

# Cooperative Demand Response Programs

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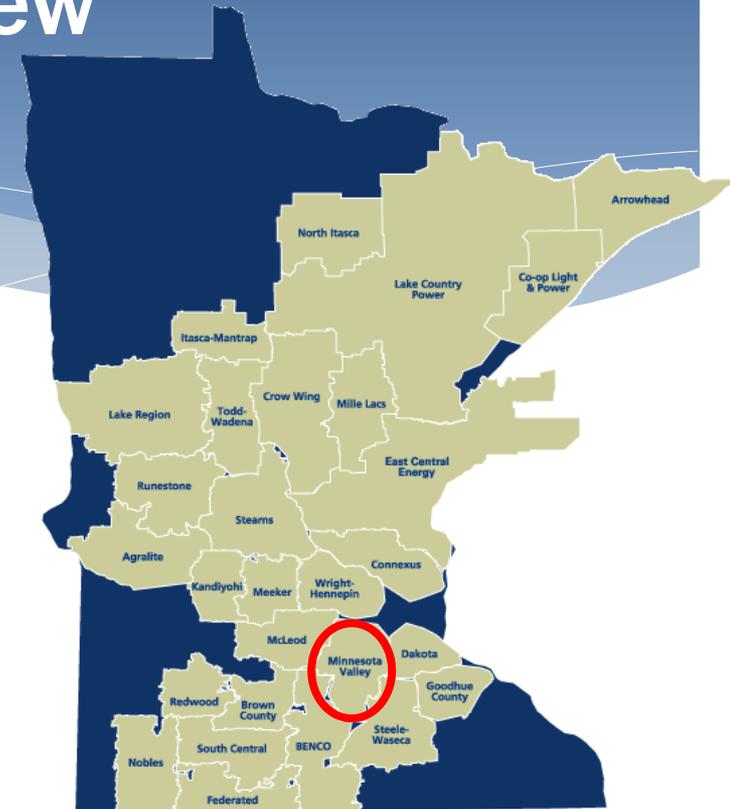
**MVEEC**

*Minnesota Valley Electric Cooperative*

Your Touchstone Energy® Cooperative 

# MVEC Overview

- \* Electric Distribution Cooperative
- \* 36,000 members
- \* 900 sq miles
  - \* Scott, Carver, Dakota, Hennepin, Rice,
  - \* Le Sueur, Blue Earth, Sibley, Waseca
- \* 80 Employees
- \* American Customer Satisfaction Index score of 87
  - \* Same score as Apple



# Wholesale Power

- \* Wholesale Power agreements with
  - \* Great River Energy
  - \* Basin Electric
- \* Billed demand and transmission based upon system peak
- \* 44% of members participate in load management
  - \* Cycled Air Conditioning
  - \* Space Heating
  - \* Water Heating
  - \* On-site generation (commercial locations)
  - \* Others



New Prague | August 16, 1944

Gentlemen: Perhaps you would be interested in knowing my husband is now somewhere in France having served in the Army for the past twenty-seven months and overseas for two years. I've continued to live on the farm since my husband's entrance into the service and must say that without the electricity it would have been impossible for me to continue on with the farm.



