

SOUTH DAKOTA ENERGY EFFICIENCY PLAN - 2016
Otter Tail Power Company
Net Benefits

	Approved Savings, Costs and Benefits				Approved Savings, Costs and Benefits			
	Energy Savings (kWh)	Proposed Budget	Total Benefits	Utility Net Benefits	Energy Savings (kWh)	Actual Expenses	Total Benefits	Utility Net Benefits
Residential								
Air Conditioning Control	1,448	\$14,000	\$62,949	\$48,949	5,549	\$11,607	\$241,304	\$229,696
Air Source Heat Pumps	222,277	\$19,000	\$129,051	\$110,051	147,592	\$9,980	\$150,909	\$140,928
Geothermal Heat Pumps	206,583	\$23,000	\$175,582	\$152,582	27,544	\$2,309	\$28,484	\$26,176
Lighting	24,098	\$4,000	\$14,324	\$10,324	46,536	\$5,961	\$27,924	\$21,963
Total - Residential	454,404	\$60,000	\$381,907	\$321,907	227,222	\$29,857	\$448,620	\$418,763
Commercial								
Air Source Heat Pumps	134,044	\$13,000	\$81,427	\$68,427	21,447	\$1,586	\$28,280	\$26,694
Custom Efficiency Projects	968,760	\$71,000	\$968,903	\$897,903	247,505	\$30,921	\$416,768	\$385,846
Drive Power	482,713	\$63,000	\$597,394	\$534,394	390,627	\$47,399	\$428,855	\$381,455
Geothermal Heat Pumps	523,938	\$57,000	\$460,462	\$403,462	479,694	\$41,478	\$603,298	\$561,820
Lighting	244,790	\$54,000	\$307,359	\$253,359	1,477,560	\$178,664	\$1,735,128	\$1,556,464
Total - Commercial	2,354,244	\$258,000	\$2,415,545	\$2,157,545	2,616,833	\$300,049	\$3,212,328	\$2,912,280
Total - Direct Impact	2,808,649	\$318,000	\$2,797,451	\$2,479,451	2,844,054	\$329,906	\$3,660,948	\$3,331,043
Indirect Impact								
Advertising & Education		\$10,000	\$0	(\$10,000)		\$13,530	\$0	(\$13,530)
EEP Development - 2016		\$25,000	\$0	(\$25,000)		\$18,895	\$0	(\$18,895)
Total - Indirect Impact		\$35,000	\$0	(\$35,000)		\$32,425	\$0	(\$32,425)
Total - All Programs (Including Development)	2,808,649	\$353,000	\$2,797,451	\$2,444,451	2,844,054	\$362,330	\$3,660,948	\$3,298,618

Benefit/Cost Results
2016 SD EEP

Data discounted to 2016	AS FILED Utility Test	ACTUAL 2016 Utility Test
NPV Method: Midyear		
Discount Rates:	8.50%	8.50%
Benefit/Cost Ratio	7.92	10.10
Total Costs	\$353,000	\$362,330
Total Benefits	\$2,797,451	\$3,660,948
Net Benefits	\$2,444,451	\$3,298,618
Total Benefits:		
Utility Elec. Production Cost Decr	\$1,639,579	\$1,578,939
Utility Ancillary	\$5,404	\$5,318
Utility Generation Cap. Credit	\$665,963	\$969,614
Utility Transmission & Distrib. Credit	\$486,505	\$1,107,077
Total Benefits	\$2,797,451	\$3,660,948
Total Costs:		
Utility Rebates Paid	\$185,699	\$252,091
Utility Fixed Admin Cost	\$167,301	\$110,239
Total Costs	\$353,000	\$362,330