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TESTIMONY of

NITA M. BURBANK, HARRY W. CLARK, DANIEL H. FISHER,
GREGORY C. GUSTAFSON, TIMOTHY C. ROBERTS, PETER B. STIFFLER,
and EMILY G. TRAETOW

Witnesses for Bonneville Power Administration

**SUBJECTS: UNAUTHORIZED INCREASE CHARGES; LOW DENSITY DISCOUNT;
IRRIGATION RATE DISCOUNT; UNANTICIPATED LOAD SERVICE**

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7 **SUBJECTS: UNAUTHORIZED INCREASE CHARGES; LOW DENSITY DISCOUNT;**
8 **IRRIGATION RATE DISCOUNT; UNANTICIPATED LOAD SERVICE**

9 **Section 1: Introduction and Purpose of Testimony**

10 *Q. Please state your names and qualifications.*

11 A. My name is Nita M. Burbank, and my qualifications are contained in BP-12-Q-BPA-09.

12 A. My name is Harry W. Clark, and my qualifications are contained in BP-12-Q-BPA-13.

13 A. My name is Daniel H. Fisher, and my qualifications are contained in BP-12-Q-BPA-22.

14 A. My name is Gregory C. Gustafson, and my qualifications are contained in
15 BP-12-Q-BPA-28.

16 A. My name is Timothy C. Roberts, and my qualifications are contained in
17 BP-12-Q-BPA-64.

18 A. My name is Peter B. Stiffler, and my qualifications are contained in BP-12-Q-BPA-72.

19 A. My name is Emily G. Traetow, and my qualifications are contained in BP-12-Q-BPA-75.

20 *Q. What is the purpose of your testimony?*

21 A. The purpose of our testimony is to sponsor the proposed changes to BPA's Unauthorized
22 Increase (UAI) Charges, Low Density Discount (LDD), Irrigation Rate Discount (IRD),
23 and Unanticipated Load Service (ULS). These provisions in the General Rate Schedule
24 Provisions (GRSPs), BP-12-E-BPA-09, section II, also are explained in the Power Rates
25 Study, BP-12-E-BPA-01, section 6.
26

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1 **Section 2: Unauthorized Increase Charges**

2 **Section 2.1: Need for Adjustments to the Unauthorized Increase Charges**

3 *Q. What is the intent of the UAI Charge?*

4 A. The UAI Charge is a penalty charge intended to deter customers from taking more power
5 from BPA than they are contractually entitled to take. UAI charges apply when
6 customers have contracted for power but take amounts in excess of amounts to which
7 they are contractually entitled. BPA has a substantial economic and reliability interest in
8 ensuring that customers are motivated at all times to ensure the availability and delivery
9 of their non-BPA resource amounts. UAI Charges are avoidable if customers arrange for
10 appropriate reserve and firming products or services. Only if UAI Charges are not an
11 economic alternative to such reserve and firming arrangements can BPA be assured that
12 Federal Columbia River Power System (FCRPS) reliability will not be jeopardized.

13 *Q. Please describe the current UAI charges for energy and demand.*

14 A. The current (WP-10) UAI charge for energy is the highest of (1) 100 mills/kWh; (2) the
15 highest diurnal Dow Jones Mid-C index price for firm power for the month; or (3) the
16 highest hourly California Independent System Operator (CAISO) Imbalance Energy price
17 for the month at Malin. The current UAI Charge for demand is the greater of (1) three
18 times BPA's applicable monthly demand charge, or (2) the sum of hourly CAISO
19 Spinning Reserve Capacity prices for all Heavy Load Hours in the month, at the CAISO
20 Expanded region.

21 *Q. Why do you propose to modify the UAI Charges for energy and demand?*

22 A. As described above, the UAI Charges are penalty charges that apply to any customer
23 taking energy and/or demand in excess of its contractual entitlement. In October 2000
24 the UAI Charges were set at their current levels. The intent then was primarily to deter
25 customers from selling their non-Federal resources dedicated to load into the market
26 while at the same time exceeding their BPA contractual entitlements to Federal power to

1 meet their load. This is still a valid concern, and since October 2000 changes have
2 occurred in the market that make it necessary to adjust the UAI Charge. These changes
3 are explained in the following two sections.
4

5 **Section 2.2: Proposed Changes to the Unauthorized Increase Charge for Energy**

6 *Q. Please describe your proposal to revise the UAI Charge for energy.*

7 A. We propose that the amount of Measured Energy or Residential Exchange Program
8 contract load that exceeds the amount of energy the purchaser is contractually entitled to
9 take during a diurnal period shall be billed the greater of: (1) 150 mills/kWh; or (2) two
10 times the highest hourly Powerdex Mid-C Index price for firm power for the month.
11 GRSP II.V. This change is proposed for the following reasons.

12 First, the current minimum UAI Charge for energy of 100 mills/kWh was adopted
13 over 10 years ago. There have been significant changes in the wholesale electric energy
14 markets in the last 10 years, and we are concerned that in FY 2012 and beyond, this
15 charge may no longer serve as a deterrent. In recent years, the west coast energy market
16 has seen several occasions during which there has been considerable price volatility. It is
17 our view that in light of the volatility in the market, the current UAI energy rate may be
18 too low, particularly when there is a significant price disparity between markets, in
19 particular between California and the Pacific Northwest.