# The Objective

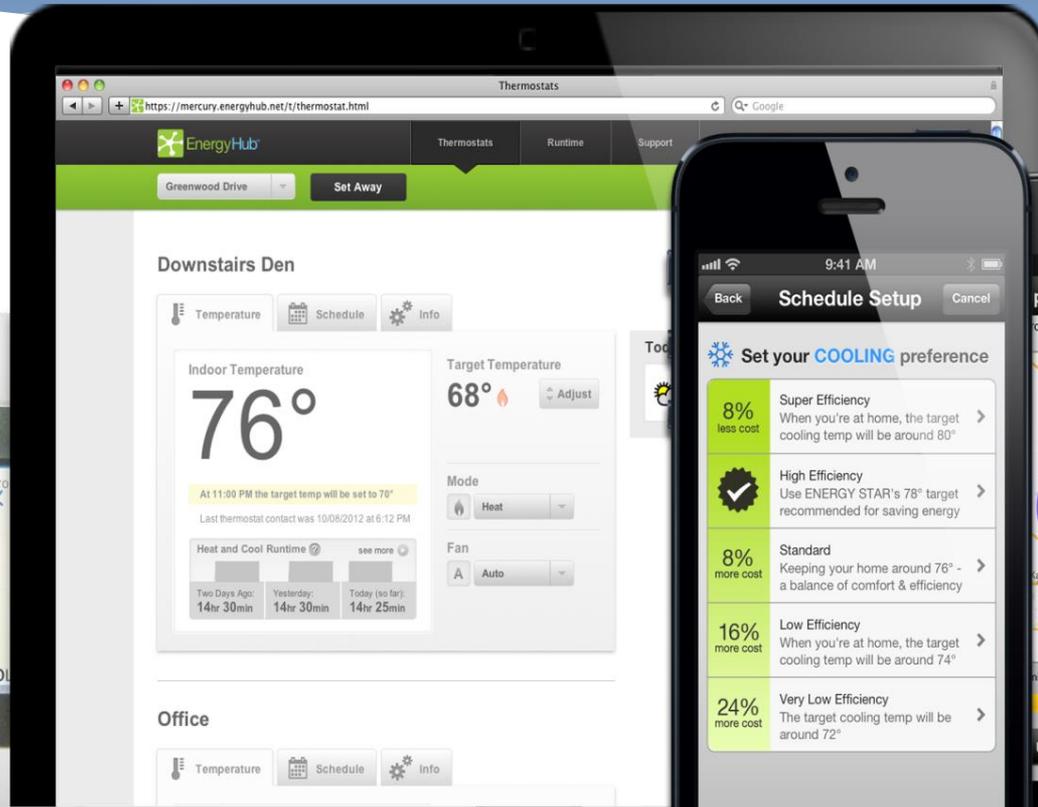
Increase member satisfaction



Monetize demand reduction



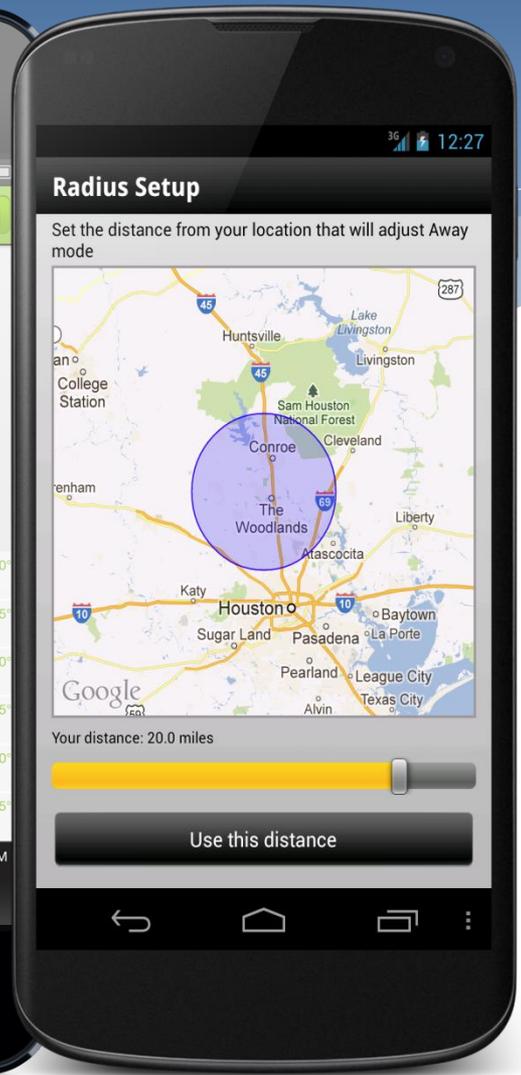
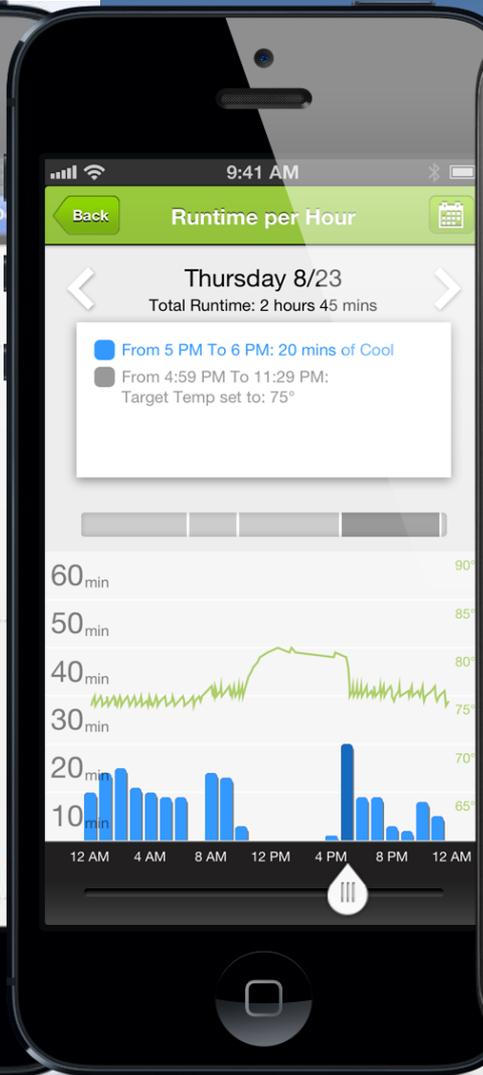
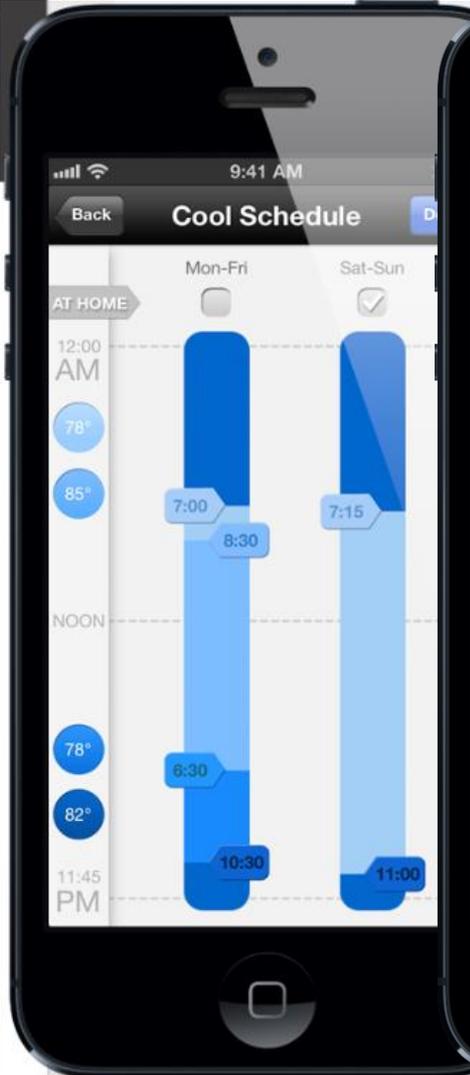
# WiFi Enabled Smart Thermostat



# Program Description

- \* Free Thermostat
  - \* RadioThermostat using EnergyHub software
  - \* Will begin offering Honeywell thermostats
- \* \$65 rebate once installed
- \* 10% discount on kWh usage June through September
- \* 4 degree bump, up to 4 hours, 5-7 times/month
- \* 2 degree pre-cool





# Member Comments

- \* Is it working okay?
  - \* Yeah, I am so loving this. Thanks so much for getting me connected as I have been showing off at work with my new app!
  - \* I have it all programmed from my iPhone!
- \* Why its Valuable?
  - \* Able to control my energy consumption
  - \* Able to adjust\play with the temperature and schedule to optimize heat\comfort with energy consumption
  - \* Able to set temperature while away from the house. Example, we were going to the Wisconsin Dells this weekend and I set the thermostat to away where the furnace only ran for 3 hrs. 26 minutes. Then on the way home, I took off the away and the house was warm at the time we arrived home! How cool is that!
  - \* You can "see" when there are problems as we had the limit switch go bad on our furnace. It ran for 20 hours and 19 hours over the weekend! On Monday I can see right when the repair tech fixed the furnace between 10-11 am.

