



Conserving Energy Makes Environmental Sense

Demand for energy is growing every day. It is estimated that our region will need another 6,000 megawatts of energy by 2020, according to the 2005 CapX 2020 study. One way to help enhance our ability to meet that future demand is to begin cutting back on energy consumption now. Conserving energy also makes environmental sense. When we reduce energy usage, we reduce the amount of greenhouse gas emissions released into the environment.



It may seem illogical that utilities would encourage their customers to cut back on energy use, but it actually makes sense. The reason is simple. Building new generation facilities in today's highly-regulated and politically charged environment is costly, time-consuming, complicated and often controversial. Most utilities would prefer to serve as many customers as possible with their existing generation facilities rather than jump the hurdles associated with building new ones.

That's why regional utilities have developed a broad range of energy conservation programs to help homeowners and businesses reduce consumption, save on energy bills and reduce emissions. Here are some of the highlights:

- Most regional utility companies participate in the Energy Star program, a conservation initiative jointly offered by the U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency (EPA). The program offers rebates and financial incentives for energy efficient appliances, lighting, construction and renovation for homes and businesses. Minnesota Power, Otter Tail Power Company and Great River Energy are all Energy Star partners.
- Great River Energy has launched a "Brighter Idea" campaign encouraging its customers to replace their incandescent lighting with compact florescent lights (CFL). According to estimates, if each of Great River Energy's 516,000 residential customers changed five incandescent bulbs to CFL bulbs, it could save 201,000 tons of greenhouse gas emissions per year, the equivalent of removing 38,000 cars from the road for a year. CFL bulbs use up to 75 percent less energy to produce the same amount of light. Since these energy-saving bulbs last, on average, about 8,000 hours, compared to 1,000 hours for incandescent bulbs, homeowners spend less money and time replacing bulbs.



- Otter Tail Power Company initiated a Home Energy Makeover program, sponsoring six free home energy makeover workshops and awarding free makeovers valued at \$7,500 each to six lucky customers in Minnesota, North and South Dakota. The makeovers focused on making the homes more energy efficient through weatherization and heating/cooling systems. Information gathered during energy audits and tests in the homes of twenty finalists served as the basis for the work plan for each makeover.
- Minnesota Power promotes energy-saving initiatives through its commercial Power Grant and residential Triple E Plus programs. For example, through PowerGrant, Minnesota Power awards grants of varying levels to commercial, industrial and agriculture customers to promote use of innovative technologies, improved manufacturing processes, and energy design assistance. Examples of successful PowerGrant applications are described in PowerGrant Profile, available in print form and located at www.mnpower.com/powergrant. Under Triple E Plus, the importance of energy efficiency is underscored through “Learn and Earn” a school-based program that educates students and communities about how to save energy while raising funds for school projects. “Learn and Earn” events are designed to build community awareness about the economic and environmental benefits of replacing incandescent light bulbs, lamps and fixtures with energy-efficient, Energy Star-qualifying compact fluorescent light (CFL) bulbs, lamps and fixtures.
- Basin Electric supports a residential energy audit program by providing audit training to its member utilities. Basin Electric promotes energy efficiency for homeowners and businesses through its participation in the Touchstone Energy alliance, which sponsors a variety of conservation programs. The cooperative also emphasizes energy efficiency in its power plant operations. In 2007 it added a new high-efficiency simple cycle gas turbine to its power plant in Groton, South Dakota. The unit will reduce CO2 emissions during the course of an average peaking season by about 30,000 tons. A second high-efficiency unit at the Groton Plant is under construction, with completion expected in 2008.

