those bonds.

ORDINANCE NO. 122799

AN ORDINANCE relating to reviewing the status of Neighborhood Plans and updating Neighborhood Plans where transit stations are or will be located and removing a budget proviso that restricted spending of a 2008 budget appropriation.

ORDINANCE NO. 122801

AN ORDINANCE relating to the City Light Department; authorizing an amendment to the Power Purchase and Sale Contract for the Lucky Peak Power Plant Project, which simplifies the calculation of the Royalty Payment made by City Light.

ORDINANCE NO. 122803

AN ORDINANCE related to the City of Seattle's 2007 LTGO bonds; amending the 2008 Adopted Budget by changing appropriations to various funds, departments, and budget control levels; and ratifying and confirming certain prior acts.

ORDINANCE NO. 122804

AN ORDINANCE relating to the City Light Department; authorizing the acquisition of real property located in the North Downtown area of Seattle and legally described as Lots 17, 18 and 19, all in Block 13, Pontius Fourth Addition to the City of Seattle, according to the plat thereof recorded in Volume 7 of Plats, Page 8, Records of King County, Washington, for electric system purposes.

ORDINANCE NO. 122805

AN ORDINANCE relating to the City Light Department; authorizing the Superintendent or his designee to enter into a seventeen-year power purchase agreement with the Bonneville Power Administration and related agreements.

ORDINANCE NO. 122806

AN ORDINANCE relating to the City Light Department, accepting various easements for overhead and underground electrical rights in King County, Washington; and placing said easements under the jurisdiction of the City Light Department.

ORDINANCE NO. 122807

AN ORDINANCE relating to the electric system of The City of Seattle; authorizing the issuance and sale of municipal light and power revenue bonds for the purposes of providing funds for certain additions and betterments to and extensions of the existing municipal light and power plant and system of the City, paying the costs of issuing and selling those bonds and providing for the reserve fund requirement; providing for the terms, conditions, covenants and manner of sale of those bonds; and describing the lien of those bonds.

ORDINANCE NO. 122808

AN ORDINANCE relating to the City Light Department; authorizing execution of a 15-year agreement with Redding Electric Utility for the exchange of renewable energy and environmental attributes.

ORDINANCE NO. 122810

AN ORDINANCE relating to economic and community development; authorizing a loan of federal Section 108 loan proceeds to finance acquisition and development of 9800 40th Avenue South and refinance existing debt; appropriating and authorizing the disbursement of Brownfields Economic Development Initiative grant ("BEDI Grant") funds to provide loan loss reserves on the loan and to finance project costs; authorizing loan documents, amendments, replacements and related documents and actions; appropriating and authorizing the collection of loan origination fees associated with the loan; and authorizing amendments to the City's 2005-2008 Consolidated Plan to reflect the transactions contemplated by this ordinance; all by a three-fourths vote of the City Council.

ORDINANCE NO. 122811

AN ORDINANCE relating to economic and community development; authorizing a loan of federal Section 108 loan proceeds to finance a portion of the costs of a community economic development project at 3333 Rainier Avenue South; appropriating and authorizing the disbursement of Brownfields Economic Development Initiative grant ("BEDI Grant") funds to provide loan loss reserves on the loan and to finance project costs; authorizing loan documents, amendments, replacements and related documents and actions; and authorizing amendments to the City's 2005-2008 Consolidated Plan to reflect the transactions contemplated by this ordinance.

ORDINANCE NO. 122812

AN ORDINANCE appropriating money to pay certain audited claims and ordering the payment thereof.

Date of publication in the Seattle Daily Journal of Commerce, October 7, 2008.

10/7(229958)