

Attachment 4
PY1 & PY2 Status Report



**Black Hills Power – South Dakota
Energy Efficiency Solutions Status Report
Program Year 1 - 2**

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Executive Summary

Black Hills Power (“BHP” or “Company”) is an investor-owned utility that provides electricity to approximately 68,000 customers in western South Dakota, northern Wyoming and southeastern Montana. Black Hills Power is part of Black Hills Corporation, which provides natural gas and electricity to more than 765,000 customers throughout the Midwest region of the United States.

BHP’s energy-efficiency portfolio is composed of residential and non-residential programs (i.e. commercial and industrial). Each program has been designed to address the needs of various customer types. The programs include:

Residential

- Water Heating
- Refrigerator Recycling
- Air Source Heat Pumps
- Geothermal Heat Pumps
- Air Source Heat Pump Retro-Commissioning
- Residential Audits
- School-Based Education
- Weatherization

Non-Residential

- C&I Lighting
- C&I Variable Frequency Drives (“VFD”)
- C&I Air Source Heat Pumps
- C&I Ground Source Heat Pumps
- C&I Water Heaters
- C&I Refrigerator Recycling
- C&I Custom Rebate

This report presents a status report of Program Year 1 (“PY1”), which ran from September 1, 2011 through August 31, 2012, and Program Year 2 (“PY2”), which ran from September 1, 2012 through August 31, 2013. Similar residential and non-residential programs are discussed together throughout the status report. The following program groupings are presented to customers as one program. The program discussions within this status report provide detailed information for each program.

- Residential Heat Pump program will include air source heat pumps, geothermal heat pumps, and air source heat pump retro-commissioning.
- C&I Prescriptive program will include all non-residential programs except the C&I Custom program.

In PY1, BHP spent approximately 66 percent of the budget and achieved 38 percent of the energy savings goal. In PY2, BHP spent approximately 54 percent of the budget and achieved 86 percent of the energy savings goal.

Tables ES1 and ES2 present projected budgets and actual expenditures by sectors in PY1 and PY2, including expenditures for incentives, marketing, and administration.

TABLE ES1: PY1 BUDGET BY SECTOR

Sector	PY1 Goal	PY1 Actual	% of Budget
Residential	\$220,920	\$137,183	62%
Non-Residential	\$251,304	\$69,377	28%
Cross Marketing & Training	\$100,000	\$113,366	113%
General Administration	\$16,000	\$67,143	420%
Total	\$588,224	\$387,068	66%

TABLE ES2: PY2 BUDGET BY SECTOR

Sector	PY2 Goal	PY2 Actual	% of Budget
Residential	\$137,303	\$70,847	52%
Non-Residential	\$277,657	\$141,596	51%
Cross Marketing & Training	\$100,000	\$73,043	73%
General Administration	\$36,000	\$47,857	133%
Total	\$550,960	\$333,343	61%

Table ES3 and ES4 provides detailed goal and actual expenditures for PY1 and PY2 by program.

TABLE ES3: PY1 UTILITY BUDGET AND EXPENDITURES BY PROGRAM

	PY1 Budget	PY1 Expenditures	% of Budget
Residential Programs			
Water Heating	\$8,050	\$4,143	51%
Refrigerator Recycling	\$25,500	\$25,069	98%
Heat Pumps	\$125,070	\$37,244	30%
Residential Audits	\$46,800	\$46,314	99%
School-Based Education	\$5,500	\$14,167	258%
Weatherization	\$10,000	\$10,246	102%
Non-Residential Programs			
C&I Prescriptive	\$166,304	\$37,509	23%
C&I Custom Rebate	\$85,000	\$31,867	37%
Cross Marketing & Training	\$100,000	\$113,366	113%
General Administration	\$16,000	\$67,143	420%
Total	\$588,224	\$387,068	66%