20 Second, we no longer believe that the highest hourly CAISO Imbalance Energy
21 price for the month at Malin is an appropriate price to use as a benchmark for the UAI
22 Charge. We believe that the Powerdex Mid-C hourly index is a better choice. When
23 initially proposed, the CAISO Imbalance Energy market was relatively straightforward
24 and simple. However, since BPA adopted it as a benchmark for the UAI Charge, the
25 CAISO market has implemented a nodal pricing structure that has added a significant
26 layer of complexity to the market. The change to the nodal pricing structure has resulted

1 in instances of high volatility within the CAISO nodal prices due to localized
2 transmission congestion and other anomalies in the California system, and in a few
3 instances has resulted in extraordinarily high Imbalance Energy prices. By way of an
4 example, in December 2009 there was a price of \$883.93/MWh in one hour, which was
5 significantly higher than any other price during the month. CAISO's move to nodal
6 prices has injected a level of locational volatility that is inconsistent with our views as the
7 underlying purpose of the UAI Charge. The Powerdex Mid-C index is an hourly market
8 price index for power in the Northwest. The hourly Mid-C market is one that BPA and
9 other Northwest parties regularly trade in and should provide a more stable and relevant
10 benchmark for the UAI Charge.

11 *Q. Are you proposing additional changes for the UAI Charge for energy?*

12 A. We are also proposing to eliminate the use of the Dow Jones Mid-C index because we
13 believe it does not serve as an appropriate benchmark. The Dow Jones Mid-C index is a
14 daily diurnal price index. We believe that daily diurnal (Heavy Load Hour (HLH) and
15 Light Load Hour (LLH)) prices from the Dow Jones Mid-C index are not a particularly
16 useful or effective tool for identifying the high hourly prices during a particular month.

17 Finally, we are proposing to add a multiplier to the Powerdex Mid-C index prices.
18 We believe that a multiplier of two times the highest hourly Powerdex Mid-C index price
19 is necessary to increase the likelihood that BPA's customers will take the actions
20 necessary to ensure that they will rarely, if ever, incur the UAI Charge. We believe that
21 this market-based multiplier will reduce, and possibly eliminate, any economic advantage
22 for a customer to engage in market price arbitrage activities.

23 *Q. Should the UAI charges for energy reflect the market value at the time of the*
24 *Unauthorized Increase?*

25 A. No. We believe that linking the charge to the market prices at the time of an
26 Unauthorized Increase would potentially undermine the deterrent nature of the charge.

1 Additionally, it could result in a lost opportunity cost for BPA. There are cost impacts to
2 BPA, even when BPA is not active in the market, when BPA provides service for an
3 Unauthorized Increase. For example, cost impacts occur when BPA uses water to
4 generate additional power to serve unauthorized increases during a period of low market
5 prices. Such generation may result in BPA losing the opportunity to generate power at a
6 later time when market prices are higher. This is a real cost to BPA and its customers.
7

8 **Section 2.3: Proposed Changes to the Unauthorized Increase Charge for Demand**

9 *Q. Is the Demand UAI charge applied in addition to the Energy UAI charge?*

10 A. Generally, yes. The UAI demand charge is the penalty for using more capacity than a
11 customer is contractually entitled to take. Generally, any power delivered in an hour that
12 is in excess of the customer's demand entitlement would also be in excess of the
13 customer's contractual energy entitlement. However, under certain contractual
14 agreements, such as an energy shaping contract, it is possible that only a UAI demand
15 charge would apply if the measured energy did not exceed the contractual entitlement.

16 *Q. Please describe your proposal to revise the UAI charge for demand.*

17 A. We propose that the amount of Measured Demand during a HLH billing hour that
18 exceeds the amount of demand the purchaser is contractually entitled to take during that
19 hour shall be billed at 1.25 times the applicable monthly demand rate.

20 *Q. Why are you proposing to make these changes to the UAI charge for demand?*

21 A. Currently, the UAI demand charge is the greater of (1) three times BPA's applicable
22 monthly demand charge, or (2) the sum of hourly CAISO Spinning Reserve Capacity
23 prices for all Heavy Load Hours in the month, at the CAISO Expanded region.
24 Beginning in October 2011, the level of the PF demand rates is proposed to increase
25 dramatically from the current levels. Given the proposed increase in demand rates, we
26 believe that maintaining the UAI for demand at three times the proposed demand rate

1 would be excessive. Our proposal to use 125 percent of the applicable monthly demand
2 rate was chosen because it roughly maintains the relationship between the current level of
3 the UAI demand charge and the one we are proposing.

4 We are also proposing to drop the CAISO Spinning Reserve Capacity as a
5 benchmark for the charge due to changes in the CAISO market that make its use less
6 applicable than it once was, as explained in section 2.2. Using 125 percent of the demand
7 charge is also consistent with BPA's energy imbalance rate, which charges 125 percent of
8 BPA's highest incremental cost for imbalances within deviation band 3, adding further
9 support for the level of the multiplier.

10 *Q. If a customer places an unauthorized increase more than once during a billing month,*
11 *are you proposing to bill customers for each occurrence at the UAI charge for demand?*

12 A. No, only the single highest demand overrun during the HLH in a billing month would be
13 billed at that month's effective UAI charge for demand.

14 *Q. Does the UAI Demand Charge apply to the Slice product?*

15 A. Yes. In parallel treatment to the Load Following product and the Block product, a UAI
16 Demand Charge would be assessed to the Slice portion of the Slice/Block product if there
17 is an unauthorized increase in energy during the Slice customer's highest hourly energy
18 delivery during the HLH of a month.