# Load management capability

## Cooling Activity 07/18/2013



07/18/2013

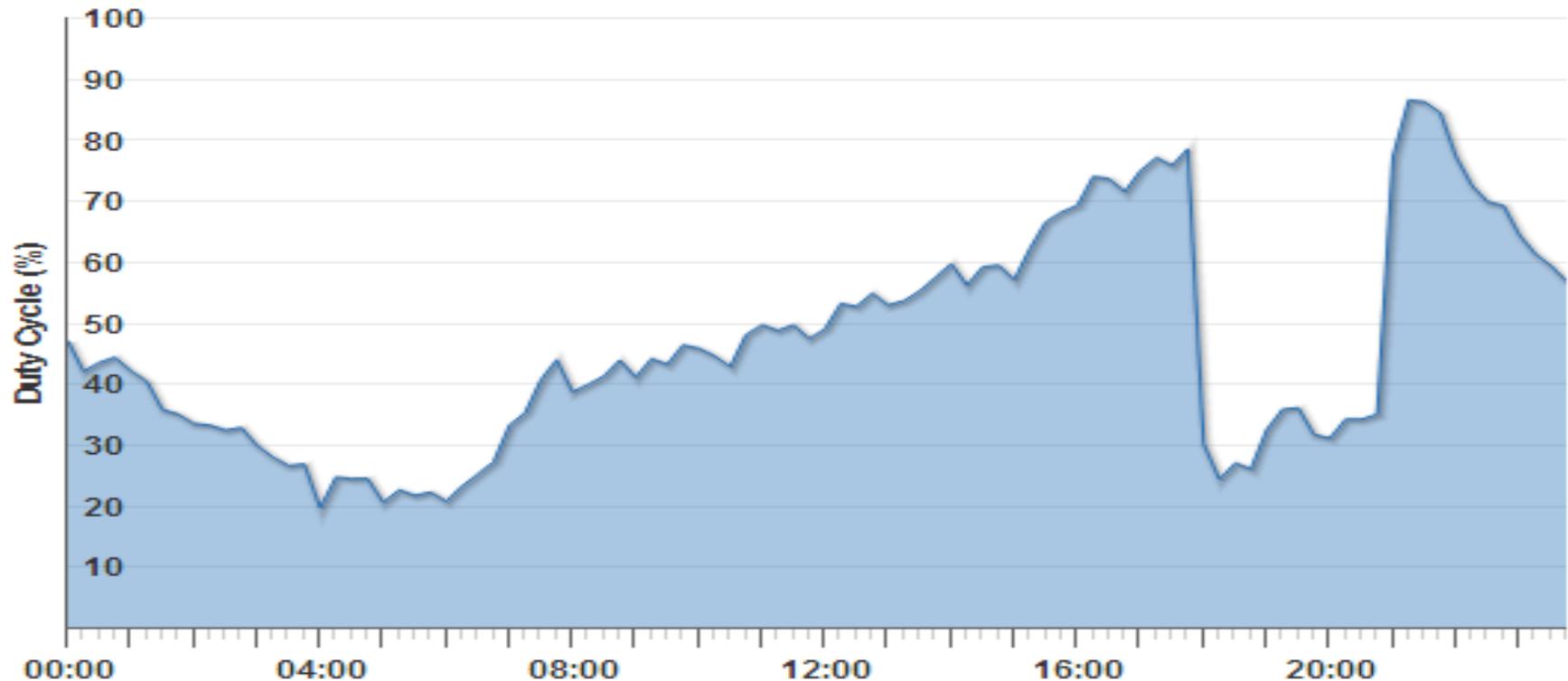


MW

%

Heating

Cooling



Data may be delayed by up to 30 minutes. All times Central Time (U.S. & Can.).