TABLE ES4: PY2 UTILITY BUDGET AND EXPENDITURES BY PROGRAM

	PY2 Budget	PY2 Expenditures	% of Budget
Residential Programs			
Water Heating	\$2,767	\$4,560	165%
Refrigerator Recycling	\$23,375	\$10,354	44%
Heat Pumps	\$50,661	\$25,982	51%
Residential Audits	\$41,250	\$10,918	26%
School-Based Education	\$10,083	\$12,135	120%
Weatherization	\$9,167	\$6,899	75%
Non-Residential Programs			
C&I Prescriptive	\$90,864	\$69,317	76%
C&I Custom Rebate	\$186,793	\$72,279	39%
Cross Marketing & Training	\$100,000	\$73,043	73%
General Administration	\$36,000	\$47,857	133%
Total	\$550,960	\$333,343	61%

Tables ES5 and ES6 present PY1 and PY2 goal and actual energy savings by sector.

TABLE ES5: PY1 ENERGY SAVINGS (kWh) BY SECTOR

	PY1 Goal	PY1 Actual	% of Goal
Residential	1,517,144	440,700	29%
Nonresidential	1,380,193	660,286	48%
Total	2,897,337	1,100,986	38%

TABLE ES6: PY2 ENERGY SAVINGS (kWh) BY SECTOR

	PY2 Goal	PY2 Actual	% of Goal
Residential	564,019	461,528	82%
Nonresidential	1,929,845	1,673,969	87%
Total	2,493,864	2,135,498	86%

Table ES7 and ES8 provides PY1 and PY2 goal and actual energy savings by program.

TABLE ES7: PY1 ENERGY SAVINGS (kWh) BY PROGRAM

	PY1 Goal	PY1 Actual	% of Budget
Residential Programs			
Water Heating	20,211	3,355	17%
Refrigerator Recycling	185,850	149,617	81%
Heat Pumps	1,117,549	171,530	15%
Residential Audits	169,784	58,581	35%
School-Based Education	23,750	57,617	243%
Weatherization	-	-	n/a
Non-Residential Programs			
C&I Prescriptive	788,151	510,470	65%
C&I Custom Rebate	592,042	149,816	25%
Total	2,897,337	1,100,986	38%

TABLE ES8: PY2 ENERGY SAVINGS (kWh) BY PROGRAM

	PY2 Goal	PY2 Actual	% of Budget
Residential Programs			
Water Heating	6,947	14,596	210%
Refrigerator Recycling	170,363	72,485	43%
Heat Pumps	261,391	296,987	114%
Residential Audits	77,818	28,017	36%
School-Based Education	47,500	49,443	104%
Weatherization	-	-	n/a
Non-Residential Programs			
C&I Prescriptive	932,017	1,034,065	111%
C&I Custom Rebate	997,828	639,904	64%
Total	2,493,864	2,135,498	86%

Table ES9 and ES10 presents PY1 and PY2 goal and actual demand savings by sector.

TABLE ES9: PY1 DEMAND SAVINGS (kW) BY SECTOR

	PY1 Goal	PY1 Actual	% of Goal
Residential	574.3	112.6	20%
Nonresidential	217.5	95.8	44%
Total	791.7	208.5	26%

TABLE ES10: PY2 DEMAND SAVINGS (kW) BY SECTOR

	PY2 Goal	PY2 Actual	% of Goal
Residential	175.1	96.7	55%
Nonresidential	284.8	299.7	105%
Total	459.8	396.5	86%

Table ES11 and ES12 presents PY1 and PY2 goal and actual demand savings by program.