19
20 **Section 3: Low Density Discount**

21 *Q. What is the LDD?*

22 A. In order to avoid adverse impacts on retail rates of BPA's customers with low system
23 densities, BPA applies a discount, to the extent appropriate, to BPA's rates for such
24 customers. The LDD shall be applied to only those charges listed in GRSP II.J.
25

1 **Section 3.1: Change in the Definition of “Consumers” in the Consumers per Mile (C/M)**
2 **Ratio**

3 *Q. What is the current definition of consumers?*

4 A. As currently defined in the WP-10 General Rate Schedule Provisions, for the LDD C/M
5 calculation “consumers” means the maximum number of consumers within the
6 customer’s distribution system in any one month during the calendar year. This includes
7 every billed consumer, regardless of usage. Separately billed services for water heating
8 and security lights are not counted as an additional billed consumer.

9 *Q. What is the definition of consumers you are proposing?*

10 A. TRM section 10.2.1 states that “BPA will propose that effective October 1, 2011, the
11 definition for Consumers in the LDD section of the FY 2012 GRSPs will be as follows:”

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

19 Security or safety lights, billed to a residential customer, will not be counted
20 as an additional consumer.

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

23 A residence and commercial establishment on the same premises, receiving
24 service through the same meter and being billed under the same rate schedule,
25 would be classified as one consumer based on the rate schedule. If the same
26 rate schedule applies to both the residential and the commercial class, the
27 consumer should be classified according to the principle use.

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

30 TRM, TRM-12S-A-03, at 91. Thus, we are advancing this proposal. The definition we
31 are proposing is the same as the definition of consumers used by the United States

1 Department of Agriculture's Rural Utilities Service. U.S. Department of Agriculture,
2 Rural Utilities Service, Bulletin 1717B-2, at 47-48.

3 *Q. Why is this change to the definition of consumers being proposed?*

4 A. Because the density of a customer's system is the basis for the LDD, a uniform and sound
5 basis for calculating density is essential. This change would ensure that the LDD is
6 provided to only customers with low system densities; it promotes equity among such
7 customers; and it supports efficient and effective administration of the LDD.

8 The current LDD definition of "consumers" has been interpreted differently by
9 different customers. The current LDD reporting criteria and the resulting annual
10 customer reporting of what constitutes a "consumer" have caused confusion and
11 inconsistency in the determination of LDD benefits. Customers eligible for LDD benefits
12 have been reporting numbers of consumers differently based on, for example, the number
13 of meters, the number of consumers, or the number of members (for cooperatives).
14 These variations in data reporting can affect LDD eligibility and the discount level.

15 We believe the proposed change in the definition of consumers more accurately
16 reflects a utility's density; provides a uniform basis for calculating the C/M ratio; ensures
17 greater equity among customers; and provides eligible customers a clear, understandable,
18 and verifiable reporting standard. Additionally, the proposed change would create
19 administrative efficiencies in BPA's implementation of the LDD.

20
21 **Section 3.2: Modification in the Calculation of LDD Under Tiered Rates**

22 *Q. Does the LDD need to be modified to accommodate tiered rates?*

23 A. Yes. We believe the level of a customer's LDD benefits should not be affected by the
24 customer's choice between purchasing BPA power sold at a Tier 2 rate(s) or applying
25 power from non-Federal resources. To accomplish this goal and still provide an

1 equivalent amount of LDD benefit as would have been provided in the absence of tiered
2 rates, we are proposing certain modifications to the LDD.

3 *Q. Please describe your proposed modifications.*

4 A. Instead of continuing the current practice of basing the discount on PF purchases, we
5 propose to adhere to the TRM by basing the discount on a customer's Total Retail Load
6 minus any Existing Resources and new large single loads (NLSLs) (Adjusted Total Retail
7 Load). TRM, section 10.2.2, at 91. The discount amounts listed in the LDD percentage
8 table in the GRSPs (Table D, GRSP II.J.3.) would serve as the basis for an annual
9 adjustment, if warranted, to reflect an increase or decrease in a customer's Total Retail
10 Load.

11 The following example was provided in the TRM at page 92. Assume a customer
12 has an LDD of 5 percent and has a Rate Period High Water Mark (RHWM) of 10 aMW.
13 If that customer's Adjusted Total Retail Load increases to 11 aMW (a 10 percent increase
14 over its RHWM), then the customer would have its LDD percentage adjusted upward to
15 5.5 percent (a corresponding 10 percent increase). For affected customers, the 7 percent
16 cap would be adjusted upward by the same amount as the LDD percentage. All other
17 remaining existing criteria to qualify for the LDD would be retained.

18 *Q. Are you proposing any modifications to the LDD that are not currently provided for in*
19 *the TRM?*

20 A. Yes. In accordance with a proposed change to the TRM that is part of this Initial
21 Proposal, when a customer's Adjusted Total Retail Load drops below its RHWM, its
22 LDD percentage will not be adjusted downward. Instead, the customer will be able to
23 retain its base LDD percentage. This allows a customer to retain the LDD benefits it
24 currently receives. For more information regarding the 2010 TRM change process, see
25 the testimony of Bliven, *et al.*, BP-12-E-BPA-11, section 8.2.

1 Q. *How would these modifications be applied?*

2 A. The modifications resulting in the updated LDD percentage would be applied to all firm
3 power purchased at PF Public Tier 1 rates (Composite customer charge, Non-Slice
4 customer charge, Load Shaping charge, and Demand charge) of the Load Following
5 customer receiving the LDD.

