
STAFF MEMORANDUM

TO: COMMISSIONERS AND ADVISORS
FROM: DARREN KEARNEY, JOSEPH REZAC, & ADAM DE HUECK
RE: EL15-044 - IN THE MATTER OF THE APPLICATION OF BLACK HILLS POWER, INC. FOR APPROVAL OF ENERGY EFFICIENCY PROGRAMS, TARIFFS, AND COST RECOVERY MECHANISM
DATE: December 4, 2015

1.0 OVERVIEW

On October 29, 2015, Black Hills Power (BHP) filed an application for commission approval for modifications to its currently effective Energy Efficiency Solutions Program (EESP). BHP's currently effective Energy Efficiency Solutions Adjustment ("EESA") Tariff was approved on August 26, 2014 in docket EL14-038 with a program effective date of September 1, 2014 through May 31, 2017.

Specifically, BHP seeks commission approval to increase its residential services EESA rate to \$0.0004/kWh and its commercial and industrial EESA rate to \$0.0009/kWh. Currently the EESA rates are \$0.0002/kWh for residential customers and \$0.0000/kWh for commercial and industrial customers. Further, BHP requests the Commission approve the proposed changes to the Company's currently effective EESP for Program Years (PY) 2015 and 2016. Finally, BHP requests acceptance of the status reports filed for PY 2013¹ of its previous EESP and PY 2014 of its currently effective EESP.

Based on the above, the questions before the Commission are:

- 1) Shall the Commission approve the EESP status reports for PY 2013 and PY 2014?
- 2) Shall the Commission approve the performance incentive recovered in PY 2014?
- 3) Shall the Commission approve the proposed EESP modifications for PY 2015 and PY 2016?
- 4) Shall the Commission approve the revised EESA rates of \$0.0004/kWh for residential customers and \$0.0009/kWh for commercial and industrial customers, as well as the associated tariff sheets with an effective date of January 1, 2016?

This memo begins by discussing BHP's EESP results for PY 2013. Next, a discussion on the results for the PY 2014 of the currently effective EESP is included. Staff then discusses the proposed program modifications for PY 2015-16 of the current EESP and BHP's proposed rates for PY 2015. Finally, Staff provides a summary of Staff's recommendations for the docket.

¹ Program years are September 1 through August 31 and are labeled as PY in this memo.

2.0 DISCUSSION

2.1 Program Year 2013 Results

Included in this year's EESP filing is the results of Program Year 2013 which occurred under BHP's previous EESP that was approved in docket EL11-002.

2.1.1 PY 2013 EESP Budget vs. Actuals

Analysis of BHP's historic EESP budgets and actual spending shows that the company was under budget in the PY 2013. This continued the trend of being under budget from previous PY2011 and PY2012. BHP's total EESP actual spending for PY2011-PY2013 was 66%, 61%, and 26% of the total budgets, respectively. Table 1 below shows the budget to actuals for PY2011-PY2013.

