# **OFF-PEAK INFORMATION FOR NEW INSTALLATIONS:**

## ELECTRIC HEATING SYSTEMS

- Electric forced air, plenum heater, boiler, heat pump, baseboard, cove heat, slab heat, and ceiling heat.
- $\cdot$  Capable of interruption for extended time periods.
- All living spaces must have adequate and automatic non-electric backup (see backup heating systems section below).
- A single thermostat system is recommended.
- Shop/garage heat is not required to have a backup source, although we strongly recommend it.
- Non-qualifying off-peak loads include: clothes dryers, dishwashers, hot tubs, pool heaters, room air conditioners, and warm tiles.
- •The cooperative provides the following equipment:
  - Meter socket
  - CTs
  - Ripple control

## BACKUP HEATING SYSTEMS

- Must maintain 65° F temperature throughout home or business.
- Must be thermostatically controlled. Nonautomated backups (wood, corn, kerosene, used oil, outdoor wood stoves, etc.) are not an adequate backup system.
- Natural gas, fuel oil, or propane forced-air or boiler systems are the most common qualifying backup heating systems.
- A single gas fireplace or electric room thermal storage heater cannot be used as the only backup.
- The off-peak meter will not be set in homes that do not have an adequate backup system.

## MAIN PANEL ELECTRIC HEAT

- Main panel electric heat and off-peak electric heat cannot serve the same space (with exception). Up to 2 kW of electric heat is allowed in main panel. Example: bathroom heater, warm tile floor heat, etc.
- Plug-in heaters are not allowed as a backup heating source.

#### UNDER FLOOR HEAT

- Must have 4"-6" of sand to qualify for off-peak rate.
- $\cdot$  Should be sized for 16+ hours/day of load control.
- Call 701-356-4400 for sizing questions.
- Use floor-sensing thermostats vs. air thermostats for hydronic and cable heat.

#### AIR CONDITIONING

- Cycled air conditioning on an off-peak meter is 6.9 cents per kWh + Purchased Power Adjustment (June-Sept.).
- Controlled 25 minutes off/25 minutes on during peak conditions in the summer.
- · Applies to central air conditioners only.

## HEAT PUMPS/MINI-SPLITS

- Air-source heat pumps must be in the off-peak circuit and controlled.
- We do not require the cooling side of a heat pump to be controlled, though the heat must be controlled.
- The cooling side is controlled 25 minutes off/25 minutes on during peak conditions in the summer (June-Sept.).

### EXCEPTION

• We recommend the mini-split heat pump be in the off-peak panel and controlled to receive the lower off-peak rate. If the mini-split heat pump is under two tons, it can be in the main panel and uncontrolled. Please contact our energy management department with questions.

## WATER HEATING AND CIRCULATING PUMPS

• These pumps are installed to ensure there is hot water immediately available. Depending on how they are configured, the impact to electric consumption will vary. Water heaters on off-peak cannot be used with circulating pumps, unless the pump is also tied to the load control equipment (ripple).

> WE WANT TO WORK WITH YOU TO FIND THE BEST RATES AND EQUIPMENT FOR YOUR SCENARIO.