6 Q. *Would the LDD apply to the amount of customer load served with power purchased at
7 Tier 2 rates?*

8 A. No. In order to not bias the choice between BPA service and self-supply, the LDD would
9 not be applied to the amount of customer load served with power purchased at Tier 2
10 rates.

11

12 **Section 3.3: Calculation of the LDD for Slice Customers**

13 Q. *How are you proposing to calculate LDD benefits for qualifying Slice customers?*

14 A. Adhering to TRM section 10.2.3, we propose to combine the LDD benefits for a
15 Slice/Block customer into a single credit. BPA would use the customer's previous fiscal
16 year's metered PF-eligible load, minus any Existing Resources, NLSLs, and above-
17 RHWM load, to estimate PF Tier 1 billing determinants as though the customer was a
18 Load Following customer. Then BPA would multiply these estimated PF billing
19 determinants by the appropriate Tier 1 rates. The sum of these products then would be
20 multiplied by the Total Retail Load-adjusted LDD percentage to derive the annual LDD
21 benefit. This benefit would be divided into 12 equal amounts to be applied to the
22 customer's monthly bill.

23 Q. *Why are you proposing this method?*

24 A. The previous method for calculating the LDD to apply to the Slice portion of a
25 customer's PF purchase was complicated and time-consuming. At the suggestion of

1 some customers, in the interest of administrative efficiency, and to adhere to the TRM,
2 we are proposing this change.

3
4 **Section 3.4: Calculation of the LDD for a Joint Operating Entity**

5 *Q. How are you proposing to calculate LDD benefits for a Joint Operating Entity (JOE)?*

6 A. The LDD benefit to a JOE will be a single discount equivalent to the sum of LDD
7 benefits for all eligible individual members of the JOE. BPA will determine the LDD for
8 the JOE based on each such individual utility member's LDD amount dollar benefit.
9 TRM, section 10.2. We propose that the monthly LDD benefit for demand for a JOE be
10 calculated as follows: (1) each individual JOE member's demand billing determinant
11 would be calculated as if such member were not a member of a JOE; (2) the calculated
12 demand billing determinants for all individual JOE members would be summed; (3) the
13 members' calculated demand billing determinants would be scaled (up or down) such that
14 the sum of all members' calculated demand billing determinants equals the JOE's
15 demand billing determinant; (4) the demand LDD benefit attributable to each JOE
16 member would be equal to the member's scaled demand billing determinant multiplied
17 by the member's applicable LDD percent and the applicable monthly demand charge; and
18 (5) each JOE member's demand LDD benefit is summed to yield the demand LDD
19 benefit to the JOE. If a JOE member does not qualify for an LDD, then its applicable
20 LDD percent would equal zero. The individual members' demand billing determinants
21 calculation will be used only for the LDD calculation.

22 *Q. Why are you proposing this method?*

23 A. The demand billing determinant for a JOE uses the JOE's coincidental system peak rather
24 than of the sum of all members' customer system peaks. However, the LDD percentage
25 is applicable to each individual member customer's system peak. By making the

1 aforementioned adjustment to the JOE’s demand LDD benefit, the members of the JOE
2 will receive benefits comparable to LDD customers who are not members of a JOE.

3
4 **Section 4: Irrigation Rate Discount**

5 **Section 4.1: Description of Irrigation Rate Discount**

6 *Q. What is the Irrigation Rate Discount?*

7 A. The Irrigation Rate Discount is a discount to BPA’s wholesale power rate for eligible
8 irrigation load served by a customer. Eligible customers would receive a discount on the
9 lesser of the amount of energy purchased at PF Public Tier 1 rates or the irrigation load
10 amounts listed in the customer’s CHWM Contract. This discount is available to eligible
11 loads during May, June, July, August, and September during the FY 2012-2013 rate
12 period.

13 *Q. Why would BPA offer an Irrigation Rate Discount?*

14 A. Reclamation of lands through irrigation for the agricultural industry is one of the primary
15 historical reasons for constructing Federal dams in the Pacific Northwest, along
16 with flood control, navigation, recreation, and power production. Historically, BPA has
17 provided rate discounts to customers that serve agricultural loads. The discounts have
18 provided direct benefits to farmers, and because agriculture is the dominant—if not the
19 sole—economic driver in many rural Northwest communities, indirect benefits to
20 supporting industries such as irrigation equipment sales, fertilizer companies, food
21 processors, and trucking.

22 *Q. Besides the historical precedent, are there other reasons for BPA to offer an Irrigation
23 Rate Discount?*

24 A. Yes. Irrigation and associated energy use are most intensive over a 5-6 month period in
25 the Pacific Northwest. As a result of this seasonal increase in energy use, customers who
26 experience it have less flexibility to respond to price signals than customers that do not

1 have seasonal increases in energy usage. The ability to respond to price signals is an
2 inherent quality of the new tiered rate design, potentially creating a rate impact to
3 customers that cannot respond to the price signals. In addition, under Subscription
4 contracts, BPA's customers with qualified irrigation load have an Irrigation Rate
5 Mitigation Product. Because those contracts will expire at the end of FY 2011, without
6 the Irrigation Rate Discount the rate impact to those customers would be exacerbated.
7 BPA and other PF customers recognized this potential rate impact and agreed that BPA
8 would propose the Irrigation Rate Discount in each rate proceeding through the term of
9 the Contract High Water Mark (CHWM) contracts. See Long-Term Regional Dialogue
10 Final Policy at 24. It is worthy to note that the Irrigation Rate Discount reflects a cost
11 shift among only the PF customer class, so when other PF customers agreed that BPA
12 should propose the Irrigation Rate Discount, they understood the rate implications. BPA
13 is also supportive of this discount because it supports BPA's statutory objective of
14 encouraging the widest possible diversified use of electric energy while avoiding adverse
15 rate impacts on any one consumer class. Long-Term Regional Dialogue Policy at 24-25;
16 Long-Term Regional Dialogue Policy Record of Decision (ROD) at 128.

