

TO: COMMISSIONERS AND ADVISORS
FROM: DARREN KEARNEY, JOSEPH REZAC, AND AMANDA REISS (STAFF)
SUBJECT: EL17-045 STAFF RECOMMENDATION
DATE: NOVEMBER 17, 2017

STAFF MEMORANDUM

1.0 OVERVIEW

On October 16, 2017, Black Hills Power (BHP) filed an application for commission approval to adjust its Energy Efficiency Solutions Adjustment (EESA) rates. Included in the application were results from Program Year (PY) 2016, revised tariff pages to reflect BHP's proposed Energy Efficiency Solutions Adjustment (EESA) rates, and other supporting data.

Specifically, BHP seeks commission approval of the proposed EESA rates. Currently the EESA rates are \$0.0007/kWh for residential customers and \$0.0013/kWh for commercial and industrial customers. Black Hills Power's proposed EESA rates to be implemented on December 1, 2017, are \$0.0003/kWh for residential customers and \$0.0012/kWh for commercial and industrial customers.

The Commission recently approved an extension to BHP's Energy Efficiency Plan for Program Years 2017 through 2019 in docket EL17-026. In this filing, BHP does not propose any changes to that recently approved plan.

2.0 DISCUSSION

2.1 PY 2016 Spending

In PY 2016, BHP came in underbudget spending only 85% of the approved budget (table 1). The residential programs experienced less participation than forecasted for many of the programs' measures, which resulted in BHP spending only 52% of the approved budget. The commercial and industrial programs experienced strong participation and came in slightly above budget. It should be noted that the General Administrative expenses were over budget and BHP identified that "the Company experienced additional higher than forecasted costs in administrative charges as a result of additional corporate oversight."¹

¹ See BHP's response to Staff DR 1-5.

Program	PY2016		
	B	A	V ¹
Residential Lighting	\$ 36,203	\$ 13,113	36%
Residential Appliance Recycling	\$ 12,630	\$ 7,544	60%
Residential HVAC	\$ 62,480	\$ 15,471	25%
Whole House Efficiency	\$ 33,016	\$ 14,766	45%
Residential Audits	\$ 23,203	\$ 12,780	55%
School-Based Education	\$ 63,150	\$ 62,223	99%
Weatherization	\$ 11,051	\$ 131	1%
Total Residential	\$ 241,733	\$126,028	52%
C&I Prescriptive	\$ 217,562	\$240,109	110%
C&I Custom	\$ 259,727	\$239,974	92%
Total Nonresidential	\$ 477,289	\$480,083	101%
Cross Marketing and Training	\$ 119,987	\$ 78,509	65%
General Administration	\$ 64,047	\$ 82,178	128%
Total Portfolio	\$ 903,056	\$766,798	85%

1) Variance (V) = % of Budget

2.2 PY 2016 Energy Savings

Table 2 provides the energy savings that occurred in PY 2016. Similar to program costs, the energy savings for PY 2016 were lower than forecasted as a result of less actual participation and the mix of technology types rebated during the year.

Program	PY2016		
	B	A	V ¹
Residential Lighting	193,951	72,337	37%
Residential Appliance Recycling	97,600	55,428	57%
Residential HVAC	321,874	111,459	35%
Whole House Efficiency	113,463	36,257	32%
Residential Audits	79,400	47,025	59%
School-Based Education	476,397	477,194	100%
Weatherization	49,776	7,692	15%
Total Residential	1,332,461	807,392	61%
C&I Prescriptive	3,384,728	1,831,274	54%
C&I Custom	2,374,754	2,011,743	85%
Total Nonresidential	5,759,482	3,843,017	67%
Cross Marketing and Training	-	-	-
General Administration	-	-	-
Total Portfolio	7,091,943	4,650,409	66%

1) Variance (V) = % of Budget

2.3 PY 2016 Benefit/Cost Tests

Actual energy efficiency spending for PY 2016 proved to be cost effective even while coming in under budget and with lower than expected participation. As shown in table

3, the total portfolio had a TRC score of 1.72. Looking at the weatherization TRC, the score of 23.41 was driven up because of low spending on measures since BHP used leftover materials for PY 2016. While each residential program (except the Whole House Efficiency program) proved to be cost effective in PY 2016, the total residential portfolio came in with a TRC of 0.83.

Program	PY2016				
	TRC	Utility	Societal	Part	RIM
Residential Lighting	1.10	1.87	1.37	4.77	0.28
Residential Appliance Recycling	1.69	2.12	2.12	12.42	0.28
Residential HVAC	1.15	3.19	1.40	3.66	0.32
Whole House Efficiency	0.97	0.97	1.20	N/A	0.26
Residential Audits	1.24	1.24	1.55	N/A	0.26
School-Based Education	1.52	1.52	1.91	N/A	0.27
Weatherization	23.41	23.41	29.04	N/A	0.33
Total Residential	0.83	0.98	1.04	10.72	0.25
C&I Prescriptive	1.90	3.34	2.35	5.19	0.39
C&I Custom	2.42	3.84	2.98	6.50	0.40
Total Nonresidential	1.99	3.17	2.45	5.81	0.39
Total Portfolio	1.72	2.53	2.12	6.19	0.36

The drop in the TRC score at the residential portfolio level is due to the marketing/cross training expenses and general administration expenses being captured in the TRC calculation at the portfolio level. Table 4 identifies how the total residential portfolio costs increased while the benefits remained the same, ultimately driving down the TRC score.