# Cooling Activity 08/24/2014



08/24/2014

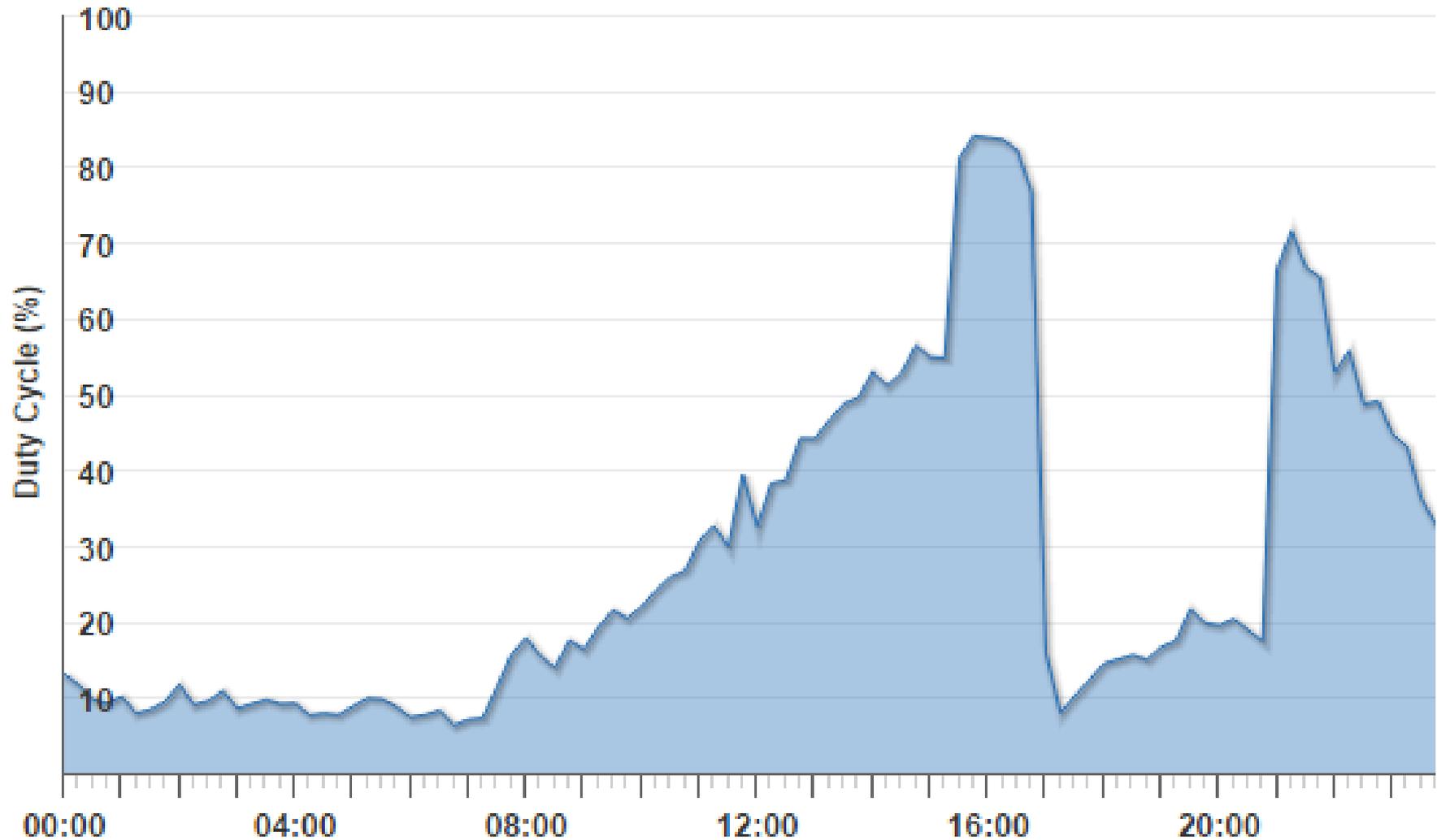


MW

%

Heating

Cooling



Data may be delayed by up to 30 minutes. All times Central Time (U.S. & Can.).

# Runtime per Hour

Download last 30 days

01/01/2013

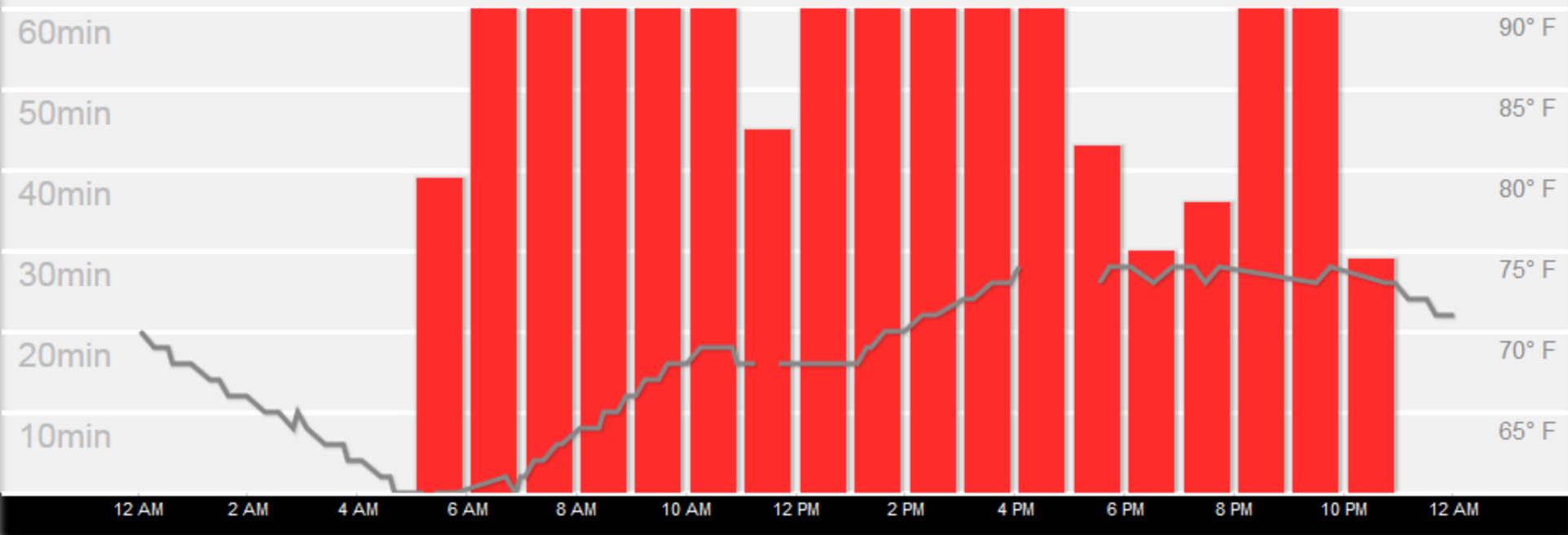


## Tuesday 1/1

Total Runtime: 15 hours 42 mins

Unavailable: 32 mins [ Show ] ?

Indoor Temp: [ Hide ]