17 *Q. How do you propose to determine the eligible load to which the Irrigation Rate Discount*
18 *would apply?*

19 *A.* All eligible customers' CHWM contracts include a provision for the Irrigation Rate
20 Discount rate adjustment. The contractual provision states that the Irrigation Rate
21 Discount will be applied to the lesser of the amount of energy a customer purchases at
22 Tier 1 rates in the applicable month or the eligible irrigation load amounts listed in
23 Exhibit D of the customer's CHWM contract. For a Load Following or Block purchaser,
24 the energy purchased at Tier 1 rates will be equal to its Actual Monthly/Diurnal Tier 1
25 Load used to calculate its Load Shaping billing determinant. For a Slice/Block
26 purchaser, the energy purchased at Tier 1 rates will be equal to the sum of (1) its monthly

1 Block purchase plus (2) its Slice Percentage multiplied by the monthly Tier 1 System
2 Capability.

3
4 **Section 4.2: Calculation of the Irrigation Rate Discount**

5 *Q. Please describe the proposed methodology for calculation of the Irrigation Rate*
6 *Discount.*

7 A. The proposed Irrigation Rate Discount is 12.09 mills per kilowatthour. This equals the
8 average cost of Tier 1 System Capability (expressed in mills/kWh) multiplied by the
9 historical percentage discount that irrigation rate mitigation customers received in
10 FY 2009 through the then-effective Irrigation Rate Mitigation Product. This value will
11 be changed in the Final Proposal to reflect the TRM Change Process.

12 The IRD calculation in the TRM Change Process is equal to the average Tier 1
13 energy rate for IRD customers multiplied by the IRMP percentage. We propose that the
14 average Tier 1 Energy Rate for eligible irrigation rate mitigation customers would be
15 based on the forecast revenue that irrigation loads would pay through the Composite
16 Customer Charge, the Non-Slice Customer Charge, and the Load Shaping Charge,
17 adjusted for any applicable Low Density Discount, divided by the sum of the irrigation
18 loads. Such charges would be calculated using an Irrigation Rate Discount TOCA
19 (IRD TOCA) derived by dividing the sum of the irrigation loads amounts in the CHWM
20 contracts (expressed in average megawatts) by the sum of all RHWMs. This IRD TOCA
21 would be applied consistent with TRM section 5. Additionally, because the irrigation
22 load amounts in each customer's CHWM contract are listed in monthly load amounts, the
23 average Tier 1 energy rate for eligible irrigation rate mitigation customers would be
24 calculated assuming a 60/40 HLH/LLH split.

25 BPA's proposed calculation of the average Tier 1 energy rate described above
26 was voted on in the TRM Change Process that occurred in summer 2010. However, the

1 proposed calculation has not yet been modeled in RAM2012. We expect to have the
2 updated calculation modeled in RAM2012 for the Final Proposal. For more information
3 regarding the 2010 TRM Change Process, see the testimony of Bliven, *et al.*,
4 BP-12-E-BPA-11, section 8.2.

5 *Q. Please describe the basis for adopting a 60/40 HLH/LLH split in the calculation of the*
6 *Tier 1 energy rate used for the Irrigation Rate Discount.*

7 *A.* The eligible irrigation amounts in the CHWM contracts are not split into diurnal amounts.
8 However, diurnal irrigation amounts are needed to perform the calculation of the average
9 Tier 1 energy rate used for the Irrigation Rate Discount, as described in the Power Rates
10 Study, BP-12-E-BPA-01, section 3.1.11. Specifically, the diurnal amounts are needed to
11 calculate Load Shaping charges. Staff proposes to use a 60/40 HLH/LLH split in the
12 calculation of the Tier 1 energy rate for the Irrigation Rate Discount. Currently BPA uses
13 a 63/37 HLH/LLH split in its Irrigation Rate Mitigation Program calculations to represent
14 the ratio of irrigation to non-irrigation loads. However, this split no longer accurately
15 represents the actual ratio. During FY 2006-2009, the average annual maximum
16 HLH/LLH split during irrigation months (May-September) among all IRMP eligible
17 customers was 62/38, and the minimum was 52/48. Staff is proposing the 60/40 split
18 because it is a more accurate representation of actual irrigation loads. Table 3.23 in the
19 Power Rates Study Documentation, BP-12-E-BPA-01A, illustrates the analysis described
20 above.

21 *Q. Are there any other updates to be made to IRD in the Final Proposal?*

22 *A.* In addition to updating the calculation of IRD to reflect the TRM Change Process, we
23 will be updating the FY 2009 IRMP percentage. The current percentage being used is
24 based on an earlier calculation of the percentage and does not reflect changes made to the
25 FY 2009 IRMP amounts.

1 **Section 4.3: Irrigation Mitigation Benefits True-Up**

2 *Q. Please describe the true-up process you are proposing.*

3 A. We propose to apply the Irrigation Rate Discount to the lesser of a customer's forecast
4 Tier 1 energy purchase or its eligible irrigation load amounts in the customer's CHWM
5 contract. Thus, it is possible for a customer to receive irrigation mitigation for irrigation
6 load that the customer does not serve in a particular season. Adhering to the TRM, we
7 propose that eligible irrigation mitigation customers would send their measured May
8 through September irrigation load amounts to BPA at the end of each irrigation season.
9 TRM at 95. If BPA determines that the measured irrigation load amounts were less than
10 the amounts used as the Irrigation Rate Discount billing determinant, then BPA will
11 calculate the excess Irrigation Rate Discount given, and the customer shall reimburse
12 such amount to BPA.