TABLE ES11: PY1 DEMAND SAVINGS (kW) BY PROGRAM

	PY1 Goal	PY1 Actual	% of Budget
Residential Programs			
Water Heating	7.7	0.4	6%
Refrigerator Recycling	28.3	20.1	71%
Heat Pumps	510.3	44.9	9%
Residential Audits	27.0	44.9	166%
School-Based Education	1.0	2.3	231%
Weatherization	-	-	n/a
Non-Residential Programs			
C&I Prescriptive	217.5	79.2	36%
C&I Custom Rebate	-	16.7	n/a
Total	791.7	208.6	26%

TABLE ES12: PY2 DEMAND SAVINGS (kW) BY PROGRAM

	PY2 Goal	PY2 Actual	% of Budget
Residential Programs			
Water Heating	3.2	1.9	59%
Refrigerator Recycling	28.3	9.8	34%
Heat Pumps	128.1	61.7	48%
Residential Audits	13.5	21.5	159%
School-Based Education	2.0	2.0	99%
Weatherization	-	-	n/a
Non-Residential Programs			
C&I Prescriptive	284.8	216.9	76%
C&I Custom Rebate	-	82.8	n/a
Total	459.8	396.5	86%

Table ES13 provides PY1 and PY2 overall portfolio cost-effectiveness results.

TABLE ES13: TOTAL PORTFOLIO COST-EFFECTIVENESS RESULTS

Test	PY1	PY2
Total Resource Cost Test	0.77	1.37
Utility Cost Test	0.90	2.52
Societal Cost Test	0.97	1.72
Participant Test	5.07	3.96
Ratepayer Impact Measure Test	0.32	0.43

Residential Programs

BHE’s residential energy efficiency programs serve residential customers, encouraging investment in energy efficient measures such as lighting, cooling equipment and whole house efficiency.

Residential Water Heating

The Residential Water Heating Program offers rebates to BHP residential customers when they replace existing electric water heaters with high-efficiency models. Customers that install a water heater meeting the following requirements are eligible to receive a rebate of \$1.50 per tank gallon:

- EF of 0.94 or greater 30 to 50 gallons
- EF of 0.92 or greater over 50 gallons

Tables 1 and 2 compare the program goals to actual program performance.

TABLE 1: RESIDENTIAL WATER HEATING PY1 SUMMARY

	Goal	Actual	% Goal Achieved
Participation	80	19	24%
Expenditures	\$8,050	\$4,143	51%
Energy Impacts (kWh)	20,211	3,355	17%
Demand Impacts (kW)	7.7	0.4	6%

TABLE 2: RESIDENTIAL WATER HEATING PY2 SUMMARY

	Goal	Actual	% Goal Achieved
Participation	33	52	158%
Expenditures	\$2,767	\$4,560	165%
Energy Impacts (kWh)	6,947	14,596	210%
Demand Impacts (kW)	3.2	1.9	59%

In PY1, BHP achieved 24 percent of the participation goal and less than 20 percent of the energy and demand savings goals while spending 50 percent of the budget. In PY2, BHP achieved 1.5 the participation goal and more than twice the energy savings goal while spending 1.5 times the budget.

Table 3 presents cost-effectiveness analysis results, based on program activity.

TABLE 3: RESIDENTIAL WATER HEATING PROGRAM COST-EFFECTIVENESS RESULTS

Test	PY1	PY2
Total Resource Cost Test	0.35	2.33
Utility Cost Test	0.33	1.30
Societal Cost Test	0.45	2.94
Participant Test	4.65	7.09
Ratepayer Impact Measure Test	0.19	0.33

Residential Refrigerator Recycling

The Refrigerator Recycling Program encourages customers to turn in old inefficient refrigerators. The program’s goal is to remove inefficient refrigerators from the electric system and dispose of them in an environmentally safe and responsible manner. Refrigerators must be between 10 and 30 cubic feet in size and in operating condition. Customers receive a \$30 rebate per qualifying unit recycled.

Tables 4 and 5 compare the program goals to actual program performance.

