

**TO:** COMMISSIONERS AND ADVISORS  
**FROM:** ERIC PAULSON AND KRISTEN EDWARDS (STAFF)  
**SUBJECT:** EL22-011 STAFF RECOMMENDATION  
**DATE:** JUNE 2, 2022

STAFF MEMORANDUM

**OVERVIEW**

With this filing, Otter Tail Power Company (Otter Tail) submitted its Energy Efficiency Plan (EEP) results for the 2021 calendar year. Further, Otter Tail requests approval of a \$278,101 financial incentive for 2021 and supports this request with its 2021 EEP status report and other supporting documentation and tables. Otter Tail also requests the Energy Efficiency Adjustment Factor remain at \$0.00195/kWh for July 2022 through June 2023.

**DISCUSSION**

2021 Budget vs. Actuals

Results for the 2021 EEP budgets to actuals are provided in the tables below. Tables 1 and 2 show the results for the residential programs and commercial programs. Actual spending for the residential programs was 134% percent of the approved budget and was 91% percent of the approved budget for commercial programs. Notably, the residential heat pumps were over budget by \$57,781 and the commercial lighting was over budget by \$21,477. The overspend in the residential heat pumps and commercial lighting programs were mostly offset with a \$74,017 underspend in the commercial heat pumps program.

<b>Table 1. 2021 Residential Program Budget</b>			
<b>Program</b>	<b>B</b>	<b>A</b>	<b>V</b>
AC Control	\$ 5,500	\$ 2,836	52%
Appliance Recycling	\$ 7,000	\$ 6,874	98%
Home Lighting	\$ 32,000	\$ 37,187	116%
Residential Heat Pumps	\$ 124,000	\$ 181,781	147%
Smart Thermostats	\$ 5,000	\$ 2,977	60%
<b>Total Residential</b>	<b>\$ 173,500</b>	<b>\$ 231,655</b>	<b>134%</b>

<b>Table 2. 2021 Commercial Program Budget</b>			
<b>Program</b>	<b>B</b>	<b>A</b>	<b>V</b>
Direct Install	\$ 17,000	\$ 8,544	50%
Commercial Heat Pumps	\$ 170,000	\$ 95,983	56%
Commercial Lighting	\$ 158,000	\$ 179,477	114%
Custom Energy Efficiency Projects	\$ 61,500	\$ 59,284	96%
Drive Power	\$ 292,000	\$ 292,724	100%
<b>Total Commercial</b>	<b>\$ 698,500</b>	<b>\$ 636,013</b>	<b>91%</b>

Table 3 shows the results for the entire EEP. Overall, the EEP came in slightly under budget; it should be noted that actual expenses remained within the maximum spending cap set at 110% of the budget.<sup>1</sup>

<b>Table 3. 2021 Total EEP Budget</b>			
<b>Program</b>	<b>B</b>	<b>A</b>	<b>V</b>
Total Residential	\$ 173,500	\$ 231,655	134%
Total Commercial	\$ 698,500	\$ 636,013	91%
Advertising and Education	\$ 38,000	\$ 40,233	106%
EEP Development	\$ 20,000	\$ 19,104	96%
<b>Total EEP</b>	<b>\$ 930,000</b>	<b>\$ 927,005</b>	<b>100%</b>

### 2021 Energy Savings

Table 4 provides the energy savings Otter Tail's EEP produced in 2021. Overall, the EEP achieved energy savings of 11,869,229 kWh for the year. This was 98% of the energy savings planned to be achieved for the year. Driving the energy savings achieved in 2021 were the Residential Lighting, Residential Air Source Heat Pumps, Commercial Lighting, and Commercial Drive Power programs.

<sup>1</sup> See Order Approving South Dakota Energy Efficiency Plan for 2021-2023: Docket EL20-022

<b>Program</b>	<b>B</b>	<b>A</b>	<b>V</b>
Res - AC Control	8,239	7,801	95%
Res - Appliance Recycling	19,461	7,702	40%
Res - Home Lighting	332,958	350,351	105%
Res - Heat Pumps	806,786	1,177,513	146%
Res - Smart Thermostats	34,700	19,045	55%
<b>Total Residential</b>	<b>1,202,144</b>	<b>1,562,412</b>	<b>130%</b>
Com - Direct Install	243,984	108,059	44%
Com - Heat Pumps	982,177	434,753	44%
Com - Lighting	1,638,575	1,756,436	107%
Com - Custom Energy Efficiency Projects	535,822	518,671	97%
Com - Drive Power	7,497,598	7,488,898	100%
<b>Total Commercial</b>	<b>10,898,156</b>	<b>10,306,817</b>	<b>95%</b>
Advertising and Education	-	-	-
EEP Development	-	-	-
<b>Total EEP</b>	<b>12,100,300</b>	<b>11,869,229</b>	<b>98%</b>

#### 2021 Benefit/Cost Tests

Table 5 provides the results from the 2021 benefit-cost test results. All programs with the exception of Residential Appliance Recycling passed the Total Resource Cost (TRC) test during the year. The total TRC test for the EEP was 2.59.

