

Deemed Savings Technical Assumptions – Residential/Commercial Air Conditioning Control

Otter Tail Power Company - 2026

Description

This measure includes residential A/C cycling controls. A/C controls reduce peak demand and/or shift energy usage to off-peak hours achieving peak kW savings and kWh savings. Energy savings are derived from measured

Algorithms

Annual kWh Savings = kWh Savings Per Event * Average # of Annual Events

Variables

Residential kW Reduction Per Event	0.628	The average kW reduction for a residential unit during an A/C control event. (Ref 2)
Residential kWh Savings Per Event	0.87	The average kWh reduction for a residential unit during an A/C control event. (Ref 2)
Residential Average # of Annual Events	43.18	Average # of residential A/C control events in a typical year. (Ref 2)
Commercial kW Reduction Per Event	1.3	The average kW reduction for a commercial unit during an A/C control event. (Ref 2)
Commercial kWh Savings Per Event	0.74	The average kWh reduction for a commercial unit during an A/C control event. (Ref 2)
Commercial Average # of Annual Events	26.48	Average # of commercial A/C control events in a typical year. (Ref 2)

References

1. MN TRM v 5.0: Residential Plug Load – Load Management Technologies
2. Otter Tail Power Residential CoolSavings Data 2021-2022.