

Discussion paper on Tiered Rates Methodology

Prepared by BPA staff as of Dec. 21, 2007

Preliminary Draft

This document represents current staff work only and
has not been reviewed by BPA Management.

To interested persons:

Attached is a *preliminary* working draft discussion paper of the Tiered Rates Methodology concept for your review. BPA will hold a workshop on January 8, 2008, from 9 a.m. to 4 p.m. in the BPA Rates Hearing Room, to respond to questions regarding this document. Following that workshop, please submit any written comments to BPA, attention: Nita Burbank, by January 11, 2008.

This preliminary TRM discussion paper is not BPA's initial proposal, nor should it be construed as such. The paper, a staff working draft that has not received management and legal review or concurrence, is very rough and normally would not be released externally. However, BPA is providing the paper in response to several requests to allow for public review and input of the TRM concept. In light of this, the next version of this working draft that you will see will be significantly different.

Through the public review and input, BPA can ascertain whether there is general acceptance of the direction in which the TRM is being developed. This preliminary TRM draft reflects some public input BPA has received over the course of several months since the Regional Dialogue Policy was released in July 2007. If you see areas where simplification is possible, please point them out. While the written comments are not meant to be formal; the comments will be posted on the Regional Dialogue Policy Implementation Web site.

BPA will continue to refine and develop the draft TRM. The next draft will be the focus of a series of workshops in late January/early February.

Please direct questions and return your comments to Nita Burbank at nmburbank@bpa.gov.

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4.1 Costing Table

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1 BPA is proposing to use High Water Marks (HWM), determined according to this Methodology,
2 as the basis for separating which portion of each customer's net requirements purchase from
3 BPA is charged Tier 1 rates and which is charged Tier 2 rates. Each customer may purchase up
4 to their HWM, limited by their net requirement, at Tier 1 rates.

5
6 To the extent that any customer has a net requirement below its HWM, resulting in an available
7 amount of power, this power will be used to reduce Tier 1 augmentation.

8
9 Should any further available power still remain, this power is available to serve net requirements
10 loads above HWMs. In order to preserve the value of the existing Federal system to PF Tier 1
11 purchasers, BPA proposes that the value of this temporary amount of power reflect a marginal
12 cost. BPA does not propose to use the available power in a way that creates a cost advantage for
13 the Tier 2 rates.

14
15 PF Tier 2 rates will be applied to Federal power service to meet a customer's net requirement
16 above its HWM. BPA proposes to set the PF Tier 2 rates to fully recover the costs of the
17 additional power acquired to supply customers who request PF Tier 2 rate service. To help
18 ensure the costs allocated to the PF Tier 2 rate stay separate from those allocated to the PF Tier 1
19 rate, the accompanying Regional Dialogue power sales contracts will include take-or-pay
20 provisions applicable to a customer's entire purchase. This should ensure that expected BPA
21 revenue covers all the costs incurred by BPA to supply its customers. The proposed Tier 1 rate
22 design provides the customer a credit similar to the value of Tier 2 priced power in excess of
23 actual needs. Because the TRM must be designed to assure full cost recovery to meet the
24 requirements of Sections 7(a) and 7(g) of the Northwest Power Act of 1980 (NPA), BPA must

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1 preserve the ability to reallocate costs to the PF Tier 1 rate in the unlikely event that Tier 2 costs
2 cannot be fully recovered through the PF Tier 2 rate.

3
4 **2. SERVICE TO PUBLIC UTILITIES**

5 This section details aspects of the TRM that will affect pricing of service to public utilities,
6 including the development of HWMs. HWMs define a customer's access to BPA's lowest cost-
7 based power rate for firm power load requirements service. Products will be described in a
8 Regional Dialogue Product Catalog and builds on the Regional Dialogue Policy Implementation
9 discussions to date.

10
11 **2.1 Contract High Water Mark**

12 Contract High Water Marks (CHWM) are measured in average annual megawatts and are the
13 starting point for determining each customer's billing determinant for power at Tier 1 rates. The
14 CHWM will be specified in each customer's contract and defines each customer's share of costs
15 allocated to the Tier 1 rate. This section details the development of the CHWMs, based on
16 adjusted historical 2010 consumer loads and the amount of critical firm power available from the
17 existing Federal system.

18
19 A key principle of the CHWM and RHWm determination processes is the equitable and
20 transparent distribution of costs of the power from the available Federal Tier 1 system among
21 eligible BPA customers. The cost distribution will be based on a utility's measured retail 2010
22 load, with adjustments for weather normalization, load and data anomalies, net of the customer's
23 non-Federal resources that it has previously designated for use in FY 2010. As discussed in
24 greater detail in following sections, this adjusted net load will be the basis for the pro rata

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1 distribution of costs for the power from the existing Federal Tier 1 system and also will be
2 subject to a conservation adjustment. The result will be a utility's CHWM.

3
4 The CHWM will not change over the life of the contract except under rare circumstances as
5 described in the Policy. CHWM is used to determine the RHW prior to each rate case
6 following the transition period, as further described later in this TRM.

7

8 **2.1.1 CHWM Determination Methodology**

9 Section II.B.2 of the Policy provides a six-step description of how HWMs will be developed:

10

11 **Mechanics of High Water Marks.** BPA will base the total HWM amount on the
12 planned firm power output of the existing Federal system, using critical water to calculate
13 the firm power, as it has traditionally been defined for regional planning purposes, plus a
14 limited amount of augmentation. The following six steps will be used to establish the
15 individual customer HWM amount, which will be included in each customer's contract
16 (Contract HWM).

17

18 Step 1 – Clarify Details of HWM Calculation. Though this Policy establishes the basic
19 parameters for HWM calculation, some details will need to be worked out before the
20 customer-specific calculations are completed. This will be done as a part of the TRM
21 before Regional Dialogue contracts are signed. This process will establish the
22 methodology for calculating each customer's HWM.

23

24 Step 2 – Forecast Individual Contract HWMs. BPA will forecast Contract HWMs for
25 each public utility before Regional Dialogue contracts are signed. This calculation will

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1 use a forecast of FY 2010 retail loads because actual FY 2010 retail loads will not yet be
2 available. The firm non-Federal resource amounts will be known since BPA will use the
3 non-Federal resource amounts already established for FY 2010 in the customers'
4 Subscription contracts. Specific adjustments to customers' FY 2010 resources for HWM
5 purposes are discussed later in this Policy. To increase the transparency of its decisions,
6 BPA intends for all individual HWM amounts to be publicly available.

7
8 Step 3 – Calculating Individual HWMs with Measured FY 2010 Loads. The forecast
9 retail loads from Step 2 will be replaced in FY 2011 with amounts based on the actual
10 retail loads experienced and measured in FY 2010. Actual FY 2010 retail loads will be
11 normalized for weather and other anomalies such as force majeure events. The HWM
12 approach of Step 1 will establish the specific methodology to be used for these
13 adjustments.

14
15 Step 4 – Determine Total Federal Tier 1 system Available for HWMs. BPA will base the
16 Contract HWM amounts on the size of the Federal Tier 1 system forecast for FY 2012 in
17 FY 2011 (using critical 1937 hydro conditions) plus up to 300 aMW of augmentation.
18 Energy from BPA's long-term resource acquisitions after FY 2006, which has its costs
19 included in the Tier 1 rate, will be considered augmentation. Total BPA supply used in
20 this step to determine HWMs will be equal to the total of the amounts calculated in Step
21 3 except for three conditions: (1) total HWMs will not be augmented above a total of
22 7,400 aMW; (2) no more than 300 aMW of augmentation will be added for this purpose;
23 and (3) HWMs will be based on the available BPA supply with no augmentation if the
24 existing Federal Tier 1 system, without augmentation, equals or exceeds the amount
25 calculated in Step 3. These steps will permanently cap the amount of augmentation at the

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1 lesser of 300 aMW and the amount needed to meet HWMs from Step 3 which are based
2 on 2010 loads (not counting later-described potential augmentation for new publics and
3 DOE Richland loads.) Further details on Federal Tier 1 system size determination will be
4 established in the TRM.

5
6 Step 5 – Resize Individual HWMs. The HWM numbers for each utility calculated in
7 Step 3 will be adjusted proportionally up or down so that the total for all then-current
8 public customers equals the amount available for HWMs established in Step 4.

9
10 Step 6 – Adjust HWM Amounts to Account for Conservation Achieved. HWM amounts
11 will be adjusted to account for the conservation each utility achieves from FY 2007
12 through FY 2010. Such conservation must be cost effective and must be verified. BPA
13 intends to establish details of this verification step as a part of Step 1 above. For
14 calculation purposes, each utility’s HWM amount from Step 5 will be increased by the
15 conservation amounts it self funded and 75 percent of the amounts BPA funded
16 (i.e., through the conservation rate credit and bilateral contracts). Then all of these
17 conservation-enhanced utility HWMs will be reduced on a pro rata basis so that they
18 again total the HWM amount determined in Step 5.

19
20 Each step of the calculation process is described in further detail in the following sections. A
21 flow chart diagram showing an overview of the CHWM determination process is presented in
22 Figure XX.

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1 **2.1.1.1 Forecast CHWM Methodology**

2 A forecast of each customer's CHWM will be done prior to the signing of Regional Dialogue
3 contracts. The forecast will be calculated consistent with the CHWM calculation methodology
4 described in section II.B.2 of the Policy. Specific resource adjustments described in section
5 II.B.9 of the Policy will be made to the resources of the relevant utility. All customers' Forecast
6 CHWMs will be made public through a posting to BPA's external web site.

7
8 **2.1.1.2 Determining 2010 Actual Load Eligible for CHWM Calculation**

9 This section will describe how the base retail load used in the CHWM calculation is developed.
10 It describes the source of the data and any adjustments made (other than those proscribed below),
11 such as when meter data is unavailable. It describes what data is used when a BPA meter is not
12 available. Information requirements from customers will include actual meter data needed to
13 determine TRL.

14
15 **2.1.1.3 Adjusting Measured 2010 Retail Load for Force Majeure and Other Anomalies**

16 This section will describe adjustments that may be made to customers' 2010 measured loads for
17 discreet load or data anomalies that would materially affect the outcome of the CHWM
18 determination process.

19
20 **2.1.1.4 Adjusting Measured 2010 Retail Load for Weather (Weather Normalization)**

21 Non-Irrigation Load: The 2010 measured load will be normalized to counter the effects of
22 abnormal weather. Unusually mild or severe weather may result in reduced or increased
23 electrical load, primarily related to space heating or cooling. Thus, abnormal weather results in a
24 measured load amount that is not representative of the utility's normal load. Weather
25 normalization is a tool to correct load data for the effect of abnormal weather.

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1
2 The relationship between temperature and seasonal retail electrical load is statistically
3 demonstrable and temperature-based weather normalization of retail electric load is a common
4 utility practice. BPA will use temperature data obtained from point-of-delivery weather stations
5 to weather normalize the load data for each utility.

6
7 **Temperature-based normalization methodology:**

8 The difference between daily average and actual temperatures are used to determine cumulative
9 levels of above- and below-average temperatures, measured in Heating Degree Days (HDD) or
10 Cooling Degree Days (CDD). The CDD and HDDs are then multiplied by weather coefficient
11 values that result in an electric load adjustment value (aMW) associated with the non-average
12 temperature conditions. The separate weather coefficients consider factors such as (to be filled
13 in later). Finally, the measured base load and the HDD and CDD adjustment values are
14 combined to obtain the weather-normalized load. This process is described in mathematical
15 terms in Figure XX. Figures XX through XX demonstrate a basic example of calculating HDD,
16 CDD and the weather-adjusted load.

17
18 **Irrigation Load:**

19 This section will describe the process for determining and normalizing irrigation load using a
20 load-averaging methodology.

21
22 **2.1.2 Determining Non-Federal Resource Amount to Reduce 2010 Load**

23 This section will describe determining customer resource amounts to be subtracted from the
24 2010 measured retail load to determine the customer firm retail load use for calculating the
25 CHWM. This step includes applying resource adjustments specifically stated in the Policy in

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1 sections II.B.9 and 10 and using resource amounts identified in a customer's 2006 Exhibit C
2 from their Subscription contract.

3
4 **2.1.3 Adjusting CHWMs To Available Federal System Resources**

5 This section describes the proportional distribution of the planned available Federal system
6 resources used as a denominator when compared to each utility's eligible load. This calculation
7 results in a preliminary CHWM. "Available Federal system resources" is an input from the
8 Federal Tier 1 system determination process in section 3 of this document. To equal the sum of
9 all utilities' preliminary HWMs, BPA will plan the Federal Tier 1 system is initially augmented
10 by up to 300 aMW to a maximum output of 7400 aMW. Federal Tier 1 system augmentation is
11 further described in the Federal Resources section of this document.

12
13 **2.1.4 Conservation Adjustment to Determine Final CHWM**

14 After the total amount of CHWMs are determined, the individual CHWMs will be adjusted for
15 conservation. The conservation adjustment to the preliminary HWM minimizes the disincentive
16 to do conservation that may reduce a public utility's FY2010 load and thus its HWM.

