

Building your business  
on energy efficiency



Summer 2009

# Building Up



Minnesota Power recently piloted a program, called “Home Performance,” to determine the energy-savings potential of existing homes in the Northland and to help homeowners access trained contractors and resources to make efficiency improvements.

The program looked at about 70 homes in Duluth, representing a cross section of housing sizes, styles and ages. Each was analyzed using a comprehensive program of whole-house energy auditing services and sophisticated building diagnostics. Participating homeowners received customized action plans, itemizing energy choices and physical improvements for their homes to reduce energy usage and lower utility bills.

While outcomes varied from house to house, participants generally found they could reduce their annual energy costs by 20 to 30 percent by implementing cost-effective recommendations.

This fall, Minnesota Power will partner with local communities and gas utilities in Duluth and Park Rapids to offer this “Home Performance” program more broadly. Success will depend upon a network of specially trained contractors. Read this issue of *Building Up* to learn more about the new program and training opportunities to increase your knowledge of home energy ratings, energy auditing and building diagnostics.

Providing your customers with quantifiable home energy data and helping them make measurable improvements is another way to build your business on energy efficiency.

Dean Tallbott  
Residential CIP Program Specialist

## HOME PERFORMANCE

Houses do not always perform the way homeowners would like or had anticipated. Drafty rooms, moisture on windows, hot and cold spots, musty odors and high energy bills are common symptoms that a house is not operating to its potential.

“Home Performance,” a new energy audit program being launched by Minnesota Power and local gas utilities in Duluth and Park Rapids, will help homeowners improve the total performance and energy efficiency of their homes using a systematic approach.

### Advanced Energy Audits With Benchmarking & Building Diagnostics

“Home Performance” takes traditional home energy auditing to a whole new level. It builds upon the knowledge homeowners can gain through standard energy audits (offered free to residential customers by Minnesota Power) with sophisticated benchmarking tools and building diagnostics.

Prior to an energy auditor’s visit, each home is assessed using the Home Energy Calculator to provide a rating based on total household energy use. This online tool (available at [www.mnpower.com/calculators](http://www.mnpower.com/calculators)) considers billing history, house size, total number of occupants and location, so the home’s energy use can be compared to other houses in the surrounding area. A Home Heating Index also is established by calculating how many BTUs per square foot are used per heating degree day to heat the home (BTUs/ft<sup>2</sup>/HDD). These baseline numbers provide “Home Performance” auditors with valuable insight into potential energy savings and help them customize audits.

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## 2010 Energy Design Conference & Expo

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**Call for Presenters—Submission Deadline: September 15, 2009** Help us celebrate two decades of energy-efficient building and education by participating in the 20th Annual Energy Design Conference & Expo. We are seeking quality, innovative sessions that meet the professional development needs of builders, contractors, architects, designers, code officials, educators, raters and weatherization professionals, as well as topics that provide useful information to students and homeowners. Review popular past topics and submit your workshop proposal online today.



*continued* The distinguishing features of “Home Performance” are advanced building diagnostics, including blower door tests, infrared thermal scans, combustion safety testing and thorough mechanical system inspections by professionals trained in building science. These tests help pinpoint the extent and location of excess air leakage and inadequate insulation. Homeowners are given a customized, detailed action plan prioritizing improvements. Both Duluth and Park Rapids are developing low interest revolving loan funds using federal stimulus dollars that would be available for residential energy-efficiency improvements. Once work is completed, advanced energy auditors return to each home and retest to verify results.

Usually, this type of advanced energy auditing service would cost \$300 to \$500, but, through this program, homeowners can expect to pay around \$125, depending on utility participation. Subsidies from Minnesota Power and participating gas utilities pay the rest.

### Work Performed by Trained Contractors

The key to real and lasting energy-saving results is a network of contractors, trained in energy auditing, building diagnostics, insulation and air sealing, and mechanical systems. The Minnesota Office of Energy Security has contracted with Dunwoody College of Technology in Minneapolis to provide a customized series of contractor training sessions across the state. Find topics, dates and locations at [www.dunwoody.edu/custom](http://www.dunwoody.edu/custom).

“This training is being offered so we can look at existing homes statewide and evaluate them to see what measures are needed to improve energy efficiency, comfort and health,” said Marilou Cheple, weatherization supervisor, Minnesota Office of Energy Security. “Houses are systems, and it is important for contractors to understand building science so air sealing, insulation and mechanical upgrades don’t create unwanted moisture, air quality or health problems in homes.”

### Future Expansion Plans

Minnesota Power plans to expand “Home Performance” across its service area and draw in additional utility partners, contractors and communities. It could bring substantial energy savings for your customers and additional business for you. 🏠

## Featured Incentives

**EDUCATE YOUR CUSTOMERS** about Minnesota Power’s conservation incentives and build your business on energy efficiency.

**Online Home Energy Calculator Tools** FREE online “do-it-yourself” tools, available at [www.mnpower.com/calculators](http://www.mnpower.com/calculators), to rate your home’s energy use and learn about ways to save energy.

**Standard Energy Audit** FREE to Minnesota Power customers, this walk-through audit includes bill analysis, low-cost/no cost energy-efficiency recommendations, energy-saving water heating tools, electrical load analysis, payback analysis for thermal and HVAC upgrades, and a customized educational packet.

**“Home Performance” Audit** Approximately \$125 (\$300-\$500 value) this comprehensive program builds upon standard energy audits by adding sophisticated building diagnostics, a detailed action plan, and follow-up verification of results. A network of trained contractors is being developed to provide the services.

**Your Home Energy Report** Beginning in September, Minnesota Power will be offering a new tool called “Your Home Energy Report,” which will provide further insight about how customers use electricity along with personalized efficiency tips.



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Visit [www.mnpower.com/actionplan](http://www.mnpower.com/actionplan) for more information on tools to help your customers make energy-saving investments.