13
14 **Section 5: Unanticipated Load Service**

15 *Q. What is unanticipated load?*

16 A. Unanticipated load is any request by a customer for firm power requirements service
17 received by BPA after February 1, 2011, that results in an increase in the customer's load
18 placed on BPA during the FY 2012-2013 rate period that was not requested and thus not
19 forecast when setting the rates for that rate period.

20 *Q. Why is the Targeted Adjustment Charge (TAC) not included in the Initial Proposal?*

21 A. The current TAC in the 2010 rate schedules is a charge applicable to requests for firm
22 requirements service that result in an unanticipated increase in certain BPA loads that
23 were projected to be served within the rate period. The tiered rate design and CHWM
24 contracts have changed BPA's PF rate design and how rates applicable to unanticipated
25 load service will recover cost. These changes have eliminated certain needs for the TAC.
26 For existing customers with a CHWM contract, the new rate design includes a Load

1 Shaping charge that applies a forecast market price rate to Load Following customers'
2 load fluctuations. Because the Load Shaping charge is based on a market price forecast,
3 it should better reflect the costs BPA would incur to serve the new or unanticipated load.
4 Because of this, the rate design has greatly increased the chance that BPA will recover its
5 added costs associated with the load variation for load growth (e.g., individual new
6 businesses and homes) and with forecast error. As a result, the Load Shaping charge
7 should adequately replace the TAC for these minor changes in planned load.

8 *Q. Does the Load Shaping charge adequately compensate BPA for larger increases in load?*

9 A. No. More significant amounts of unanticipated load, such as an annexation during a rate
10 period, warrant an additional check to verify that the added obligation is properly
11 addressed by the posted rates. Such unanticipated load can result in considerably larger
12 load obligations for BPA. We believe that a TAC-like rate structure should apply to
13 these circumstances. The TAC altered the posted rates; however, BPA's proposed tiered
14 rate structure makes it difficult to adjust the posted rates and achieve the intended result.
15 As a result, we are proposing Unanticipated Load Service.

16 *Q. What is the process for securing Unanticipated Load Service?*

17 A. If the customer requests service after February 1, 2011, BPA will update the customer's
18 Exhibit D of its CHWM contract (for public customers) or New Resource Firm Power
19 (NR) Block contract (for investor-owned utilities) to reflect BPA's agreement to serve the
20 unanticipated load amount and to set the duration of service of such load, not to exceed
21 the number of months remaining in the rate period.

22 *Q. What is the significance of February 1, 2011?*

23 A. A request prior to February 1, 2011, will allow BPA sufficient time to include necessary
24 load amounts in the final load forecasts for the FY 2012-2013 final rates. After
25 February 1, 2011, any load a customer asks BPA to serve that is not included in BPA's
26 Final Proposal Power Loads and Resources Study will be Unanticipated Load, as defined

1 in GRSPs section III. Previously BPA applied a TAC to any amount of load for which
2 BPA received notification too late to be reflected in the Initial Proposal. WP-10-A-02,
3 Appendix B, section II.P. We believe a notification received by February 1, 2011, before
4 the load forecasts are prepared for the Final Proposal, is sufficient planning notification.

5 *Q. What are the sources of unanticipated load BPA will be serving?*

6 A. The only sources of unanticipated load are load service for New Publics, load that is
7 added or annexed from an investor-owned utility by a public, a new large single load,
8 investor-owned utility load, and Above-RHWM load that is forecast to be served by a
9 customer's Non-Federal Specified Resource that is delayed in coming on-line.

10 GRSP II.U.

11 *Q. If a Load Following customer exceeds its forecast load, is that excess considered*
12 *unanticipated load?*

13 A. No. Fluctuations in the load of Load Following customers caused by weather variations
14 or load growth will not be considered unanticipated load, even if the load growth was not
15 anticipated. The Load Shaping rate is designed for just such a load, as specified in
16 section 3.1.6.2 of the Power Rates Study.

17 *Q. Does the Slice/Block contract allow for service to unanticipated load?*

18 A. No.

19 *Q. What is Unanticipated Load Service?*

20 A. Unanticipated Load Service defines the expected types of unanticipated load BPA might
21 serve and the rates that will be applied when unanticipated load is placed on BPA.

22 Unanticipated Load Service rates are comprised of both energy rates and demand rates.

23 GRSP II.U.

1 *Q. The TAC included language stating that if a public agency annexed load from an IOU*
2 *that the IOU may realize a reduction in benefits; is this still the case?*

3 A. No. This language is not necessary under the REP Settlement; however, if the Settlement
4 is not adopted, this language may need to be added and applied to the Unanticipated Load
5 Service.

6 *Q. Please describe the proposed rates for unanticipated load.*

7 A. Unanticipated Load rates are proposed for the PF-12, NR-12, and FPS-12 rate schedules.
8 The Priority Firm Unanticipated Load Rate applies to service for New Publics and for a
9 COU that adds or annexes load from an IOU. The NR Unanticipated Load Rate applies
10 to service to New Large Single Loads and to any IOUs that request load service. The
11 FPS Unanticipated Load Rate applies to any COU customer that requests load service
12 due to a delay in its non-Federal specified resource coming on-line. These rates can be
13 found in GRSP II.U, sections 2, 3, and 4. Each of the rates includes energy and demand
14 charges.

