

Utilities Collaborating on Conservation & Efficiency

CERTS Conference

*Harnessing Resources & Teamwork for Minnesota's
Energy Future*

February 11, 2009

Dean Talbott - Minnesota Power



Minnesota Power

- ◆ Electric utility serving NE Minnesota
- ◆ 140,000 customer base
- ◆ Industrial based utility serving the taconite and pulp industry of the Mesabe Iron Range



Minnesota Power Service Area

CIP

Conservation Improvement Program

- ◆ MN state mandate implemented in 1982 requiring utilities to spend .5 to 2.0% of gross operating revenue on energy conservation related programs
- ◆ Current annual statewide CIP spending – approximately \$108 million
- ◆ Conservation spending must meet cost benefit criteria
- ◆ Conservation and efficiency spending must result in savings consistent with the energy sold by each utility
- ◆ In other words,
 - gas utilities allocate funds based on gas savings, and
 - electric utilities allocate funds based on electric savings

CIP Goals

- ◆ Promote consumer and industry awareness of energy conservation and its positive effect on the environment
- ◆ Reduce utility bills for homes and businesses
- ◆ Generate innovations in developing energy efficient products and technologies; and
- ◆ Promote new energy resource development

Next Generation Act of 2007

- ◆ Signed by Minnesota Governor Tim Pawlenty October of 2007
- ◆ The Act is designed to:
 - increase energy efficiency
 - expand community-based energy development
 - Renewable Energy Standard – 25% renewable generation by 2025
 - establish a statewide goal to reduce greenhouse gas emissions 80% by 2050

CIP Activity – Minnesota Power 3 Year Average

- ◆ Annual spending - \$3,595,590
- ◆ Annual savings – 41,044,333 kWh's

Current Collaboration Projects

New Construction Programs

Partnered with GRE to establish consistent program standards and participation requirements



- ◆ Achieved ENERGY STAR new homes certification levels
- ◆ Benefits builders that construct homes in different utility service areas. Streamlines and eases program participation
- ◆ MP – Triple E (over 800 homes completed)
- ◆ GRE – Energy Wise

Current Collaboration Projects (cont)

- ◆ Green Park Rapids Initiative
 - Partnered with MN Energy Resources (gas utility) to provide comprehensive energy audits to all participating households
 - Blower door testing and infrared thermal scanning
 - Provide customer with a detailed action plan on improving the home's thermal performance

PARTICIPANT



GREEN
PARK RAPIDS

GO GREEN! SAVE GREEN!

TO PARTICIPATE CALL

732-4158

ENERGY AUDITS SPONSORED BY



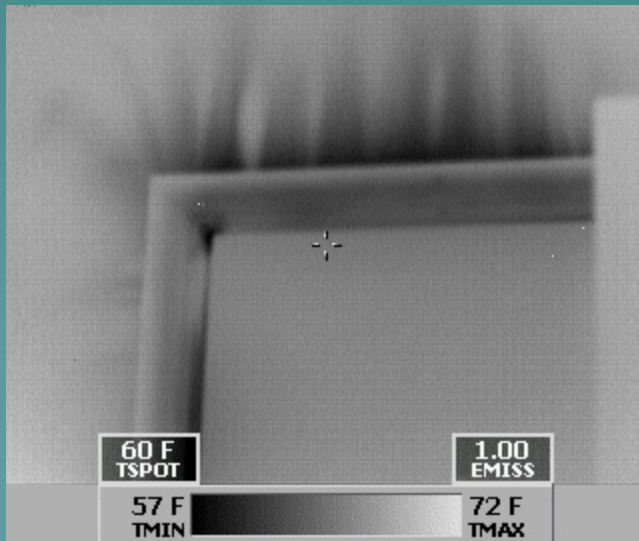
Current Collaboration Projects (cont)

- ◆ Green Park Rapids Initiative Partners
 - Hubbard County Regional Economic Development Commission
 - Park Rapids Housing and Redevelopment Authority
 - Headwaters Regional Development Commission
 - Hubbard County Housing and Redevelopment Authority
 - City of Park Rapids
 - Hubbard County

Home Performance Program



- Comprehensive home energy audit
- Includes blower door testing and infrared scan
- cost share from customer (\$125 - \$150)
- desire to partner with gas utilities



Current Collaboration Projects (cont)

- ◆ Residential Energy Audits – Partner with Comfort Systems, City of Duluth Gas municipal
- ◆ Approx 200 – 250 participants per year
- ◆ Participants can apply for the Home Energy Loan Program
 - 4.9% fixed yearly interest rate
 - Single and Multiple family homes
 - Up to \$15,000/\$5000



Current Collaboration Projects (cont)

- ◆ ENERGY STAR rebate programs
 - Appliances
 - light fixtures
 - cfl's
- ◆ Heating and Cooling Rebates
 - High efficient furnaces with ECM motors
 - Air source heat pumps
 - Central air conditioning
 - Drain Water Heat Recovery units
- ◆ Partnering with MP municipal utilities:
Aitkin, Brainerd, Mountain Iron, Ely, Pierz,
Gilbert, Two Harbors, Grand Rapids



Current Collaboration Projects (cont)

◆ Education and Training

- Energy Design Conference & Expo
- Hosted by MP, partial partner and sponsor list includes: GRE, Comfort Systems, MN Energy Resources
- 1300 attendees & over 90 exhibitors per year
- Over 60 workshops offered on a variety of energy, housing and sustainable topics

Join us in Duluth, MN

March 9 (preconference)

March 10 and 11, 2009

Duluth Entertainment and Convention Center (DECC)

19th Annual **Energy Design 09**
Conference & Expo
Workshops | Seminars | Product Exhibits

It's so much more than a Builder's Conference.