TARGET TEMPS

60°

74°

60°

# Runtime per Hour

Download last 30 days

01/03/2013

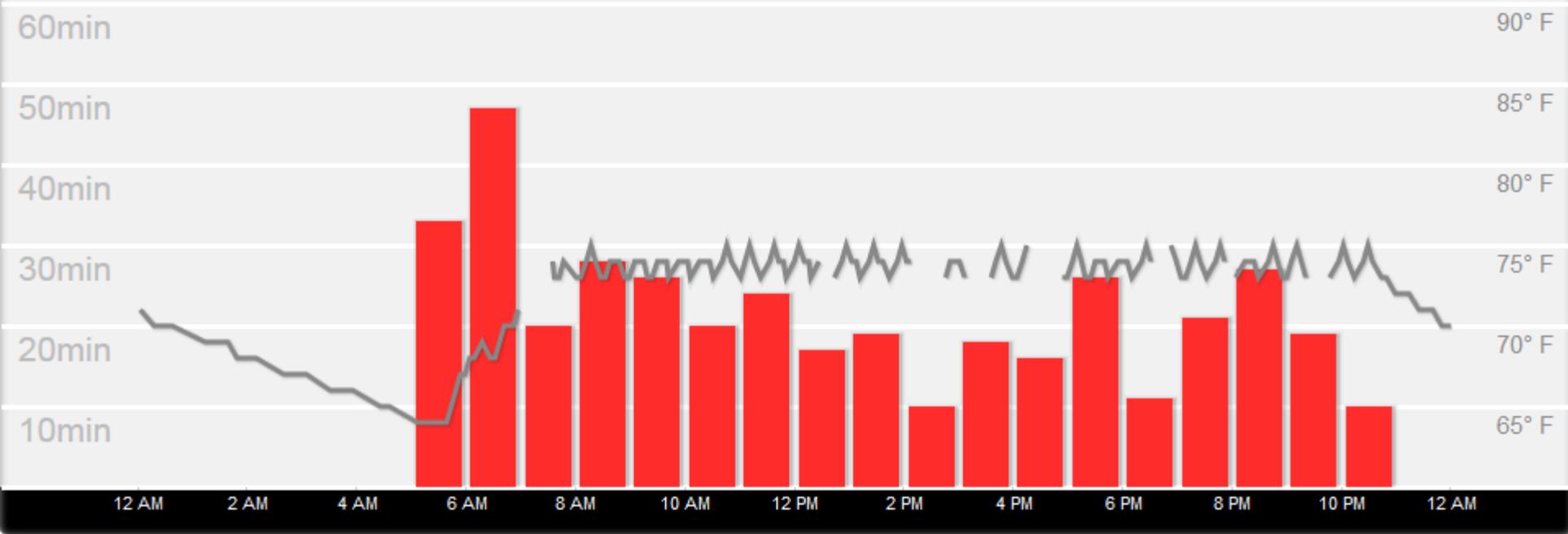


## Thursday 1/3

Total Runtime: 6 hours 32 mins

Unavailable: 3 hours 5 mins [\[ Show \]](#)

Indoor Temp: [\[ Hide \]](#)



TARGET TEMPS

60°

74°

60°

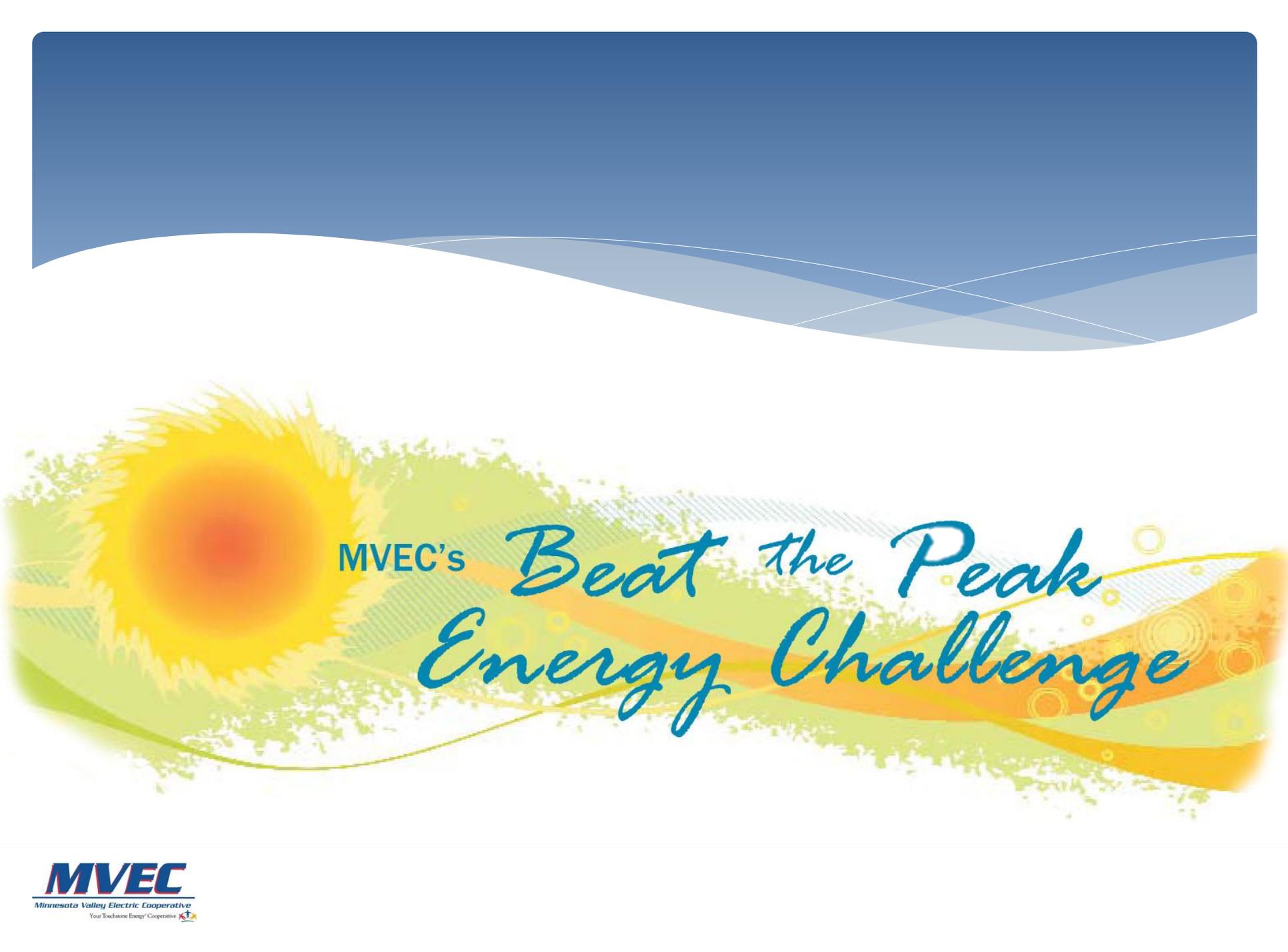
# Wifi Thermostat Program

Increase member satisfaction



Monetize demand reduction





MVEC's *Beat the Peak  
Energy Challenge*

# The Energy Challenge

- 1 Energy reduction in a game format
- 2 \$25,000 in cash prizes
- 3 Members competed as individuals and some banded together as teams:



# Incentives

## Team Prizes

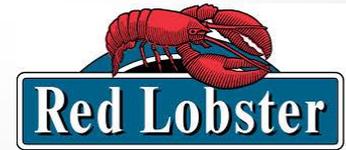
Team Size	1st Prize	2nd Prize	3rd Prize
5-10	\$1,000.00	\$500.00	\$250.00
11-25	\$2,500.00	\$1,000.00	\$500.00
Over 25	\$7,500.00	\$3,000.00	\$1,500.00

**Total Team Prizes = \$17,750.00**

## Individual Prizes

	June	July	August
1st	\$500.00	\$500.00	\$500.00
2nd	\$250.00	\$250.00	\$250.00
3rd	\$100.00	\$100.00	\$100.00

**Total Individual Prizes = \$2,550**



Weekly drawings

# The Energy Challenge

1

Focused on reducing  
5 p.m. to 9 p.m.