Program	PY 2011			PY 2012			PY 2013		
	B	A	V ^{1,2}	B	A	V ^{1,2}	B	A	V ^{1,2}
Water Heating	\$ 8,050	\$ 4,143	51%	\$ 2,767	\$ 4,560	165%	\$ 9,224	\$ 2,243	24%
Refrigerator Recycling	\$ 25,500	\$ 25,069	98%	\$ 23,375	\$ 10,354	44%	\$ 70,125	\$ 18,283	26%
Heat Pumps - ASHP	\$ 85,070	\$ 13,800	16%	\$ 39,661	\$ 15,713	40%	\$ 113,293	\$ 17,268	15%
Heat Pumps - Geothermal	\$ 10,000	\$ 5,200	52%	\$ 5,500	\$ 3,000	55%	\$ 14,667	\$ 2,200	15%
Heat Pumps - Retro-Commissioning	\$ 30,000	\$ 18,244	61%	\$ 5,500	\$ 7,269	132%	\$ 16,500	\$ 420	3%
Total Heat Pumps	\$125,070	\$ 37,244	30%	\$ 50,661	\$ 25,982	51%	\$ 144,460	\$ 19,888	14%
Residential Audits	\$ 46,800	\$ 46,314	99%	\$ 41,250	\$ 10,918	26%	\$ 123,750	\$ 33,047	27%
School-Based Education	\$ 5,500	\$ 14,167	258%	\$ 10,083	\$ 12,135	120%	\$ 30,250	\$ 21,536	71%
Weatherization	\$ 10,000	\$ 10,246	102%	\$ 9,167	\$ 6,899	75%	\$ 27,500	\$ 6,899	25%
Total Residential	\$220,920	\$137,183	62%	\$137,303	\$ 70,848	52%	\$ 405,309	\$101,896	25%
C&I Prescriptive - Lighting	\$ 50,000	\$ 28,970	58%	\$ 84,028	\$ 65,008	77%	\$ 252,083	\$ 21,000	8%
C&I Prescriptive - Motors	\$ 10,000	\$ -	0%	\$ -	\$ -	-	\$ -	\$ -	-
C&I Prescriptive - VFDs	\$ 34,000	\$ 3,105	9%	\$ 1,986	\$ -	0%	\$ 5,958	\$ -	0%
C&I Prescriptive - ASHPs	\$ 20,000	\$ 4,612	23%	\$ 3,667	\$ 1,424	39%	\$ 11,000	\$ -	0%
C&I Prescriptive - GSHPs	\$ 50,000	\$ 222	0%	\$ 908	\$ 2,750	303%	\$ 2,724	\$ -	0%
C&I Prescriptive - Water Heaters	\$ 1,000	\$ 232	23%	\$ 183	\$ 135	74%	\$ 550	\$ 75	14%
C&I Prescriptive - Refridge Recycling	\$ 1,304	\$ 369	28%	\$ 92	\$ -	0%	\$ 275	\$ -	0%
Total C&I Prescriptive	\$166,304	\$ 37,510	23%	\$ 90,864	\$ 69,317	76%	\$ 272,590	\$ 21,075	8%
C&I Custom	\$ 85,000	\$ 31,867	37%	\$186,793	\$ 72,279	39%	\$ 560,378	\$163,301	29%
Total Nonresidential	\$251,304	\$ 69,377	28%	\$277,657	\$141,596	51%	\$ 832,968	\$184,376	22%
Cross Marketing and Training	\$100,000	\$113,366	113%	\$100,000	\$ 73,043	73%	\$ 300,000	\$ 69,459	23%
General Administration	\$ 16,000	\$ 67,143	420%	\$ 36,000	\$ 47,857	133%	\$ 108,000	\$ 79,717	74%
Total Portfolio	\$588,224	\$387,069	66%	\$550,960	\$333,344	61%	\$1,646,277	\$435,448	26%

1) Variance (V) = % of Budget

2) On Target (Green) if V is between 75% and 110%

2.1.2 PY 2013 Energy Savings

Total energy savings (KWh) showed improvement over program years 2011 and 2012 but took a step back in 2013. In PY 2011, BHP only achieved 38% of total portfolio targeted energy savings and improved to 86% in PY 2012. This equated to 1,100,986 kWh and 2,135,497 kWh of saved energy, respectively. However in PY 2013, BHP only achieved 27% of total portfolio targeted energy savings. Overall, in PY 2013, the residential programs achieved 11% of its energy savings goal and the commercial and industrial programs achieved 42% of its energy savings goal. This equates to 1,497,772 kWh in energy savings. Table 3 provides the energy savings reported for PY 2011 through PY 2013.

