

SOUTH DAKOTA ENERGY EFFICIENCY PLAN , 2014 only
 OTTER TAIL POWER COMPANY

Attachment 1 to IR SD-PUC-02-02

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
	Year 1 Energy Savings	Year 1 Demand Savings	Program Life	Year 1 Costs	Year 1 Benefits	Year 2 Benefits	Year 3 Benefits	Year 4 Benefits	Year 5 Benefits	Year 6 Benefits	Year 7 Benefits	Year 8 Benefits	Year 9 Benefits	Year 10 Benefits	Year 11 Benefits	Year 12 Benefits	Year 13 Benefits	Year 14 Benefits	Year 15 Benefits	Total Benefits	Net Benefits	BENEFIT / COST RESULTS
	kWh	kW	Years	\$																		
DIRECT IMPACT PROJECTS																					in today's dollars	UTILITY TEST (T / D)
RESIDENTIAL																						
Air Conditioning Control	1,448	21.3	15	\$14,000	\$3,790	\$3,851	\$3,387	\$3,260	\$5,266	\$4,913	\$4,582	\$4,281	\$3,997	\$3,733	\$3,485	\$3,255	\$3,041	\$2,842	\$2,656	\$56,340	\$42,340	4.02
Air Source Heat Pumps -Residential	222,277	6.5	12	\$19,000	\$8,033	\$8,096	\$7,997	\$10,312	\$10,259	\$10,122	\$9,398	\$9,843	\$9,562	\$9,425	\$8,791	\$8,339	\$0	\$0	\$0	\$110,176	\$91,176	5.80
Geothermal Heat Pumps -Residential	206,583	17.4	15	\$23,000	\$9,474	\$9,566	\$9,225	\$11,300	\$12,329	\$12,012	\$11,164	\$11,414	\$11,002	\$10,733	\$10,012	\$9,470	\$9,040	\$8,544	\$8,077	\$153,362	\$130,362	6.67
Lighting	24,098	2.2	9-12	\$4,000	\$1,127	\$1,138	\$1,096	\$1,337	\$1,469	\$1,430	\$1,329	\$1,356	\$1,307	\$152	\$142	\$134	\$0	\$0	\$0	\$12,016	\$8,016	3.00
Total - Residential	454,404	47.4		\$60,000	\$22,424	\$22,653	\$21,705	\$26,209	\$29,322	\$28,477	\$26,472	\$26,894	\$25,867	\$24,043	\$22,430	\$21,198	\$12,081	\$11,386	\$10,733	\$331,894	\$271,894	5.53
COMMERCIAL																						
Air Source Heat Pumps -Commercial	134,044	3.9	12	\$13,000	\$5,063	\$5,103	\$5,045	\$6,518	\$6,462	\$6,379	\$5,923	\$6,209	\$6,034	\$5,949	\$5,549	\$5,264	\$0	\$0	\$0	\$69,498	\$56,498	5.35
Custom Efficiency Projects	968,760	134.6	15	\$71,000	\$53,284	\$53,864	\$51,110	\$60,343	\$70,184	\$67,830	\$63,078	\$63,466	\$60,843	\$58,935	\$54,983	\$51,902	\$49,377	\$46,586	\$43,959	\$849,744	\$778,744	11.97
Drive Power	482,713	104.8	15	\$63,000	\$33,465	\$33,868	\$31,637	\$35,974	\$44,590	\$42,766	\$39,794	\$39,425	\$37,596	\$36,159	\$33,739	\$31,783	\$30,133	\$28,379	\$26,731	\$526,038	\$463,038	8.35
Geothermal Heat Pumps -Commercial	523,938	43.6	15	\$57,000	\$24,787	\$25,025	\$24,179	\$29,745	\$32,211	\$31,415	\$29,194	\$29,906	\$28,844	\$28,163	\$26,272	\$24,856	\$23,736	\$22,439	\$21,216	\$401,989	\$344,989	7.05
Lighting	244,790	75.0	10	\$54,000	\$21,173	\$21,442	\$19,856	\$22,091	\$28,392	\$23,548	\$21,918	\$21,543	\$20,486	\$19,630	\$18,317	\$17,236	\$3,820	\$3,592	\$3,377	\$266,419	\$212,419	4.93
Total - Commercial	2,354,244	361.8		\$258,000	\$137,772	\$139,302	\$131,826	\$154,671	\$181,839	\$171,939	\$159,906	\$160,548	\$153,803	\$148,837	\$138,859	\$131,042	\$107,066	\$100,995	\$95,283	\$2,113,689	\$1,855,689	8.19
Total - Direct Impact	2,808,649	409.1		\$318,000	\$160,196	\$161,954	\$153,532	\$180,880	\$211,161	\$200,415	\$186,378	\$187,442	\$179,670	\$172,880	\$161,289	\$152,240	\$119,148	\$112,381	\$106,016	\$2,445,583	\$2,127,583	
INDIRECT IMPACT PROJECTS																						
Advertising & Education	0	0.0		\$10,000																\$0	-\$10,000	
Development	0	0.0		\$25,000																\$0	-\$25,000	
TOTAL - ALL PROGRAMS	2,808,649	409.1		\$353,000																\$2,445,583	\$2,092,583	6.93
EEP Carrying Charges July 2012 - June 2013				\$6,412																		
Financial Incentive @ 30% of Program Expenses				\$105,900																		
TOTAL - ALL EXPENSES & BENEFITS				\$465,312																\$2,445,583	\$1,980,271	5.26

2012 SD Sales	Total Net Benefits	Net Benefits per kWh
407,054,057	\$1,980,271	\$0.00486