



WAHOO UTILITIES LOAD CONTROL PROGRAM

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Wahoo Utilities currently has some of the lowest electric rates in the state/nation. One of the ways of controlling costs is by the implementation of our load control program. By reducing our peak demand, with air conditioner and irrigation control, Wahoo Utilities customers help keep our rates low!

WAHOO LOAD CONTROL PROGRAM

Wahoo Utilities pays for electricity on the wholesale market and sells it back to our customers. The cost of power is complicated but is focused on 2 main parts.

1. The total amount of energy or kilowatts (kW)
2. The peak usage or demand charge.

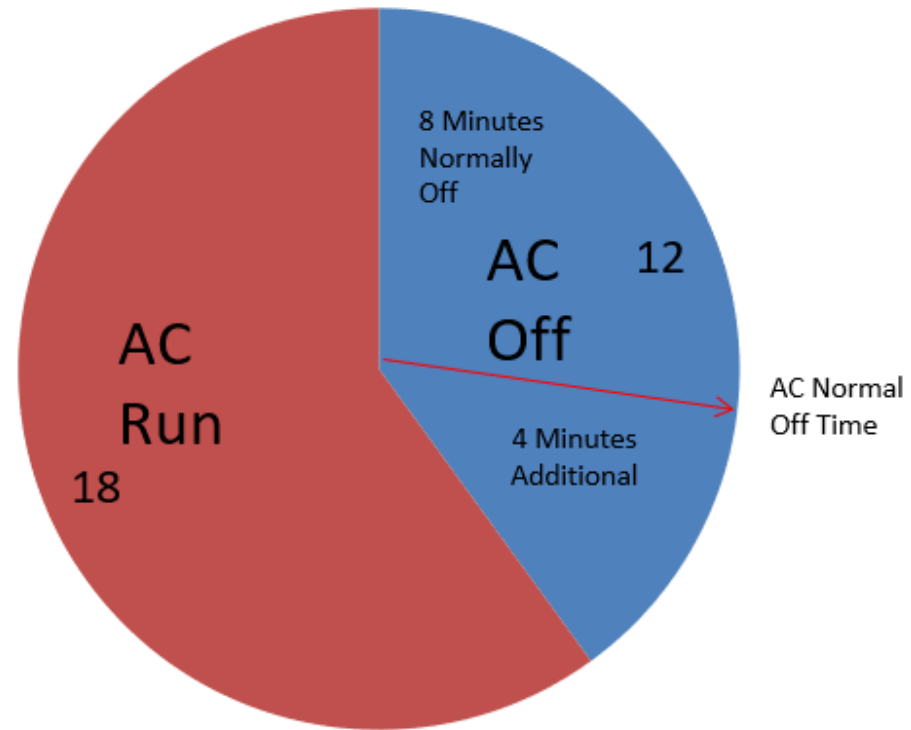
The Load Control Program helps us reduce the peak demand charges and save hundreds of thousands of dollars

AIR CONDITIONER AND IRRIGATION LOAD CONTROL

- NPPD sends out billable demand message for their anticipated peak days.
- At a locally determined threshold, Wahoo implements 5 groups of AC control and 1 group of irrigation.
- 6 different days of control in 2020
- Typical hours are from 1:00 P.M.-7:00 P.M. Monday-Friday.
- 12 minutes control-18 minutes non-control for every 30 minutes.
- 7 hours/420 minutes for 2020.
- \$700,000 savings in 10 years for every 1000 kW of demand reduction.