TABLE 4: RESIDENTIAL REFRIGERATOR RECYCLING PY1 SUMMARY

	Goal	Actual	% Goal Achieved
Participation	150	153	102%
Expenditures	\$25,500	\$25,069	98%
Energy Impacts (kWh)	185,850	149,617	81%
Demand Impacts (kW)	28.3	20.1	71%

TABLE 5: RESIDENTIAL REFRIGERATOR RECYCLING PY2 SUMMARY

	Goal	Actual	% Goal Achieved
Participation	150	74	49%
Expenditures	\$23,375	\$10,354	44%
Energy Impacts (kWh)	170,363	72,485	43%
Demand Impacts (kW)	28.3	9.8	34%

In PY1, BHP achieved the participation goal and 80 percent of the energy savings goal. In PY2, BHP achieved approximately 50 percent of the participation and energy savings goal while spending 45 percent of the budget.

Table 6 presents cost-effectiveness analysis results, based on program activity.

TABLE 6: RESIDENTIAL REFRIGERATOR RECYCLING PROGRAM COST-EFFECTIVENESS RESULTS

Test	PY1	PY2
Total Resource Cost Test	1.15	1.31
Utility Cost Test	1.58	1.88
Societal Cost Test	1.46	1.66
Participant Test	6.66	6.76
Ratepayer Impact Measure Test	0.35	0.36

Residential Heat Pumps

The Residential Heat Pump Program offers rebates to residential customers for replacing or upgrading heating and cooling equipment with energy efficient heat pumps. Customers are also eligible to receive an incentive for retro-commissioning an air source heat pump once every five years. Customers are eligible to receive the following:

Measure	Rebate
Air Source Heat Pump (1-5 tons, SEER ≥15 & HSPF ≥8.5)	\$150 per ton
Geothermal Heat Pump (1-5 tons, EER ≥16.5 and COP ≥3.6)	\$200 per ton
Electric Furnace to Heat Pump Replacement (1-5 tons, SEER ≥15 & HSPF ≥8.5)	\$1,500
Air Source Heat Pump Retro-Commissioning	\$60

The tables below compare program goals to actual program performance.

TABLE 7: RESIDENTIAL HEAT PUMP BUDGET VERSUS TO EXPENDITURES

	PY1			PY2		
	Goal	Actual	% of Budget	Goal	Actual	% of Budget
Air Source Heat Pump	\$85,070	\$13,800	16%	\$39,661	\$15,713	40%
Geothermal Heat Pump	\$10,000	\$5,200	52%	\$5,500	\$3,000	55%
Retro-Commissioning	\$30,000	\$18,244	61%	\$5,500	\$7,269	132%

TABLE 8: RESIDENTIAL HEAT PUMP ENERGY SAVINGS GOAL VERSUS ACTUAL

	PY1			PY2		
	Goal	Actual	% of Goal	Goal	Actual	% of Goal
Air Source Heat Pump	236,229	58,689	25%	91,669	91,973	100%
Geothermal Heat Pump	22,220	9,527	43%	12,221	11,260	92%
Retro-Commissioning	859,100	103,313	12%	157,502	193,754	123%

TABLE 9: RESIDENTIAL HEAT PUMP DEMAND SAVINGS GOAL VERSUS ACTUAL

	PY1			PY2		
	Goal	Actual	% of Goal	Goal	Actual	% of Goal
Air Source Heat Pump	107.9	5.4	5%	43.6	9.2	21%
Geothermal Heat Pump	10.2	6.6	65%	6.1	6.5	107%
Retro-Commissioning	392.3	32.9	8%	78.5	46.0	59%

TABLE 10: RESIDENTIAL HEAT PUMP PARTICIPATION GOAL VERSUS ACTUAL

	PY1			PY2		
	Goal	Actual	% of Goal	Goal	Actual	% of Goal
Air Source Heat Pump	72	18	29%	36	33	92%
Geothermal Heat Pump	5	3	60%	3	3	100%
Retro-Commissioning	500	88	18%	100	112	112%

In PY1, BHP achieved 20 percent of participation goal and 15 percent of the energy savings goal while spending 30 percent of the program budget. In PY2, BHP exceeded the participation and energy savings goal while spending 50 percent of the program budget.

Table 11 presents cost-effectiveness analysis results, based on program activity.

