



JACKSON ELECTRIC COOPERATIVE CONTROLLED HEAT REQUIREMENTS

Jackson Electric Cooperative offers a special low off-peak electric rate for electric heating systems that are wired for peak load control. Under this program, the electric heat is metered separately (dual meters) and is switched off during peak demand periods via a load control receiver installed by Jackson Electric. **The off-peak meter will be billed at the standard rate until all load control wiring is completed.**

What is a Dual Fuel Heating System?

A dual fuel heating system is any configuration of electric heat that is installed in combination with an automatic, non-electric backup source of heat. When a peak control period occurs, the electric heat is switched off and the non-electric back-up heating system is activated to provide heat during the control period. **The installation or use of any uncontrolled electric heat, such as a portable electric space heater, that may operate during peak control periods, is not permitted on either meter under this program.**

What is an Electric Thermal Storage Heating System?

An electric thermal storage system (ETS) is an electric heating system using high density brick within a room heater or central heating system to store heat for use during a peak control period. Because an ETS system recharges itself with heat during off-peak hours, usually at night for use during the following day, no back-up heat source is needed. ETS systems are designed to be switched off on a daily basis. **The installation or use of any uncontrolled electric heat, such as a portable electric space heater, that may operate during peak control periods, is not permitted on either meter under this program.**

Metering Requirements

Controlled heating systems require two meters, one for the main service and one for the controlled heating loads. In most cases, that means the installation of a dual meter socket and two parallel services. Please wire for the heat meter on the right side. Please contact the cooperative to obtain dual metering specifications. **The off-peak meter will be billed at the standard rate until all load control wiring is in place.**

What is permitted on the heat meter?

Generally speaking, all electric space heating, cooling systems and domestic hot water systems are permitted on the controlled heat meter provided they are hard wired; no plug-in outlets. Loads such as dryers, stoves, hot tubs, plug-in air conditioners, and other non-controlled loads are not allowed on the heat meter. Well pumps used for open-loop geothermal heat pumps are generally permitted on the heat meter. We reserve the right to restrict wells on heat meters if heavy water use during control periods is likely.

When are the control periods and how long are they?

Dual fuel control periods usually occur on the 5-15 coldest and 5-15 hottest days of the year. Winter control periods usually start about 5 p.m. and end about 11 p.m. If the following mornings are severely cold, load control may occur then as well. Summer load control usually starts about 4 p.m. and ends about 10 p.m. Cooling loads are cycled on and off every 15 minutes during summer load control.

ETS (Electric thermal storage) heating control periods occur daily. Generally speaking, the control periods start about 5- 6 a.m. and last until late morning or early afternoon. Then, heating systems and water heaters get 2.5 hours to recharge and are switched off again until 10- 11 p.m. Total on-time is 10 hours; 7.5 hours at night and 2.5 hours during the day. ETS load control does not occur on weekends or holidays unless it is a full load control (high peak) day.

When are water heaters switched off?

Water heaters wired through the heat meter are wired for daily load control. We encourage the use of 105 gallon water heaters so there is adequate hot water for use during these daily control periods. See the ETS heating control periods above for the daily control times. Older installations not originally wired for daily load control are being converted to daily load control of water heaters. If replacing, we recommend a 105 gallon water heater. If your water heater is too small for daily load control, you will be required to remove your water heater from the heat meter and wire it through the main meter. Your load control receiver will be reconfigured so your water heater is switched off less frequently and for shorter durations.

What are the control wiring requirements?

The installation of a load control receiver to switch off heating and cooling loads is required to receive the off-peak rate for electric heat. In most cases, the receiver will be attached to the dual meter socket located on the house. Please refer to the attached DUAL METERING WIRING SPECIFICATIONS. Please provide two (2) #10 wires for each water heater plus three (3) #12 wires (one white) from the meter socket to the lower portion of the load center. In most cases, low voltage wiring, as shown in the DUAL METERING WIRING SPECIFICATIONS, is also required, and must be in place before the load control receiver is installed. Please call about control wiring options if the meter socket is not attached to the house.