



February 20, 2004

The Honorable Alan Olson  
Chair, Energy and Telecommunication Interim Committee  
PO Box 201706  
Helena, MT 59620

Dear Representative Olson:

On behalf of the Northwest Energy Efficiency Alliance, I am writing to provide information to the Energy and Telecommunications Interim Committee of the Montana Legislature on the impacts that regional energy efficiency programs have had in the state. I understand that the committee is taking comments on the universal system benefits programs for natural gas and electricity. While the Alliance policy against taking advocacy positions prevents us from commenting directly on the law, I wanted to make sure the committee members understand the benefits that the State of Montana has received from investments in energy efficiency made with USB funds in the past.

#### **Collaborating on energy efficiency**

The Northwest Energy Efficiency Alliance is a non-profit group of electric utilities, state governments, public interest groups and efficiency industry representatives. The Alliance, established in 1996, has been working in the Northwest states of Idaho, Montana, Oregon and Washington to make affordable, energy-efficient products and services available in the marketplace.

Complimentary to electric utilities' local energy efficiency programs, the Alliance's efforts use a tool called market transformation. Market transformation crosses state boundaries and utility service territories to remove the barriers that keep energy efficiency from becoming a normal part of the marketplace and a consideration in consumer purchases. Since 2000, the Alliance's efforts in Montana have been funded by USB dollars at a level of about \$545,000 a year. This amount however does not include all of the market transformation programs funded by USB in the state.

While the Alliance is a regional organization, we know benefits are returning to Montana and not just in energy savings. In 2003, five Alliance projects alone spent over \$400,000 in Montana directly delivering Alliance programs. These costs were associated with activities like field services and cooperative retailer promotional dollars for the ENERGY STAR lighting and home products programs, Montana code work, support for the Montana Local Governments Association, and delivering trainings in more efficient building practices for the commercial buildings sector.

### **Market transformation saves**

Through 2003, the region has saved about 130 aMW at a cost of about one penny per kilowatt-hour from its market transformation efforts. This cost is about one-quarter of the typical cost of electricity generation. In addition, significant environmental benefits are gained from these savings through reduced greenhouse gas emissions such as carbon dioxide. In Montana specifically, the savings attributed to the state is about 5.8 aMW, which saves electricity customers there about \$2 million a year in reduced power purchases.

These savings are accomplished through regional collaboration and highly leveraged activities that result in cost-effective energy savings. These two factors are what make market transformation so powerful. Through this collaboration, the region has been able to maximize its resources with economies of scale and shared costs of programs that cover the four-state area. Alliance's programs represent the Northwest's interests with a single voice in the marketplace. That collective voice is heard more clearly by market actors, such as manufacturers or retailers, and results in a greater impact.

In addition, as a single point of contact the Alliance is able to focus on key leverage points and strategic relationships within a particular market to encourage market actors to make and sell products, such as motors, clothes washers or lighting, that use energy more efficiently and urge service providers to invest in business offerings that improve the operational efficiency of Northwest homes and businesses, such as duct sealing or compressed air efficiency. This effort, coupled with utility programs to encourage consumers to choose higher efficiency products and services has resulted in significant energy savings at a cost that neither activity could have achieved alone.

### **Proven track record**

As an independent, non-profit organization, the Alliance is able to fully focus on its mission to "catalyze the Northwest marketplace to embrace energy-efficient products and services," and has successfully done so. According to an independent study conducted last fall assessing the organization's market transformation activities, the Alliance "made substantive contributions to transforming regional markets for energy efficiency equipment and practices."

Drawing on cost-effectiveness modeling as well as staff and Board expertise, the Alliance has developed a portfolio of projects that touches the residential, commercial, industrial and agricultural sectors. Specifically, these programs have brought the following benefits to Montana.

### **1) ENERGY STAR Home Products & Lighting**

About 260 Montana appliance and lighting retailers participate in the region's programs to promote energy-saving ENERGY STAR qualified products. Through their participation, these stores receive access to a cooperative marketing fund; field services; and assistance with other marketing and promotions, including marketing materials, outreach events and public relations.