TABLE 11: RESIDENTIAL HEAT PUMP PROGRAM COST-EFFECTIVENESS RESULTS

Test	PY1	PY2
Total Resource Cost Test	0.92	1.88
Utility Cost Test	1.06	2.40
Societal Cost Test	1.15	2.37
Participant Test	4.35	5.06
Ratepayer Impact Measure Test	0.32	0.38

Residential Audit Program

The Residential Audit Program is composed of the Residential Online Energy Audit Tool and on-site customer audits. Customers receive a free energy audit to identify ways they can reduce the energy consumption in their homes. As part of the audit, auditors install low-cost energy saving measures and provide educational information.

Tables 12 and 13 compare the program goals to actual program performance.

TABLE 12: RESIDENTIAL AUDIT PROGRAM PY1 SUMMARY

	Goal	Actual	% Goal Achieved
Participation	200	70	35%
Expenditures	\$46,800	\$46,314	99%
Energy Impacts (kWh)	169,784	58,581	35%
Demand Impacts (kW)	27.0	44.9	166%

TABLE 13: RESIDENTIAL AUDIT PROGRAM PY2 SUMMARY

	Goal	Actual	% Goal Achieved
Participation	100	33	33%
Expenditures	\$41,250	\$10,918	26%
Energy Impacts (kWh)	77,818	28,017	36%
Demand Impacts (kW)	13.5	21.5	159%

In PY1, BHP achieved 35 percent of participation and energy savings goals as well as 170 percent of demand goals and spent almost the entire budget. In PY2, BHP achieved approximately the same participation and savings while spending 26 percent of the budget.

Table 14 presents cost-effectiveness analysis results, based on program activity.

TABLE 14: RESIDENTIAL AUDIT PROGRAM COST-EFFECTIVENESS RESULTS

Test	PY1	PY2
Total Resource Cost Test	0.23	0.48
Utility Cost Test	0.23	0.48
Societal Cost Test	0.29	0.59
Participant Test	n/a	n/a
Ratepayer Impact Measure Test	0.16	0.25

School-Based Energy Education Program

The School-Based Energy Education Program seeks long-term energy savings through enhanced education and awareness of energy efficiency among students. The program is promoted to school districts and teachers throughout education associations and targets middle school children and their households. The program includes a kit which consists of a set of low-cost measures for installation in the home. The program will target middle school-aged children and their households.

Tables 15 and 16 compare the program goals to actual program performance.

TABLE 15: SCHOOL-BASED EDUCATION PROGRAM PY1 SUMMARY

	Goal	Actual	% Goal Achieved
Participation	125	289	231%
Expenditures	\$5,500	\$14,167	258%
Energy Impacts (kWh)	23,750	57,617	243%
Demand Impacts (kW)	1.0	2.3	231%

TABLE 16: SCHOOL-BASED EDUCATION PROGRAM PY2 SUMMARY

	Goal	Actual	% Goal Achieved
Participation	250	248	99%
Expenditures	\$10,083	\$12,135	120%
Energy Impacts (kWh)	47,500	49,443	104%
Demand Impacts (kW)	2.0	2.0	99%

Based upon the program performance, the School-Based Energy Education Program was very popular among schools within BHP’s service territory. The PY1 program participation, expenditures and savings were more than double the goals/budget, essentially meeting PY2 goals and budget. Program PY2 performance met approximately 100 percent of the goals/budget.

Table 17 presents cost-effectiveness analysis results, based on program activity.

TABLE 17: SCHOOL-BASED EDUCATION PROGRAM COST-EFFECTIVENESS RESULTS

Test	PY1	PY2
Total Resource Cost Test	0.72	0.73
Utility Cost Test	0.72	0.73
Societal Cost Test	0.92	0.94
Participant Test	n/a	n/a
Ratepayer Impact Measure Test	0.27	0.27

Weatherization Program

Qualifying low-income customers receive help with managing their energy use and utility bills through the Weatherization Program. This program is offered to any low-income residential customer receiving service from BHP, including senior citizens and disabled customers. Eligible customers receive free installation of energy savings measures in their residence.

