

Conservation Billing Credits Public Meeting

October 24, 2014

BPA Rates Hearing Room
Portland, OR



Agenda

- Introduction
- Northwest Power Act Background
- Proposed Policy Change
- Contract Language
- Calculating Billing Credit
- Spending and Savings Minimums

Introduction

- Decision to Pursue Billing Credits.
 - After EE's Post-2011 Review, BPA determined it would plan to offer Conservation Billing Credits, responding to customer requests for a way to use their own funding sources for Energy Efficiency (EE) rather than BPA's Energy Efficiency Incentive (EEI) budget.
- Implementing Billing Credits.
 - Implementing Billing Credits would require a change to the Billing Credit Policy and Contract Language to establish terms and conditions.

Northwest Power Act Background

- 6(h)(1) “[1] If a customer so requests, [2] the Administrator shall grant billing credits to such customer [3] for conservation activities independently undertaken by such customer [4] which reduce the obligation of the Administrator that would otherwise have existed to acquire other resources.”
- 6(h)(3) “The rate impact on the Administrator’s other customers of granting the credit shall be equal to [1] the rate impact such customers would have experienced had the Administrator been [2] obligated to acquire resources in an amount equal to that actually saved by the activity for which the credit is granted.”

Notice Provisions

- 6(h)(6) Before granting any billing credit, BPA must:
 - Comply with the notice provisions of 6(c)
 - Publish in Federal Register
 - Notify the Council
 - Notify Governors
 - Notify customers
 - Include the cost of the billing credit in budget submittal to Congress

Proposed Policy Change

- The current 1993 Billing Credit Policy established the credit on a dollars per MWh saved for both conservation and generation. BPA is proposing to suspend the current policy and replace it with a conservation only approach that applies through the term of the Regional Dialogue contracts and mimics the financial impacts of how BPA implements conservation through the EEI.

Contract Language

The proposed contract language:

- establishes how the credit will be calculated
- will be accomplished through a special provision for participating customers in the Regional Dialogue contracts
- establishes that Implementation Manual rules will still apply to customers' EE activities.

Billing Credits customers would still have access to the Unassigned Account and could participate in bilateral transfers.

Calculating the Billing Credit

Step 1: Determining Cost

- We assume BPA will use third party financing for \$67 million of EEI investments in FY2016 at a current tax-exempt interest rate forecast of 5.20%. Of this total, \$0.5 million is associated with a utility that wants to self-manage its EEI activities.
- To determine what the \$0.5 million would cost BPA, we use an incremental revenue requirement approach which calculates interest on the net investment over its life. As a result, amortization expense is the same over the life of the investment but the interest expense declines over time. Since BPA typically uses “bullet bonds” for investments with interest-only payments over time followed by the principal payment at the very end, this approach recognizes the reductions to interest expense as the cash that is generated by the annual amortization expense of the EE investment is used to pay down other debts.

Example

		Billing Credit Customer		
		\$ 500	5.20%	Total
		A	B	C
		Amortization Expense	Interest	Expense
	(\$000s)			
1	Year 1	41.67	24.86	66.52
2	Year 2	41.67	22.66	64.33
3	Year 3	41.67	20.49	62.16
4	Year 4	41.67	18.33	59.99
5	Year 5	41.67	16.16	57.83
6	Year 6	41.67	13.99	55.66
7	Year 7	41.67	11.83	53.49
8	Year 8	41.67	9.66	51.33
9	Year 9	41.67	7.49	49.16
10	Year 10	41.67	5.33	46.99
11	Year 11	41.67	3.16	44.83
12	Year 12	41.67	0.99	42.66
13				
14	Total	500.00	154.95	654.95
15				
16	Annual Average			54.58
17	Monthly Credit			\$ 4.55

Calculating the Billing Credit

Step 2: Confirm Cost of Billing Credit is No Higher Than Status Quo

- Here we confirm that the cost of the billing credit program in combination with the cost of the remaining BPA-managed program is no higher than the status quo, a program managed entirely by BPA.

