



Transportation Block Heater Smart Controls

Date reviewed: 04/04/2016

| Description of Technology | | Energy Saving Opportunity | |
|--|--|--|---|
| <p>Diesel engines commonly use immersion type heaters that use 110v to ensure quick and smoke-free start-up during cold temperatures. Typically engine heaters are plugged in below a particular temperature and left on throughout the cold period. Smart controllers allow the block heaters to be cycled on and off dependent on the ambient air temperature.</p> | Sector(s): | <input type="checkbox"/> Residential | <input checked="" type="checkbox"/> Commercial & Industrial |
| | Applicability Criteria: | Diesel Engines | |
| | Efficiency Improvement: | Heating control, Electricity savings | |
| | Energy (%) Savings Potential: | 40% - 75% (Technology dependent) | |
| | Demand (%) Reduction Potential: | None | |
| | | | |
| Strengths | | Weakness | |
| <ul style="list-style-type: none"> Control is dependent on temperature rather than user discretion Easy retrofit application. Controllers can replace existing electrical outlet or used in-line with an extension cord | | <ul style="list-style-type: none"> May need qualified installer | |
| Third Party Analysis/ Previous MTAC Reviews | | Suppliers Known to MTAC | MTAC Status |
| <p>Bonneville Power Administration, conducted studies on this technology</p> | | <p>IPLC</p> <p>ELEproducts</p> | <p>Acknowledged to have energy savings potential and referred to individual PA for their own EE program consideration</p> |
| Market Development Issues | |   | |
| Cost: | \$190 - \$500 | | |
| Market Risk and Barriers: | IPLC outlet dedication for block heater use only | | |
| Time to Market: | Currently on market | | |
| Simple Pay-back: (Years) | Varies | | |