Tables 18 and 19 compare the program goals to actual program performance.

TABLE 18: WEATHERIZATION PROGRAM PY1 SUMMARY

	Goal	Actual	% Goal Achieved
Participation	18	19	106%
Expenditures	\$10,000	\$10,246	102%

TABLE 19: WEATHERIZATION PROGRAM PY2 SUMMARY

	Goal	Actual	% Goal Achieved
Participation	25	24	96%
Expenditures	\$9,167	\$6,899	75%

The program was successful in PY1 and PY2, spending almost the entire budget and achieving most of the participation goals. The program is offered to eligible low-income customers, therefore energy and demand savings associated with the program are secondary to the program goal of helping customers manage their energy use.

Combined Residential Program Portfolio Cost-Effectiveness

Table 20 shows the cost-effectiveness of the residential programs.

TABLE 20: COMBINED RESIDENTIAL PROGRAM COST-EFFECTIVENESS RESULTS

Test	PY1	PY2
Total Resource Cost Test	0.67	1.27
Utility Cost Test	0.74	1.44
Societal Cost Test	0.84	1.60
Participant Test	6.30	6.18
Ratepayer Impact Measure Test	0.28	0.34

Non-Residential Programs

BHE’s non-residential energy efficiency programs serve commercial and industrial customers, encouraging investment in energy efficient measures such as lighting, cooling and heating equipment, motors and refrigerator recycling.

Commercial Prescriptive Rebate Program

The Commercial Prescriptive Rebate Program provides standardized prescriptive rebates to commercial and industrial customers that install, replace or retrofit electric savings measures. These measures, including lighting, cooling and heating equipment, electric motors and variable frequency drives, are proven technologies that are readily available with known performance characteristics. All C&I customers are eligible to participate in this program. The same customer can participate in more than one measure in the same year.

The tables below compare the program goals to actual program performance.

TABLE 21: COMMERCIAL PRESCRIPTIVE BUDGET VERSUS TO EXPENDITURES

	PY1			PY2		
	Budget	Actual	% of Budget	Budget	Actual	% of Budget
C&I Lighting	\$50,000	\$28,970	58%	\$84,028	\$65,008	77%
C&I Motors	\$10,000	\$0	0%	\$0	\$0	n/a
C&I VFDs	\$34,000	\$3,105	9%	\$1,986	\$0	0%
C&I Air Source Heat Pumps	\$20,000	\$4,612	23%	\$3,667	\$1,424	39%
C&I Ground Source Heat Pumps	\$50,000	\$222	0.4%	\$908	\$2,750	303%
C&I Water Heaters	\$1,000	\$232	23%	\$183	\$135	74%
C&I Refrigerator Recycling	\$1,304	\$369	28%	\$92	\$0	0%

TABLE 22: COMMERCIAL PRESCRIPTIVE ENERGY SAVINGS GOAL VERSUS ACTUAL

	PY1			PY2		
	Goal	Actual	% of Goal	Goal	Actual	% of Goal
C&I Lighting	468,910	336,922	72%	644,752	1,024,782	159%
C&I Motors	15,998	-	0%	-	-	n/a
C&I VFDs	164,537	153,115	93%	226,238	-	0%
C&I Air Source Heat Pumps	87,511	14,239	16%	4,011	2,582	64%
C&I Ground Source Heat Pumps	39,996	-	0%	-	6,377	n/a
C&I Water Heaters	2,526	-	0%	232	324	140%
C&I Refrigerator Recycling	8,673	6,195	71%	56,784	-	0%