17
18 For conservation to be credited toward the conservation adjustment it must be cost-effective
19 verified conservation achieved from FY2007 through FY2010 that reduced the customer's load
20 in FY2010. For calculation purposes, each utility's preliminary HWM amount from Step 5 will
21 be credited 1 aMW for each 1 aMW of utility self-funded conservation savings and 0.75 aMW
22 for each 1 aMW of BPA-funded savings (i.e., through the conservation rate credit and bilateral
23 contracts). The conservation-adjusted preliminary HWMs will then be adjusted proportionately
24 so that the sum of the HWMs determined in Step 5 is again equal to the available Federal Tier 1
25 system. The conservation adjustment redistributes the HWM amounts among the utilities but

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1 does not increase or decrease the amount of available power from the Federal Tier 1 system. The
2 result of this is the Contract HWM.

3
4 **2.1.4.1 Example of the Conservation Adjustment Calculation – This will eventually be an**
5 **appendix to this document because this is a one time HWM adjustment.**

6 Below in Figure 1.1 is a simplified example of how the conservation adjustment works. The
7 example shows a single utility doing varying amounts of conservation. Credit for this
8 conservation is given in row A¹. In row B, the amount of conservation that was achieved is
9 accounted for in the preliminary HWM (Load with no conservation (100) minus the conservation
10 achieved). In row C, the conservation credit is added back to arrive at the conservation adjusted
11 HWM (row A + row B). In row D, the rebalancing factor is calculated by taking the individual
12 conservation-adjusted HWM (row C) and dividing it by the sum of the conservation-adjusted
13 HWMs for all utilities (row C ÷ 7,470 aMW). In this example the sum of the conservation-
14 adjusted HWMs is 7,470 aMW (the sum of all the utilities preliminary HWM plus the total
15 conservation by all utilities). To establish the Contact HWM the rebalancing factor is multiplied
16 by the available Federal Tier 1 system (row D × 7,300 aMW). As noted in the footnote in Figure
17 1.1, as the amount of conservation achieved increases, the amount of augmentation decreases,
18 assuming that the augmentation cap of 300 aMW has not been reached.

19
20
21
22
23

¹ In this example it is assumed that all conservation is utility self-funded and 100% credit is given for achieved conservation.

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1 **Figure 1.1 – Single Utility Conservation Adjustment Scenarios**
Single Utility Conservation-Adjustment Scenarios

Assumptions:

Available FBS = 7300 aMW, incl. 100 aMW aug.

Total Conservation by All Other Utilities = 170 aMW

	Scenario A	Scenario B	Scenario C
Base Case - load with no conservation (FY 2010)	100	100	100
A. Conservation Credit FY 2007 - 2010 (aMW)	0	1	3
B. Preliminary HWM (with effect of conservation)	100	99	97
C. Conservation Adjusted HWM (aMW)	100	100	100
D. Rebalancing Factor = $\frac{\text{Cons-Adj HWM}}{\Sigma \text{ Cons-Adj HWMs}}$	100/7470	100/7470*	100/7470*
E. Contract HWM (aMW) (Rebalancing factor X FBS)	97.72	97.72	97.72
Net Change due to conservation adjustment	-2.28	-1.28	.72
Headroom before need to purchase Tier 2 power	0	0	.72

*The increase in the sum of the cons-adj HWMs would be offset by an equal reduction in needed augmentation → no change to 7470 amount

2
3
4 **2.1.5 Counting the Conservation Credit toward the Adjustment**

5 Figure 1.2 shows how the process of counting conservation savings for the conservation
6 adjustment will take place. The process for verifying savings will be the process described in
7 BPA’s Conservation Rate Credit and Conservation Acquisition Agreement Implementation
8 Manual² (Implementation Manual). A copy of this manual can be found on BPA’s Web site at
9 <http://www.bpa.gov/energy/n/projects/post2006conservation/manual/>. The Manual must be
10 followed for BPA-funded as well as utility self-funded conservation measures, projects and
11 programs.

² All references to the *Implementation Manual* in this section refer to the current manual at the time the project/report is submitted to Planning, Tracking and Reporting system.

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1 **Figure 1.2 – Conservation Adjustment Process Flow Chart**



2
3 BPA will conduct oversight visits of all utilities’ conservation savings that have been submitted
4 in biannual and annual reports through the Planning, Tracking and Reporting (PTR) system.

5
6 To count toward the conservation adjustment, conservation measures and projects eligible for
7 reimbursement according to the Implementation Manual must be started after October 1, 2006
8 and no later than September 30, 2010. Measures must also be effective on load in FY 2010 (i.e.
9 measures where the measure life does not extend through FY 2010 or a major plant closing
10 where measures were implemented, will not count toward the conservation adjustment as they
11 are not reducing FY 2010 load).

12
13 **2.1.5.1 Cost-Effective Measures**

14 All savings that are claimed for credit toward the conservation adjustment must be considered
15 cost-effective in accordance with the then-effective Implementation Manual when the
16 conservation is reported to BPA. BPA acquires cost-effective conservation as defined by the
17 Council’s Power Plan. In determining cost-effectiveness, the Council looks to section 3.3 of the
18 NPA.

19
20 Deemed measures in the PTR for which BPA provides a reimbursement are considered cost-
21 effective. Deemed measures are those measures with a predetermined amount of savings.

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

6
7 **2.1.5.2 Savings Entry into the Planning Tracking and Reporting System**

8 For savings to be counted toward the conservation adjustment they must be entered into and
9 reported through the PTR per the schedule required in the then current BPA Implementation
10 Manual and no later than September 30, 2010. Annual reports in the PTR for FY 2010 must be
11 submitted in suitable form no later than October 31, 2010. Credit will not be given toward the
12 conservation adjustment for any savings that are contained in reports which are not submitted on
13 time.

14
15 Deemed measures must be reported through the PTR and accepted by BPA's Contracting
16 Officer's Technical Representative (COTR). The acceptance phase is when reports have been
17 reviewed by the COTR and a determination has been sent by BPA accepting the report. Through
18 the oversight process the amount of savings may change either by: 1) a utility notifying BPA that
19 they made an error, or 2) BPA making an adjustment as a result of findings from an oversight
20 review.

21
22 For custom projects the Completion Report must be submitted and accepted no later than
23 September 30, 2010, and be included in the Conservation Rate Credit (CRC) FY2010 annual
24 report and/or CAA invoice. All required measurement and verification must take place and be

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1 final before the Completion Report is submitted to BPA for acceptance. Oversight applies to
2 custom projects as well.

3

4 **2.1.5.3 Transparency of the Annual Conservation Savings Amount**

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

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

12

13 **2.1.6 Verification and Oversight**

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

20

21 Oversight may result in a change to the energy savings achieved by a utility, either up or down,
22 after the savings in the reports have been accepted. Therefore, depending on the timing of the
23 oversight, the published conservation achievements may be adjusted to account for findings from
24 the oversight visits. For FY 2010, the numbers will be finalized by early 2011 and will not be
25 modified past that time.

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2.1.7 Non-Standard Cases and Exceptions

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

2.1.7.1 Federal Conservation Projects

Federal projects will not be required to input measure and project savings into the PTR system. These projects will be imported directly into BPA’s Energy Efficiency database. These savings are not put into the PTR because the federal entities claiming the savings are not standard utility customers and are not utilizing CRC or CAA funding. If a utility wishes to claim savings for projects completed in their service territory at federal facilities for which CRC or CAA funds were used they will need to report the savings through the PTR as required by the Implementation Manual.

2.1.7.2 Irrigation Rate Mitigation Program

The Irrigation Rate Mitigation program provides participants a one-quarter mill credit (\$0.00025) for irrigation load to be utilized for cost-effective conservation measures. These savings are not currently reported through the PTR system. At this time, options are still being explored as to how to best verify these saving so that can be given credit toward conservation adjustment.

For savings to be reviewed and credited toward the conservation adjustment measures and/or projects must be reported annually on the timeline required in the Implementation Manual for CRC and CAA funded measures.

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1 **2.1.7.3 Scientific Irrigation Scheduling**

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

9

10 **2.1.7.4 Transformer De-energization**

11 Transformer de-energization is designed as having a three-year measure life. Only those savings
12 actually realized in FY2010 from transformer de-energization will be credited toward the
13 conservation adjustment.

14

15 **2.1.8 CHWM Timing and Transparency**

16 **Timing**

17 The CHWM will be calculated as soon as possible but will likely be in the second half of FY
18 2011 to allow time to gather and make adjustments to the 2010 load and conservation data.

19

20 **Transparency:**

21 All customers' final CHWMs and the underlying calculation results will be posted on BPA's
22 external Web site.

23

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1 **2.1.9 CHWM for New Public Utility Customers**

2 **2.1.9.1 Setting the Contract HWM Amount for New Publics**

3 Once qualified for service, a new public utility must provide a 3-year binding notice in advance
4 of the time it will be eligible to purchase power with a HWM. During the interim period, if
5 necessary to supply load, the utility may purchase power from BPA at rates that are established
6 for that purpose. These rates will be similar to BPA's currently effective targeted adjustment
7 charge (TAC). Details for this approach will be worked out in the applicable rate cases.

8

9 The CHWM for a new public will be based on its forecast net requirement the year deliveries
10 begin, limited by the percentage derived by dividing the existing CHWMs by the forecast total
11 net requirements of existing public utilities that year. This ensures that new utilities do not
12 receive greater access to lowest-cost PF than existing customers.

13

14 **2.1.9.2 Rate Case Limit for Small Utilities**

15 If requests exceed the 50 aMW rate period limit established in the Policy, BPA will not prorate
16 down the Contract HWM additions for new publics with a net requirement load of 10 aMW or
17 less. This will be limited to the first five such utilities that would have otherwise seen a Contract
18 HWM reduction and will count toward the 250 aMW overall limit for new publics. Any
19 additional amounts provided to these utilities will add to the 50 aMW limit for that rate period.

20

21 **2.1.9.3 Rate Case Limit for Tribal Utilities**

22 Contract HWMs initially established for new tribal utilities (defined as those commencing
23 service from BPA after FY 2000) can be increased for load growth and the expansion of service
24 territory by up to an aggregate total of 40 aMW. Any such amounts will be added to the 50
25 aMW rate period limits and count towards the overall 250 aMW contract-term limit. This

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1 exception will expire at the earlier of (1) the end of FY 2021 or (2) when the overall 250 aMW
2 HWM limit for all new publics is reached.

3
4 **2.1.9.4 HWM if a New Public is Formed from an Existing Public**

5 A new public customer that forms out of an existing public will receive a share of the existing
6 public's Contract HWM equal to its proportion of the existing utility's total retail load. Any
7 additional Contract HWM amounts the customer is eligible for as a new public will be provided
8 through the treatment discussed above. However, the Contract HWM amounts provided from
9 the existing public utility will not count toward the aggregate or rate period limits.

10

11 **HWM If New Public is Formed from an IOU:**

12 New public customers that form from an existing IOU will be eligible for HWMs only through
13 the standard approach discussed above.

14

15 **Phasing In HWM Amounts:**

16 When there are competing requests that exceed the 50 aMW cap, utilities larger than 10 aMW
17 will have the amount of their HWM requests over 10 aMW phased in over subsequent rate
18 periods. This is to ensure that access to the 250 aMW is spread broadly and not used solely by
19 one large new public utility. The phasing would be 33.3 percent for the next 24 aMW and 20
20 percent for any remaining amounts. **[APPENDIX THE REMAINDER OF THE SECTION].**

21 This is illustrated below for a new 64 aMW utility, assuming that additional requests are not
22 received in the future periods that would require amounts beyond the first period to be phased
23 out further in time.

24 There needs to be quoted from the Policy.

25

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	<u>1st Period</u>	<u>2nd Period</u>	<u>3rd Period</u>	<u>4th Period</u>	<u>5th Period</u>
Initial Amount	10 aMW				
33.3% for next 24	8 aMW	8 aMW	8 aMW		
20% for all else	6 aMW				
Annual HWM Addition	24 aMW	14 aMW	14 aMW	6 aMW	6 aMW
Cumulative HWM	24 aMW	38 aMW	52 aMW	58 aMW	64 aMW

7

2.2 Rate Period High Water Mark

A Rate Period High Water Mark (RHWM) will be calculated in each power rate case that adjusts the CHWM amount based on the changes in projected amounts of firm power from the Federal Tier 1 system and augmentation amounts established for service under Tier 1 rates. The RHWM will scale up and down from the CHWM in relation to changes in the planned output of the Federal Tier 1 system during the rate period.

14

2.2.1 RHWM Calculation

This section will describe the process to calculate the RHWM and the necessary inputs for an individual customer with an individual HWM (designated by “i”).

18

$$RHWM_i = \frac{CHWM_i}{\sum CHWM} \times (FBS + AUG)$$

where: *FBS* is the sum of the forecast annual energy production of resources whose costs are used to establish Tier 1 rates:

$$FBS = \sum Tier1Resource - Offthetop - Federal Transmission Losses$$

where *Offthetop* is defined in (see section XX):

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1 and AUG = Augmentation amounts established according to the procedures outlined
2 in section XX.
3 $CHWM_i$ changes only for annexations (and as outlined for the exception for the new
4 Tribal utilities),
5 $\Sigma CHWM$ may change due to new publics and potentially the DOE Richland
6 exception.
7

8 **2.2.2 RHWMTiming and Transparency**

9 This section will describe when the RHWMT calculation will be made prior to each rate case to
10 lock down planned load served at the Tier 2-price. All customers' RHWMTs and the forecasted
11 amount of available Federal Tier 1 system used in the determination will be posted on BPA's
12 external Web site.

