

2027-2029 SOUTH DAKOTA ENERGY EFFICIENCY PLAN
Otter Tail Power Company
Residential Program Assumptions

Appendix B, Table 1

	Participation Per Year	Average kWh Savings	Average kW Savings	Rebate Amount
Air Conditioning Control				
Resd Cool Savings New Participants	10	41.58	0.7	-
Resd Installed Cool Savings Past Year Participants	246	41.58	0.7	-
Resd Short-Duration Controlled Rates Participants	425	41.58	0.7	
Total Program	681	28,316	471.93	\$0.00
Home Lighting				
Resd Retail LED Bulbs - Per Unit	3,090	9.71	0.00	\$1.69
Resd Hardwired Indoor LED Retrofit Per Project	24	4,703	1.35	\$322.50
Resd Hardwired Indoor LED New Construction Per Project	24	2,302	0.13	\$184.90
Resd Hardwired Outdoor LED Retrofit Per Project	6	2,350	-	\$79.94
Resd Hardwired Outdoor LED New Construction Per Project	6	2,729	-	\$41.78
Total Program	3,150	228,590	39.18	\$18,000
Home Heating and Cooling				
Resd Energy Star AC Unit	1	182	0.21	\$50.00
Resd Energy Star AC Unit Quality Installation	1	150	0.22	\$100.00
Resd Energy Star AC Unit Tune Up	5	424	0.25	\$50.00
Resd Heat Pump Unit Tune Up	5	3,878	0.25	\$150.00
Resd Heat Pump Quality Installation Per Ton	25	729	0.08	\$200.00
Resd Pre-Heating Domestic Hot Water Per Ton	5	848	0.01	\$200.00
Resd Energy Recovery Ventilation -NEW	5	582	0.20	\$500.00
Resd Air to Water Heat Pump Per Ton	1	8,454	-	\$1,200.00
Resd Window Heat Pump Unit - NEW	3	7,040	0.49	\$200.00
Resd Packaged Terminal Per Ton - NEW	3	7,930	0.35	\$200.00
Resd Standard Air Source Heat Pump Per Ton	15	3,667	0.06	\$400.00
Resd Cold Climate Heat Pump (Ducted) Per Ton	70	4,923	0.11	\$1,000.00
Resd Cold Climate Heat Pump (Ductless) Per Ton	30	4,923	0.11	\$800.00
Resd Geothermal Heat Pump Per Ton	5	7,808	0.25	\$1,400.00
Total Program	174	686,908	21.54	\$119,000
Smart Thermostat				
Resd Tier 2 Thermostat - Electric Heating	5	1,068	-	\$75.00
Resd Tier 2 Thermostat - Cooling Only	5	258	-	\$50.00
Resd Tier 3 Thermostat - Line Voltage - Heating Only	5	1,438	-	\$75.00
Resd Tier 3 Thermostat - Electric Heating	20	1,068	0.09	\$75.00
Resd Tier 3 Thermostat - Cooling Only	5	258	0.09	\$50.00
Total Program	40	36,477	2.32	\$2,750.00

2027-2029 SOUTH DAKOTA ENERGY EFFICIENCY PLAN
Otter Tail Power Company
Commercial Program Assumptions

Appendix B, Table 2

	Participation Per Year	Average kWh Savings	Average kW Savings	Rebate Amount
Drive Power				
Comm HVAC or Seasonal Fan ASD - \$10 Per HP	4	16,308.93	-	\$150
Comm Process or Year-Round Fan ASD - \$20 Per HP	95	34,735.38	4.52	\$537
Comm Totally-Enclosed Motor - Per Unit	114	3,760.57	0.45	\$350
Comm Open Drip-Proof Motor - Per Unit	2	1,832.94	0.34	\$350
Comm Electronically Commutated Fan Motor - Per Unit - NEW	6	1,917.34	0.50	\$90
Comm Electronically Commutated Circulator Motor - Per Unit	6	8,245.35	1.88	\$70
Comm Explosion-Proof Motor - Per Unit	4	3,366.84	0.41	\$350
Comm High Volume Low Speed Fan - Per Unit - NEW	4	25,133.32	4.97	\$225
Comm Hand Dryer Motor - Per Unit - NEW	6	1,557.58	0.18	\$250
Total Program	241	3,981,790	518.67	\$97,000
Commercial Heating and Cooling				
Comm Heat Pump Quality Installation Per Ton	50	676.05	0.08	\$200
Comm Energy Star AC Quality Installation - Per Unit	2	150.29	0.22	\$100
Comm Energy Star AC Unit Tune Up - Per Ton	5	162.55	0.08	\$25
Comm Heat Pump Unit Tune Up - Per Ton	5	867.16	0.08	\$50
Comm Pre Heating Domestic Hot Water - Per Ton	6	847.75	0.11	\$200
Comm Energy Recovery Ventilation -Per Unit - NEW	10	340.26	0.20	\$200
Comm ERV - HRV - Demand Control Ventilation - Per Unit - NEW	5	51.68	0.00	\$50
Comm Heat Pump Water Heater - Per Ton- NEW	2	2,005.06	0.23	\$500
Comm Air to Water Heat Pump Per Ton	1	2,776.22	0.00	\$1,200
Comm Packaged Terminal Per Ton - NEW	15	4,968.82	0.35	\$200
Comm Smart Thermostat - Per Unit - NEW	10	786.14	0.00	\$75
Comm Standard Air Source Heat Pump Per Ton	6	2,264.60	0.06	\$400
Comm Cold Climate Heat Pump (Ducted) Per Ton	50	3,048.07	0.11	\$1,000
Comm Cold Climate Heat Pump (Ductless) Per Ton	35	3,048.07	0.11	\$800
Comm Geothermal Heat Pump Per Ton	6	5,481.70	0.57	\$1,400
Total Program	208	442,743	26.62	\$109,000
Commercial Lighting				
Comm Exit Fixture Lighting Retro - Per Unit	4	1,679	0.22	\$50
Comm Hard Wired Indoor Lighting Retro - Per Project	33	19,802	3.37	\$1,033
Comm Hard Wired Outdoor Lighting Retro - Per Project	4	8,334	-	\$237
Comm Lamp Linear Lighting Retro - Per Project	2	11,142	1.81	\$333
Comm Screw In Lighting Indoor Retro - Per Project	2	18,540	3.29	\$186
Comm Screw In Lighting Outdoor Retro - Per Project	1	8,821	-	\$8
Comm Motion Sensor Lighting Retro - Per Unit	2	1,438	0.27	\$53
Comm Motion Sensor Lighting New Construction - Per Unit	1	1,438	0.27	\$70
Comm Hard Wired Indoor Lighting New Construction - Per Project	30	12,662	2.29	\$403
Comm Hard Wired Outdoor Lighting New Construction - Per Project	4	5,586	-	\$75
Comm Screw In Lamps Indoor Lighting New Construction - Per Project	1	3,954	1.01	\$49
Comm Screw In Lamps Outdoor Lighting New Construction - Per Project	2	2,594	-	\$11
Comm High Wattage New Construction 100 to 149 - Per Unit - NEW	1	1,194	0.22	\$55
Comm High Wattage New Construction 150 to 199 - Per Unit - NEW	1	1,420	0.26	\$85
Comm High Wattage New Construction 200 to 249 - Per Unit - NEW	1	3,221	0.60	\$115
Comm High Wattage New Construction 250 to 299 - Per Unit - NEW	1	3,845	0.71	\$130
Comm High Wattage New Construction 300 and Above - Per Unit - NEW	1	5,149	0.95	\$165
Total Program	91	1,192,189	195.53	\$49,000