

**SOUTH DAKOTA ENERGY EFFICIENCY PLAN - 2011**  
**OTTER TAIL POWER COMPANY**  
 June 16, 2010

APPENDIX B

Table 2

	2011 Proposed Savings, Costs and Benefits				2011 Actual Savings, Costs and Benefits			
	ENERGY SAVINGS (KWH)	PROPOSED BUDGET	TOTAL BENEFITS	UTILITY NET BENEFITS	ENERGY SAVINGS (KWH)	ACTUAL BUDGET	TOTAL BENEFITS	UTILITY NET BENEFITS
<b>DIRECT IMPACT PROJECTS</b>								
<b>RESIDENTIAL</b>								
Residential Demand Control	3,587	\$5,000	\$76,337	\$71,337				
Air Source Heat Pumps - Residential	168,130	\$14,000	\$119,363	\$105,363				
Geothermal Heat Pumps - Residential	120,400	\$19,000	\$292,358	\$273,358				
Air Conditioning Control *	1,464	\$6,000	\$63,106	\$57,106				
Total - Residential	293,581	\$44,000	\$551,164	\$507,164				
<b>COMMERCIAL</b>								
Grant	967,500	\$74,000	\$684,700	\$610,700				
Motors	37,733	\$10,000	\$32,060	\$22,060				
Lighting	280,094	\$30,000	\$246,323	\$216,323				
Air Source Heat Pumps - Commercial	184,943	\$25,000	\$134,835	\$109,835				
Geothermal Heat Pumps - Commercial	350,719	\$45,000	\$806,144	\$761,144				
Total - Commercial	1,820,989	\$184,000	\$1,904,060	\$1,720,060				
Total - Direct Impact	2,114,570	\$228,000	\$2,455,224	\$2,227,224				
<b>INDIRECT IMPACT PROJECTS</b>								
Advertising & Education	0	\$10,000	\$0	(\$10,000)				
Development	0	\$25,000	\$0	(\$25,000)				
Total - Indirect Impact	0	\$35,000	\$0	(\$35,000)				
<b>TOTAL - ALL PROGRAMS</b>	2,114,570	\$263,000	\$2,455,224	\$2,192,224				

\* Air conditioning programs include summer load reductions, which are not coincident to the system winter-peak Programs evaluated using DSMore software, no environmental externalities used, all dollars discounted to 2011

**SOUTH DAKOTA ENERGY EFFICIENCY PLAN - 2011**  
**OTTER TAIL POWER COMPANY**  
**Incentive Plan Forecast**

**APPENDIX B**  
 Table 3

**Calculated Values Based on Pre-Year Inputs**

Original Budget	\$263,000	
Energy Savings Goal at Original Budget	2,114,570	
	0.342770%	((Budget x 30 percent) / Projected Net benefits @ 150% of goal) / 7
Multiplier for each 10% of energy savings goal		
Estimated Net Benefits at Proposed Filing	\$2,192,224	

**Calculation of Estimated Incentive**

Derived Numbers Give the Percent of Net Benefits Awarded at Different Percentages of Energy Savings Goal

Percent of KWH Savings Goal	kWh Savings	Percent of Base	Estimated Benefits Achieved	Estimated Incentive
90 % of savings goal	1,903,113	0.34277%	\$1,973,002	\$6,763
100 % of savings goal	2,114,570	0.68554%	\$2,192,224	\$15,029
110 % of savings goal	2,326,027	1.02831%	\$2,411,446	\$24,797
120 % of savings goal	2,537,484	1.37108%	\$2,630,669	\$36,069
130 % of savings goal	2,748,941	1.71385%	\$2,849,891	\$48,843
140 % of savings goal	2,960,398	2.05662%	\$3,069,114	\$63,120
150 % of savings goal	3,171,855	2.39939%	\$3,288,336	\$78,900

Incentive cap = 30% of budget	\$263,000
	30%
	\$78,900

**Determine incentive - post year**

Inputs from previous sheet results (or enter arbitrary numbers for calculating and viewing)		
2010 Actual Energy Savings Achieved	2,114,570	100.00%
2010 Actual Expenditures	\$263,000	
2010 Actual Net Benefits	\$2,192,224	
Actual percentage applied to net benefits	0.69%	
Percent of actual net benefits	\$15,029	
Incentive not to go negative or to exceed incentive CAP		

<b>Calculated Incentive</b>	<b>\$15,029</b>
-----------------------------	-----------------