13
14 **2.3 Transition CHWMT Method**

15 For the first three years of the next rate power sales contract and TRM, BPA is providing a
16 transition period.

17 As a part of the transition to tiered rates, BPA will establish the above-HWMT power amount for
18 each customer for the first three years by November 2009. This method differs somewhat from
19 the long-term method described above by using forecast data instead of actual data. The
20 transition method is necessary to provide planning certainty for both BPA and customers because
21 the long-term method for FY 2012-2013 will not be known until it is too late to make reasoned
22 purchase decisions to serve load that exceeds the HWMT amount.
23

24 The amount of load above HWMT calculated for each customer will set how much of the
25 customer's FY 2012 and FY 2013 load will be purchased from BPA at a Tier 2 rate or self-

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1 supplied by the customer. Each customer will commit by November 2009 in their contract
2 whether the load is served by BPA, their own resources, or a combination of the two.

3
4 **2.3.1 Methodology for Tier 2 Amounts for the Transition Period**

5 Because BPA will not have CHWMs set in time to establish rates in the first rate period, BPA
6 will set above-HWM amounts for each customer in FY 2009 rather than wait for the actual
7 CHWM amounts to be set in FY 2011. The planned loads for the transition period will be
8 calculated for each customer as the difference between BPA's official FY 2008 Forecast CHWM
9 and an FY 2009 forecast of each customer's FY 2012-2014 net requirements.

10
11 Above HWM amounts established in FY 2009 for Load Following customers become the
12 amount that will be subject to Tier 2 rates unless a customer commits non-federal resources
13 during the transition period. The transition period for Load Following customers that choose a
14 combination of BPA Tier 2 and non-BPA resources or to purchase under Vintaged Tier 2 rates
15 will be treated the same as Slice and Slice/Block customer amounts discussed below.

16
17 For Block and Slice/Block customers with set amounts of BPA-served above-HWM load, above-
18 HWM load estimates for the transition period will continue to be used through FY 2014. Those
19 customers made a three-year commitment to take a specified amount of Tier 2-priced power
20 when they made their election to have BPA serve some amount of their above-HWM load.

21 Those commitment amounts will not be revisited. The RHWM for the second rate period will
22 then be used for FY 2015, the second year of the FY 2014-2015 rate period.

23

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1 **2.4 Determination of Tier 2 Amounts**

2 This section addresses load service at PF Tier 2 rates for customers that choose to have BPA
3 serve some or all of their net requirement load at prices above the HWM load. During the
4 transition period planned load service above the HWM will be at PF Tier 2 rates and the amount
5 eligible for Tier 2 will be determined as described in section XX of this document.

6
7 Following the transition period, a customer's planned amount eligible for Tier 2 is the amount of
8 consumer load in excess of its firm resources and its RHWM that a customer has forecasted and
9 committed to purchase from BPA for each year of the rate period. This load forecast is
10 conducted for the rate case and is not the annual net requirements calculation. The customer's
11 actual Tier 2-priced load amount is based on the Tier 2 service election the customer has already
12 committed to in its contract.

13
14 If a customer is dedicating unspecified resource amounts of specific resources to serve its loads
15 above its RHWM, it must provide non-Federal resources in an amount that will reduce its net
16 requirement load to no more than its RHWM. In that case the Tier 2 load service amount for that
17 customer would be zero. Further details regarding power service for above-HWM load, will be
18 provided in the customers power sales contract.

19
20 **2.5 Residential Exchange for Public Customers**

21 A principle objective in tiering BPA's rates is to maintain the low cost basis of Federal Tier 1
22 system resources. This objective would be thwarted to the extent that the cost of new customer
23 resources was subsidized through the Residential Exchange Program (REP). Most public
24 customers realize that the objectives of tiering rates requires a paradigm shift on the treatment of
25 new resource costs vis-à-vis the REP. BPA expects that public customers will agree to forgo

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1 REP benefits associated with new resource costs to receive a contract that provides them a
2 HWM.

3

4

3. FEDERAL SYSTEM RESOURCES

5 The Federal system resources, contract obligations, and contract purchases necessary for
6 developing tiered rates will be determined in accordance with this Methodology. The Federal
7 system resources assigned to each tier of service will then be incorporated in the ratemaking
8 process.

9

10 **3.1 Federal System Resources Used to Establish Tier 1 Rates**

11 This section describes the existing Federal system resources, how the output of those resources
12 will be determined for each rate period, the other Federal obligations that reduce the amounts of
13 Federal power supply available at the Tier 1 rate, and how the output and the costs of these
14 resources are used for service at Tier 1 rates.

15

16 The Federal system resources, contract purchases, and contract obligations used to establish the
17 costs and quantity for service at Tier 1 rates will be comprised of BPA's best estimate of the
18 following: (1) hydro generation estimates for regulated and independent hydro projects which
19 BPA markets or is contracted to market power; plus (2) generation from other projects not
20 included in BPA's regulated or independent hydro generation estimates, plus (3) other BPA
21 contract purchases; less (4) other BPA contract obligations. The netting of these Federal system
22 resources less contract obligations will become BPA's forecast of available Federal resources for
23 Tier 1 services. This forecast will be completed by the August 15 prior to BPA's initial rate
24 proposal.

25

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1 **3.1.1 Federal System Hydro and Other Federal System Resources**

2 The Federal system resource output for each contract year and the associated monthly and
3 diurnal amounts that comprise such annual output will be developed for each year of the
4 upcoming rate period from a forecast prepared for use in the RHW process.

5

6 The Federal System resources dedicated to Tier 1 service include regulated hydro, independent
7 hydro, thermal and other Federal system resources, non-Federal Canadian entitlement return for
8 Canada, imports, and intra-regional transfers (in) are detailed in Table 3.1. The diurnal aspects
9 of BPA's contracts make it necessary to analyze imports and intra-regional transfers (in)
10 contracts individually.

11

12 As estimates of power and non-power requirements for the hydro system change over time, BPA
13 will incorporate its best estimate those changes. Additionally, as future contracts or acquisitions
14 of the output for new or existing resources or contact purchases are signed, a determination of
15 their inclusion in the Federal Tier 1 system will be made in future rate case proposals.

16

17 **3.1.2 Other BPA Contract Obligations**

18 There are a number of obligations that are imposed on BPA by statutes, treaties, Memorandums
19 of Agreement, and contracts which require the generation or delivery of power, or forbearance
20 from generating power, in order to support the operation of the Federal Columbia River Power
21 System (FCRPS). BPA also has a few contractual obligations that generate revenues and will
22 exist in FY 2012 and beyond. These obligations diminish the amount of power available from
23 the Federal system resources and reduce the amount of power dedicated to Tier 1 service. These
24 obligations are assumed to be served by Federal system firm resources regardless of weather,
25 water, or economic conditions. The Federal system contract obligations change over time year

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1 and the associated monthly and diurnal amounts that comprise such annual output will be
2 developed for each year of the upcoming rate period from a forecast prepared for use in the
3 RHW process.

4
5 The Federal system contract obligations that reduce Federal system resources dedicated to Tier 1
6 service include USBR loads, exports, intra-regional transfers (in), and other Federal system
7 obligations, such as, but not limited to, contracts pertaining to BPA transmission services,
8 resource support services, or other contract agreements that act as a load obligation on the
9 Federal system. These contract obligations are detailed in Table 3.2. The diurnal aspects of
10 BPA's contract obligations make it necessary to analyze these contract obligations individually.

11
12 **3.1.3 Calculation of the Federal System Resources Available for Tier 1 Service**

13 This section will discuss how RHW amounts will be adjusted each rate period.

14
15 **3.1.4 Process for Changing Planned Amounts Federal System Resources**

16 For purposes of this Methodology only it is not expected that the Federal system resources used
17 for setting rates will change over time. However, the output and the costs included in the Tier 1
18 rates are subject to change. . For example, if a named resource ceases to operate, the output
19 will be set to zero and the costs will remain in the Tier 1 rate pool. Resource acquisitions
20 subsequent to FY 2006 are included either as system augmentation within the augmentation
21 limits established for service at Tier 1 rates or as resources whose costs are added to the cost of
22 Tier 2 rates.

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1 **3.1.5 Augmentation Limits for Tier 1 Rates**

2 **3.1.5.1 Augmentation Amounts Affecting Tier 1 Rates**

3 The cost basis for Tier 1 rates and determination of the amounts available under customers
4 HWMs may also include augmentation beyond the specific resources and contracts discussed
5 above. The circumstances where augmentation costs may be included in Tier 1 rates with an
6 adjustment to HWM amounts are limited as follows.

7
8 **3.1.5.2 Augmentation to Initial HWM Amounts for Publics in 2011**

9 In step four of the calculation of Contract HWM amounts BPA will establish an amount of
10 augmentation that may be added to the cost of Tier 1 resources used to calculate the cost basis
11 and the HWM amount for Tier 1 rates. This amount will be between 0 and 300 aMW. To
12 determine the specific augmentation amount BPA will start with the total measured, weather
13 adjusted 2010 load established in step three of the HWM determination process and subtract
14 from it that planned firm power of the Federal Tier 1 system available for FY 2012 in FY 2011
15 (using critical 1937 hydro conditions for the resources and obligations established earlier in this
16 section). The resulting amount will be considered as augmentation up to the cap of 300 MWs of
17 planned purchases for HWM purposes with the calculation as follows:

- 18 a. If the result is zero or less the augmentation amount for the initial HWM will be zero.
19 b. If the result is greater than zero then the augmentation amount is the smaller of the
20 result or 300 aMW, subject to the limit in the following section c below.
21 c. For this calculation, the total amount of CHWMs will not exceed 7400 aMW. This
22 may result in a reduction to the result in section b. above.

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3.1.5.3 Augmentation for Service to DOE Richland

BPA provides power to federal agencies for federal purposes including ongoing high priority defense materials production and waste processing/disposal activities at the U.S. Department of Energy Hanford, Washington, site. DOE Richland will have the right to increase its initial Contract HWM by up to 70 aMW in order to serve new on-site defense materials production and waste processing/disposal loads, if such loads occur. If such loads are added, BPA will augment Tier 1 resources as necessary to avoid reducing the Contract HWMs of other customers and will include the costs in Tier 1 rates.

3.1.5.4 Augmentation for New Publics

BPA will augment up to 250 aMW for the CHWMs of newly qualified public utility customers formed during the term of the Regional Dialogue Contracts. To the extent that requests for net requirement load service to new public customers exceed the 250 aMW CHWM established for new publics in this methodology, over the course of the Regional Dialogue contracts, then the new public customers would purchase the remainder of its net requirements power at Tier 2 rates.

3.1.5.5 Rate Case Limits for New Publics

Each rate case BPA will limit Contract HWM additions for new publics each rate period to 50 aMW except for amounts provided under the exceptions for small utilities and Tribal utilities discussed earlier. If requests exceed the limit, individual Contract HWM amounts of new publics will be prorated down to meet the 50 aMW limit. Net requirements service provided to any new public utility that exceeds the 50 aMW HWM limit will be an addition to eligible amounts that are requested in the next rate period.

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1 **3.1.5.6 Augmentation for DSI Loads**

2 BPA is still exploring alternatives for providing benefits to DSIs. If BPA ultimately decides to
3 sell power to the DSIs, BPA would augment the Tier 1 system so that such sales would not
4 decrease the publics' HWMs. See chapter 10.3 for further discussion regarding DSI service.

5
6 **3.1.5.7 Determining Augmentation Amounts Each Rate Period**

7 Each rate case the actual augmentation amounts from the allowable amounts established above
8 will be determined. Actual augmentation amounts for each rate period will generally be lower
9 than this limit because the Rate Period HWMs set a cap on Tier 1 rate power available for each
10 utility's power purchase from BPA in that rate period. A utility that loses load will not be able to
11 purchase its full Rate Period HWM amount. Augmentation amounts will be determined in each
12 rate case when BPA forecasts the size of the existing Federal Tier 1 system and the amount of
13 load to be served at Tier 1 rates. At this time BPA will establish a forecast of the total amount of
14 Contract HWM amounts available that customers will not be purchasing during the upcoming
15 rate period. Amounts of actual augmentation that will be included in Tier 1 rates will be reduced
16 by these unused Contract HWM amounts. In addition to augmentation amounts for service to
17 publics, each rate period BPA will determine the amount of augmentation, if any, that will be
18 available for DSI customers within the limits established above.

19
20 **3.1.5.8 Rate Treatment for Excess Augmentation Purchases:**

21 BPA may acquire long-term resources in anticipation of augmentation needs for future rate
22 periods. For the FY 2012 to FY 2013 rate case this amount will be limited to 150 aMW which is
23 half of the potential limit for existing publics, plus any augmentation required to serve DSIs.
24 Afterwards the amount will be limited to 80 percent of the total augmentation limit from all

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1 categories listed above established in the previous rate case. If unused Contract HWM amounts
2 cause an augmentation limit for a rate case to drop below the amount of augmentation that has
3 already been purchased under long-term resource contracts, BPA will establish a value for the
4 excess augmentation and include it in the Customer Charge by comparing the forecast market
5 value of the power to the average cost of the augmentation. A forecast market value that exceeds
6 the cost of augmentation will result in lower Tier 1 rates, a forecast market value lower than the
7 cost of the augmentation would result in higher Tier 1 rates.