		Billing Credit Customer			Non-Billing Credit Customers (EEI)			Total			EEI (Status Quo)		
		A	B	C	D	E	F	G	H	I	J	K	L
		\$ 500	5.20%	Total	\$ 64,500	5.20%	Total			Total	\$ 65,000	5.20%	Total
		Amortization Expense	Interest	Expense	Amortization Expense	Interest	Expense	Amortization Expense	Interest	Expense	Amortization Expense	Interest	Expense
(\$000s)													
1	Year 1	41.67	24.86	66.52	5,375.00	3,206.49	8,581.49	5,416.67	3,231.34	8,648.01	5,416.67	3,231.34	8,648.01
2	Year 2	41.67	22.66	64.33	5,375.00	2,923.10	8,298.10	5,416.67	2,945.76	8,362.43	5,416.67	2,945.76	8,362.43
3	Year 3	41.67	20.49	62.16	5,375.00	2,643.60	8,018.60	5,416.67	2,664.10	8,080.76	5,416.67	2,664.10	8,080.76
4	Year 4	41.67	18.33	59.99	5,375.00	2,364.10	7,739.10	5,416.67	2,382.43	7,799.10	5,416.67	2,382.43	7,799.10
5	Year 5	41.67	16.16	57.83	5,375.00	2,084.60	7,459.60	5,416.67	2,100.76	7,517.43	5,416.67	2,100.76	7,517.43
6	Year 6	41.67	13.99	55.66	5,375.00	1,805.10	7,180.10	5,416.67	1,819.10	7,235.76	5,416.67	1,819.10	7,235.76
7	Year 7	41.67	11.83	53.49	5,375.00	1,525.60	6,900.60	5,416.67	1,537.43	6,954.10	5,416.67	1,537.43	6,954.10
8	Year 8	41.67	9.66	51.33	5,375.00	1,246.10	6,621.10	5,416.67	1,255.76	6,672.43	5,416.67	1,255.76	6,672.43
9	Year 9	41.67	7.49	49.16	5,375.00	966.60	6,341.60	5,416.67	974.10	6,390.76	5,416.67	974.10	6,390.76
10	Year 10	41.67	5.33	46.99	5,375.00	687.10	6,062.10	5,416.67	692.43	6,109.10	5,416.67	692.43	6,109.10
11	Year 11	41.67	3.16	44.83	5,375.00	407.60	5,782.60	5,416.67	410.76	5,827.43	5,416.67	410.76	5,827.43
12	Year 12	41.67	0.99	42.66	5,375.00	128.10	5,503.10	5,416.67	129.10	5,545.76	5,416.67	129.10	5,545.76
13		-	-	-									
14	Total	500.00	154.95	654.95	64,500.00	19,988.13	84,488.13	65,000.00	20,143.08	85,143.08	65,000.00	20,143.08	85,143.08

