

**SOUTH DAKOTA ENERGY EFFICIENCY PLAN - 2016**  
**Otter Tail Power Company**  
**Benefit/Cost Ratios**

APPENDIX A, TABLE 3

	Approved Benefit / Cost Test Results					Actual Benefit / Cost Test Results				
	Utility Test	Total Resource Test	Ratepayer Impact Test	Societal Test	Participant Test	Utility Test	TRC Test	RIM Test	Societal Test	Participant Test
<b>Residential</b>										
Air Conditioning Control	4.50	6.50	4.12	6.50	inf.	20.79	30.07	13.32	30.07	inf.
Air Source Heat Pumps	6.79	2.86	0.68	2.86	5.01	15.12	5.52	0.94	5.52	5.14
Geothermal Heat Pumps	7.63	2.16	0.85	2.16	2.72	12.34	3.64	0.83	3.64	3.36
Lighting	3.58	4.10	0.73	4.10	16.15	4.68	29.11	0.52	29.11	286.28
<b>Total - Residential</b>	<b>6.37</b>	<b>2.72</b>	<b>0.88</b>	<b>2.72</b>	<b>3.57</b>	<b>15.03</b>	<b>10.32</b>	<b>1.68</b>	<b>10.32</b>	<b>6.11</b>
<b>Commercial</b>										
Air Source Heat Pumps	6.26	2.88	0.73	2.88	3.69	17.83	5.50	1.26	5.50	3.81
Custom Efficiency Projects	13.65	4.59	1.71	4.59	2.12	13.48	1.64	2.34	1.64	0.47
Drive Power	9.48	3.94	1.79	3.94	1.72	9.05	3.78	1.05	3.78	2.87
Geothermal Heat Pumps	8.08	2.27	0.93	2.27	1.87	14.55	2.96	1.04	2.96	2.17
Lighting	5.69	3.14	1.35	3.14	2.05	9.71	46.73	1.18	46.73	103.06
<b>Total - Commercial</b>	<b>9.36</b>	<b>3.50</b>	<b>1.39</b>	<b>3.50</b>	<b>2.00</b>	<b>10.71</b>	<b>4.89</b>	<b>1.21</b>	<b>4.89</b>	<b>3.27</b>
<b>Indirect Impact</b>										
Advertising & Education										
EEP Development - 2016										
<b>Total - Indirect Impact</b>										
<b>Total - All Programs</b>	<b>7.92</b>	<b>3.27</b>	<b>1.27</b>	<b>3.27</b>	<b>2.25</b>	<b>10.10</b>	<b>5.06</b>	<b>1.24</b>	<b>5.06</b>	<b>3.40</b>