TABLE 23: COMMERCIAL PRESCRIPTIVE DEMAND SAVINGS GOAL VERSUS ACTUAL

	PY1			PY2		
	Goal	Actual	% of Goal	Goal	Actual	% of Goal
C&I Lighting	152.9	74.2	48%	240.5	210.0	87%
C&I Motors	4.0	-	0%	-	-	n/a
C&I VFDs	-	-	n/a	-	-	n/a
C&I Air Source Heat Pumps	40.0	4.1	10%	40.0	1.7	4%
C&I Ground Source Heat Pumps	18.3	-	0%	2.0	5.1	252%
C&I Water Heaters	1.0	-	0%	1.0	0.1	5%
C&I Refrigerator Recycling	1.3	1.0	72%	1.3	-	0%

TABLE 24: COMMERCIAL PRESCRIPTIVE PARTICIPATION GOAL VERSUS ACTUAL

	PY1			PY2		
	Goal	Actual	% of Goal	Goal	Actual	% of Goal
C&I Lighting	102	18	18%	153	33	22%
C&I Motors	20	-	0%	31	-	0%
C&I VFDs	12	2	17%	18	-	n/a
C&I Air Source Heat Pumps	40	1	3%	40	2	5%
C&I Ground Source Heat Pumps	9	-	0%	9	4	44%
C&I Water Heaters	10	-	0%	10	2	20%
C&I Refrigerator Recycling	7	5	71%	7	-	0%

In PY1, BHP spent approximately 23 percent of the budget and achieved 65 percent of the energy savings goal and 36 percent of the demand savings goal. In PY2, BHP spent approximately 75 percent of the budget and achieved 111 percent of the energy savings goal and 76 percent of the demand savings goal.

Table 25 presents results from the cost-effectiveness analysis, based on program activity.

TABLE 25: COMMERCIAL PRESCRIPTIVE PROGRAM COST-EFFECTIVENESS RESULTS

Test	PY1	PY2
Total Resource Cost Test	3.08	1.75
Utility Cost Test	5.02	6.88
Societal Cost Test	3.89	2.19
Participant Test	6.68	3.50
Ratepayer Impact Measure Test	0.48	0.50

Commercial Custom Rebate Program

The Commercial Custom Rebate Program offers rebates to commercial and industrial customers that plan to install equipment that does not qualify for a prescriptive rebate. Custom rebates are determined individually for each project based upon the equipment energy savings and the cost difference between standard and high efficiency equipment (i.e. the incremental cost of the equipment).

Custom rebates, up to \$25,000 per year per facility, are the lesser of the following:

- 50% of the incremental cost
- \$0.30 per kWh savings

TABLE 26: COMMERCIAL CUSTOM PROGRAM PY1 SUMMARY

	Goal	Actual	% Goal Achieved
Participation	-	4	n/a
Expenditures	\$85,000	\$31,867	37%
Energy Impacts (kWh)	592,042	149,816	25%
Demand Impacts (kW)	-	16.7	n/a

TABLE 27: COMMERCIAL CUSTOM PROGRAM PY2 SUMMARY

	Goal	Actual	% Goal Achieved
Participation	-	19	n/a
Expenditures	\$186,793	\$72,279	39%
Energy Impacts (kWh)	997,828	639,904	64%
Demand Impacts (kW)	-	82.8	n/a

The program spent approximately 35-40 percent of the budget in PY1 and PY2. The program achieved 25 percent of the PY1 energy savings goal and 64 percent of the PY2 energy savings goal. In PY1, BHP provided reduced rebates for LED lighting projects that did not pass the TRC test. The rebates typically covered 5 to 10 percent of the incremental cost of the lighting project. In PY2, BHP rebated a number of LED lighting and Induction lighting projects.

Table 28 presents cost-effectiveness analysis results, based on program activity.

TABLE 28: COMMERCIAL CUSTOM PROGRAM COST-EFFECTIVENESS RESULTS

Test	PY1	PY2
Total Resource Cost Test	0.99	1.87
Utility Cost Test	1.88	3.61
Societal Cost Test	1.26	2.35
Participant Test	2.53	4.20
Ratepayer Impact Measure Test	0.41	0.46