Program	PY 2011			PY 2012			PY 2013		
	B	A	V ^{1,2}	B	A	V ^{1,2}	B	A	V ^{1,2}
Water Heating	20,211	3,355	17%	6,947	14,596	210%	40,421	6,885	17%
Refrigerator Recycling	185,850	149,617	81%	170,363	72,485	43%	371,700	93,859	25%
Heat Pumps - ASHP	236,229	58,689	25%	91,669	91,973	100%	478,080	85,369	18%
Heat Pumps - Geothermal	22,220	9,527	43%	12,221	11,260	92%	44,439	6,026	14%
Heat Pumps - Retro-Commissioning	859,100	103,313	12%	157,502	193,754	123%	1,718,200	7,511	0%
Total Heat Pumps	1,117,549	171,529	15%	261,392	296,987	114%	2,240,719	98,906	4%
Residential Audits	169,784	58,581	35%	77,818	28,017	36%	169,784	34,809	21%
School-Based Education	23,750	57,617	243%	47,500	49,443	104%	23,750	89,516	377%
Weatherization	-	-	N/A	-	-	N/A	-	-	N/A
Total Residential	1,517,144	440,699	29%	564,020	461,528	82%	2,846,374	323,975	11%
C&I Prescriptive - Lighting	468,910	336,922	72%	644,752	1,024,782	159%	937,821	193,998	21%
C&I Prescriptive - Motors	15,998	-	N/A	-	-	N/A	32,795	0	N/A
C&I Prescriptive - VFDs	164,537	153,115	93%	226,238	-	N/A	329,074	0	N/A
C&I Prescriptive - ASHPs	87,511	14,239	16%	4,011	2,582	64%	87,511	0	N/A
C&I Prescriptive - GSHPs	39,996	-	N/A	-	6,377	N/A	39,996	0	N/A
C&I Prescriptive - Water Heaters	2,526	-	N/A	232	324	140%	2,526	799	32%
C&I Prescriptive - Refridge Recycling	8,673	6,195	71%	56,784	-	N/A	8,673	0	N/A
Total C&I Prescriptive	788,151	510,471	65%	932,017	1,034,065	111%	1,438,395	194,797	14%
C&I Custom	592,042	149,816	25%	997,828	639,904	64%	1,326,032	979,000	74%
Total Nonresidential	1,380,193	660,287	48%	1,929,845	1,673,969	87%	2,764,428	1,173,797	42%
Total Portfolio	2,897,337	1,100,986	38%	2,493,865	2,135,497	86%	5,610,802	1,497,772	27%

1) Variance (V) = % of Budget

2) On Target (Green) if V is greater than 75% of Budget

2.1.3 PY 2013 Cost Effectiveness

Table 3 shows the results from the benefit/cost tests completed for PY 2013 performance. Only three programs proved to be cost-effective in PY 2013, which included the water heating program, the heat pump program, and the commercial and industrial prescriptive program. The EESP for PY 2014-16 was modified by BHP in an attempt to produce better benefit/cost test results.²

Program	PY 2011					PY 2012					PY 2013				
	TRC	Utility	Societal	Part	RIM	TRC	Utility	Societal	Part	RIM	TRC	Utility	Societal	Part	RIM
Water Heating	0.35	0.33	0.45	4.65	0.19	2.33	1.30	2.94	7.09	0.33	1.01	0.75	1.25	7.40	0.29
Refrigerator Recycling	1.15	1.58	1.46	6.66	0.35	1.31	1.88	1.66	6.76	0.36	0.52	0.58	0.66	6.60	0.25
Heat Pumps	0.92	1.06	1.15	4.35	0.32	1.88	2.40	2.37	5.06	0.38	2.16	2.22	2.68	5.66	0.38
Residential Audits	0.23	0.23	0.29	-	0.16	0.48	0.48	0.59	-	0.25	0.13	0.13	0.16	-	0.10
School-Based Education	0.72	0.72	0.92	-	0.27	0.73	0.94	-	0.27	0.35	0.35	0.45	-	-	0.19
Weatherization	0.67	0.74	0.84	6.30	0.28	1.27	1.44	1.60	6.18	0.34	0.67	0.74	0.84	6.30	0.28
C&I Prescriptive	3.08	5.02	3.89	6.68	0.48	1.75	6.88	2.19	3.50	0.50	1.38	3.67	1.70	2.76	0.50
C&I Custom	0.99	1.88	1.26	2.53	0.41	1.87	3.61	2.35	4.20	0.46	0.70	1.24	0.88	2.06	0.37
Total Portfolio	0.77	0.90	0.97	5.07	0.32	1.37	2.52	1.73	3.96	0.43	0.73	1.10	0.91	2.57	0.35

2.1.4 PY 2013 Performance Incentive

BHP recovers a performance incentive (also referred to as lost margin recovery) that is set at a fixed percentage of 30% of actual program expenses with a cap set at 30% of the approved budget. The performance incentive is imbedded within the EESA rates and recovered from ratepayers throughout each program year. In PY 2013, BHP charged \$150,095 to the tracker account for the performance incentive during the program year, which ended up being 15 months for the reporting period due to a 3-month plan extension. Staff reviewed the tracker account and confirms that BHP's calculation of the performance incentive is accurate.

² See docket EL14-038, which approved BHP's EESP for PY 2014-2016

2.2 Program Year 2014 Results

Included in this year's EESP filing is the results of Program Year 2014 which occurred under BHP's currently effective EESP that was approved in docket EL14-038. The current EESP was approved through Program Year 2016, with the last recovery period being December 1, 2016 through November 30, 2017.