<b>Program</b>	<b>TRC</b>	<b>RIM</b>	<b>PART</b>	<b>UTIL</b>	<b>SOC</b>
Res - AC Control	5.21	4.09	inf.	5.21	5.21
Res - Appliance Recycling	0.39	0.22	inf.	0.37	0.45
Res - Home Lighting	2.44	0.47	8.11	5.10	3.25
Res - Heat Pumps	1.52	0.43	4.79	3.58	2.11
Res - Smart Thermostats	1.45	0.34	6.55	1.94	1.73
<b>Total Residential</b>	<b>1.67</b>	<b>0.45</b>	<b>5.25</b>	<b>3.73</b>	<b>2.27</b>
Com - Direct Install	3.58	0.51	inf.	2.15	3.90
Com - Heat Pumps	1.81	0.51	4.03	2.21	2.39
Com - Lighting	5.82	0.68	10.27	5.31	7.54
Com - Custom Energy Efficiency Projects	1.57	0.80	2.00	4.19	2.02
Com - Drive Power	2.82	0.77	3.66	14.71	3.67
<b>Total Commercial</b>	<b>2.91</b>	<b>0.74</b>	<b>4.03</b>	<b>9.02</b>	<b>3.78</b>
Advertising and Education	-	-	-	-	-
EEP Development	-	-	-	-	-
<b>Total EEP</b>	<b>2.59</b>	<b>0.68</b>	<b>4.27</b>	<b>7.12</b>	<b>3.39</b>

### 2021 Financial Incentive

Otter Tail is awarded a financial incentive in order to compensate Otter Tail 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 2021, 30% of the approved budget is \$279,000 and 30% of actual spending equaled \$278,101. Therefore, Otter Tail is requesting approval for the lesser amount of \$278,101.

### Energy Efficiency Adjustment Factor

Otter Tail requests the Energy Efficiency Adjustment Factor remain at the existing rate of \$0.00195/kWh for July 2022 through June 2023. This rate would be in place of the calculated rate of \$0.00224 that is based on the projected revenue requirement of \$1,116,232 and projected sales of 499,147,420 kWh. As noted in the filing on pages 19 and 20, an increase in the rate of 10% would result in a rate of \$0.00215. With an increase of 10%, which is still below that of the calculated amount, the carrying charges are only reduced by \$3,277. However, Otter Tail believes the rate will still trend down in 2023 due to the reduction in the budget. Therefore, Otter Tail suggests keeping the rate at its current level to provide rate stability for customers. Table 6 provides the breakdown of the calculated rate of \$0.00224. Table 7 provides the estimated monthly bill impact for a typical customer's utility bill from the Energy Efficiency Adjustment Factor if the rate was increased to the calculated rate.

<b>Description</b>	<b>Amount</b>	<b>Rate Impact</b>
Tracker Account Under Recovery <sup>1</sup>	\$ 291,525	\$ 0.00058
2021 Financial Incentive	\$ 278,101	\$ 0.00056
Remainder of 2022 EEP Budget <sup>2</sup>	\$ 145,734	\$ 0.00029
Forecasted 2023 EEP Expenses <sup>3</sup>	\$ 379,266	\$ 0.00076
Forecasted Carrying Costs	\$ 21,606	\$ 0.00004
<b>Total</b>	<b>\$ 1,116,232</b>	<b>\$ 0.00224</b>

1) Forecasted at end of June 30, 2022

2) 2022 budget was approved by the Commission in Docket EL20-022. The dollars reflected here are OTP's forecasted spending for the remainder of the 2022 budget.

3) 2023 budget was approved by the Commission in Docket EL20-022. The dollars reflected here are OTP's forecasted spending through June 30, 2023.

<b>Rate Class</b>	<b>Current EEA Factor</b>	<b>Calculated EEA Factor</b>	<b>Difference</b>	<b>Average kWh/Bill</b>	<b>Estimated Monthly Bill Impact</b>
Residential	0.00195	0.00224	0.000286	927	\$0.27
Farm	0.00195	0.00224	0.000286	1,730	\$0.49
General Service	0.00195	0.00224	0.000286	2,604	\$0.74
Large General Service	0.00195	0.00224	0.000286	274,707	\$78.57
Irrigation	0.00195	0.00224	0.000286	2,036	\$0.58
Outdoor Lighting	0.00195	0.00224	0.000286	79	\$0.02
Municipal Pumping	0.00195	0.00224	0.000286	2,870	\$0.82
Water Heating Control	0.00195	0.00224	0.000286	198	\$0.06
Interruptible Load	0.00195	0.00224	0.000286	1,777	\$0.51
Deferred Load	0.00195	0.00224	0.000286	2,159	\$0.62

1) Otter Tail proposes the rate remain at \$0.00195

## **STAFF RECOMMENDATION**

Staff makes the following recommendations:

- 1) Staff agrees with Otter Tail's calculation of the financial incentive and recommends that the commission approve a 2021 financial incentive of \$278,101,
- 2) Staff recommends the Commission approve the 2021 Energy Efficiency Plan Status Report, and
- 3) Staff recommends the Commission approve Otter Tails request that the Energy Efficiency Adjustment Factor remain at \$0.00195/kWh for July 2022 through June 2023.