2

Members decided  
how they would  
reduce

## Survey says. . .

MVEC asked “What are you doing to save during Beat the Peak reduction days?”

96% limit the use of electric appliances

85% turn off unnecessary lights, appliances or electronics

78% use shades or blinds on their windows

64% delay using hot water heater

62% increase their A/C thermostat by 4 degrees

58% participate in Energy Wise program(s)

49% use their ceiling fan to circulate cool air



# How we communicated

Participants could choose:

- Email
- Phone call
- Text message

Messages were sent day before  
and day of the reduction event



# emails

## It's time to Beat the Peak!



Today is another **Beat the Peak Reduction Day**. We're asking all participants to reduce as much electric use as possible between 5 p.m. and 9 p.m.

### Just one more evening this week!

We know it isn't easy to reduce electricity three evenings in a row, but it looks like a cool down is on its way.

Yesterday, 3.4 MW of electricity was saved during the four-hour reduction period. This is the same amount of horsepower to keep five NASCAR race cars going full throttle for four hours. It was the same amount of energy used by MVEC's entire Elysian Substation for those four hours. For each hour, it saved approximately 900 pounds of coal.



## Heads Up!

We just wanted to let you know that tomorrow (Monday, Aug. 26th) will likely be a Beat the Peak Reduction Day, currently scheduled from 5:00 p.m. to 9:00 p.m. Watch for an email from us tomorrow confirming the specific Beat the Peak Energy Reduction times.

## Snap a pic for chance at hotel stay!

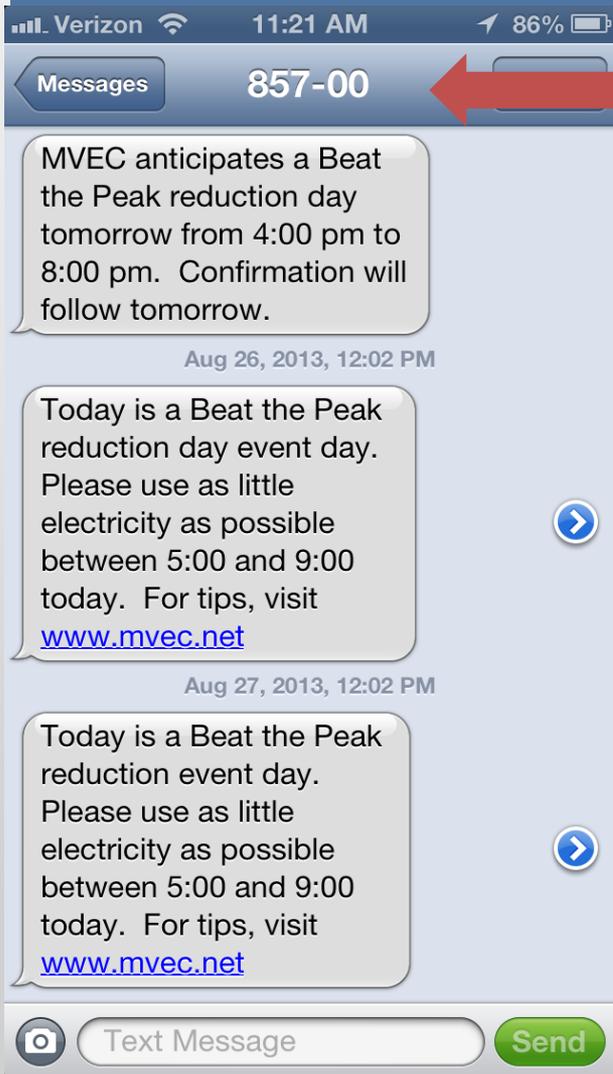


### Don't forget about our Beat the Peak photo contest!

Everyone who submits a photo of the best, funniest or most memorable way their family Beats the Peak will be entered into a drawing for a one-night stay at the Country Inn & Suites of Chanhasen.

The deadline to enter the photo with a descriptive caption is Monday, Sept. 2, 2013. Send it to [beatthepeak@mvec.net](mailto:beatthepeak@mvec.net).

(By submitting a photo, you are giving MVEC permission to use it in future Beat the Peak promotions and communications.)



text  
messages



phone:

Auto phone calls  
sent day before  
and day of the  
event

# Twitter

 **MN Valley Electric** @\_MVEC\_ 24 Jun  
Ready? Beat the Peak from 5 p.m. until 9 p.m. today. Save energy and win - for yourself and your team! [mvec.net](http://mvec.net)  
Expand

 **MN Valley Electric** @\_MVEC\_ 26 Jun  
It's a three-peat! Beat the Peak Reduction Day from 5-9 p.m. tonight. Prizes include \$100 gift cards and a night at Country Inn & Suites  
Expand [← Reply](#) [🗑 Delete](#) [★ Favorite](#) [⋮ More](#)

 **MN Valley Electric** @\_MVEC\_ 16 Jul  
Yep. It's a Beat the Peak kind of day. Plan now how you will save electricity between 5 and 9 p.m. for prizes - and a lower bill.  
Expand [← Reply](#) [🗑 Delete](#) [★ Favorite](#) [⋮ More](#)

 **MN Valley Electric** @\_MVEC\_ 17 Jul  
Great work last night! Over 3.7 megawatts saved for Beat the Peak. Enough to power a small town for 4 hours. [mvec.net/challenge](http://mvec.net/challenge)  
Expand

# Facebook



**Minnesota Valley Electric Cooperative**

July 16 near Minneapolis

Ready to Beat the Peak tonight? Get outside, go downstairs, take in a movie - whatever it takes to stay cool and save on your electric use between 5 and 9 p.m. this evening. Remember, some fabulous prizes are at stake for those who go the distance each evening this week!

Like · Comment · Share



**Reta Lind** Head to Henderson for the Classic Car Roll-In from 6-9 pm 😊

July 16 at 12:00pm via mobile · Like · 1



**Minnesota Valley Electric Cooperative** Great idea!

July 16 at 12:02pm · Like



Write a comment...