2.2.1 PY 2014 Budgets vs. Actuals

Table 4 shows the approved budget and actual expenses for PY 2014. With regards to the residential budget, BHP spent only 34% of the approved budget. This resulted from less actual participation in the Lighting, Appliance, and HVAC programs than expected. With regards to the nonresidential budget, BHP spent 81% of the approved budget. It should be noted that the Small Business Direct program was eliminated and those dollars were transferred to the commercial and industrial prescriptive program. Overall, BHP spent 88% of the approved budget after accounting for all expenses.

For budget forecasting, BHP imbeds Cross Marketing/Training and General Administration Costs within each program. Therefore, underspending in the residential and nonresidential program also partially resulted from BHP pulling those imbedded costs out of the program actual costs and adding a separate budget line for them. When the actual General Administration and Cross Marketing/Training³ costs are imbedded back into the residential and nonresidential programs for PY 2014, BHP spent 71% of the approved residential budget and 101% of the approved nonresidential budget.

One ongoing concern for energy efficiency plans is the potential for cross subsidization. Since BHP has separate EESA rates for residential customers and nonresidential residential customers, the potential for cross subsidization is eliminated.

	B	A	V ^{1, 2}
Residential Lighting and Appliance	\$ 62,858	\$ 15,788	25%
Appliance Recycling - Refridge	-	-	-
Appliance Recycling - Freezer	-	-	-
Total Appliance Recycling	\$ 59,916	\$ 11,827	20%
Residential HE HVAC - ASHP	\$ 30,594	\$ 7,121	23%
Residential HE HVAC - Early retire ASHP	\$ 16,317	\$ 1,000	6%
Residential HE HVAC - HP Water Heater	\$ 19,037	\$ 1,000	5%
Residential HE HVAC - ES Water Heater	\$ 4,079	\$ 1,490	37%
Residential HE HVAC - Geothermal	\$ 9,790	\$ 6,400	65%
Residential HE HVAC - Early Retire Geo	\$ 6,119	\$ 1,300	21%
Residential HE HVAC - HP replace EF	\$ 10,198	\$ 2,588	25%
Total Residential HE HVAC	\$ 96,134	\$ 20,899	22%
Whole House Efficiency	\$ 28,009	\$ 23,068	82%
Residential Audits	\$ 13,860	\$ 10,335	75%
School-Based Education	\$ 18,191	\$ 15,589	86%
Weatherization	\$ 21,164	\$ 4,079	19%
Total Residential	\$ 300,132	\$ 101,585	34%
Small Business Direct	\$ 319,372	\$ -	0%
C&I Prescriptive - Lighting	\$ 4,045	\$ 148,041	3660%
C&I Prescriptive - Motors	\$ 1,680	\$ 135	8%
C&I Prescriptive - VFDs	\$ 10,080	\$ 1,545	15%
C&I Prescriptive - ASHPs	\$ 6,300	\$ 150	2%
C&I Prescriptive - SPHPs	\$ 6,300	\$ -	0%
C&I Prescriptive - GSHPs	\$ 5,880	\$ -	0%
C&I Prescriptive - Water Heaters	\$ 3,360	\$ -	0%
C&I Prescriptive - Total	\$ 37,645	\$ 149,871	398%
C&I Custom	\$ 21,649	\$ 155,603	719%
Total Nonresidential	\$ 378,666	\$ 305,474	81%
Cross Marketing and Training		\$ 86,853	N/A
General Administration		\$ 103,345	N/A
Total Portfolio³	\$ 678,798	\$ 597,257	88%

1) Variance (V) = % of Budget

2) On Target (Green) if V is between 75% and 110%

3) Forecasted Budget for Total Portfolio includes Cross Marketing/Training and Admin Expenses

³ See Attachment 8 to BHP's Filing, titled "EESA Balancing Account by Rate Class," for actual General Admin and Cross Marketing/Training costs incurred to each customer class.

2.2.2 PY 2014 Energy Savings

Overall, BHP's EESP produced the expected energy savings in PY 2014. For the total EESP portfolio, 97% of the energy savings goal was achieved. The total energy savings produced was driven up by the commercial and industrial lighting program that achieved 337% of the program's goal. Staff notes that energy savings in the residential programs need to be improved since BHP's EESP only achieved 30% of the energy savings goal established for all residential programs. Table 5 provides a breakdown of energy savings goal and the actual energy savings produced during PY 2014 for each program.