15 *Q. Please describe the proposed energy rates.*

16 A. For each rate schedule, the charge for energy will be the greater of the applicable posted
17 rate or the applicable diurnal period forecast market price for purchased power plus any
18 additional costs incurred in purchasing power from other entities. The posted ULS
19 energy rates for PF and FPS (the Resource Replacement rate), are set at the same level as
20 the PF-12 Load Shaping rates. The posted ULS energy rates for NR are set at the same
21 level as the NR-12 energy rates (NR-12 rate schedule, section 2.1.1).

22 *Q. When will BPA calculate the applicable energy rates for each request for unanticipated*
23 *load service?*

24 A. BPA will calculate the applicable rates at the time a customer makes its request for power
25 service by written notification to BPA, with finalization of the rates occurring prior to
26 BPA and the customer signing a final contract to serve unanticipated load.

1 Q. *Why is the Load Shaping rate proposed to be the basis for the posted ULS energy rates*
2 *for PF and FPS?*

3 A. The Load Shaping rate is proposed for PF to ensure that customers receiving ULS will
4 not receive more favorable treatment than Load Following customers that experience
5 unexpected load changes within the same rate period. The Resource Replacement rate,
6 which is equal to the Load Shaping rate, is proposed for FPS also to ensure that
7 customers are not receiving more favorable treatment than Load Following customers
8 that experience unexpected load changes within the same rate period. This treatment is
9 consistent with unanticipated load served through the NR rate schedule. The
10 unanticipated NR load should not be served at a rate less than the posted NR rate.

11 Q. *Why are you proposing that the energy rate be the greater of the posted rate or the*
12 *forecast market price?*

13 A. We are proposing that the energy rate be the greater of the posted rate or the forecast
14 market price to ensure that BPA recovers its cost for purchased power, if any, and does
15 not absorb the cost of purchasing power to meet unanticipated load that is at a higher
16 price than the rate that would otherwise be applied to unanticipated load.

17 Q. *What market forecast will be used in lieu of the applicable posted rate?*

18 A. The market price to be used will be determined at the time of the request for
19 Unanticipated Load Service and will be either available forward market price indices at
20 that time or BPA's most current market price forecast.

21 Q. *What additional costs may BPA incur when purchasing power to serve Unanticipated*
22 *Loads?*

23 A. Besides the actual purchase power expense, we do not expect BPA to incur any
24 additional costs, but BPA would reserve the right to reflect any added costs in the
25 calculation of the market price for Unanticipated Load Service. Potential additional costs

1 could include transmission, ancillary service, and other charges BPA may incur in
2 purchasing power from other entities.

3 *Q. What demand rate applies to Unanticipated Load Service?*

4 A. The demand rate applied to Unanticipated Load Service is the same for each of the rate
5 schedules and is set equal to the PF Public Tier 1 demand rate.

6 *Q. Why do you propose to set the demand rate for Unanticipated Load Service equal to the
7 demand rate for anticipated load service?*

8 A. The PF Public demand rate is based on the long-run marginal cost of a capacity resource,
9 as described in the Power Rates Study, section 3.1.6.3. BPA could charge unanticipated
10 load a demand rate based on the short-run cost of capacity, because that would represent
11 the added cost BPA would experience due to load placed on BPA with short notice.
12 However, there currently is not a transparent or liquid market for short-term capacity in
13 the Pacific Northwest, which makes calculating a short-run cost difficult.

14 Furthermore, we believe the same logic applied to the Unanticipated Load Service
15 energy rates should apply to the Unanticipated Load Service demand rates. That is,
16 Unanticipated Load Service should not receive a more favorable rate treatment than
17 anticipated load. Provided there was access to a short-run cost of capacity, Staff would
18 apply the greater of the long-run cost of capacity or the short-run cost of capacity.
19 Because there is no market for short-run capacity in the Pacific Northwest at this time, we
20 propose to set the Unanticipated Load Service demand rate equal to the posted demand
21 rate in the applicable rate schedule.

22 *Q. How do you propose that the demand billing determinant for Unanticipated Load Service
23 charges be determined?*

24 A. Calculation of the demand billing determinant depends on which rate schedule is applied
25 to the unanticipated load. If unanticipated load is served under the PF rate schedule, the
26 demand billing determinant is proposed to be the lesser of (1) the maximum

1 unanticipated hourly load in a month during the HLH minus the average HLH load
2 amount for the month or (2) 20 percent of the highest unanticipated hourly load amount
3 in a month during the HLH. If unanticipated load is served under the NR or FPS rate
4 schedules, the demand billing determinant is proposed to be the maximum unanticipated
5 load in a month during HLH, in kilowatts, for the billing period minus the average of
6 unanticipated load in a month during HLH.

7 *Q. Why is the calculation of the Unanticipated Load Service demand billing determinant for*
8 *the PF rate schedule different from that under the NR and FPS rate schedules?*

9 A. Unlike the demand billing determinant in the NR and FPS rate schedules, the demand
10 billing determinant in the PF rate schedule includes a Contract Demand Quantity (CDQ).
11 The CDQ was created to ameliorate rate impacts caused by different load shapes when
12 BPA adopted a new rate design through the TRM. Because the NR rates are not tiered, a
13 similar amelioration is not needed for the NR. Likewise, the application of a CDQ-type
14 adjustment to the unanticipated load demand billing determinant under the FPS rates
15 should not apply.