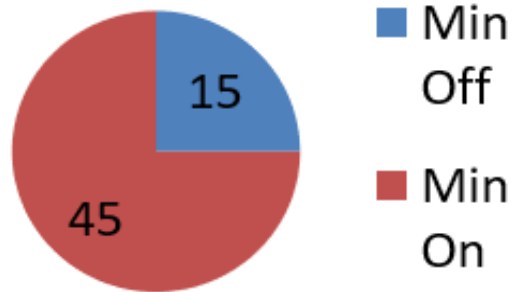
AC RUN/AC CONTROL MINUTES

AC Runtime in a 30 minute period

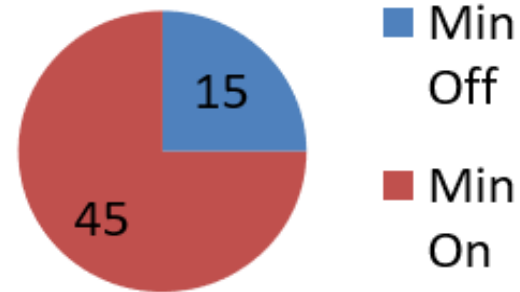


UNCONTROLLED WITH NORMAL OFF PERIODS 4 KW DEMAND

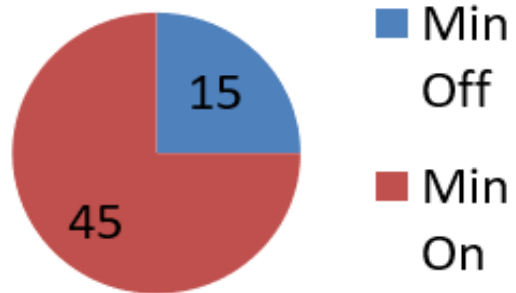
60 Minutes



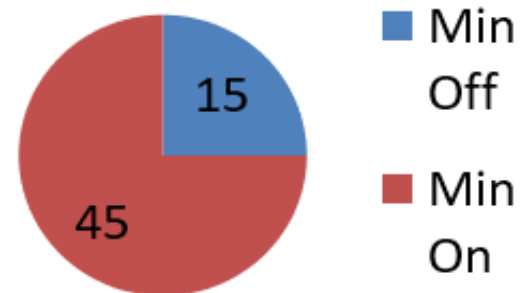
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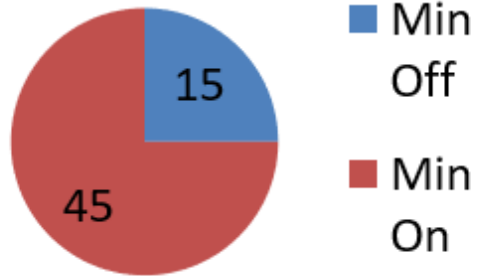
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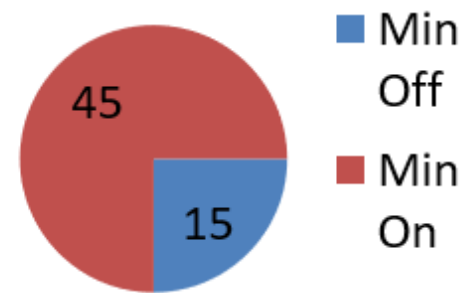
CONTROLLED WITH NORMAL OFF PERIOD