252 people saw this post

Boost Post



**Minnesota Valley Electric Cooperative** shared a link.

June 24 near Minneapolis

Are you ready? The first energy reduction period for the Beat the Peak Energy Challenge is today! Cut back on electric use from 5 p.m. until 9 p.m. and see how much electricity you can save. This is the first chance to begin earning cash pr... See More



**Beat the Peak Energy Challenge**

[www.mvec.net](http://www.mvec.net)

MVEC's Beat the Peak Energy Challenge is a free and easy way to earn cash prizes (over \$20,000 in total) – either for yourself, a favorite charity, or organization – while you manage energy use and lower your monthly bill.

Like · Comment · Share



143 people saw this post

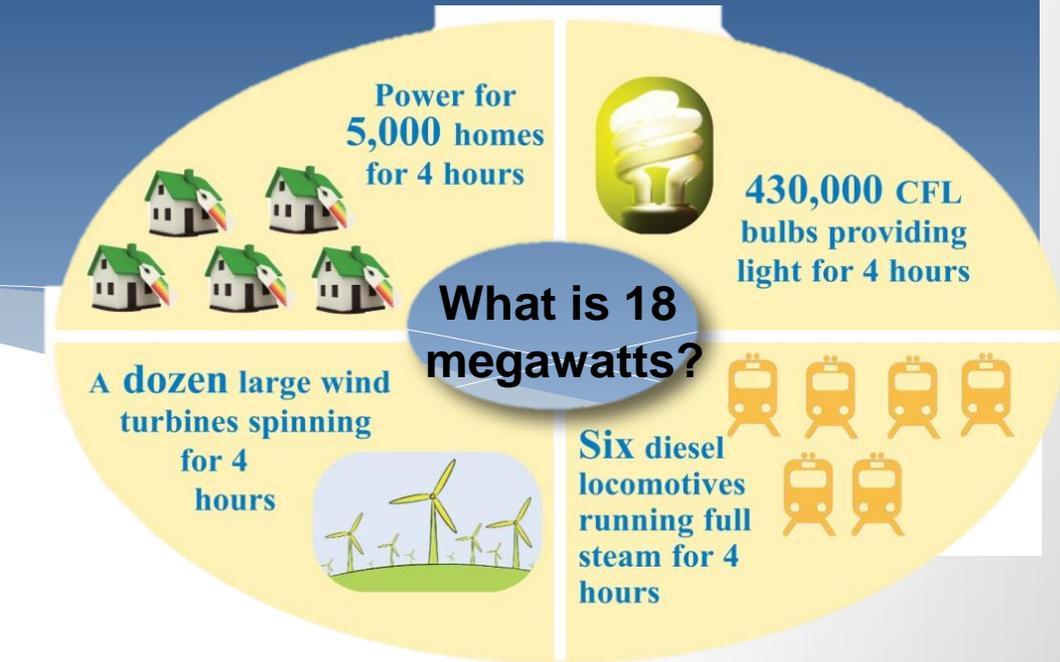
Boost Post

# Fun ways we explained MWh reduction

## Corndogs and kilowatts

### *What's the connection?*

According to a smart guy on our engineering staff, kilowatt units can be compared with calories. He said the 3.4 MWh saved during last night's conservation efforts is equivalent to going to the State Fair and eating 4,000 corndogs each second for four hours. Aren't you glad you just saved some electricity last night instead!



 Minnesota Valley Electric Cooperative  
August 21

Have you emailed [beatthepeak@mvec.net](mailto:beatthepeak@mvec.net) a photo of your family Beating the Peak? There's another chance tonight as we're asking participants to conserve electricity from 5-9 p.m. Last evening's efforts were 3.7 MW, which is enough to power nearly all the homes in Montgomery for four hours. That's a lot of Kolacky!



 Minnesota Valley Electric Cooperative  
July 18

Five NASCAR race cars at full throttle for four hours - that's the equivalent horsepower saved by Beat the Peak last evening. We know it isn't easy, but tonight we need one more reduction period from 5-9 p.m. Then it looks like a break with... [See More](#)



# Member comments

(and photo contest entries)

“Our 3 kids are so excited about Beat the Peak that sometimes the littlest one ends up in tears because he is not fast enough to beat his siblings to the switch to shut it off. They are also excited because it usually means we get to go to the lake and swim.”



# Member comments

(and photo contest entries)



“It is pretty amazing that this “contest” has driven so many people to take part – and save lots of energy. Imagine what could happen with a much larger participation rate.”