16 *Q. In calculating the demand billing determinant for Unanticipated Load Service, why might*
17 *it be based on 20 percent of the highest hourly load?*

18 A. We are proposing 20 percent of the highest hourly load as one of the factors for
19 calculating the PF-12 Unanticipated Load Service demand determinant. This will result
20 in a demand charge similar to the demand charge faced by the customer's existing
21 (anticipated) load. We expect that most Load Following customers will have roughly
22 10 percent of their Tier 1 Customer System Peak (CSP) subject to the demand rate.
23 However, for some customers, the load subject to the demand charge could be twice that
24 before any further mitigation is introduced, as described in TRM-12S-A-03
25 section 5.3.5.2. Implementing a cap of 20 percent of the highest HLH take from BPA in
26 a month will reduce the likelihood that unanticipated load is exposed to a demand charge

1 that is less than one for an existing customer but at the same time does not create an
2 unnecessarily high demand charge.

3 *Q. Why do you propose that unanticipated load be charged at market energy and marginal*
4 *capacity rates?*

5 A. The charge is designed to allow BPA to recover the costs of purchased power, lost
6 opportunity, and other expenses associated with serving the unanticipated load. If BPA
7 does not have the ability to plan and account for loads through the ratesetting process, the
8 cost of meeting unanticipated variations in load obligation would be either increased
9 market purchases or forgone market sales. All else being equal, both increased market
10 purchases and forgone market sales that were not forecast when setting rates would have
11 the same net effect on BPA's recovery of the revenue requirement. Setting the rates
12 applied to service to unanticipated load at market matches the costs incurred by BPA,
13 allowing a more accurate pass-through of those costs, thereby enhancing revenue
14 requirement recovery.

15 *Q. Will the Unanticipated Load Service rates be lower if BPA has unused RHWM?*

16 A. No. The Unanticipated Load Service rates will not be lower if BPA has unused RHWM.
17 Unused RHWM will be used to reduce augmentation and/or increase firm power planned
18 as available for sale into the market during the rate period, both of which are forecast in
19 the ratesetting process and reflected in the posted rates. Once rates have been set, BPA's
20 need to provide power to serve unanticipated loads would result in BPA incurring
21 marginal or market costs, not embedded costs that are likely lower than market.

22 *Q. What about load fluctuations that occur below a customer's RHWM?*

23 A. Load fluctuations that occur below a customer's RHWM are subject to the Load Shaping
24 Charge True-Up. The Load Shaping Charge True-Up is calculated annually and ensures
25 that customers are not charged forecast market price rates for power eligible for purchase
26 at a Tier 1 rate. The Load Shaping Charge True-Up charges unanticipated load caused by

1 weather variations or load growth a Tier 1 rate and not a forecast market price rate. This
2 true-up was designed to alleviate concerns related to the accuracy of a customer's load
3 forecast. In addition, the Load Shaping Charge True-Up is intended to be a transitional
4 charge that will occur less frequently in the future as BPA's customer load growth
5 eliminates any Unused RHW. For these reasons, the Load Shaping True-Up does not
6 conflict with the logic for removing the TAC for these minor changes in planned load.

7 *Q. How does the Unanticipated Load Service in the NR rate schedule differ from the TAC?*

8 A. The TAC was applied as a levelized charge applied to the posted rates. With the
9 Unanticipated Load Service, instead of calculating a levelized charge that includes a
10 Net Present Value (NPV) calculation, it applies either the posted rate or the market rate
11 during the applicable month. This eliminates the need to include a NPV calculation.

12 *Q. Is the Unanticipated Load Service proposed to apply to load placed on BPA due to a loss
13 of a dedicated resource?*

14 A. No. As proposed, Unanticipated Load Service is not available for a customer's loss of a
15 dedicated resource. As described above, under the FPS rate schedule, it is available to
16 serve Above-RHW load that is forecast to be served by a customer's Non-Federal
17 Specified Resource that is delayed in coming on-line. For the replacement of a dedicated
18 resource BPA has made other services available: Resource Support Services; specifically,
19 Forced Outage Reserve Service. See Power Rates Study, section 3.5.6.1.

20 *Q. What happens to the unanticipated load in the next rate period, BP-14?*

21 A. In the next rate period, the load will no longer be treated as unanticipated load, provided
22 the load is identified prior to the notification deadline of the next rate period. If the load
23 is identified before the next notification deadline, BPA will include the load in planning
24 for the next rate period. The applicable Unanticipated Load Service will end, and power
25 service for the load will be at the applicable rate for the service, because the load would
26 be included in the ratesetting process for the next rate period.

1 Q. *What are the notification provisions for Unanticipated Load Service?*
2 A. GRSP II.U.1 specifies that notification for load amounts between 1 and 50 aMW must be
3 provided by customers at least three months in advance of service, and notification for
4 load amounts greater than 50 aMW must be provided by customers at least six months in
5 advance of service.

6 Q. *Why is there a three-month period for requests for service less than 50 aMW and six-*
7 *month notice for requests greater than 50 aMW?*

8 A. The notification periods are intended to allow for sufficient time for power sales contract
9 modifications or updates, calculating the applicable rate, and acquiring any power
10 needed. Once a customer has contracted for Unanticipated Load Service, such service
11 becomes take-or-pay. To discontinue Unanticipated Load Service the customer must
12 provide three months' notice to BPA.

13 Q. *Does this conclude your testimony?*

14 A. Yes.

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