3 KW DEMAND

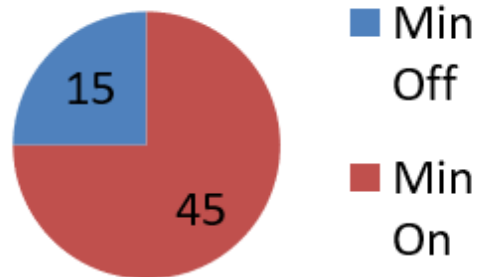
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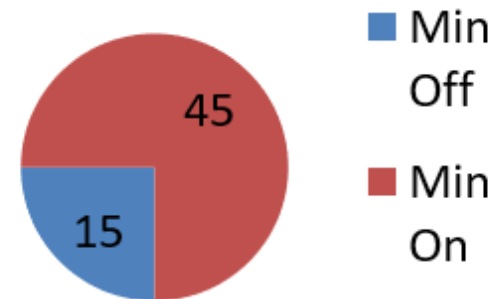
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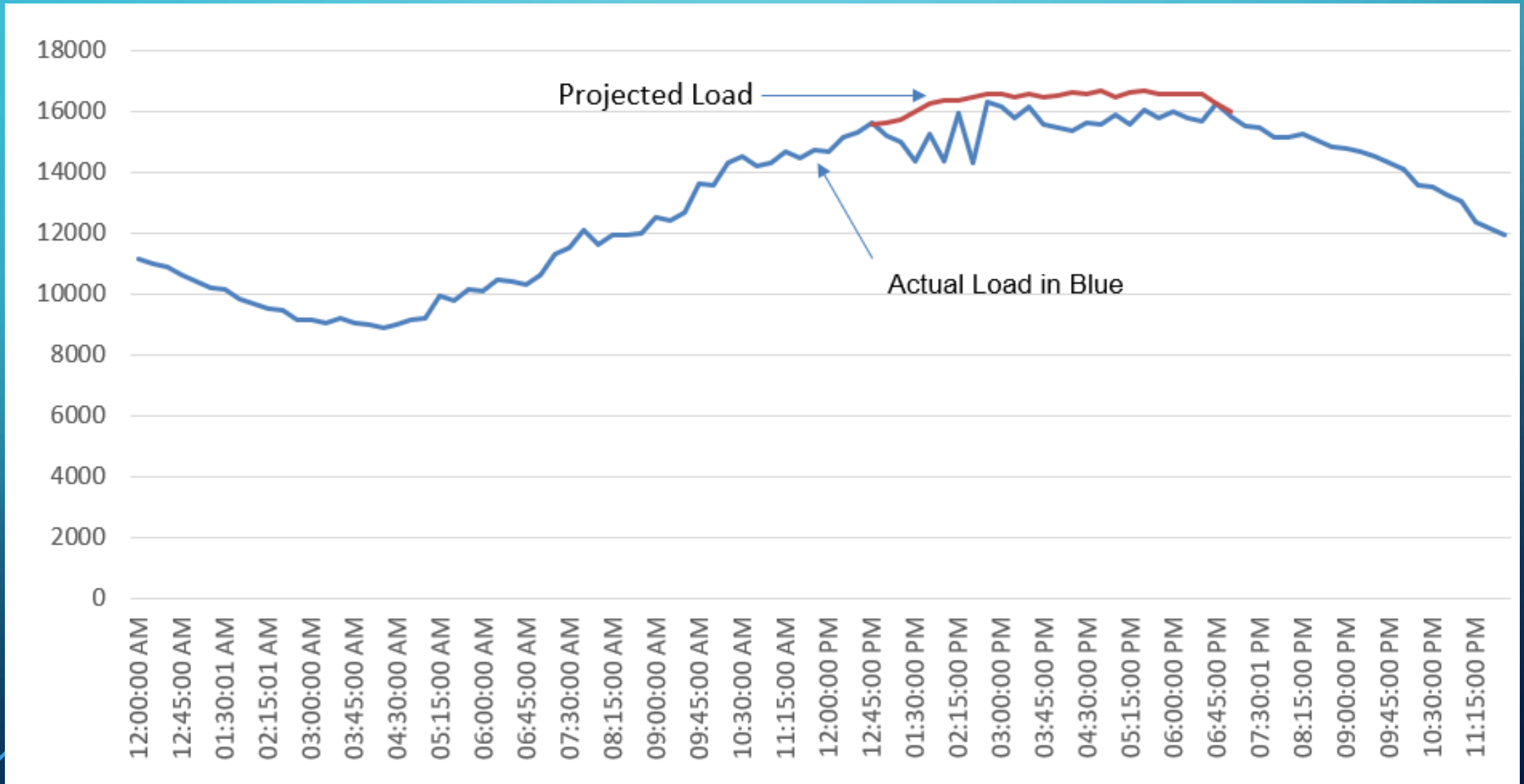


25% Reduction of demand & all A/C's run normal amount of time but at different times.