Program	Benefits			Costs					TRC
	Avoided Energy	Avoided Demand	Total	Non-Incentive	Measure	Marketing/ Cross Training	General Administration	Total	
Residential Lighting	\$ 23,494.63	\$ 1,039.01	\$ 24,533.64	\$ 4,982.58	\$17,335.00	\$ -	\$ -	\$ 22,317.58	1.10
Residential Appliance Recycling	\$ 15,331.87	\$ 657.62	\$ 15,989.49	\$ 5,344.19	\$ 4,092.00	\$ -	\$ -	\$ 9,436.19	1.69
Residential HVAC	\$ 43,287.65	\$ 6,006.10	\$ 49,293.75	\$ 1,662.50	\$41,280.80	\$ -	\$ -	\$ 42,943.30	1.15
Whole House Efficiency	\$ 13,041.64	\$ 1,328.54	\$ 14,370.17	\$ 14,765.66	\$ -	\$ -	\$ -	\$ 14,765.66	0.97
Residential Audits	\$ 15,273.44	\$ 604.69	\$ 15,878.13	\$ 12,780.00	\$ -	\$ -	\$ -	\$ 12,780.00	1.24
School-Based Education	\$ 90,885.92	\$ 3,444.20	\$ 94,330.12	\$ 62,222.55	\$ -	\$ -	\$ -	\$ 62,222.55	1.52
Weatherization	\$ 2,904.95	\$ 173.27	\$ 3,078.21	\$ 131.49	\$ -	\$ -	\$ -	\$ 131.49	23.41
Total Residential Portfolio	\$ 204,220.10	\$ 13,253.42	\$ 217,473.52	\$ 101,888.97	\$62,707.80	\$ 54,956.00	\$ 41,089.00	\$260,641.77	0.83

2.4 Energy Efficiency Solutions Adjustment (EESA) Rates

In its initial filing, BHP proposed to reduce the residential EESA rate and leave the commercial and industrial customer EESA rate the same. Upon review of the balancing account submitted to support the proposed rates, Staff found that BHP did not submit an accurate balancing account. BHP submitted a balancing account that inappropriately included costs that were not approved for recovery in docket EL16-034. Further, the initial calculation of the EESA rates double counted program development costs.² As such, BHP submitted a revised balancing account, rate calculation sheet, and tariffs. The

² See Staff DR 2-4

rates before the Commission for approval are \$0.0003/kWh for residential and \$0.0012/kWh for commercial and industrial. Both proposed rates are a reduction from the currently effective rates.

<u>Line</u>	<u>Description</u>	<u>Reference</u>	<u>Residential</u>	<u>Commercial & Industrial</u>
1	Balancing Account as of 8/31/2017		\$ 17,239	\$ 139,178
2	Estimated EESA Revenues 9/1/2017 - 11/30/2017		\$ (72,377)	\$ (218,224)
3	2017-2019 Plan Development Costs (included in Line 4)			
4	PY 2017 Budgeted Program Expenditures		\$ 157,669	\$ 692,827
5	PY 2017 Budgeted Fixed Percentage Incentive	Line 4 * 30%	\$ 47,301	\$ 207,848
6	Total Estimated Recoverable Costs		<u>\$ 149,832</u>	<u>\$ 821,629</u>
7				
8	Forecasted kWh Sales 12/1/2017 - 11/30/2018		513,095,445	697,614,086
9				
10	Proposed EESA Rate Effective 12/1/2017		<u>\$0.0003/kWh</u>	<u>\$0.0012/kWh</u>
	Current EESA Rate Effective 12/1/2016		<u>\$0.0007/kWh</u> SDEES1	<u>\$0.0013/kWh</u> SDEES2

Staff reviewed the balancing account and found that the BHP properly accounted for the PY 2016 fixed percentage incentive of \$230,039. This reflects 30% of actual spending that occurred in PY 2016, which came in at \$766,798 for the year. It should also be noted that the PY 2017 budget included in the proposed EESA rates was approved in docket EL17-026 and properly reflected in calculation.

3.0 STAFF RECOMMENDATION

Staff makes the following recommendations to the Commission:

- 1) Approve the PY 2016 Status Report;
- 2) Approve the PY 2016 fixed percentage incentive of \$230,039; and
- 3) Approve the proposed EESA rates of \$0.0003/kWh for residential customers and \$0.0012/kWh for commercial and industrial customers, and the associated tariff sheets, with an effective date of December 1, 2017.