

Load Management in Apex, NC

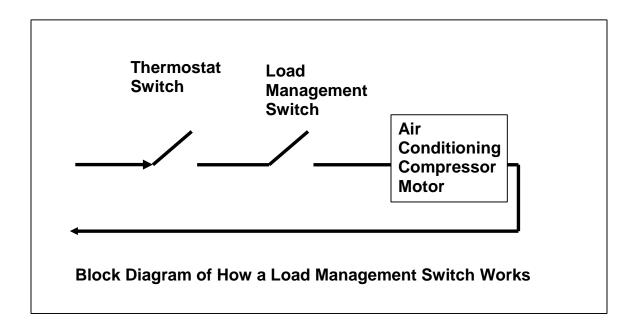
The Town of Apex Load Management Program provides economic and environmental benefits to our citizens and our society. Under normal load conditions, power producers run their most efficient power plants. When high loads occur, power producers will run their less efficient plants to meet the energy demands during those high use periods. By participating in a load management program, we as a Town are using less of the less efficient power plants during periods of high demand. A system where people are paid well for simple conservation of natural resources makes sense.

Since 1993, all new homes and renovation projects on homes costing more than \$10,000 automatically receive load management switches provided by the Town. The Load Management Switch is a small, light-grey box (approximately 8.5" high x 7" wide x 3.5" deep) Many people mistake these small switch boxes for cable TV boxes mounted on the sides of homes. Here is what the Load Management Switch looks like:



If you are an electric customer of the Town of Apex, you can help "Beat the Peak" with residential load management. Load management is a means of controlling the amount of electricity being used at any one time. When periods of peak demand occur, load management is used to reduce the demand and lower costs. Load management switch devices allow the Town, via radio control, to temporarily turn off water heaters, electric heat strips, and air conditioning compressors on an intermittent basis.

In doing so, the Town reduces the peak demand all across its service area. The more switches the Town has in place, the greater the impact of this peak-shaving program.



When the compressor on your air conditioner is turned off by the Load Management Switch, the circulating fan continues to run to keep hour house cool with the residual coolness left in the compressor. The average peak lasts two to three hours and the compressor is typically cycled off two times every hour and operates normally the remainder of those times. Your house temperature may increase by only a few degrees based on you level of participation. Studies conducted by other utilities over the last several years have shown that equipment is not harmed. Cycling off is just like turning the unit off at the thermostat.

The water heater will be turned off for periods of up to about four hours during peak demand period. Most water heaters have the ability to keep water hot for four more hours after power has been turned off so you should experience little inconvenience, if any at all.

The Load Management System will operate only on days when demand for electricity is expected to reach a monthly high peak or in the event of an electric system emergency associated with high loads.

There is never a maintenance charge with the Town's Load Management Program. If you have concerns that your load management switch is not working properly please call 919-249-3531.

Electric Water Heater Control- Water heaters are cycled off during load management periods. Controlling water heaters will not affect the amount of hot water available. Customers receive \$2.00 utility bill credit each month.

Electric Heat Strip Control- Heat strips are controlled during the winter load management periods (January – April). Compressors continue to provide heat. Customers receive \$10.00 utility bill credit each month.

Air Conditioning Options

Central Air Conditioner 25% Control – (Minimum required participation level) The compressor is cycled off for brief periods, approximately 7.5 minutes every half hour. The circulating fan continues to run and comfort level changes are usually undetectable. Customers receive \$4.00 utility bill credit for 4 consecutive months in the summer.

Central Air Conditioner 50% Control – (Optional participation level) The compressor is cycled off for brief periods, approximately 15 minutes every half hour. The circulating fan continues to run; comfort level changes are perceptible during extreme heat. Customers receive \$8.00 utility bill credit for 4 consecutive months in the summer.

Central Air Conditioner 100% Control – (Optional participation level) The compressor is off for the entire load management period. Fans will continue to operate but air will not be cooled. Homes may become warm. Customers receive \$20.00 utility bill credit for 4 consecutive months in the summer.

Savings between \$16 & \$144 per year

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
25% Air Conditioner Control	1	1	1	1	•	\$4.00	\$4.00	\$4.00	\$4.00	•		,	\$16
50% Air Conditioner Control	-	-	-	-	-	\$8.00	\$8.00	\$8.00	\$8.00	1	-	1	\$32
100% Air Conditioner Control	-	1	1	-	•	\$20.00	\$20.00	\$20.00	\$20.00	•	•	,	\$80
Electric Heat Strip Control	\$10.00	\$10.00	\$10.00	\$10.00	1	•		•	1	1	1	1	\$40
Electric Hot Water Heater Control	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$24

Example of Possible Savings:

A customer is enrolled in:

- 50% Load Management (Air Conditioning),
- Electric Heat Strip Control (because of the customer's all-electric HVAC unit),
- Electric Hot Water Heater Control.

The Customer receives annual credits of \$32 for the Air Conditioning Load Management, \$40 for the Electric Heat Strip Control, and \$24 for the Electric Hot Water Heater, for a grand total of \$96 in benefits throughout the year. If the customer's bill was near \$100 per month on average, this would be like getting a month free!

If you have any questions concerning our Load Management Program or would like to change your participation level please contact our Utilities and Finance Office at 919-362-8676 or your may contact the Electric Utilities Division directly at 919-249-3531.