

## Concept for a Conservation Rate Design For the Post-2011 BPA Conservation Program

### General Concept

- Propose and establish a Composite Customer Rate through a 7(i) rate making process that includes an assumed cost level for BPA acquisition of its share of its public utility customers' conservation target (PCCT), established by the Northwest Power and Conservation Council at the Council's defined \$/MWh cost effective conservation cost or other predetermined amount.
- PF power rate would be increased to recover the cost of attaining the Council's PCCT.
- A benchmark would be established for each individual customer for an amount of the PCCT, based on the size of a customer's Forecast Annual Tier 1 Load.
- BPA would include in monthly power bills a \$/MWh credit, based on each customer's PCCT amount.
- The \$/MWh credit would be largest for customers not using BPA's conservation services (equal to the Council's cost effective conservation cost) and smallest for customers fully using BPA's conservation services. Conservation credits at these levels would be limited to each customer's share of the Council's target. (Those participating in the BPA program pool will not have an individual target.)
- Allow for a conservation exchange between high savers and low savers: Additional conservation achieved by customers (above their share of the Council's target) would still receive a credit but the credit would be much smaller and equal to BPA's \$/MWh cost to offer conservation services (program implementation).
- Customers that achieve little or no conservation will also receive a credit for their share of the Council's target but the credit will be reduced by BPA's \$/MWh cost to offer conservation services (program implementation).
- Similar to BPA's current contract and Conservation Rate Credit (CRC), the GRSPs would need to establish the application of the post-2011 conservation rate design (CRD) and the power sales contract would need to establish the parties' obligations/duties under the CRD program.

*Differences from current Conservation Rate Credit*

- ✓ Credit based on \$/MWh of achieved conservation instead of \$/MWh credit on all energy purchased from BPA
- ✓ Amount of credit varies by customer – dependent on use of BPA's services
- ✓ Four rates instead of one (two credit rates and two exchange rates)
- ✓ EE must distinguish between infrastructure/non-acquisition costs (paid by all), acquisition costs (paid by all), and acquisition program costs (paid by select group)
- ✓ Each customer is allocated a share of the Council's target based on their Tier One Cost Allocator (TOCA), though those participating in the BPA program pool do not need to meet an individual target.

*Benefits of this approach*

1. A transparent purchase price for Conservation is established.
2. Method does not distinguish between Tier 1 and Tier 2 – all cost effective conservation is acquired. Instant benefit to the customer if customer is exposed to Tier 2. Instant benefit to the PNW if customer's load is below HWM but long-term benefit to the customer by delaying Tier 2 exposure.
3. Clear demonstration that BPA is purchasing the conservation from the customer (real-time \$ exchange for MWhs).
4. Benefits/costs of self-supply are transparent through the delta between BPA's two conservation credit rates.
5. Cost of not meeting target is transparent (equal to the published \$/MWh cost effective conservation rate).

*Drawbacks of this approach*

1. Complex relative to current CRC

Assumption - Identical customers except for conservation needs/potential

	A	B	C	D
1 Council Target Conservation (MWh)		125		
2 Conservation achieved through Infrastructure money (MWh)		25		
3 Council Target Less Conservation Achieved thru Infrastructure money (MWh)		100		
4 Cost-Effective Conservation Rate (\$/MWh)		\$ 225		
5				
6 Conservation Acquisition Cost (Line 3 x 4)		\$ 22,500		
7 Infrastructure Conservation Acquisition Cost (Line 2 x 4)		\$ 5,625		
8 Total Conservation Acquisition Costs (Line 6 + 7)		\$ 28,125		
9 BPA Conservation Program Costs (Non-Acquisition Infrastructure)		\$ 500		
10 Total Conservation Costs (Line 8 + 9)		\$ 28,625		
11				
12 Customer #1 TOCA - Self Supply		25%		
13 Customer #2 TOCA - Partial BPA Program Use		25%		
14 Customer #3 TOCA - Full Program Use		25%		
15 Customer #4 TOCA - Full Program Use with limited Cost-Effective Conservation		25%		
16 Sum of TOCAs		100%		
17				
18		Share (TOCA	Provided	Exchanged
19 Cust. #1 Utility Self-Supplied Conservation (MWh)		x Line 3)		
20 Cust. #2 BPA Partial Program Conservation (MWh)		25	30	5
21 Cust. #3 BPA Full Program Conservation (MWh)		25	30	5
22 Cust. #4 BPA Full Program Use with limited Cost-Effective Conservation (MWh)		25	10	-15
23				
24 Revenue Requirement less Conservation		\$ 1,000,000		
25 Conservation Acquisition Costs (Line 6)		\$ 22,500		
26 BPA Conservation Program Cost (Acquisition Full + Partial) - Included in Acquisition Costs on Line 6		\$ 1,000		
27 MWh supported by BPA's Conservation Program (Line 20C + Line 21C)		60	MWh	
28 BPA Total Conservation Costs (Infrastructure + Program costs) (Line 7 + 9)		\$ 6,125		
29 Total Revenue Requirement (Lines 24 + 25 + 28)		\$ 1,028,625		
30				
31 <b>POSTED RATES - updated through 7(i) for each Rate Period</b>				
32 Demand Revenue		\$ 40,000		
33 Load Shaping Revenue		\$ 15,000		
34 Composite Customer Rate (\$/%/mo)		\$ 811.35		
35 Conservation Acquisition Credit (Self-supply) (\$/MWh)		\$ (225.00)		
36 Conservation Acquisition Credit (Partial BPA Program) (\$/MWh) (Line 4 - [Line 26 / Line 27])		\$ (208.33)		
37 Conservation Acquisition Credit (Full BPA Program) (\$/MWh)		\$ -		
38 Conservation Exchange Rate (Self-supply) (\$/MWh) (Line 35 - 36)		\$ (16.67)		
39 Conservation Exchange Rate (Partial BPA Program) (\$/MWh)		\$ -		
40 Conservation Exchange Rate (Full BPA Program & No Conservation) (\$/MWh)		\$ 208.33		