Table 5. EESP Energy Savings (kWh) for PY 2014			
	B	A	V ^{1,2}
Residential Lighting and Appliance	407,497	46,665	11%
Appliance Recycling - Refridge	-	-	-
Appliance Recycling - Freezer	-	-	-
Total Appliance Recycling	340,675	90,415	27%
Residential HE HVAC - ASHP	47,880	12,928	27%
Residential HE HVAC - Early retire ASHP	9,576	3,289	34%
Residential HE HVAC - HP Water Heater	121,360	6,935	6%
Residential HE HVAC - ES Water Heater	6,371	1,911	30%
Residential HE HVAC - Geothermal	59,461	29,731	50%
Residential HE HVAC - Early Retire Geo	24,776	11,193	45%
Residential HE HVAC - HP replace EF	69,821	27,928	40%
Total Residential HE HVAC	339,245	93,915	28%
Whole House Efficiency	85,147	22,245	26%
Residential Audits	37,787	19,649	52%
School-Based Education	100,088	108,429	108%
Weatherization	28,106	15,643	56%
Total Residential	1,338,545	396,961	30%
Small Business Direct	893,129	0	0%
C&I Prescriptive - Lighting	57,450	1,293,935	2252%
C&I Prescriptive - Motors	6,029	58,553	971%
C&I Prescriptive - VFDs	185,397	60,997	33%
C&I Prescriptive - ASHPs	13,601	1,813	13%
C&I Prescriptive - SPHPs	29,708	0	0%
C&I Prescriptive - GSHPs	111,064	0	0%
C&I Prescriptive - Water Heaters	17,337	0	0%
C&I Prescriptive - Total	420,586	1,415,298	337%
C&I Custom	603,018	1,337,582	222%
Total Nonresidential	1,916,733	2,752,880	144%
Cross Marketing and Training	-	-	N/A
General Administration	-	-	N/A
Total Portfolio	3,255,278	3,149,841	97%

1) Variance (V) = % of Budget

2) On Target (Green) if V is greater than 75%

2.2.3 PY 2014 Cost Effectiveness

Table 6 provides the benefit/cost test results calculated for PY 2014. Overall the total EESP portfolio proved to be cost effective in PY 2014 with a Total Resource Cost (TRC) test result of 2.33. However, the total EESP portfolio's cost effectiveness was driven up due to the non-residential programs. All of the residential programs produced TRC results less than 1.0, which means the benefits of the program did not outweigh the costs of the program. BHP identified that the low TRC scores for the residential

programs resulted because participation in the programs during PY 2014 fell well below their goals.⁴ Based on the TRC results for the residential programs, BHP needs to work to increase participation in those programs over the next two program years.

Program	PY 2014				
	TRC	Utility	Societal	Part	RIM
Residential Lighting and Appliance	0.32	0.78	0.4	2.77	0.19
Appliance Recycling	0.61	0.66	0.77	12.75	0.21
Residential HVAC	0.79	0.96	0.98	4.97	0.25
Whole House Efficiency	0.25	0.25	0.31	n/a	0.14
Residential Audits	0.23	0.23	0.3	n/a	0.13
School-Based Education	0.43	0.43	0.55	n/a	0.18
Weatherization	0.72	0.72	0.89	n/a	0.22
Total Residential	0.5	0.56	0.62	7.39	0.2
Small Business Direct	-	-	-	-	-
C&I Prescriptive	2.88	3.58	3.59	9.16	0.37
C&I Custom	4.98	3	6.18	20.1	0.37
Total Portfolio	2.33	2.31	2.89	11.46	0.34

2.2.4 PY 2014 Performance Incentive

As previously noted in section 2.1.4, BHP recovers a performance incentive (also referred to as lost margin recovery) that is set at a fixed percentage (30%) of actual program expenses with a cap set at 30% of the approved budget. The performance incentive is imbedded within the EESA rates and recovered from ratepayers throughout each program year. In PY 2014, BHP charged \$179,176 to the tracker account for the performance incentive for the 12-month reporting period. Staff reviewed the calculation of the performance incentive and confirms BHP's calculation is accurate.

2.3 Proposed EESP for Program Years 2015 and 2016

BHP proposes modifications to its EESP for program years 2015 and 2016. Modifications include the removal of certain measures, the addition of certain measures, and a reduction of the currently approved budgets for the program years. This section discusses the proposed modifications to BHP's EESP.

