The Evolving Utility Business Model A Cooperative Approach

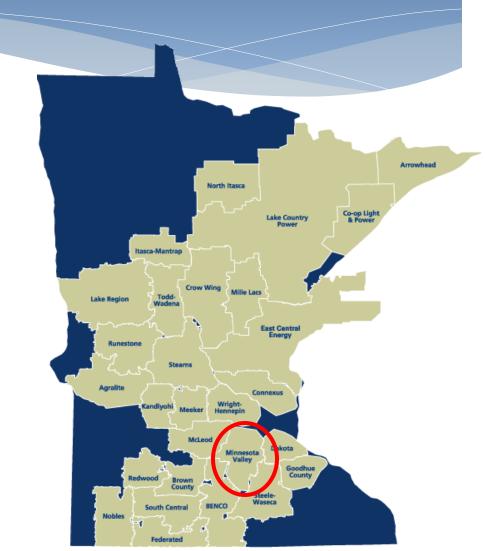
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MVEC Overview

- * Electric Distribution Cooperative
- Based in Jordan, MN
- * 80 Employees
- * 36,000 members
- Multiple Power Suppliers
 - * Great River Energy
 - * Basin Electric





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





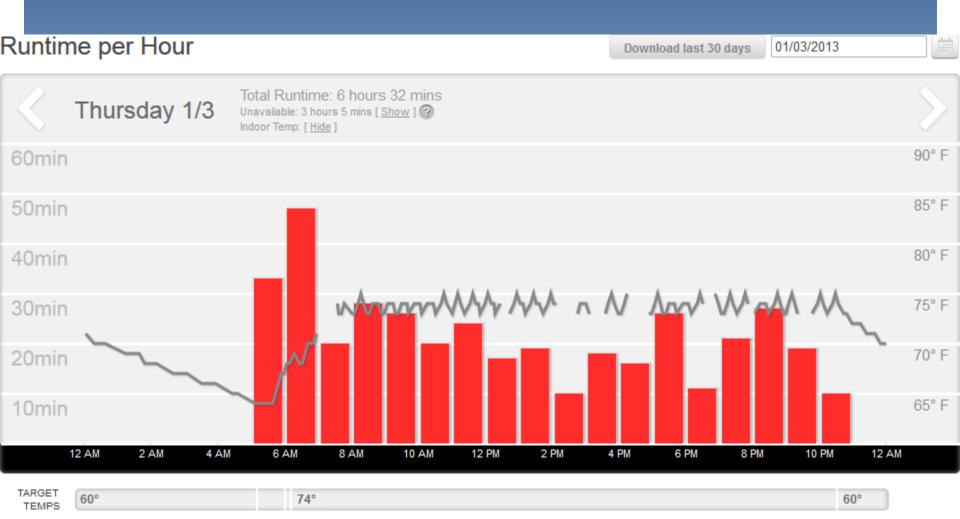


Utility load management capability















The Energy Challenge

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













The Energy Challenge

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



Facebook







Grab their attention

Fun and clever ways to explain mega-watt hour 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!



Grab their attention

Fun and clever ways to explain mega-watt hour reduction

Power for 5,000 homes for 4 hours



430,000 CFL bulbs providing light for 4 hours



A dozen large wind

turbines spinning

for 4

hours





What is 18 megawatts?

Six diesel locomotives running full steam for 4

hours





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 if off. They are also excited because it usually means we get to go to the lake and swim."







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!"







Outcome of 2013's Beat the Peak

- Lower member bills
 - 38 MWh reduced during events
- Lower MVEC power bill
 - \$51,000 reduced power costs
- Gave money back to community
 - Over \$25,000 to individuals and their causes





Residential Battery Storage

- Participated in the Department of Energy Smart Grid Demonstration Program
 - Develop economic analysis of battery storage at residential locations
 - Develop operational framework for initiating control of residential battery storage devices
 - * Evaluate the benefits of residential battery storage on residential electric service reliability.
 - * Evaluate the benefits of residential battery storage together with renewable energy sources.
 - * Identify other system or grid benefits such as volt/VAR control and participation in the Midwest Independent System Operator (MISO) Ancillary Services market



Residential Battery Storage







Image a utility program that...

- * 9 of 10 participants rate good or excellent
- * 8 of 10 look at the utility more favorably after enrolling
- * 96% of participants would sign up for program again if given the choice
- * 95% report the program has made it easier to manage their electric bill so it fits their budget
- * 82% said that participation has helped them better understand what factors impact the size of their electric bill
- * 7 of 10 report they waste a lot less electricity since enrolling in the program
- * 59% indicate their electric costs are noticeably lower under the program
- Paid the participant for reducing usage at key times







- MVEC's prepay billing program
 - Optional billing program
 - * <u>Information</u>: With PayGO you have more information about your energy usage. You'll learn how much you use each day and see trends over time.
 - * <u>Control</u>: You are in control of when you pay for electricity. Pay weekly, monthly and any day or time you choose.
 - * Conservation: Knowing how much you are spending on electricity leads to lower use studies indicate between 10 and 12%! You may even find yourself pinching that last penny on the account to make it last as long as possible.
 - * \$5 credit for those that reduce usage on key days







Thank You

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