Register early at

www.duluthenergydesign.com

space is limited and early bird pricing ends after February 25th.

Current Collaboration Projects (cont)

- ◆ Education and Training – Professional Development
- ◆ Solar Electric (PV) training
 - Started in 2004, 4 workshops offered
 - Advanced PV Solar installer training (2 days)
 - Half day code official training
 - Half day training for architects and engineers
 - Partners include: GRE, MPCA, MP, MN Office of Energy Security
- ◆ Provided a larger network of trained installers to compliment the state and utility solar PV rebate programs

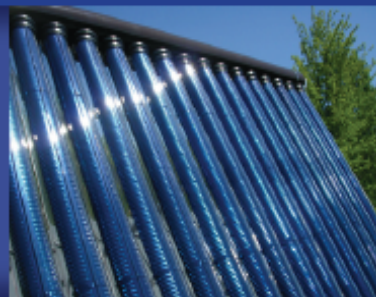
Current Collaboration Projects (cont)

- ◆ Education and Training – Professional Development
- ◆ Solar Thermal Installer Training (2 days)
 - 5 workshops offered around the state in 2008
 - Over 160 attendees
 - Partners include: Ottertail Power, Xcel, GRE, MP, MN Office of Energy Security, MN Renewable Energy Society

Solar Thermal Workshops in Minnesota

Solar Thermal Design and Installation Training—Professional Development

May and June 2008



Four dates and locations to choose from:

- **Duluth—May 13 & 14**
The Suites Hotel in Canal Park
- **Mankato—May 28 & 29**
Holiday Inn
- **St. Paul—June 10 & 11**
Flannery Construction
- **Fergus Falls—June 26 & 27**
Otter Tail Power Company Community Rooms

These workshops are being offered with the anticipation of a future state and utility incentive program for solar thermal systems.

Workshop registration is \$75 and includes lunches and resource manual, “Solar Hot Water Systems—Lessons Learned” by Tom Lane.

Who should attend: Plumbers, HVAC Contractors, Mechanical Contractors, Solar Companies, and Code Officials

Register online at www.mnrenewables.org

Current Collaboration Projects (cont)

- ◆ Education and Training – Professional Development
- ◆ Small Wind Turbine Installation Workshop (3 days)
 - February 11 – 13, 2009 (good planning, eh!)
 - Class filled to capacity, second workshop being planned to accommodate those on a wait list
 - Partners include: GRE, MP, Minnesota Office of Energy Security, MN Renewable Energy Society (MRES), Windustry

Small Wind Turbine Installation Workshop

Professional Development



Maple Grove, MN • February 11-13, 2009

Great River Energy Headquarters

Due to increasing interest in renewable energy and residential-sized wind turbines, this three-day workshop is being offered to provide an opportunity to learn the ins and outs of small wind project development. The timeliness of this workshop complements the growing demand and interest in renewable energy.

With the passage of the Emergency Economic Stabilization Act of 2008 came a small wind investment tax credit to help consumers purchase small wind for home, farm or business use. Owners of small wind systems with 100 kilowatts (kW) of capacity and less can receive a credit for 30% of the total installed cost of the system, not to exceed \$4,000. The credit will be available for equipment installed through December 31, 2016. For turbines used for homes, the credit is additionally limited to the lesser of \$4,000 or \$1,000 per kW of capacity.

Workshop registration is \$125 and includes lunches and the resource manual "*Renewable Energy for Home, Farm and Business*" by Paul Gipe.

Who should attend?

New & existing small wind installers, MN small wind manufacturers, electricians, consultants, PV installers interested in wind and Minnesota Renewable Energy Society members.

Register online at:
www.mnRenewables.org

Watt Hour Meters

- Measures electrical consumption on 120 volt (wall plug in) appliances
- Calculate your electrical expenses by the day, week, month
- Available at all public libraries throughout Minnesota Power's service area

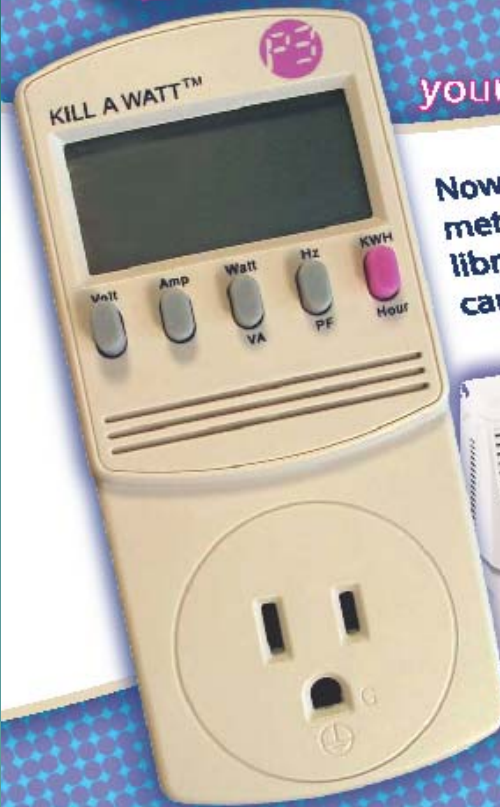


Do you ever wonder how much

ELECTRICITY

your appliances are using?

Now you can find out by using the **Kill-A-Watt** meter that is available for check-out at the library desk. Instructions and convenient carrying case are included.



Brought to you by:



Ask any library personnel for checkout information.