2.3.1 Proposed Modifications to Program Measures for PY 2015 and 2016

BHP proposes to change certain measures within its EESP portfolio. The changes, along with a discussion on those changes, are included below.

- 1) Residential Lighting Program: BHP proposes to remove CFLs from the residential lighting program due to the market shifting to LED technologies. Staff agrees with removing residential CFLs from the EESP.
- 2) Appliance Recycling Program:

⁴ See Response to Staff DR1-9

- I. BHP proposes to remove the existing rebates for Energy Star Refrigerators and add a program titled “Recycle and Replace – ENERGY STAR Refrigerator.” The new program would provide a \$75 rebate to customers that recycle an inefficient secondary refrigerator for the purchase of a new ENERGY STAR Refrigerator.⁵ Staff has concerns with this proposed change for two reasons. First, the Energy Star Refrigerator rebate program was cost effective in PY 2014, with a TRC of 1.04. Second, the new program “Recycle and Replace – ENERGY STAR Refrigerator” has a forecasted TRC of 0.52 for PY 2015 and PY 2016. Based on Staff’s review, it appears BHP is replacing a cost-effective program with a cost-ineffective program. Given this, Staff recommends BHP revisit this decision and determine if the proposed new program can be altered in any way to make it cost-effective or, in the alternative, not offer the “Recycle and Replace – ENERGY STAR Refrigerator” program.
 - II. BHP also proposes to offer a \$25 rebate to the dealer for each appliance collected. Staff views this rebate as removing in-efficient refrigerators from the electric system and has no concerns with this change. Further, in its response to Staff Data Request 1-10, BHP identified that a dealer may incur costs of approximately \$100 per unit to recycle appliances through a 3rd party contractor. The \$25 appears to partially off-set the additional expense the dealer incurs for collecting and recycling old appliances. Finally, Staff determined that the Appliance recycling program will be cost effective with the dealer rebate (if “Recycle and Replace – ENERGY STAR Refrigerator” is removed from the program).
- 3) Residential Efficiency HVAC:
- I. BHP proposes to add measures to the HVAC program, which include ductless mini split air conditioner (SEER ≥19), ductless mini split heat pump (SEER ≥19), and central air conditioner (SEER 15). Staff has concerns with the addition of central air conditioner (SEER 15) and ductless mini split air conditioner (SEER ≥19) based on the fact that they are forecasted to have PY 2015 TRC results of 0.70 and 0.91, respectively. Staff recommends that BHP revisit these two program incentives in order to determine if they can alter the rebate amount to make the measures cost effective or, in the alternative, determine if the measures do in fact add overall value to the EESP.
 - II. BHP also proposes to add a \$50.00 incentive to be given to dealers for each energy efficient equipment installation. Staff has no concerns with this incentive since the program is expected to be cost effective in PY 2015 and PY 2016.
- 4) Whole House Efficiency Program: BHP plans to offer a Residential Kit that contains easy to install measures at no cost to the customer who participate in the program. Staff has no concerns with this change.
- 5) Residential Audit: BHP plans to offer the option of receiving a Residential Kit containing easy to install measures, at no cost, for customers who complete the online residential audit. Staff has no concerns with the Residential Kit offering.

⁵ BHP provides justification for the new program in response to Staff Data Request 1-17.

- 6) Weatherization: BHP proposes to remove CFL rebates from the program and offer a Residential Kit containing easy to install measures at no cost. Staff has no concerns with the program modification.
- 7) Small Business Direct Install: BHP discontinued this program and transferred the budget to the C&I prescriptive and C&I Custom programs. Staff has no concerns with this change.
- 8) C&I Prescriptive:
 - I. BHP proposes to remove variable frequency drives (VFDs) from the program. Staff had initial concerns that the VFDs would no longer be offered since they tend to produce large amounts of energy savings. However, BHP identified that customers could apply for VFD rebates through the C&I Custom program.⁶ This resolved Staff's concern.
 - II. The list of qualifying measures in the program was modified based on current federal baseline standards and equipment costs. Regarding the qualifying measures list, Staff has concerns with continuing to offer Ceiling Mount Occupancy Sensors since the measure produced a TRC of 0.72 in PY 2014 and is forecasted to have a TRC of 0.79 in PY 2015. Given this, Staff recommends BHP re-visit the rebate amount in order to determine if the occupancy sensors can be offered cost-effectively or, in the alternative, remove the ceiling mounted occupancy sensors from the program.