2020 LOAD CONTROL

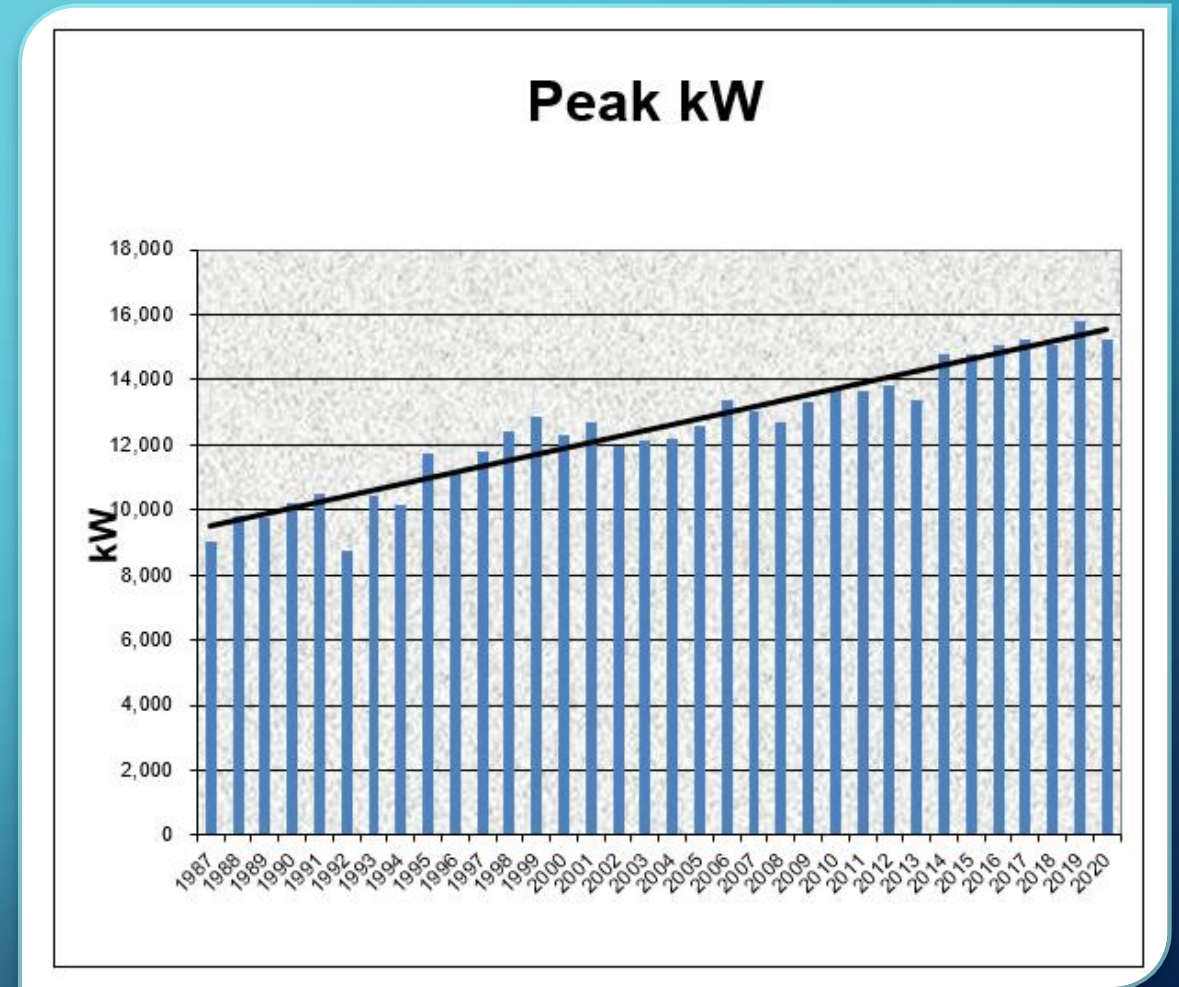
2020 Load Control	Approximate kW	Potential Savings	
1857 AC Load Control	1857		
13 Irrigation Wells	800		
Total Control	2657 x \$ 16.02 =	\$ 42,565.14	
		x4(months)	
		\$ 170,260.56	Demand
		+	
	2657x \$ 4.38 x12	\$ 139,651.92	Ancillary
		x12(months)	&Substation
		=	
Total Potential Yearly Savings		\$ 309,912.48	

PEAK DAY IN JULY 2021 WITH LOAD CONTROL



PEAK KW

- Wahoo's load control program is designed to help keep customers electric utility costs down.
- Wahoo's electric peak demand(kW) continues to rise.



LOAD CONTROL DEVICES



WAHOO CITY ORDINANCE

Load control units are required as part of the City of Wahoo's ordinances. Below is the language and location of the actual ordinance:

AIR CONDITIONERS

§ 52.60 PERMIT REQUIRED.

(A) No person shall install an air conditioner within the city or its environs where supplied with electric current from the city electric system without first having procured a permit therefore from the Building Inspector, or to use such air conditioner during the period that a permit may be revoked.

(B) The person making an application for and procuring a permit shall thereby consent that the Board of Public Works or its designated agent may check and inspect any air conditioner and its electric connections installed under such permit at any reasonable time without request of the permit holder or previous notice to such permit holder.

('72 Code, § 3-9 17) (Am. Ord. 1340, passed 4-19-90; Am. Ord. 1493, passed 4-13-95; Am. Ord. 1815, passed 10-24-02) Penalty, see § 10.99

WAHOO CITY ORDINANCE

§ 52.62 INSTALLATION REQUIREMENTS.

No unit of three-fourths horsepower or larger may be installed on less than 240 volts service.

No air conditioner with a motor exceeding three horsepower actual rating shall be connected to a single phase service unless a special permit is granted by Utility Board or its Agent.

Any user requiring three phase power for an air conditioner shall be subject at all times to any and all regulations of the city applicable to other three phase electric power users.

All central air conditioners installed after April 15, 1990 must have a load control device approved by the Utility connected and operating. The load control device must not be disconnected there from without prior permission of the Utility.

('72 Code, § 3-919) (Am. Ord. 1340, passed 4-19-90) Penalty, see § 10.99

The background is a solid teal color. In the corners, there are decorative white line-art elements resembling circuit traces or data paths, with small circles at the end of the lines.

IF YOU HAVE QUESTIONS ABOUT OUR LOAD CONTROL PROGRAM, PLEASE CONTACT US

Ryan Hurst

Utilities General Manager

402-443-3222