Example

Calculating the Billing Credit

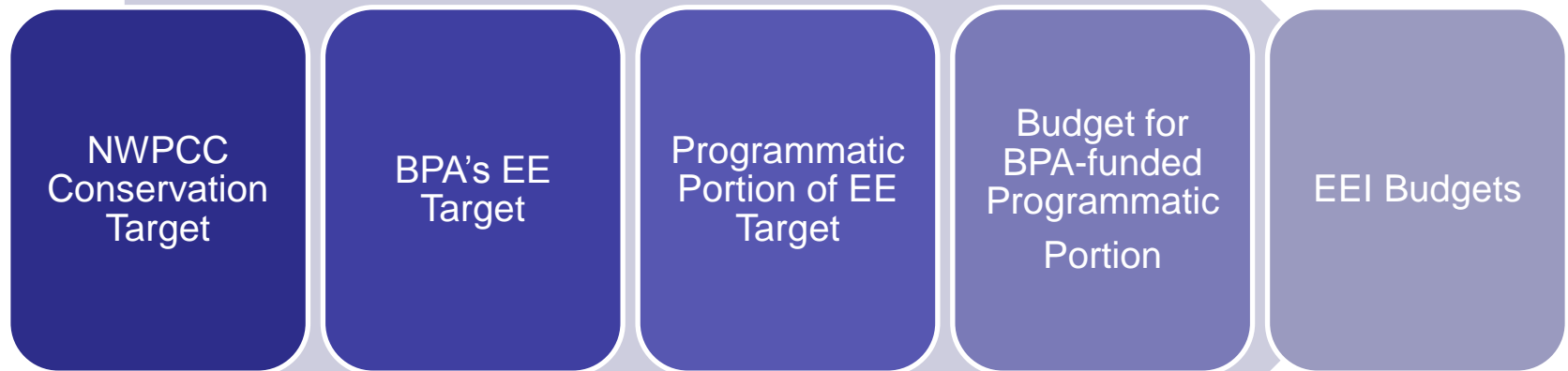
Step 3: Convert to Mortgage Payment

- BPA Accounting expects to treat the billing credits paid to the utility as a liability to be reduced over time. The amortization of the liability and the interest will most likely be calculated using a mortgage calculation.
- To create a mortgage payment stream that matches the allowable cost of the billing credits, it is necessary to identify the interest rate. The rate will differ from the investment rate because we are shifting from one method that attempts to identify the net cost of an investment to a method that calculates a debt service stream. This approach derives an effective interest rate for the investment.
- In this example, the mortgage calculation rate is 4.6947% instead of the 5.20% rate on the investment.

Example

		Mortgage Calculation			Billing Credit Customer		
		A	B	C	D	E	F
		\$ 500	4.69%	Total	\$ 500	5.2%	Total
		Amortization Expense	Interest	Expense	Amortization Expense	Interest	Expense
	(\$000s)						
1	Year 1	31.78	22.80	54.58	41.67	24.86	66.52
2	Year 2	33.31	21.27	54.58	41.67	22.66	64.33
3	Year 3	34.91	19.67	54.58	41.67	20.49	62.16
4	Year 4	36.58	18.00	54.58	41.67	18.33	59.99
5	Year 5	38.34	16.24	54.58	41.67	16.16	57.83
6	Year 6	40.17	14.40	54.58	41.67	13.99	55.66
7	Year 7	42.10	12.48	54.58	41.67	11.83	53.49
8	Year 8	44.12	10.46	54.58	41.67	9.66	51.33
9	Year 9	46.24	8.34	54.58	41.67	7.49	49.16
10	Year 10	48.46	6.12	54.58	41.67	5.33	46.99
11	Year 11	50.78	3.80	54.58	41.67	3.16	44.83
12	Year 12	53.22	1.36	54.58	41.67	0.99	42.66
13					-	-	-
14	Total	500.00	154.95	654.95	500.00	154.95	654.95
15							
16	Annual Average			\$ 54.58			\$ 54.58

Spending and Savings Minimums for Billing Credit Customers



Achieving BPA's target is based on utilities deploying funds and delivering energy savings. Conservation billing credits targets must be constructed in such a way that there is enough parity with the EEI program to ensure BPA achieves its target.

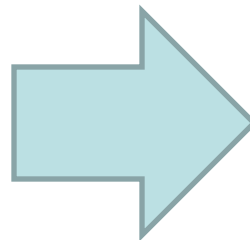
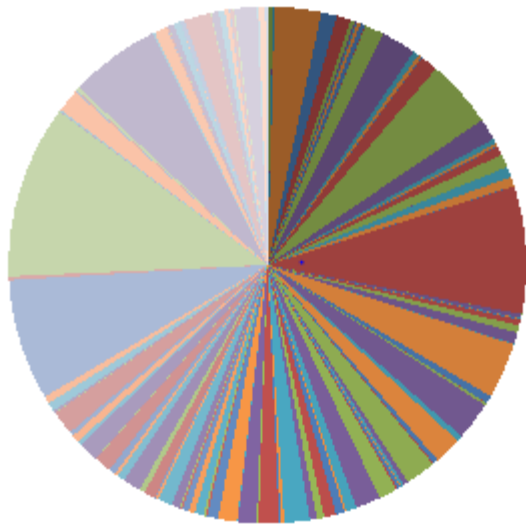
Spending and Savings Minimums for Billing Credit Customers

Principles

- Consistent methodology for all customers
- Align with EEI program to ensure BPA achieves its BPA-funded programmatic target