2.3.2 Proposed Budget Changes for PY 2015 and PY 2016

Table 7 displays the current EESP budgets for PY 2015 and PY 2016 approved in docket EL14-038 and the proposed budget changes. The proposed changes reduce the budgets for both PY 2015 and PY 2016. Looking at PY 2015, BHP proposes to reduce the residential budget by approximately \$115,000 and increase the nonresidential budget by approximately \$40,000 from the currently approved budgets. In PY 2016, BHP proposes to reduce the residential budget by approximately \$120,000 and increase the nonresidential program budget by approximately \$11,000 over the currently approved budgets. Staff has no concerns with the proposed budget changes. However, BHP may need to reduce the budgets slightly should BHP remove cost-ineffective measures as discussed in the previous section.

Program	PY 2015			PY 2016		
	As Approved	Revised	Difference	As Approved	Revised	Difference
Residential Lighting and Appliance	\$ 78,110	\$ 31,635	\$ (46,475.00)	\$ 93,423	\$ 40,555	\$ (52,868.00)
Total Appliance Recycling	\$ 76,256	\$ 23,999	\$ (52,257.00)	\$ 92,597	\$ 30,319	\$ (62,278.00)
Total Residential HE HVAC	\$ 115,069	\$ 57,661	\$ (57,408.00)	\$ 134,003	\$ 84,944	\$ (49,059.00)
Whole House Efficiency	\$ 35,011	\$ 32,288	\$ (2,723.00)	\$ 35,011	\$ 37,078	\$ 2,067.00
Residential Audits	\$ 13,860	\$ 25,263	\$ 11,403.00	\$ 13,860	\$ 25,263	\$ 11,403.00
School-Based Education	\$ 18,191	\$ 66,150	\$ 47,959.00	\$ 18,191	\$ 66,150	\$ 47,959.00
Weatherization	\$ 25,397	\$ 9,647	\$ (15,750.00)	\$ 29,630	\$ 11,576	\$ (18,054.00)
Total Residential	\$ 361,894	\$ 246,643	\$ (115,251.00)	\$ 416,715	\$ 295,885	\$ (120,830.00)
Small Business Direct	\$ 399,215	\$ -	\$ (399,215.00)	\$ 479,058	\$ -	\$ (479,058.00)
C&I Prescriptive - Total	\$ 27,062	\$ 242,915	\$ 215,853.00	\$ 32,474	\$ 272,322	\$ 239,848.00
C&I Custom	\$ 53,713	\$ 275,746	\$ 222,033.00	\$ 68,060	\$ 318,682	\$ 250,622.00
Total Nonresidential	\$ 479,990	\$ 518,661	\$ 38,671.00	\$ 579,592	\$ 591,004	\$ 11,412.00
Cross Marketing and Training	-	\$ 39,646	N/A	-	\$ 49,902	N/A
General Administration	-	-	N/A	-	-	N/A
Total Portfolio	\$ 841,884	\$ 804,950	\$ (36,934.00)	\$ 996,307	\$ 936,791	\$ (59,516.00)

⁶ See BHP Response to Staff Data Request 1-15

2.3.3 Proposed Energy Savings Goal Changes for PY 2015 and PY 2016

Table 8 shows the energy savings goals for PY 2015 and PY 2016 as set forth in the currently approved EESP plan. The table also shows the proposed goal changes for these program years. BHP’s proposed EESP for PY 2015 and PY 2016 results in a decrease of expected energy savings for the residential programs and results in an increase of expected energy savings for the nonresidential programs. The total proposed EESP portfolio is expected to produce greater energy savings than the EESP portfolio currently approved. Energy savings were forecasted based on AEG’s study and shows that BHP strives to increase energy savings throughout the next program cycle. New programs, modified programs, and increased expected participation are expected to increase energy savings realized over the next two years when compared to actual savings achieved in past years.