8

9 **3.1.5.9 Rate Treatment When Augmentation Amounts are not Established Prior to the**

10 **Initial Proposal**

11 Augmentation amounts that are not matched up with actual resource or contract purchases prior
12 to the initial proposal will have their costs established based on a forward look at expected
13 market prices during the rate period.

14 **3.1.6 Source of Forecast Data and Customer Review Rights**

15 This section describes which forecasts BPA will use to determine the Federal system output for
16 use in establishing RHWMs. It will describe the process BPA will use to allow customers to
17 review the data prior to the calculation of RHWMs for each rate period.

18

19 **3.2 Slice Amounts**

20 The Slice percentage for each customer purchasing Slice will be determined prior to FY 2012,
21 and will not change during the Slice contract period, except in the two following situations:

22

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1 (1) when a Slice customer's retail load loss exceeds the full amount of a Slice customer's Block,
2 the Slice percentage will be reduced. Any revenues associated with BPA's resale of reductions
3 in the Slice percentage for this reason will be shared with all Tier 1 customers. The power
4 available from reductions in Slice percentages for this purpose would include both unused
5 requirements power and surplus power components because Slice is a product that includes both
6 service to net requirements firm load as well as an advance sale of surplus power.

7
8 (2) when augmentation purchases are increased within the 250 aMW of new public utility load,
9 for DSI power sales, and for DOE-Richland and the Slice percentage will also be reduced. In
10 this case no power amounts would be freed up or remarketed. This is a mathematical adjustment
11 to maintain comparable access to firm power at BPA's Tier 1 rates due to system expansion.
12 This also reflects the fact that the value of available secondary for all purchasers is being spread
13 over a greater number of megawatts.

14
15 **3.3 Slice Resources Equal Tier 1 Resources**

16 This section describes the equating of the Resources whose costs are used to establish Tier 1
17 rates with those available as Slice System Resources.

18 The Slice resources will be comprised of the same resources and contracts available for Tier 1
19 service as described below. As is the case for Tier 1 resources and contracts, the Slice resources
20 also will be decremented for current BPA contract obligations and Federal Transmission losses.

21 The amount and composition of these obligations could change from rate period to rate period.
22 (See sections 3.1.1, Federal System Hydro and Other Federal System Resources and 3.1.2, Other
23 BPA Contract Obligations). Currently, these obligations include all items BPA's loads and
24 resources study categories entitled "exports, regional transfers out, USBR 2002 PSC (irrigation
25 load), and federal transmission losses." Slice customers will share in any costs or revenues

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1 associated with these obligations. Known costs and revenues associated with these obligations
2 will be included in the Slice Revenue Requirement that is the basis for the Slice customer charge.
3 These costs and revenues will be subject to the annual Slice True-Up process as discussed in
4 Chapter 5, along with other costs and revenues in the Slice Revenue Requirement.

5
6 Slice customers will pay a percentage share of the gross costs of augmentation specifically for
7 existing publics discussed earlier (between 0 and 300 MW), plus any resource support service
8 costs associated with shaping these augmentation amounts into a flat annual block. Slice
9 customers will receive a percentage share of these augmentation power amounts determined in
10 the final rate proposal for the applicable rate period with their share of the augmentation amount
11 delivered to Slice customers in hourly annual flat blocks.

12
13 Slice customers will also pay their percentage share of all costs of augmentation for other
14 purposes (section XX) established in this TRM to be included in Tier 1 rates, including a
15 projection of support service costs to shape those augmentation amounts into the shapes of the
16 loads they will serve. Amounts of power provided under Slice will not be increased for this
17 purpose because these types of augmentation will result in a reduction in the Slice percentage
18 discussed earlier in this TRM.

19
20 Slice customers will share in the revenue received for power provided to BPA's Transmission
21 Services in support of their reserves and ancillary services. This power will not be reflected in
22 the calculation of resources and contracts available for Tier 1.

23
24 **The Slice treatment of the cost of capacity additions will be addressed in this section.**

25 Slice customers will not pay for any balancing power purchases.

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3.3.1 Federal System Resources Acquired for Tier 2 Service

This section briefly describes the treatment of resources whose costs are used to set Tier 2 rates.

4. COST ALLOCATIONS

This section outlines the cost allocations that support the Tier 1 rate design proposal and how the Tier 2 costs will be separated from Tier 1 costs. The costing table in an appendix is an integral part of understanding the concepts presented here.

The process of tiering rates requires that a strict procedure to allocate revenue requirements and adjustments thereto, to the separate tiers be developed and followed. Further, due to the differences in products offered to preference customers, the allocation of revenue requirement should also address the cost distinctions among the products; therefore, this methodology commits BPA to the following allocation methodology through the term of the Regional Dialogue contracts.

4.1 Cost Allocation Principles

The following principles are used in developing the methodology and should form the basis to address circumstances that may arise that are not specifically dealt with in the following allocation methodology.

Principle #1 Tiered rates is a ratemaking construct implemented through an allocation of costs rather than an allocation of power.

Principle #2 Tier 1 costs are to be kept separate and distinct from Tier 2 cost. Tier 2 costs will be recovered through Tier 1 rates when it is the

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1 cost pool associated with service to Public Customers who do not receive a HWM as discussed
2 in section XX. Although this initial table contains one Tier 2 cost category, additional Tier 2
3 categories will be added as additional Tier 2 offerings are developed and the associated cost
4 pools are established.

5

6 The allocation of costs into the categories is a ratemaking exercise that falls within the province
7 of section 7 of the NPA. The establishment and modification of the allocation will be conducted
8 consistent with the provisions of section 7(i).

9

10 **4.3 Cost Categories and Cost Allocation Table**

11 The Cost Allocation Table will guide the allocation of costs among the cost categories: Tier 1
12 Composite, Tier 1 Slice, Tier 1 Non-Slice or Tier 2, and the melded cost pool. The Cost
13 Allocation Table will conform to BPA's cost accounting reporting of expenses. The allocation
14 of costs among the categories will form the basis for setting customer charges and rates for firm
15 power sales to customers.

16

17 **4.4 Inclusion of New Costs or Credits**

18 All BPA power-related costs will be included in the Cost Allocation Table. BPA will decide the
19 allocation of new costs and credits to the appropriate category through a 7(i) rate process. See
20 True-Up language in section XX. Rate case parties will be afforded the opportunity to test the
21 proposed allocation through the rate process. The Administrator will determine the final
22 decision on the proper allocation of the new costs or credits.

23

24

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1 rates for Tier 1 so that the aggregate non-Tier-2 Power business products meet the applicable
2 Agency financial risk standard(s) as implemented for Power. BPA may continue the current
3 approach of using true-ups for Slice risk mitigation and reserves, CRAC, and DDC for non-Slice
4 risk mitigation.

5

6 **5.4 Slice True-Up Calculation and Billing Process**

7 Slice customers will have an annual True-Up for expenses and credits in the Composite Revenue
8 Requirement. Slice customers will not pay PNRR or CRACs, if PNRR and CRACs are
9 applicable to non-Slice rates. The annual Slice True-Up Adjustment will be calculated for each
10 FY as soon as BPA's audited financial data are available (usually in November of each contract
11 year). The annual Slice True-Up Adjustment will be calculated by subtracting the average
12 Composite Revenue Requirement for the applicable period upon which the Composite Customer
13 Charge is based, from the Actual Composite Revenue Requirement and multiplying the
14 difference by the customer's Slice percentage. The Composite Revenue Requirement contains
15 items that are subject to the Slice True-Up Adjustment.

16

17 Any unanticipated costs/revenue credits that are incurred during the rate period that do not fall
18 into the following categories will be charged/credited to Slice customers through their annual
19 Slice True-Up process. However, if Slice customers challenge the inclusion of any unanticipated
20 costs or revenue credits, this will be a subject for discussion in the rate case subsequent to the
21 challenge.

22

23

24

25

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1 **Formula for True-Up calculation:**

2 Actual Composite Revenue Requirement minus the average Composite Revenue Requirement
3 (for applicable period upon which the Composite Customer Charge is based) will result in the
4 True-Up Amount

5
6 If the True-Up Amount is positive, then this results in a charge that is applied to the Slice
7 customer's bill. If the True-Up Amount is negative, then this results in a credit that is applied to
8 the Slice customer's bill. The True-Up Amount will be multiplied by the customer's Slice
9 percentage to determine the amount that is owed or credited to that customer.

10
11 The Actual Composite Revenue Requirement will include expenses and revenues accounted for
12 by BPA in the applicable fiscal year, in accordance with Generally Accepted Accounting
13 Principles (GAAP) and are used in the calculation of Accumulated Annual Net Revenues
14 (AANR).

15
16 The Actual Composite Revenue Requirement will include a component (Minimum Required Net
17 Revenue) for the amount in a fiscal year by which BPA's actual generation amortization and
18 irrigation assistance payments to the U.S. Treasury exceed the total actual non-cash expenses in
19 the Composite Revenue Requirement.

20
21 The final True-Up Adjustment Charge for each customer shall be applied either as a one-month
22 credit (if the adjustment is negative) or as a three-month charge (if the adjustment is positive, and
23 spread equally across the three months) following the month the True-Up Adjustment is
24 calculated. Slice customers may have an option of paying the entire charge in one month
25 following the month the True-Up Adjustment is calculated.

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1

2 BPA will provide a preliminary estimate of the Slice True-Up Adjustment prior to providing the
3 Slice True-Up Adjustment that is based on audited financial data.

4

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

7 • If the True-Up Adjustment Charge is a credit to the Slice customer, the period for interest
8 computation shall end at the due date of the bill that contains such credit.

9 • If the True-Up Adjustment Charge is a charge payable to BPA, the period for interest
10 computation shall end at the due date for each of three bills. For Slice customers who opt
11 to pay the charge in one month, the period for interest computation shall end at the due
12 date for the bill.

13

14 There will be no independent audit rights for the Slice True-Up. Any challenges to the inclusion
15 of costs or credits for the Slice True-Up will be an issue in the rate case subsequent to the rate
16 period in which the True-Up was conducted.

17

18 The customer Slice rate will also be subject to a True-Up charge.

19

20

6. TIER 1 RATE DESIGN

21 In this TRM, BPA is proposing to develop a long-term Tier 1 rate design that will be applicable
22 for the full term of the Regional Dialogue contracts. The Tier 1 rate design will be applicable to
23 customers who receive a HWM through their Regional Dialogue contract. Without a HWM,
24 customers would likely be charged differently than outlined here. The design of rates applying

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1 to such customers will be developed in the relevant rate proceedings. No long-term rate design
2 certainty would be conveyed to such customers.

3
4 The Tier 1 rate structure consists of four elements: Customer Charges, a Demand Charge, a Load
5 Shaping Charge and a Load Following Charge. Each of these will be described below. .

6
7 **6.1 Customer Charges**

8 The customer charges will collect the majority of BPA's Tier 1 costs. There will be three
9 customer charge rates: A) a Composite rate that includes the costs that apply to all PF customers
10 with a HWM regardless of the product choice among Load Following, Slice or Block; B) a
11 Non-Slice rate that applies to PF customers purchasing either the Load Following or Block
12 products; and C) a Slice rate that applies to PF customers purchasing the Slice product. Each
13 rate will be expressed as a dollar per one percent of the Federal Tier 1 system. Each customer's
14 billing determinant will be expressed as their Tier 1 Cost Allocation (TOCA). Each customer's
15 TOCA will be based on the smaller of the customer's RHWM or the customer's forecast net
16 requirement, and is calculated as a percentage of the total of all RHWM. Expressed as a formula
17 this would be calculated as follows:

18
19
$$TOCA = \frac{\min(RHWM, Netreq)}{\sum RHWM}$$

20 where: *TOCA* = customer Tier 1 Cost Allocation

21 *RHWM* = customer Rate Period High Water Mark

22 *Netreq* = forecast of customer Net Requirement done prior to each rate case

23

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1 Customers purchasing the Slice product will have two TOCAs: one for their Block product
2 purchase, to which the Non-Slice rate applies, and one for their Slice product purchase, to which
3 the Slice rate applies. The TOCA for their Slice purchase will be the Slice percentage as
4 determined in their Regional Dialogue contract. These values will be determined as:

5

6 $SliceTOCA = Slice\%$

7

8 $NonSliceTOCA = TOCA - Slice\%$

9

where: $Slice\%$ = a customer's Slice amount as determined in contract

10

11 **6.1.1 Tier 1 Cost Allocation Among the Customer Charges**

12 The Composite rate will apply to customers purchasing the Load Following, Block, and Slice
13 products. The billing determinant for the Composite rate will be the customer's TOCA. For
14 Slice customers, the Composite rate will apply to both the Slice TOCA and the Non-Slice
15 TOCA. The Composite rate will consist of BPA's Composite Tier 1 costs (see Chapter 4).