Spending and Savings Minimums for Billing Credit Customers

Status Quo



FY16-17
TOCA-based EEI

\$135M

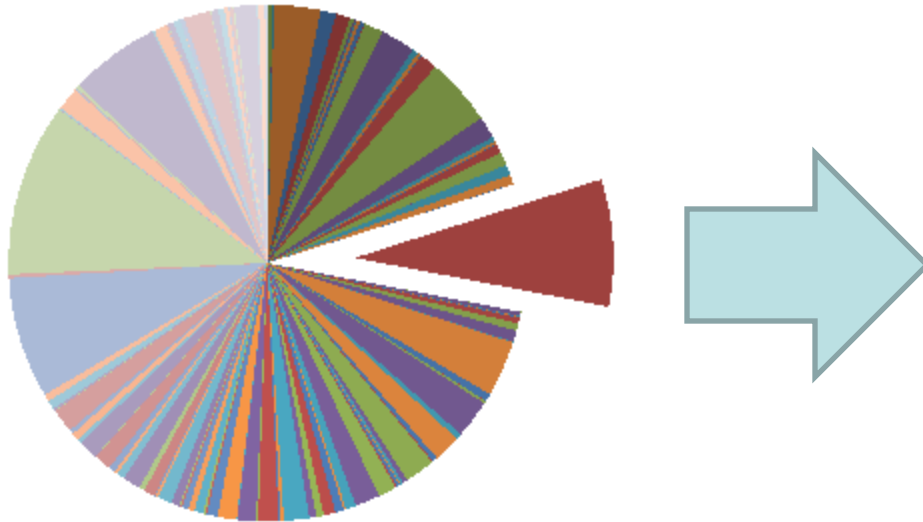
BPA-funded programmatic
target FY16-17

95 aMW

Originally Proposed Savings Minimum Methodology

- Minimum delivery amount would be based on the customer's status quo EEI budget divided by the average programmatic incentive costs used by BPA in its EE action plan for the rate period in question.
- We now realize there is a simpler way to arrive at the same outcome using TOCA

Spending and Savings Minimums for Billing Credit Customers



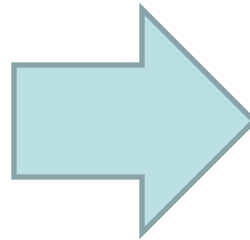
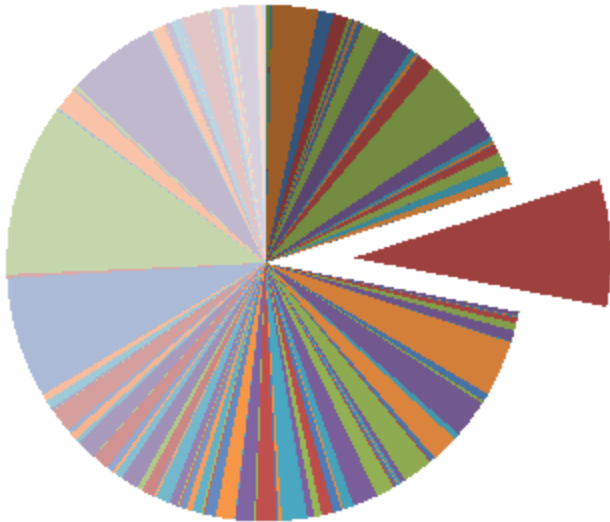
\$ Minimum
(Utility's default EEI budget)

and

aMW Minimum
(*TOCA* portion of BPA-funded programmatic target)

Spending and Savings Minimums for Billing Credit Customers

Example: 5% TOCA



\$ Minimum

$$\text{\$135M} \times 0.05 =$$

\\$6.75M

and

aMW Minimum

$$95 \text{ aMW} \times 0.05 =$$

4.75 aMW

Newly Proposed Savings Minimum

- Similar to the spending minimum, BPA proposes to set the savings minimum based on a customer's TOCA
- BPA recognizes that within the EEI program there is some variation in utility average costs due to the choice of measure combinations at varying costs
- BPA is open to exploring a savings minimum methodology that allows for a grace band below the minimum amount with no requirement of a true-up
- **BPA is seeking public comment on whether there should be a grace band and, if so, how the grace band should be defined**

Reporting Against the Minimums

- Customer will report savings into BPA's reporting system
- Savings will be converted into dollars using BPA's willingness to pay
 - For example, one residential direct install power strip
 - \$60 willingness to pay → \$60 counted against the spending minimum
- **BPA is open to and seeking public comment on how performance payments should be treated relative to the spending minimum**

Questions or Comments?

- Contact Scott Wilson, 503 230-7638, or email skwilson@bpa.gov
- Website:
 - <http://www.bpa.gov/power/pl/regionaldialogue/implementation/documents/#CBC>
- Public Comment:
 - <http://www.bpa.gov/applications/publiccomments/OpenCommentListing.aspx>