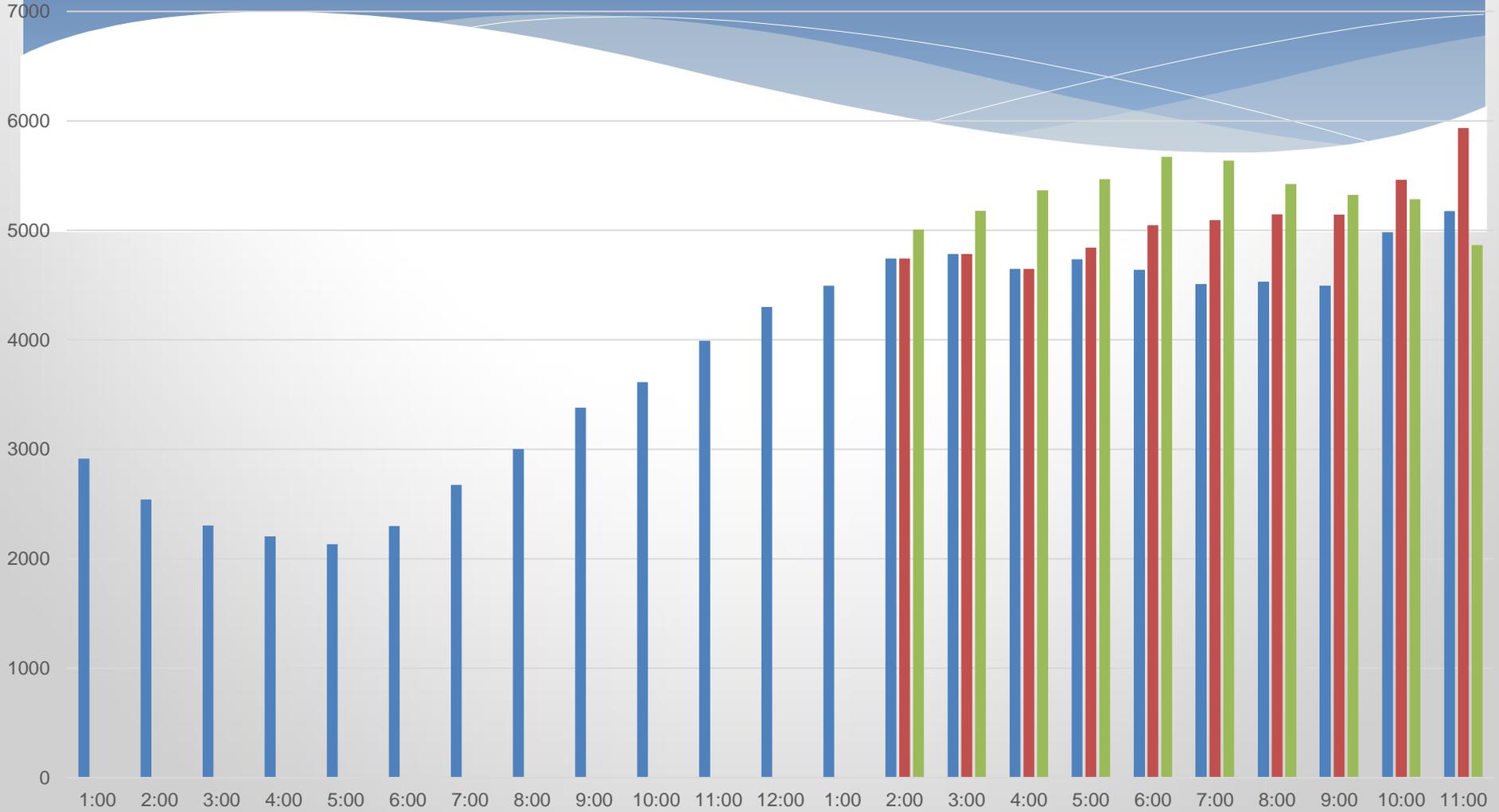
# Member comments

(and photo contest entries)

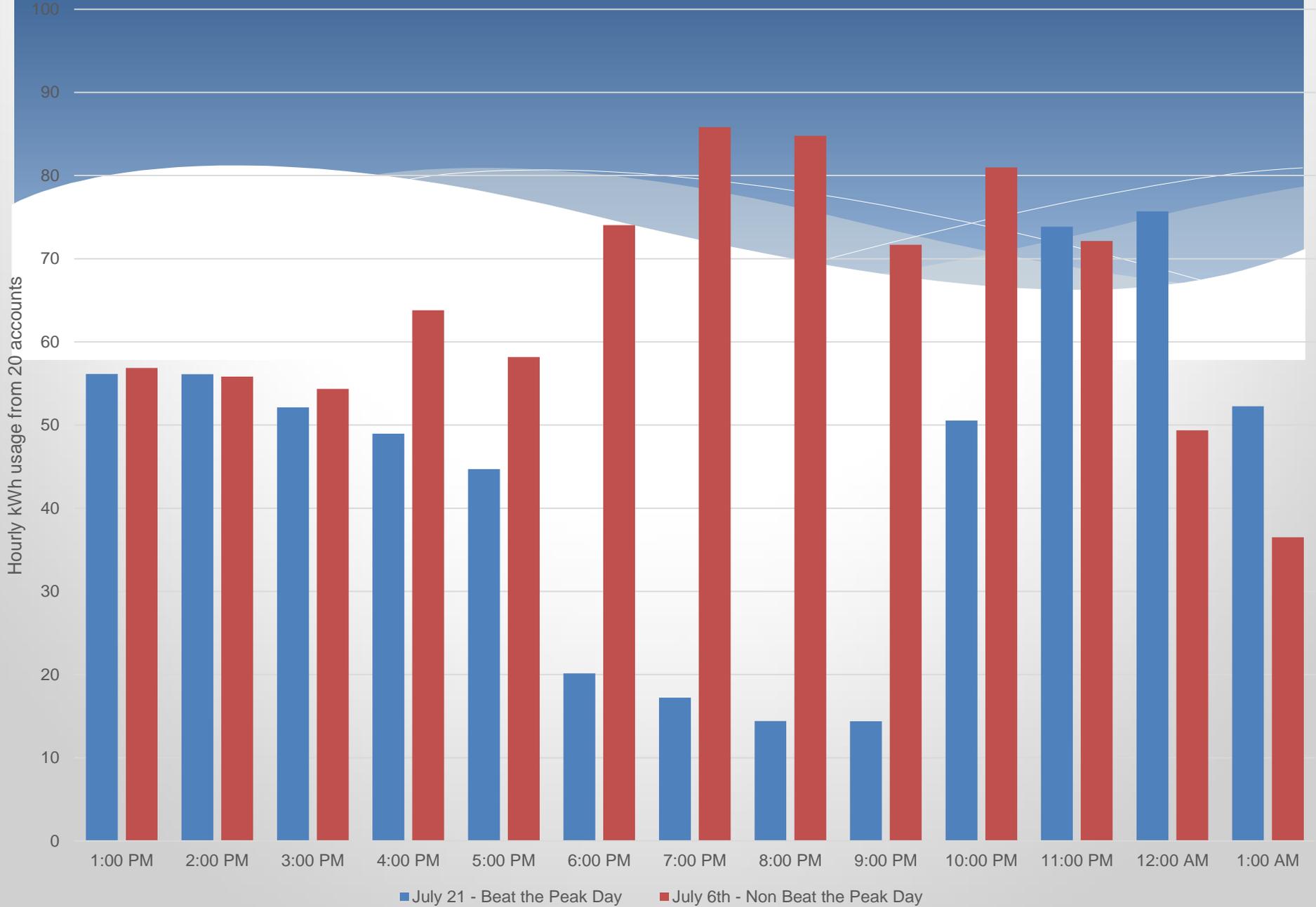
“My kids are so into this they even unplugged my alarm clock. Thanks for doing this. We were talking about this tonight and we think this is a brilliant program. Thanks for being a coop that cares about all of us!”



# July 21st - Beat the Peak Event



# Total Hourly Electric Usage from Top 20 Finishers



The NeighborHOOD  
of St. Patrick



Angel  
of  
Hope

"Fearfully and Wonderfully Made"  
Psalm 139

# Beat the Peak Energy Challenge

Increase member satisfaction



Monetize demand reduction



# Thank You

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