16

17 $CompositeRate = CompositeRRQ \div \sum TOCA$

18

where: $CompositeRRQ$ = BPA's Composite Tier 1 Costs

19

20 **6.1.2 Non-Slice Customer Rate**

21 The Non-Slice rate will apply to customers purchasing the Load Following and Block products,
22 and the block portion of the Slice product. The billing determinant for Load Following and
23 Block customers will be their TOCA; the billing determinant for a Slice customer will be their
24 Non-Slice TOCA. The Non-Slice rate will consist of the Non-Slice costs (see Chapter 4).

25

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1 $NonSliceRate = NonSliceRRQ \div \sum NonSliceTOCA$

2 where: $NonSliceRRQ$ = BPA's Non-Slice Tier 1 Costs

3 $\sum NonSliceTOCA$ = the sum of TOCA for Load Following and Block purchasers
4 plus NonSliceTOCA for Slice purchasers

5
6 **6.1.3 Slice Customer Rate**

7 The Slice rate will apply to customers purchasing the Slice product. The billing determinant will
8 be the Customer's Slice TOCA. The Slice rate will consist of the Slice costs (see Chapter 4).

9
10 **6.2 Load Shaping Charge**

11 The Load Shaping charge collects revenue for shaping the critical output of the FBS to the shape
12 of a customer's BPA-served load. This charge is applicable only to customers purchasing Block
13 and Load Following products.

14
15 At the time of the determination of each customer's RHWM, the firm energy output (*i.e.*, critical
16 energy) for the Federal Tier 1 system will be determined for each diurnal period in each month
17 of the year (24 values). These values will be multiplied by the customer's TOCA to establish the
18 customer's Tier 1 diurnal amount.

19
20 The load shaping rate will be applied to the difference between the customer's actual diurnal
21 load and its Tier 1 diurnal amount. This calculation will result in either a positive or negative
22 billing determinant. If the customer's load is less than its Tier 1 diurnal amount, the result will
23 be negative. If the customer's load is greater than its Tier 1 diurnal amount, the result will be
24 positive.

25

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1 There will be two Load Shaping rates. One rate will apply when a customer's load on BPA is
2 above its RHWM. The second rate will apply when a customer's load on BPA is below its
3 RHWM.

4
5 **Treatment When Above the RHWM:**

6 The Load Shaping rate for each of the 24 diurnal periods of the year that applies when load on
7 BPA is above the RHWM will be the forecast market price for firm energy for that period as
8 determined in rate case.

9
10 **Treatment When Below the RHWM:**

11 The load shaping rate that applies when a customer purchases less than its RHWM during a year
12 will be the 24 prices for the first rate scaled to BPA's Tier 1 costs applicable to non-Slice
13 customers. The above treatments are based on forecasts from the rate case when the actuals for
14 Load Following customers cause a switch between shaping charges.

15
16 **6.3 Demand Charge**

17 The Demand Charge collects revenue from customers purchasing the Block and Load Following
18 products. The purpose of the Demand Charge is to incentivize customers to reduce their peak
19 hour energy take from BPA. The billing determinant will be based on one hour each month and
20 will be customer specific. The hour will be the customer's largest one-hour energy take from
21 BPA during the heavy load hour period. After the hour and quantity are identified for each
22 customer each month, several adjustments will be made to the quantity for calculation of a
23 customer's Demand billing determinant. The adjustments include a reduction for average HLH
24 energy use for the month, a reduction to approximate BPA's Generation System Peak, and an
25 adjustment based on historical peak use.

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1
2 Four values will be used for calculating a customer’s demand billing determinant (or billing
3 demand). These values are the customer’s system peak on BPA (CSP), the Rate Period Demand
4 Adjuster, the average HLH energy use each month (aHLH), and the customer specific Contract
5 Demand Quantity (CDQ). The following formula will be used to calculate a customer’s monthly
6 demand billing determinant:

7
8
$$BillingDemand = Max(0, CSP \times RPDemandAdjuster - aHLH - CDQ)$$

9 where: *BillingDemand* = demand billing determinant

10 *CSP* = Customer’s maximum hourly load (System Peak) placed on BPA

11 *RPDemandAdjuster* = Rate Period Demand Adjuster

12 *aHLH* = actual average energy use during heavy load hours

13 *CDQ* = historic Contract Demand Quantity

14
15 The Demand rate will be based on the annual fixed capital cost of the most economic capacity
16 machine as determined in each rate case. The source for identifying the most economic capacity
17 machine and the fixed capital costs associated with that machine will be from a third party such
18 as the Energy Information Administration, EPRI Technical Assessment Guide, or the Council.
19 BPA may choose to use short-term capacity costs instead of long-term capacity costs when BPA
20 forecasts that there will be a regional surplus of capacity during a rate period. The rate will be
21 proportionally shaped to the HLH energy prices from the load shaping rate.

22
23 **6.3.1 Rate Case Demand Adjuster**

24 The Rate Case Demand Adjuster will scale a customer’s measured CSP to approximate the peak
25 at BPA’s GSP. The demand adjuster will be equal to the sum of all preference customers’

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1 demands on BPA at the time of the GSP, divided by the sum of all preference customers' CSP
2 demands on BPA. The demand adjuster will change each rate period based on the observed
3 demands of the three most recent fiscal years as developed in the rate adjustment process.

4

$$5 \text{ RateCaseDemadAdjuster} = \frac{\sum_{i+3}^{i+3} GSP_i}{\sum_i^{i+3} CSP_i}$$

6 where: *GSP* = BPA's monthly peak delivery to PF Customers

7 *CSP* = monthly Customer System Peak on BPA

8

9 **6.3.2 Contract Demand Quantity (CDQ)**

10 The Contract Demand Quantity (CDQ) is based on each customer's historical peak. At the time
11 of the determination of each customer's CHWM, BPA will also establish 12 monthly historic
12 values of demand above aHLH for each customer. These customer-specific historic values will
13 be the customer's CDQ for each month. The CDQ will be calculated using the average adjusted
14 monthly CSP (Contract CSP) less the average monthly HLH (Contract aHLH), using FY 2005,
15 2006, and 2007 billing data.

16

17 Similar to the Rate Period Demand Adjuster, a contract demand adjuster will be calculated using
18 FY 2005, 2006, and 2007 billing data and will be applied to the average CSP that is determined
19 for each month. This value is used only once for setting each customer's monthly CDQ.

20

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1
$$ContractDemandAdjuster = \frac{\sum_{i=FY\ 2005}^{FY\ 2007} GSP_i}{\sum_{i=FY\ 2005}^{FY\ 2007} CSP_i}$$

2 where: *GSP* = BPA's monthly peak delivery to PF Customers

3 *CSP* = monthly Customer System Peak on BPA

4

5 The Contract Demand Adjuster will be multiplied by the monthly Contract CSP to produce a
6 Contract Adjusted CSP.

7

8 The Contract Adjusted CSP will be adjusted a second time by 90 percent prior for use in
9 determining the monthly quantity. The adjustment is designed to assure that some portion of
10 each customer's demand is on the margin to incentivize peak reduction on BPA. This will
11 produce the Final Contract Adjusted CSP.

12

13 The CDQ is determined by subtracting Contract aHLH from the Final Contract Adjusted CSP.
14 These monthly quantities above aHLH energy will remain in use for calculating the customer
15 demand billing determinant for the entire term of the contract. These values could be positive or
16 negative, but are subject to a maximum test where the minimum value will be the Contract
17 aHLH multiplied by the Contract CSP Adjuster minus the Contract aHLH.

18

19
$$CDQ = \max(FinalAdjustedCSP - Contract_aHLH, Contract_aHLH \times ContractCSPAdjuster - Contract_aHLH)$$

20

where: *FinalAdjustedCSP* =

21

Contract_aHLH = monthly average Heavy Load Hour energy from FY 2005-07

22

ContractCSPAdjuster =

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6.4 Load Following Charge

BPA has not made a final decision on whether the Load Following Charge will be proposed in the TRM.

The Load Following Charge collects revenue for added cost associated with following load on an hour-to-hour basis. The Load Following Charge is applicable only for customers purchasing the Load Following product. The Load Following Charge will be based on the costs of the capacity provided by BPA’s power function to BPA’s transmission function for hour-to-hour load ramping. The costs of the capacity for resource following is not included in the Load Following Charge. The capacity provided to the transmission function will be valued in each rate adjustment proceeding. The billing determinant will be a customer’s total retail load.

7. TIER 2 RATE DESIGN

7.1 Overall Construct

A customer’s product choice will affect the Tier 2 rate alternatives available to it. In general, customers electing BPA as their service provider for all or a portion of their above HWM load are also agreeing to pay for the marginal costs of resource acquisitions and purchases BPA must make beyond those resources used to establish the costs included in Tier 1 rates. Tier 2 rates will be based on the cost of providing a flat annual amount of power. The Tier 2 Rate Alternatives currently contemplated include a Load Growth Tier 2 Rate, a short-term Tier 2 rate and a Vintage Tier 2 Rate. Detailed descriptions of BPA’s proposed list of initial Tier 2 rate alternatives can be found in Attachment XX. Over time BPA may propose in individual wholesale power rate case 7(i) proceedings to update, modify or add to the Tier 2 rate alternatives described in Attachment XX.

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1 **7.1.1 Timing**

2 All customers must determine and notify BPA by November 2009 whether they will purchase
3 power from BPA at Tier 2 rates or apply resources for their load above their HWM.

4
5 **1. By contract signing (December 2008):** At the time of contract execution, customers
6 choosing the Load Following contract may elect to have their entire above HWM load served at
7 the Load Growth Tier 2 rate at this time. Customers choosing this rate are also eligible to
8 participate in the Shared Rate Plan, but must also make their Shared Rate Plan election at this
9 time.

10
11 Alternatively, Load Following customers can elect at contract signing to take service at the Load
12 Growth Tier 2 rate for all but the first X aMW of above HWM load for the first three years of
13 power deliveries served. The X aMW may be different in different years of the first 3-year
14 period. They must decide by November 2009 how they wish to have the X amount served
15 (specifying a Tier 2 rate alternative or non-federal resources). Customers choosing this treatment
16 are not eligible for the Shared Rate Plan. No other above HWM-load elections are needed by
17 contract signing.

18
19 **2. By November 2009:** Load Following customers must elect how their above HWM
20 load will be served through FY 2012 to 2014. Their choice is all BPA Tier 2 (short-term and/or
21 Renewable Vintage Tier 2, if available), all non-federal resources, or some pre-defined
22 combination of the two (i.e., the first 5 aMW of above HWM load served at the short-term Tier 2
23 with non-federal resources covering the rest). In addition, customers that have elected to have
24 less than 100% of their above-HWM load covered by the Load Growth Tier 2 must specify how
25 the remaining amount will be met FY 2012-14.

26
27 Block and Slice/Block customers must elect how their above HWM load will be served through
28 FY 2012 to 2014. Their choice is between all non-federal resources or some pre-defined

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1 combination of the available Tier 2 rates (with a defined take-or-pay commitment) and non-
2 federal resources (filled in annually).

3
4 **3. By September 30, 2011:** All customers must elect how their above HWM load will
5 be served from FY 2015-FY 2019. They must honor existing notice and commitment they have
6 made and may choose between Tier 2 rate alternatives BPA makes available or apply their own
7 resource.

8
9 **4. By September 30, 2016 (i.e., 3 years prior to the end of FY 2019):** All customers
10 must elect how their above HWM load will be served through FY 2020-FY 2024. They must
11 honor existing notice and commitment they have made and may choose between Tier 2 rate
12 alternatives BPA makes available or apply their own resource.

13
14 **5. By September 30, 2021 (i.e., 3 years prior to the end of FY 2024):** All customers
15 must elect how their above HWM load will be served through FY 2025-FY 2028. They must
16 honor existing notice and commitment they have made and may choose between Tier 2 rate
17 alternatives BPA makes available or apply their own resource.

18
19 **7.2 Setting Tier 2 Amounts**

20 As described in section XX, prior to each rate case BPA will set customers' RHWMs and in
21 conjunction with that calculate customers' above-HWM load. Depending on the elections Load
22 Following customers make in accordance with the notice requirements described above, BPA
23 will also at this time set amounts of above-HWM load priced at a Tier 2 rate. Block and
24 Slice/Block customers will have already set their amount of above-HWM load charged a Tier 2
25 rate.

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1 Example: Load Following customer's Total Retail Load forecast is 100 aMW and Rate Period
2 HWM is 80 aMW (and are forecast to be unchanged for both years of the rate period. Since the
3 customer committed to the short-term Tier 2 rate for all of its above HWM load service, its Tier
4 2 lock down amount is 20 aMW for both years of the rate period. The customer's bill in every
5 month of the rate period it will have a flat bock of power (20 MW * 1000 * the number of hours
6 in the month) multiplied by the short-term Tier 2 rate.