	A	B	C	D
1	<b>Customer #1 - Self Supply</b>			
2	Composite Charge	\$ 243,406		
3	Demand	\$ 10,000		
4	Load Shaping	\$ 3,750		
5	Share of conservation (MWh)	25		
6	Conservation Acquisition Credit	\$ (5,625)		
7	Conservation Exchange	5		
8	Conservation Exchange Credit/Charge	\$ (83)		
9	Net Bill	\$ 251,448		
10	MWh conservation benefit	30		
11				
12	<b>Customer #2 - Partial Use of BPA Program</b>			
13	Composite Charge	\$ 243,406		
14	Demand	\$ 10,000		
15	Load Shaping	\$ 3,750		
16	Share of conservation (MWh)	25		
17	Conservation Acquisition Credit	\$ (5,208)		
18	Conservation Exchange	5		
19	Conservation Exchange Credit/Charge	\$ -		
20	Net Bill	\$ 251,948		
21	MWh conservation benefit	30		
22				
23	<b>Customer #3 - Full Use of BPA Program</b>			
24	Composite Charge	\$ 243,406		
25	Demand	\$ 10,000		
26	Load Shaping	\$ 3,750		
27	Share of conservation (MWh)	25		
28	Conservation Acquisition Credit	\$ -		
29	Conservation Exchange	5		
30	Conservation Exchange Credit/Charge	\$ 1,042		
31	Net Bill	\$ 258,198		
32	MWh conservation benefit	30		
33				
34	<b>Customer #4 - Full Use of BPA Program with limited Cost-Effective Conservation</b>			
35	Composite Charge	\$ 243,406		
36	Demand	\$ 10,000		
37	Load Shaping	\$ 3,750		
38	Share of conservation (MWh)	25		
39	Conservation Acquisition Credit	\$ -		
40	Conservation Exchange	-15		
41	Conservation Exchange Credit/Charge	\$ (3,125)		
42	Net Bill	\$ 254,031		
43	MWh conservation benefit	10		
44				
45	Total Revenue Collected by BPA (Line 9+20+31+42)	\$ 1,015,625		
46	Net Conservation Expense Paid to Customers (Line 6+8+17+19+28+30 +39+41)	\$ (13,000)		
47		\$ 1,028,625		
48	<b>Assumed Self-Incurred Cost</b>			
49	Customer #1 - Self Supply	\$ 6,750		
50	Customer #2 - Partial Use of BPA Program	\$ 6,250		
51	Customer #3 - Full Use of BPA Program	\$ -		
52	Customer #4 - Full Use of BPA Program with limited Cost-Effective Conservation	\$ -		
53				
54	<u>Total Cost</u>		<u>Self Benefit</u>	
55	Customer #1 - Self Supply	\$ 258,198	(MWh)	30
56	Customer #2 - Partial Use of BPA Program	\$ 258,198		30
57	Customer #3 - Full Use of BPA Program	\$ 258,198		30
58	Customer #4 - Full Use of BPA Program with limited Cost-Effective Conservation	\$ 254,031		10