

**TO:** COMMISSIONERS AND ADVISORS  
**FROM:** DARREN KEARNEY, BRIAN ROUNDS, AND KRISTEN EDWARDS (STAFF)  
**SUBJECT:** EL14-039 STAFF RECOMMENDATION  
**DATE:** AUGUST 15, 2014

STAFF MEMORANDUM

**OVERVIEW**

With this filing, Otter Tail Power (OTP) submitted its Energy Efficiency Plan (EEP) results for the 2013 calendar year. The company requests approval of an \$84,000 financial incentive for 2013 and supports this request with its 2013 EEP status report and other supporting documentation and tables. Finally, OTP does not seek to change its EEP with this filing<sup>1</sup> and requests the commission approve the continuation of the Energy Efficiency Adjustment Rider at \$0.00103/kWh.

**DISCUSSION**

Budget vs. Actuals

Results for the 2013 EEP budgets to actuals are provided in the tables below. Table 1 shows the results for the residential programs, which came in under budget for the year (at 89% of planned spending).

Program	B	A	V
AC Control	\$ 10,000	\$ 9,760	98%
Air Source Heat Pumps	\$ 14,000	\$ 14,673	105%
Geothermal Heat Pumps	\$ 21,000	\$ 15,687	75%
<b>Total Residential</b>	<b>\$ 45,000</b>	<b>\$ 40,120</b>	<b>89%</b>

Table 2 shows the results for the commercial program, which also came in under budget for the year (at 91% of spending).

Program	B	A	V
Air Source Heat Pumps	\$ 25,000	\$ 6,784	27%
Custom Efficiency Projects	\$ 73,000	\$ 75,709	104%
Geothermal Heat Pumps	\$ 50,000	\$ 17,906	36%
Lighting	\$ 37,000	\$ 76,983	208%
Motors	\$ 17,000	\$ 5,435	32%
<b>Total Commercial</b>	<b>\$ 202,000</b>	<b>\$ 182,817</b>	<b>91%</b>

<sup>1</sup> Otter Tail's 2014-2015 Energy Efficiency Plan was approved in docket # EL13-016

Finally, Table 3 shows the results for the entire EEP. Overall, the EEP came in slightly over budget. Higher EEP development expenses offset the budget under runs that occurred in the residential and commercial programs. Driving the higher EEP development expenses was increased time spent on developing the 2014/2015 biennial plan and OTP attended more meetings with the SDPUC than typical.<sup>2</sup>

<b>Program</b>	<b>B</b>	<b>A</b>	<b>V</b>
Total Residential	\$ 45,000	\$ 40,120	89%
Total Commercial	\$ 202,000	\$ 182,817	91%
Advertising and Education	\$ 8,000	\$ 7,838	98%
EEP Development	\$ 25,000	\$ 50,773	203%
<b>Total EEP</b>	<b>\$ 280,000</b>	<b>\$ 281,548</b>	<b>101%</b>

### Energy Savings

Table 4 provides the energy savings OTP's EEP produced in 2013. Overall, the program achieved actual energy savings of 1,611,525 kWh for the year. This was only 71% of the energy savings planned to be achieved for 2013 (2,274,260 kWh). Contributing to the lower actual energy savings in 2013 were the commercial programs, particularly the air source heat pump and custom efficiency project programs. Less participation than expected resulted in the low energy savings for air source heat pumps. On the other hand, the type of projects<sup>3</sup> completed in the custom efficiency program resulted in the lower energy savings for that program. Finally, the commercial lighting program helped to offset some of the lower energy savings produced by other programs due to a high amount of participation in commercial lighting for 2013.

<b>Program</b>	<b>B</b>	<b>A</b>	<b>V</b>
Res - AC Control	1,464	439	30%
Res - Air Source Heat Pumps	168,130	156,361	93%
Res - Geothermal Heat Pumps	120,398	104,549	87%
<b>Total Residential</b>	<b>289,992</b>	<b>261,349</b>	<b>90%</b>
Com - Air Source Heat Pumps	314,403	72,296	23%
Com - Custom Efficiency Projects	806,250	183,117	23%
Com - Geothermal Heat Pumps	308,633	126,040	41%
Com - Lighting	522,671	968,723	185%
Com - Motors	32,311	0	0%
<b>Total Commercial</b>	<b>1,984,268</b>	<b>1,350,176</b>	<b>68%</b>
Advertising and Education	-	-	-
EEP Development	-	-	-
<b>Total EEP</b>	<b>2,274,260</b>	<b>1,611,525</b>	<b>71%</b>

<sup>2</sup> See Otter Tail Response to Staff Data Request # 1-3

<sup>3</sup> See Otter Tail Response to Staff Data Request # 1-2

## Benefit/Cost Tests

The benefit/cost tests that resulted from OTP's 2013 EEP are included in Table 5. All programs had a Total Resource Cost (TRC) test greater than 1.0, indicating that each program was economical in 2013 and well managed. Overall, the total EEP portfolio had a TRC of 3.45 and shows that the benefits of the entire program outweigh the costs of the program.

<b>Program</b>	<b>TRC</b>	<b>RIM</b>	<b>PART</b>	<b>UTIL</b>	<b>SOC</b>
Res - AC Control	2.55	1.96	-	2.03	2.55
Res - Air Source Heat Pumps	4.18	0.89	5.00	7.44	4.35
Res - Geothermal Heat Pumps	3.77	2.24	1.42	14.38	3.83
<b>Total Residential</b>	<b>3.78</b>	<b>1.52</b>	<b>2.34</b>	<b>8.84</b>	<b>3.86</b>
Com - Air Source Heat Pumps	3.55	0.99	3.60	7.89	3.68
Com - Custom Efficiency Projects	2.30	2.89	0.56	5.75	2.32
Com - Geothermal Heat Pumps	3.42	2.04	1.42	12.88	2.69
Com - Lighting	5.41	1.52	3.29	14.17	5.54
Com - Motors	-	-	-	-	-
<b>Total Commercial</b>	<b>3.73</b>	<b>1.74</b>	<b>1.84</b>	<b>9.9</b>	<b>3.79</b>
Advertising and Education	-	-	-	-	-
EEP Development	-	-	-	-	-
<b>Total EEP</b>	<b>3.45</b>	<b>1.62</b>	<b>1.92</b>	<b>7.69</b>	<b>3.52</b>

## 2013 Financial Incentive

Otter Tail Power is awarded a financial incentive in order to compensate the company for lost revenues associated with energy savings derived from the EEP. The financial incentive is the lesser of: 1) 30% of the approved budget, or, 2) 30% of the actual spending. For 2013, 30% of the approved budget equaled \$84,000 and 30% of actual spending equaled \$84,465. Given this, OTP is requesting approval of \$84,000, which is the lesser amount.

## **STAFF RECOMMENDATION**

Staff reviewed OTP's 2013 EEP report and makes the following recommendations:

- 1) Staff agrees with OTP's calculation of the financial incentive and recommends that the commission approve a 2013 financial incentive of \$84,000.
- 2) Even though OTP reported less energy savings in 2013 than expected, the company still produced strong TRC test results for each program. It is Staff's opinion that OTP is effectively managing its EEP and no program changes are needed at this time. Staff, therefore, recommends that the commission approve OTP's request to continue the Energy Efficiency Adjustment Rider at \$0.00103/kWh.