Program	PY 2015			PY 2016		
	As Approved	Revised	Difference	As Approved	Revised	Difference
Residential Lighting and Appliance	507,436	152,004	-355,432	607,751	193,951	-413,800
Total Appliance Recycling	432,750	81,400	-351,350	524,825	100,479	-424,346
Total Residential HE HVAC	392,042	193,824	-198,218	444,838	324,063	-120,775
Whole House Efficiency	106,700	90,540	-16,160	106,700	113,463	6,763
Residential Audits	37,787	79,400	41,613	37,787	79,400	41,613
School-Based Education	100,088	476,397	376,309	100,088	476,397	376,309
Weatherization	28,106	41,480	13,374	28,106	49,776	21,670
Total Residential	1,604,909	1,115,045	-489,864	1,850,095	1,337,529	-512,566
Small Business Direct	1,116,411	0	-1,116,411	1,239,694	0	-1,239,694
C&I Prescriptive - Total	1,378,572		-1,378,572	1,698,922		-1,698,922
C&I Custom	0		0	0		0
Total Nonresidential	2,494,983	4,683,170	2,188,187	3,038,616	5,770,366	2,731,750
Cross Marketing and Training	-	-	-	-	-	-
General Administration	-	-	-	-	-	-
Total Portfolio	4,099,892	5,798,215	1,698,323	4,888,711	7,107,895	2,219,184

2.3.4 Cost Effectiveness of Proposed EESP for PY 2015 and PY 2016

The forecasted TRC results for BHP’s proposed EESP for PY 2015 and PY 2016 are included in Table 9. The appliance recycling program is the only program that is forecasted to have a TRC less than 1.0. Staff believes that not including the “Recycle and Replace – ENERGY STAR refrigerator” to the Appliance Program would push the TRC to above 1.0.

Staff is also concerned that the residential programs could result in lower than forecasted TRC results if participation is not as expected, similar to what occurred in PY 2014. Therefore, BHP should work to ensure participation is realized and also work to find ways to minimize fixed costs in order to have a cost-effective residential program in PY 2015 and PY 2016.

Program	PY 2015	PY 2016
Residential Lighting and Appliance	1.02	1.02
Appliance Recycling	0.94	0.94
Residential HE HVAC	1.02	1.10
Whole House Efficiency	1.02	1.13
Residential Audits	1.01	1.02
School-Based Education	1.38	1.40
Weatherization	1.24	1.26
Total Residential	1.01	1.04
Small Business Direct	-	-
C&I Prescriptive	3.18	3.46
C&I Custom	1.90	2.00
Total Nonresidential	2.45	2.62
Cross Marketing and Training	-	-
General Administration	-	-
Total Portfolio	2.03	2.13

2.3.4 Performance Incentive for PY 2015 and PY 2016

BHP will continue to charge a fixed percentage performance incentive set at 30% of actual program expenses in PY 2015 and PY 2016. The purpose of the incentive is to offset lost margins that result from the energy savings of the EESP. A cap for the budget will remain in place at 30% of the approved budget. This means the performance incentive will not exceed \$241, 485 for PY 2015 and \$281,037 for PY 2015. This financial incentive is similar to incentives awarded to other utilities offering energy efficiency programs in South Dakota.

3.0 Energy Efficiency Solutions Adjustment Rates

With this filing, BHP proposes to change the Energy Efficiency Solutions Adjustment Rates for both residential and nonresidential customers. Currently, the EESA rate for residential customers is \$0.0002/kWh and the EESA rate for commercial and industrial customers is \$0.0000/kWh. Black Hills Power proposes to increase both of these rates for PY 2015 to a rate of \$0.0004/kWh for residential customers and \$0.0009/kWh for commercial and industrial customers. It should be noted that these proposed rates include the fixed percentage. Staff reviewed the BHP's EESA tracker account and agrees with BHP's proposed increase in EESA rates should the Commission approve BHP's budget as approved.

4.0 Recommendation

Staff makes the following recommendations to the Commission for docket EL15-044:

- 1) The Commission approve the PY 2013 and PY 2014 Status Reports;
- 2) The Commission approve the performance incentive for PY 2014;
- 3) The Commission approve BHP's proposed EESP for PY 2015 and PY 2016, subject to BHP reviewing the program measures that Staff has concerns regarding the cost effectiveness as discussed in section 2.3.1;
- 4) That the Commission order the cost-ineffective measures as discussed in section 2.3.1 be removed from the program unless BHP provides justification for the inclusion of those measures that satisfies the Commission;
- 5) That the Commission approve the proposed budget for the EESP PY 2015 and PY 2016, given that if any cost-ineffective measures are removed the budget will likely not be materially impacted; and
- 6) That the Commission approve the proposed EESA rates for PY 2015 and the associated tariff sheets with an effective date of January 1, 2016.