7

8 **7.3 Cost Basis**

9 Once Tier 2 amounts are known for the rate period the revenue requirements will calculated to
10 reflect the following components: Resource costs or market purchases, firming/shaping/outage
11 reserve services provided by the Tier 1 system (if applicable), and an overhead cost adder. Each
12 Tier 2 rate alternative will have its own separate revenue requirement. We are proposing a true-
13 up for the resource support services provided by the Tier 1 system to ensure energy neutrality
14 and to lessen the amount of risk exposure the Tier 1 system (and purchasers) must otherwise
15 take.

16

17 **7.3.1 Resource Costs and RSS**

18 Any resources acquired by BPA to serve above-HWM loads will include appropriate RSS
19 charges necessary to use the resource output to serve a flat annual load. If a particular Tier 2 cost
20 pool is being sourced with green power, but it is not the Vintage Renewable Tier 2 rate, then the
21 forecast revenues from the sale of the green attributes will be credited to the cost pool.

22

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1 **7.3.2 Overhead Cost Adder**

2 Each Tier 2 rate alternative will include an overhead cost adder. This is intended to recover the
3 costs associated with BPA’s provision of service at Tier 2 rates. BPA will propose a simplified
4 approach to derive the adder. The adder will be calculated every rate period.

6 **7.3.3 Risk Mitigation**

7 BPA is proposing to have a true-up for differences between planned and actual energy associated
8 with the RSS provided to Tier 2 only. Please see that section for more clarification. Over time,
9 when there is more specificity about the costs allocated to the various Tier 2 cost pools, BPA will
10 assess the associated risks of the different resources, fuel costs, etc. and proposes risk mitigation
11 tools. In addition, BPA may revisit the tools it is using for risk mitigation in Tier 2.

13 **7.3.4 Renewable Vintage Tier 2 Rate Example**

14 Assume for purposes of this example only, BPA has 20 aMW of Vintage Renewable Tier 2 rate
15 service committed. It has acquired the output of a 70 MW wind farm at a cost of 70 mills for the
16 planned generation of 20 aMW. The RSS associated with this resource cost includes diurnal
17 flattening (7 mills) and a resource shaping charge (5 mills) to get it financially equivalent to an
18 annual flat block of power. The overhead adder is $20 * 8760 * 0.25$, or \$43,800. The total
19 revenue requirement is reflected in the table below:

Cost Category	Annual Cost	
Resource Cost	12,264,000	
DFS	1,226,400	
Resource Shaping	876,000	
Overhead Cost Adder	43,800	
Total	14,410,200	
Vintage Renewable Tier 2 Rate:		82.25

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1
2 An individual customer has subscribed to 3 aMW of power at this Tier 2 rate, so it will be
3 charged \$2,161,530 for the year before taking into consideration any energy true-ups or possible
4 remarketing credits/charges discussed below.

5
6 **7.4 Remarketing of Tier 2 Amounts**

7 BPA will remarket committed Tier 2 amounts in the event a customer loses load or if RHWMs
8 increase. Block and Slice/Block customers must make take-or-pay commitments to specific
9 amounts of Tier 2 service when giving notice to purchase under the Tier 2 rate from BPA. In
10 addition, BPA will remarket on a rate period basis committed Tier 2 amounts in the event of load
11 loss for Load Following customers that have made take-or-pay commitments to the vintage Tier
12 2 rate alternatives for periods longer than a rate period. These committed Tier 2 amounts may be
13 greater than the above HWM load calculated prior to the rate case if the customer's load is less
14 than projections or if RHWM amounts increase from what was expected at the time the Tier 2
15 amounts were set.

16
17 **Calculating the Remarketed Tier 2 Proceeds:**

18 If an amount of the take-or-pay Tier 2 block is to be remarketed the proceeds from doing so will
19 be credited against the Tier 2 charges, with the difference being assigned to the customer (could
20 be a credit or a charge). BPA will value the remarketing amounts based on a percent (set in rate
21 case) of Mid-C or a comparable successor for a flat annual block of power for the upcoming year
22 with values calculated based on the average daily closing price for a future fiscal year flat block
23 of power averaged across all days of July and August. The percent will reflect amounts off of
24 100 percent for transaction fees, transmission costs, and transmission losses. The value of the
25 remarketed amount will be divided by 12 and netted against each month's billed take-or-pay Tier

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1 2 amount. For those customers selecting the Vintage Renewable Tier 2 rate, the green attributes
2 from the full amount of the take-or-pay commitment would still flow to the customer.

3
4 **7.5 Provision for Additional Tier 2 Rate Alternatives**

5 From time to time there may be a need to refresh the Tier 2 alternatives described in Attachment
6 2. BPA will take the following steps in its public process for developing a new or modifying an
7 existing Tier 2 rate alternative: Periodically BPA may propose to update or modify the above-
8 described Tier 2 rate alternatives or BPA may propose new Tier 2 rate alternatives replacing
9 Attachment 2 with an updated version. The rates for such updated Tier 2 rate alternatives would
10 be calculated through a rate case.

11
12 **7.5.1 Provision for Conservation Mechanisms in Lieu of Tier 2 Rate Alternatives**

13 A utility with a Rate Period HWM below its firm net requirement load may request that BPA
14 serve its load in excess of the Rate Period HWM at a Tier 2 rate. The opportunities to provide
15 conservation to customers in lieu of more expensive incremental resource acquisitions may not
16 always be feasible, but providing these opportunities is a legitimate response to customer needs.
17 BPA could potentially help a utility develop conservation to offset its need to buy power in
18 excess of its Rate Period HWM. Depending on the circumstances, BPA could develop financial
19 incentives that encourage a utility to develop conservation in amounts that reduce some or all of
20 the utility's load above its Rate Period HWM. BPA would fully recover the cost of such
21 conservation from the customer through a bilateral arrangement.

8. RESOURCE SUPPORT SERVICES (RSS)

There are four services in the RSS package. They are the Diurnal Flattening Service (which also includes a Diurnal Flattening Service True-up and, in certain circumstances, a Resource Shaping Charge), Forced Outage Reserves, Secondary Crediting Service, and Resource Remarketing Service. Detailed product descriptions for the suite of products within RSS can be found in Attachment XX.

8.1 Diurnal Flattening Service (DFS)

The DFS is a service that physically or financially makes a variable resource (that is contracted to load) comparable to a resource that generates power in a shape that is flat within the 24 HLH and LLH periods of the year. This service will be used to price the Tier 2 rate and will also be offered to eligible non-federal resources. This service is consistent with the Long-Term Regional Dialogue Final Policy statements that the Tier 2 rate and non-federal resources serving load will be benchmarked off a specific shape, with the likely shape being a flat annual block.

This charge will be resource-specific and will be based on historical generation or forecast generation when historical generation is not available. Diurnal Flattening Service will have two charges, one for capacity and the other for energy. The energy charge will apply to the amount of forecast generation that lies above the expected diurnal output of the resource. The charge will be a \$/MWh charge that will be calculated based on efficiency losses associated with the resource identified in each rate case. The capacity rate for this service will be the Tier 1 Demand Rate.

The quantity of support capacity needed for each resource will be defined as the expected generation minus the forecast operational minimum (method for determining the expected

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1 generation and the forecast operational minimum will be resource specific). The operational
2 minimum does not include planned or force outages since the resource is not operating, nor does
3 it include the ramping process of a planned or forced outage. The price of this capacity will be
4 defined in the rate case and will be the same charge used for the Tier 1 Demand Charge. The
5 monthly charge for capacity will be the monthly demand rate multiplied by the quantity of
6 resource-specific support capacity.

7

8 **8.1.1 Diurnal Flattening Service True-Up**

9 The Diurnal Flattening Service is designed to be an energy-neutral service. Therefore, a true-up
10 is needed when a resource produces more or less energy than what was expected when the
11 service was priced. The DFS True-Up will compare the 24 expected diurnal monthly energy
12 amounts to the actual generation of the resource. If a resource produces more than its expected
13 energy, then a credit is applied to the resource. If a resource produces less than its expected
14 energy, then a charge is applied to the resource.

15

16 **8.1.1.1 True-up for BPA Resource Serving Load above HWM**

17 A resource used by BPA to establish Tier 2 rates will be assigned to a cost pool (e.g., vintage,
18 default). The cost of RSS to shape the resource to a flat annual block will be included in the cost
19 pool. The total generation will be forecasted for the cost pool resources. The total cost of the
20 pool divided by forecast generation will result in a rate, in \$/MWh, for the pool. For customers
21 purchasing the Load Following product, the actual power delivery will follow load and not be a
22 block. The Tier 2 power with DFS will be billed at the applicable Tier 2 rate.

23

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1 Since the total generation of the resources whose costs are included in the Tier 2 rate are
2 forecast, a true-up to actual generation is necessary. At the end of each month the actual
3 generation will be known.

4
5 When the resource amounts projected from a particular tier 2 cost pool are different from
6 forecast, the difference in the energy will be deemed delivered from or to Tier 1 and the price
7 will be based on the actual Dow Jones Mid-C index (or other replacement index). Its sale price
8 will be at a discount, the discount to be defined each rate case. The net cost of this energy is the
9 difference between the Tier 2 rate charged minus the market price multiplied by the total energy
10 shortfall and the computed market value of the energy.

11
12 **8.1.1.2 True-up for Customer Resource Serving Load above HWM**

13 The primary difference in treatment between a BPA resource and Customer resource is that the
14 customer does not pay BPA a Tier 2 rate for the delivered energy; therefore, the true up is
15 different.

16
17 If a customer acquires a resource to serve load above their HWM and requests RSS to shape the
18 output of the resource to a flat annual block, then the customer will have to forecast the annual
19 generation and the minimum and maximum operating level by month so that BPA can assess the
20 cost of the Diurnal Flattening Service resource support service. The service the customer
21 receives is the physical or financial delivery of a firm flat annual block based on forecast energy
22 output. BPA PS will be required to be the scheduling agent for these resources for Load
23 Following customers with an NT contract.

24

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1 When the amount the customer resource generated is different than forecast, the difference will
2 be deemed delivered from Tier 1 and the price will be based on the actual Dow Jones Mid-C
3 index (or other replacement index). Its sale price will be at a discount, the discount to be defined
4 each rate case. These true-up amounts, positive or negative, will be added as an adjustment to
5 the customer's bill

6

7 **8.2 Resource Shaping Charge**

8 This service is not applicable for load following customers that only need a financially flattened
9 resource.

10

11 The Resource Shaping Charge is a charge or credit that adjusts for the value difference between
12 an equivalently sized flat annual block and the planned resource energy shape. Planned
13 generation must be firm and flat in each of the 24 HLH and LLH periods of the year (the DFS
14 can provide this).

15

16 If the resource shape is known prior to publishing of the final rate proposal for each rate period,
17 the rates used to calculate the Resource Shaping Charge will be equal to rates used for the Load
18 Shaping Charge. The rate for each of the 24 diurnal periods of the year will be the forecast
19 market price for firm energy for that period as determined each rate case.

20

21 This charge/credit will be calculated each year but will be billed flat monthly (annual charge
22 divided by 12). The resource's firm and flat HLH and LLH output (or expected if purchasing
23 DFS) will be compared to the shape of an equivalent sized flat annual block.

24

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1 The Resource Shaping Charge will be applied to the difference between a flat annual block and
2 the resource's firm output (flat annual block minus resource's firm or expected output). This
3 calculation can be a positive or negative number. If the customer's resource produces (or
4 expected if purchasing DFS) less energy than the flat block during one of the 24 diurnal periods
5 of the year, this will result in a positive billing determinant (charge), this charge will be the
6 forecast cost of purchasing power to make the equivalent of a flat annual block. If the
7 customer's resource produces more energy than the flat block during one of the 24 diurnal
8 periods of the year, this will result in a negative billing determinant (credit), this credit will be
9 the value of selling power above the flat annual amount at the forecast price. The calculated
10 billing determinant for HLH and LLH energy will be applied to the corresponding Resource
11 Shaping Rate, which will be equal to the Load Shaping Rate.

12
13 **8.3 Forced Outage Reserves**

14 Forced Outage Reserves Forced Outage Reserves (FOR) service from Power Services (PS) picks
15 up where Contingency Reserve Energy service from Transmission Services (TS) ends, except
16 when the customer notifies BPA of the need to use FOR service for the start of the hour. The
17 quantity of FOR capacity needed to be purchased will either be the name plate capacity times a
18 percent or the machine forced outage rating. The charge will be the monthly FOR capacity
19 multiplied by a demand charge set at the same level as the PF Tier 1 demand charge. There will
20 be an annual energy limit defined as 5 percent (or the machine forced outage rating) multiplied
21 by the contract capacity limit multiplied by the number of hours in the year multiplied by 2.
22 There will be a 5 consecutive year energy limit defined as 5 percent (or the machine forced
23 outage rating) multiplied by the contract capacity limit multiplied by the number of hours in the
24 year multiplied by 5.

25

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1 Forced Outage Reserves Energy (FORE) is energy used when the FOR service is requested. The
2 power provided shall be charged for the first day at the higher of the hourly Dow Jones Mid C
3 price or the Cal-ISO hourly price plus all take out prices and applicable transmission adders or
4 the applicable Load Shaping Rate, as defined in the GRSPs. For the subsequent days the price
5 should be the higher of mid-C daily or BPA's actual purchase price for the replacement energy.