Under a recent promotion called "Double Your Savings with ENERGY STAR," which took place from April 15 to July 15 last year, the Northwest's ENERGY STAR Home Products program brought together 58 utility partners throughout the region, eight clothes washer manufacturers, and 441 retailers to bring over 3 million Northwest consumers the opportunity to receive significant rebates on ENERGY STAR qualified machines. About 2,000 Montana households took advantage of the Double Your Savings offer receiving at least \$100 off their new machine (in most cases, \$50 was provided by the manufacturer and \$50 from the local utility).

In all, these machines will save Montana consumers about \$30,000 in electricity costs per year (based on a 4 cent per kWh residential rate). Based on sales data from the promotion, Montana saw a 19.49% increase in market share of qualifying washers for the participating areas, bringing the market share for these washers to nearly half of all clothes washer sales in independent retail stores. This is higher than the national market share average for qualifying clothes washers at 24%.

### **2) BetterBricks**

Through the Alliance partnership, the region sponsors a commercial sector initiative called BetterBricks designed to improve the energy efficiency of Northwest offices, schools, hospitals and grocery stores. Under this effort, Northwest commercial building professionals can call on BetterBricks to connect them with the information, tools, training and consultation needed to design and construct energy-efficient, high performance buildings. High performance buildings use less energy and provide more comfortable workspaces. Studies have shown increased productivity results from enhanced worker comfort.

Architects, developers, builders and facilities managers use BetterBricks to help them incorporate energy efficiency into their building designs, construction plans and day-to-day maintenance operations. In 2003 and 2002, about 220 individuals from Montana architecture, engineering, and design firms as well as government agencies attended trainings supported by BetterBricks on advanced lighting, high performance building designs and efficient operation practices. Design professionals from the state used BetterBricks advisor services on over 70 projects. These services included daylighting and electric lighting consultations and energy modeling.

### **3) Industrial and agricultural efficiencies**

The region provides a number of resources for industrial companies and agricultural businesses to help improve the efficiency of their operations including:

- ?? Under its Microelectronic Efficiency Initiative, the Alliance worked with Advanced Silicon Materials, Inc.'s (AsiMI) plant in Moses Lake, Washington, to demonstrate that a new feedstock—dendritic polysilicon teardrops—would save energy by reducing the time of production. The project resulted in 25% less time to produce the same amount of product and used 25% less electricity. The company's facility in Butte, Montana, applied the improved process to its higher efficiency reactors and was able to squeeze out another 15% in energy savings.
- ?? BacGen is a project that promotes the use of process controls to optimize electricity used in small to mid-sized wastewater treatment plants. Appropriately adjusted controls can also deliver other benefits by helping plants comply with water quality regulation and better manage sludge accumulation, chlorination and de-chlorination, effluent ammonia and odors. Under the project, six initial demonstration sites were identified including one in Roundup, Montana. At the Roundup facility, the project resulted in a reduction in average energy use by 50%. These savings directly benefit state taxpayers by reducing the operating expenses of their wastewater facilities.
- ?? An Alliance project supports the business plan development and marketing efforts for a soil moisture data logger called the AM400. The inexpensive device is designed to give irrigators trend information about soil moisture levels so they can optimize their water use and reduce pumping needs. To date, about 125 units have been sold in Montana saving crop growers an estimated \$74,000 a year.

This is a sampling of our efforts. Attached is a more comprehensive summary of the benefits the region's market transformation efforts through the Alliance have brought to Montana. I hope this information and the information provided in this letter serves to inform the committee on the value that Montana has received in return for its investment in regional energy efficiency efforts through the Alliance. As always, we are happy to discuss further some of the specific activities and benefits of our programs. Please do not hesitate to contact me at 503-827-8416 ext. 227 with further questions.

Sincerely,



Margaret Gardner  
Executive Director

Cc: Mary Vandenbosch, Research Analyst