Lowering Your Electric Bills

Since July 1st, 1996, the customer's electric rate is determined by how much the customer participates in helping to reduce the City's monthly "Peak Demands". The more a customer participates, the lower that customer's rate will be for ALL the electricity the customer uses.

These rate reductions accompany the Load Management ordinance of 2018 (Chapter 19, Article V) and amendment of 2020 that requires Load Management devices be installed on new construction and requires Load Management participation on new accounts.

Rate reductions are applied for Load Management on the following major electrical appliances:

A. Cycling (50%) Air Conditioning control on Heat Pumps during cooling season – CA/C

B. Water Heaters all year long – WH

C. Auxiliary (emergency) Heat Strips on Heat Pumps during heating season – HS

D. Total (100%) Control of Air Conditioning on Heat Pumps during cooling season – TA/C

Detailed descriptions of these programs are located within this information packet.

General Description of the Load Management Program

Load Management is a program that allows the Utility Provider to control electrical use at certain times to help avoid costly Peak Power Demands. A peak demand is when consumers try to consume more electricity than the provider can supply. Power Generation plants running already at maximum must rely on auxiliary generation to supplement power to "The Grid".

Peak demands occur in the summer or winter when temperatures are extreme or sustained. The highest demands are during the hours of 6 to 8 a.m. when people are getting up and ready for work, and from 4 to 6 p.m. when people are getting home and settling in for the night. This "Peak" amount of power used determines costs for power. When the peak goes up, so do the costs.

Description of Load Management Programs

<u>Cycling Air Conditioning Control</u> – CA/C

This program consists of cycling air conditioners during Load Management periods. Units will be off for 50% or *approximately* 15 minutes, *twice* every hour during load management. Only the compressor on the heat pump is switched off, so the circulatory fan inside the structure may continue to run during the off cycle.

This is the most tolerable of the air conditioning control through load management. Most participants are unaware that the unit is being controlled. It is estimated that on the hottest summer day

during load management, the temperature inside only increases two to four degrees.

Total Air Conditioning Control – TA/C

Total Air Conditioning control is an expansion of the cycling air conditioning program. Instead of cycling units, 100% shed control shuts the units off completely during the peak period. Participating in Total Air Conditioning control is strictly VOLUNTARY and provides a $0.02/kWh discount for the entire year.

Also, unlike cycling air conditioning control, participants will fully notice when their air conditioning is being controlled. Under Total A/C control, units will be off from three hours or longer at a time during high temperature extremes. In some isolated cases, this may occur for many days in a summer month.

Participants under Total A/C often state that they are used to living without air conditioning or are not at home during the peak. Others willingly endure the inconvenience for the savings presented by the lower rate.

Water Heater Control – WH

This program consists of turning off your electric water heater for the duration of the load management period. Customers with water heaters sized sufficiently for their family size and lifestyle, report they rarely if ever notice load management control.

Water heaters are controlled 12 months of the year. During cold winter months, control is usually from 6-8 a.m. Control is usually from 4-6 p.m. during hot summer months and at various afternoon and evening hours during the beginning and ending

months of summer. Occasionally during the spring and fall, control will be during both the morning and afternoon hours.

<u>Heat Strip Control</u> – HS

This program consists of turning off the auxiliary (emergency) Heat Strips in the Heat Pump during the load management period. In extremely cold weather, heat strips are used to provide additional heat when the efficiency of heat pumps decreases.

Heat strips are controlled during the heating season usually between 6-8 a.m.

As with all the Load Management programs, switches are installed by a licensed electrician.

Customer and City Requirements for Load Management Control

Customer installs or is assigned installation of the LM switch or switches.

The City covers the cost of the switch and installation fee on new switches. In some instances, should a disconnected switch need to be reconnected, the City may charge a reconnection fee. Customers can request a switch be removed or deactivated at any time, due to health or other reasons, but will lose the discount after review approval.

The City only controls air conditioning during the summer months and heat strips only during the winter months but will give the customer credit all year long.

Customer must accept responsibilities for insuring switches are not tampered with! The City must be notified within 2 days after

any controlled appliance is serviced or replaced. We will inspect the switch to insure it is working properly. If it is discovered that the switch has been tampered with, the City will deal with the party who did the work on the appliance.

It is a VIOLATION of NC State Law to tamper with any Load Management Switch (G.S. 14-151.1). The City maintains a program of random testing of all LM switches. Customers must agree to allow City representatives to audit and inspect LM switches installed on your appliances. If a routine inspection finds switches that are tampered with (missing, not connected or opened and otherwise tampered with), without notification of work on the appliance, any savings granted that account for that switch for the previous 12 months will be billed to the customers electric account. Switch reconnection or replacement will be performed by a licensed electrician. The cost will be added to the customer's account. If there are any customer questions, please call the Public Works 457-7935 or the Load Management office at 457-7938.