6

7 **8.4 Secondary Crediting Service**

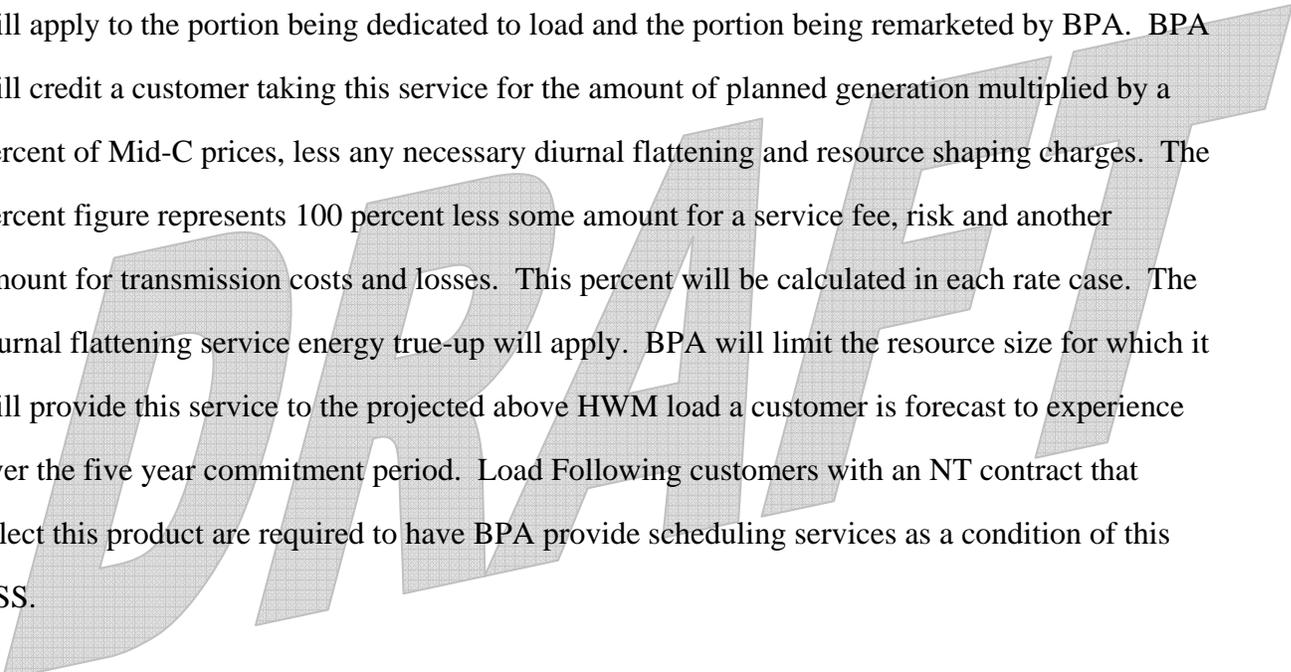
8 Secondary Crediting is available for load following customers and allows them to dedicate the
9 entirety of a metered or scheduled hydro resource (either dispatchable or non-dispatchable, as
10 long as it has both a firm critical component *plus* a secondary or nonfirm energy component) to
11 load. This service is currently intended to apply to hydro resources but could apply to other
12 resources if critical periods are established for them. BPA will credit the secondary energy back
13 to the customer at XX percent \ of monthly firm Mid-C averages less applicable PF Tier 1
14 charges, unless BPA is in a spill operation, in which case BPA may not provide the credit. If the
15 amount of future secondary crediting service is greater than that which BPA provides today the
16 percentage may drop below XX percent. The customer taking this service can declare its
17 resource flat within the diurnal period or it can declare a peak amount, but it must deliver the
18 MW at time of its customer's system peak. The MW difference between customer's peak (less
19 other resources delivered) and the declared resource peak is the maximum the customer can take
20 on any given hour (PF Entitlement). This service would take the place of Service and Exchange
21 and the Complex Partial with Dedicated Resource Services. Customers previously taking the
22 service and exchange product may be able to continue to deliver their resource to a POR other
23 than their load, as they do today. Load Following customers with an NT contract that select this
24 product are required to have BPA provide scheduling services as a condition of this RSS.

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8.5 Resource Remarketing Service

The Resource Remarketing Service is only available for load following customers purchasing a new resource in an amount that is greater than its current above-HWM need. The customer taking this service will dedicate the entire resource to serve their above-HWM load. When above-HWM load amounts are calculated prior to the rate case, the customer will be able to remove the amount of resource not needed to serve its above HWM load. This additional generation is remarketed by BPA. These amounts should decrease over time as customer grows into their resource. The flattening services will be applied to resources using this service. RSS will apply to the portion being dedicated to load and the portion being remarketed by BPA. BPA will credit a customer taking this service for the amount of planned generation multiplied by a percent of Mid-C prices, less any necessary diurnal flattening and resource shaping charges. The percent figure represents 100 percent less some amount for a service fee, risk and another amount for transmission costs and losses. This percent will be calculated in each rate case. The diurnal flattening service energy true-up will apply. BPA will limit the resource size for which it will provide this service to the projected above HWM load a customer is forecast to experience over the five year commitment period. Load Following customers with an NT contract that select this product are required to have BPA provide scheduling services as a condition of this RSS.



9. OTHER RATE DESIGN

9.1 Low Density Discount

The LDD will continue under tiered rates. No LDD will be paid on Tier 2 in order to allow a level playing field in choices between BPA service and self-supply. However, the Tier 1 LDD

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1 discount will be adjusted based on the utility's total load such that the utility gets approximately
2 the same benefit they would have received under melded rates.

3 As indicated in BPA's Long Term Regional Dialogue Final Policy, BPA intends to continue to
4 offer a low density discount (LDD) in its wholesale power initial rate proposals. Section 7(d)(1)
5 of the Northwest Power Act authorizes the Administrator to provide a discount, to the extent
6 appropriate, to customers whose retail rates have been adversely affected by low system
7 densities. The Administrator has discretion to establish the criteria under which the LDD is
8 offered and to determine whether it is appropriate to offer an LDD based on the criteria adopted.

9
10 BPA proposes the following 3 changes to the LDD in the post-2011 period:

11
12 **Definition of Consumers:**

13 BPA will propose the following definition for Consumers in the Low Density Discount section
14 of the FY 2012 General Rates Schedule Provisions (GRSPs) which will be effective October 1,
15 2011.

16
17 Consumers will be the number of consumers, by classification, having a current service
18 connection in December of each year. Residential consumers (seasonal and non-seasonal)
19 should be counted on the basis of the number of residences served. If one meter serves two
20 residences, then two consumers should be counted. If a water heater is metered separately from
21 other appliances on the same premises, the water heater load will not count as a separate
22 consumer.

23
24 Security or safety lights, billed to a residential customer, will not be counted as an additional
25 consumer.

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

4
5 A residence and commercial establishment on the same premises, receiving service through the
6 same meter and being billed under the same rate schedule, would be classified as one consumer
7 based on the rate schedule. If the same rate schedule applies to both the residential and the
8 commercial class, the consumer should be classified according to principal use.

9
10 Consumers for Public Street and Highway Lighting should be counted by the number of billings,
11 regardless of the number of lights per billing.

12
13 **Adapting the LDD to a tiered rates world:**

14 BPA advocates that the level of a customer's LDD benefits should not be affected by its choice
15 between BPA power sold at a PF Tier 2 rate and power from non-Federal resources. In order to
16 allay this concern and still provide an equivalent amount of LDD benefit as would have been
17 provided in the absence of tiered rates, the following modified approach will be proposed.

18 Instead of the current practice of basing the discount on a fixed percentage, the LDD would be
19 reformulated. The percentage discounts in the LDD percentage discount table applicable to each
20 customer would be adjusted each rate year by the percent which each customer's net requirement
21 has increased above its HWM. For example, if a customer is receiving an LDD of 5 percent, it
22 has a HWM of 10 aMW, and its net requirement load is 11 aMW, the utility would have its LDD
23 percentage adjusted upward to 5.5 percent. This adjustment would also be applicable to the 7
24 percent cap. This updated LDD percentage would apply to all BPA Tier 1 purchases (customer
25 charge, load shaping and the demand charge) of the customer receiving the LDD. These costs

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1 would be allocated as BPA program costs. This adjustment would apply to LDD-eligible Slice
2 customers in a similar manner. The eligibility requirements of C/M and K/I will still be
3 calculated and may result in customers now eligible for the discount becoming non-eligible in
4 the future.

5
6 **Calculation of LDD for Slice:**

7 Slice customers will have their LDD dollar benefit calculated as though they were Load
8 Following customers, with the exception that a discount on the Load variance charge will not be
9 included in the benefit. Using the previous fiscal year's load data, an annual Low Density
10 Discount dollar benefit amount will be calculated. This figure will be divided by twelve to
11 derive a monthly LDD credit. This monthly LDD credit will be applied to the customer's
12 monthly power bills. There will be no separate Slice and Block LDD benefits calculated. The
13 LDD percentage would be adjusted for load growth as described in section XX above.

14
15 **9.2 Irrigation Rate Mitigation**

16 A discount for irrigated loads will continue under tiered rates. Eligible irrigation loads will not
17 increase. The discount will be a fixed percentage discount on the Tier 1 rate. Since irrigation
18 loads will not increase, there will be no Tier 2 service to these loads.

19 As specified in the BPA Long Term Regional Dialogue Final Policy, BPA will propose
20 Irrigation Rate Mitigation (IRM) in BPA's wholesale power initial rate proposals in the form of a
21 fixed percentage discount. In these wholesale power initial rate proposals BPA will propose that
22 the fixed percentage will be the effective reduction in the melded, weighted average of the spring
23 and summer rates caused by the irrigation rate mitigation product in the average FY 2007-2009
24 PF rates, and is estimated to be in the 30-34% range. This discount will be seasonally available
25 on qualifying loads during May, June, July, August and September.

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2 Regional Dialogue contracts will include a provision acknowledging the irrigation discount
3 program as a rate adjustment, the terms of which will be determined in rate proceedings and
4 subject to BPA's GRSPs. Qualifying irrigation loads will also be specified in Regional Dialogue
5 contracts. A section 7(i) rate proceeding would establish the need for, and amount of, an
6 irrigation discount applied to qualifying irrigation loads starting with the FY 2012 rate period.
7 Any discount, if adopted by the Administrator, will be included in BPA's GRSPs for BPA's FY
8 2012 Tier 1 power rates or successor rates.

9
10 BPA will propose the following basis for IRM eligibility in the FY 2012 General Rate Schedule
11 Provisions (GRSPs) which will be effective October 1, 2011. To qualify for the IRM discount,
12 the Purchaser must meet one of the following criteria:

- 13 (a) Participated in BPA's FY 1997-2001 Summer Seasonal Product.
- 14 (b) Participated in BPA's FY 2007-2011 Irrigation Rate Mitigation Product.
- 15 (c) The purchaser's annual irrigation rate schedule sales must be greater than 7500 MWh in
16 the months of May thru September.
- 17 (d) A minimum of 5% of the annual total retail load sales must have been billed under the
18 purchaser's irrigation rate schedule.

19
20 For both non-Slice and Slice customers, the discount for irrigation mitigation will be a reduction
21 (expressed in \$/kWh) in the Customer Charge for May through September applied to the
22 qualifying irrigation kWh specified in the contract for load following customers and applied to
23 the lesser of their monthly block or the qualifying irrigation kWh specified in the contract for
24 Slice customers. All other charges and billing determinants will not be affected. To ensure
25 equivalent treatment of Slice and non-Slice customers, the reduction (expressed in \$/kWh) in the

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1 Customer Charge for Slice customers will equal the reduction (expressed in \$/kWh) in the
2 Customer Charge of load following customers.

3

4 There will be a true up process at the end of the irrigation season to ensure that the customer
5 could demonstrate the full amount of irrigation load. If a utility's May-Sept measured irrigation
6 load is less than the amount of load eligible for mitigation, a true up will be owed to BPA at end
7 of the irrigation season.

8

9 BPA will require participating customers to implement cost-effective conservation measures on
10 irrigation systems in their service territories. The conservation measures may be eligible for
11 future BPA conservation programs, although the eligibility of particular measures and the
12 amount of BPA support have not been determined.

13

14 **9.3 DSI Service**

15 BPA is exploring a number of approaches intended to provide service benefits to the direct-
16 service industries (DSIs) after 2011, including a financial mechanism similar to the existing FY
17 2007-2011 DSI contract that provides the Region with known, capped costs. These types of
18 costs would be allocated as BPA program costs.

19

20 Also, BPA reserves the option to provide some level of physical power to the DSIs under a
21 Regional Dialogue contract. If BPA were to make such a sale, it might be necessary for BPA to
22 purchase FBS replacement resources so that such sales would not result in a decrease to the
23 publics' HWMs. These system replacement costs would be allocated as FBS costs. It is
24 expected that the non-Tier 2 rates will reflect the costs of these purchases. This power sale

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1 would be priced at the Industrial Firm Power (IP) rate in accordance with section 7(c). BPA
2 does not intend to tier the IP rate.

3

4 **9.4 7(b)(2) Rate Test**

5 No changes are proposed to the rate test to accommodate tiered rates. The rate test will use all
6 PF loads; Tier 1, Tier 2. The 7(b)(2) rate test will be performed in accordance with the

7 applicable rate case Section 7(b)(2) Implementation Methodology. Under tiered rates, the rate

8 test will use aggregates rates that combines the forecasted costs and loads of BPA’s Tier 1, Tier
9 2. The rate test will not be tiered.

10

11 **Sections need to be added on the following topics:**

12 TRM Dispute Resolution

13 Reopening of the TRM

14 20-year term approval

15 Review by FERC

16

17

18



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**Table 3.1
Federal System Resources and Contract Purchases
Included in Available Federal Base System Calculation**

Regulated Hydro Projects	
Albeni Falls Bonneville Chief Joseph Dworshak Grand Coulee Hungry Horse Ice Harbor	John Day Libby Little Goose Lower Granite Lower Monumental Mc Nary The Dalles
Independent Hydro Projects	
Anderson Ranch Big Cliff Black Canyon Boise River Diversion Chandler Cougar Cowlitz Falls Detroit Dexter Foster	Green Peter Green Springs - USBR Hills Creek Lookout Point Lost Creek Minidoka Packwood Palisades Roza
Thermal and Other Federal System Resources	
Georgia-Pacific Paper (Wauna) Klondike III Columbia Generating Station Dworshak/Clearwater Small Hydropower Elwah Hydro Glines Hydro Ashland Solar Project	Condon Wind Project Foote Creek 1 (BPA Share) Foote Creek 2 (BPA Share) Foote Creek 4 (BPA Share) Klondike I Stateline Wind Project (BPA Share) White Bluffs Solar
Non-Fed Canadian Entitlement Return for Canada	Contract Number
Priest Rapids CER for Canada	97PB-10099
Rock Island #1 CER for Canada	97PB-10102
Rock Island #2 CER for Canada	97PB-10102
Rock Reach CER for Canada	97PB-10103

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Wanapum CER for Canada	97PB-10100
Wells CER for Canada	97PB-10101
Imports	
BCHP to BPA PwrS	99PB-22685
PASA to BPA Pk Repl	94BP-93658
PASA to BPA S/N/X	94BP-93658
PASA to BPA Xchg Nrg	94BP-93658
PPL to BPA So Idaho	89BP-92524
RVSD to BPA Pk Repl	94BP-93958
RVSD to BPA Seas Xchg	94BP-93958
RVSD to BPA Xchg Nrg	94BP-93958
SPP to BPA Harney Wells	88BP-92436
Intra-Regional Transfers (Out)	
PPL to BPA Pk Repl	88PB-92497
PPL to BPA SPX	94BP-94332
Slice ERE to BPA	07BP-11883

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**Table 3.2
Federal System Other Contract Obligations
Included in Available Federal Base System Calculation**

Exports	Contract Number
USBR Load	
BPA to BRCJ	14-03-49151
BPA to BRCJ	14-03-17506
BPA to BRRC	14-03-73152
BPA to BREG	14-03-49151
BPA to BRGC	14-03-001-12160
BPA to BROP	14-03-79239
BPA to BRSI	14-03-49151
BPA to BRSID	14-03-99106
BPA to BRSV	14-03-63656
BPA to BRTD	14-03-33210
BPA to BRTV	14-03-49151
BPA to BRYK	00PB-12132
Exports	
BPA to BCHA Can Ent	99EO-40003
BPA to BHEC Pwr S	97PB-10051
BPA to CMEC Pwr S	97PB-10055
BPA to PASA C/N/X	94BP-93658
BPA to PASA S/N/X	94BP-93658
BPA to RVSD C/N/X	94BP-93958
BPA to RVSD C/N/X	90BP-92858
BPA to RVSD Cap S	90BP-92858
BPA to RVSD Seas Xchg	94BP-93958
BPA to SMGT Pwr S	04PB-11446
BPA to SPP Pwr S	88BP-92436
Federal System Intertie Losses	
Intra-regional Transfers Out	
BPA to AVWP WP3 S	85BP-92186
BPA to PPL Cap S	88BP-92497
BPA to PPL SNX	94BP-94332
BPA to PPL SoID	89BP-92524
BPA to PSE WP3 S	85BP-92185
Other Federal System Obligations	

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Federal system Tx losses for power deliveries Ancillary services to BPAT Interchange Loop flow support Voltage support (VAR) Project use loads not included in USBR Resource Support Services Other reserve obligation	
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1 **Table 4.1: Costing Table**

2

	COSTS AND RATE ADJUSTMENTS	K e y	Year 1 Forecast	Audited Actual Data	Year 2 Forecast	Audited Actual Data	Total Rate Period
	COMPOSITE COST						
1	Expenses:						
2	Power System Generation:						
3	Operating Generation						
4	Columbia Generating Station (WNP-2)	F					
5	Bureau of Reclamation	F					
6	Corps of Engineers	F					
7	Long-Term Contract Generating Projects	F					
8	Long-Term Contract Generating Projects	N					
9	Operating Generation Settlement Payment						
10	Colville Generation Settlement	F					
11	Spokane Generation Settlement	F					
12	Non-Operating Generation						
13	Trojan Decommissioning	F					
14	WNP-1&3 Decommissioning	F					
15	Contracted Power Purchases						
16	DSI Monetized Power Sale	F					
17	PNCA Headwater Benefit	F					
18	Hedging/Mitigation						
19	Other Power Purchases						
20	Bookout Adjustments to Contracted Power Purchases	F					
21	Augmentation Power Purchases						
22	Tier 1 Augmentation Power Purchases	F					
23	Augmentation RSS Adder	F					
24	Residential Exchange						
25	IOU Residential Exchange (gross costs)	X					
26	minus IOU Residential Exchange revenue	--					
27	Public Residential Exchange (gross costs)	X					
28	minus Public Residential Exchange revenue	--					
29	Other Settlements	X					
30	Renewable Generation	F					
31	Generation Conservation						
32	DSM Technologies	C					
33	Low Income Weatherization & Tribal	C					
34	Energy Efficiency Development	C					
35	Legacy Conservation	C					
36	Market Transformation	C					
37	Power System Generation Sub-Total						
38							
39	Transmission Acquisition and Ancillary Services:						
40	Transmission & Ancillary Services	G					

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	COSTS AND RATE ADJUSTMENTS	K e y	Year 1 Forecast	Audited Actual Data	Year 2 Forecast	Audited Actual Data	Total Rate Period
41	Third Party GTA Wheeling	G					
42	Third Party Trans & Ancillary Services						
43	Generation Integration	G					
44	Telemetry/Equip Replacement	G					
45	Transmission Acquisition and Ancillary Services Sub-Total						
46							
47	Power Non-Generation Operations:						
48	PBL System Operations						
49	Efficiencies Program	G					
50	Information Technology	G					
51	Generation Project Coordination	G					
52	Slice Implementation						
53	PBL Scheduling						
54	Operations Scheduling	G					
55	Operations Planning	G					
56	PBL Marketing and Business Support						
57	Sales & Support	G					
58	Public Communication & Tribal Liaison	G					
59	Strategy, Finance & Risk Mgmt	G					
60	Executive and Administrative Services	G					
61	Conservation Support (EE Staff Costs)	C					
62	Power Non-Generation Operations Sub-Total						
63							
64	Fish and Wildlife: USF&W+Planning Council:						
65	BPA Fish and Wildlife (includes F&W Shared Services)	F					
66	USF&W Lower Snake Hatcheries	F					
67	Planning Council	G					
68	Environmental Requirements	G					
69	Fish and Wildlife: USF&W+Planning Council Sub-Total						
70							
71	BPA Internal Support:						
72	CSRS/FERS Post-Retirement Contribution	G					
73	Agency Services G&A (excludes Direct Project Support)	G					
74	Corporate Support – Shared Services (excludes Direct Project Support)	G					
75	TBL Supply Chain – Shared Services	G					
76	BPA Internal Support Sub-Total						
77							
78	Bad Debt Expense	G					
79	Other Income, Expenses, Adjustments	G					
80							
81	Non-Federal Debt Service						
82	Operating Generation Debt Service						

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	COSTS AND RATE ADJUSTMENTS	K e y	Year 1 Forecast	Audited Actual Data	Year 2 Forecast	Audited Actual Data	Total Rate Period
83	Columbia Generating Station Debt Service	F					
84	Cowlitz Falls Debt Service	F					
85	Northern Wasco Debt Service	F					
86	Non-Operating Generation Debt Service						
87	WNP-1 Debt Service	F					
88	WNP-3 Debt Service	F					
89	Trojan Debt Service	F					
90	Conservation Debt Service	F					
91	ENW Retired Debt	F					
92	ENW LIBOR Interest Rate Swap	F					
93	Non-Federal Debt Service Sub-Total						
94							
95	Other Expenses:						
96	Depreciation	G					
97	Amortization	F					
98	Amortization	C					
99	Interest Expense						
100	Appropriated Interest	G					
101	Capitalization Adjustment	G					
102	Gross Bonds Interest Expense	G					
103	Amortization of Cap Bond Premium	G					
104	AFUDC	G					
105	Interest Earned on BPA Fund						
106	Other Expenses Sub-Total						
107	Total Expenses						
108							
109	Revenue Credits:						
110	Firm Surplus Credit (Excess HWM)	F					
111	Hungry Horse Reservation Credit	F					
112	WNP3 Revenue Credit	G					
113	Ancillary Products	F					
114	4(h)(10)(C)	F					
115	Colville and Spokane Settlements	F					
116	Downstream Benefits and Storage	F					
117	Energy Efficiency Revenues & Miscellaneous	G					
118	Green Tags	G					
119	Tier 2 Overhead Credit	F					
120	Tier 2 Risk Adder	F					
121	Total Revenue Credits						
122							
123	Minimum Required Net Revenue Calculation:						
124	Principal Payment of Federal Debt for Power	G					
125	Irrigation Assistance	G					
126	Depreciation	G					
127	Amortization	G					
128	Capitalization Adjustment	G					
129	Bond Premium Amortization	G					

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	COSTS AND RATE ADJUSTMENTS	K e y	Year 1 Forecast	Audited Actual Data	Year 2 Forecast	Audited Actual Data	Total Rate Period
130	Principal Payment of Federal Debt exceeding Non Cash Expenses	G					
131	Minimum Required Net Revenues Sub-Total						
132							
133	Rate Design Adjustments:						
134	Low Density Discount	--					
135	Irrigation Rate Mitigation Costs	--					
136	7(c)(2) Delta Allocation	--					
137	7(b)(3) Protection Amount Allocation	--					
138	7(b)(2) Industrial Adjustment	--					
139	Conservation Rate Credit	--					
140	Rate Design Adjustments Sub-Total						
141	Total Composite Cost						
142							
143	SLICE COST:						
144	Slice Implementation	G					
145	Adjustments						
146	minus Reinvested Renewable Revenues	--					
147	minus Tmn for Non-System-Obligations	--					
148	minus TMS Expenses	--					
149	minus Sales & Support Exclusion	--					
150	minus Bad Debt Exclusion	--					
151	minus TMS Depreciation	--					
152	subtotal Slice Adjustments						
153	Total Slice Cost						
154							
155	NON-SLICE COST:						
156	Other Power Purchases (Balancing)	F					
157	Other Power Purchases (Capacity)	F					
158	Hedging/Mitigation	F					
159	Third Party Trans & Ancillary Services	G					
160	Interest Earned on BPA Fund	G					
161	Planned Net Revenues for Risk	G					
162	FPS (Surplus)/Shortfall	--					
163	subtotal Slice Adjustments	--					
164	minus Revenue Credits						
165	Reserve Services	G					
166	Secondary Revenue	F					
167	Demand Revenue	--					
168	Load Shaping Revenue	--					
169	Load Following Revenue	--					
170	Resource Support Services Revenue	--					
171	Total Non-Slice Cost						
172							
173	TIER 2 COST (calculated for each T2 rate):						
174	Acquisition Costs	F					
175	BPA Overhead Costs	F					

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	COSTS AND RATE ADJUSTMENTS	K e y	Year 1 Forecast	Audited Actual Data	Year 2 Forecast	Audited Actual Data	Total Rate Period
176	RSS Adder	F					
177							
180	Total Tier 2 Cost						
181							
182	Slice True-Up Adjustment Calculation						
183	Composite+Slice Costs						
184	Composite+Slice Actual Amounts						
185	True Up Amount (diff. between actuals and forecast)						
186	Amount Billed (22.6 percent)						
187	True Up Adjustment						
188							
189							
190	Customer Charge Rate Calculations		Composite	Slice	Non-Slice		
191	Annual Revenue Requirement (2-year total)						
192	Monthly Revenue Requirement (2-year total divided by 24 months)						
193	Sum of Billing Determinants		100.0	22.6	77.4		
194	One Percent of Monthly Requirement (Rate Per Percent = Monthly Revenue Requirement divided by 100)						
195							
196	Sum of FBS Costs	F					
197	Sum of Exchange Costs	X					
198	Sum of New Resource Costs	N					
199	Sum of Conservation Costs	C					
200	Sum of 7(g) Costs	G					

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Cost Allocation Key:

- F Federal Base System
- X Exchange Resources
- N New Resources
- C Conservation
- G 7(g) Costs