2009-10 Energy Policy for Montana

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Part VII and VIII of IX "Promoting conservation" and "Promoting energy efficiency incentives"

Governor Schweitzer's Energy Policy statement on conservation and efficiency:

"Energy efficiency and conservation are the best homegrown defense against high-energy prices and produce the quickest results. Energy efficient houses keep us warmer while saving money, especially for those who are forced to choose between food and medicine or heat. Energy efficient cars make citizens less subject to the supply disruptions associated with hurricanes and international politics, and an energy efficient state has less need for costly environmental cleanups. State government will focus resources on energy efficiency and conservation, through both direct assistance to Montana's lower income families and support of industries, businesses, and practices that promote energy efficiency. The state of Montana should strive to attain greater efficiencies and conservation as a means of reducing energy costs."

ETIC Energy Policy statement: (This is a DRAFT statement that has not received ETIC approval. It is meant ONLY as a starting point for ETIC discussion)

Findings:

Montana's current energy policy stresses energy conservation, efficiency, and demand response. Montana utilities and cooperatives also dedicate money to demand-side management programs ranging from residential energy audits to discounts on energy efficient lighting. Since implementing the Universal System Benefits (USB) program in 1999, the state has required utilities and cooperatives to sustain conservation and efficiency programs. Montana's two largest utilities also address demand-side management in their portfolio planning, which is reviewed by the Public Service Commission (PSC).

Montana energy customers are increasingly aware of tax incentives in place to encourage weatherization. The PSC, Department of Revenue, and the Department of Environmental Quality (DEQ) have dedicated time and resources to educating Montanans about these programs.

ETIC recommendations: ?

Recommendations (Examples from other state energy policies):

Idaho (During the 2006 session, the Idaho Legislature passed House Concurrent Resolution No. 62, directing the Legislative Council Interim Committee on Energy, Environment and Technology to develop an integrated state energy plan. The Energy Plan's principal focus was boosting the acquisition of in state energy conservation and renewable energy resources. Idaho ranked 20th overall among the fifty states on the 2009 State Energy-Efficiency Scorecard produced by the American Council for an Energy Efficient-Economy (ACEEE). Idaho also ranked "most improved" from 2007 to 2008.)

Idaho recommendations and policies:

- ☐ When acquiring resources, Idaho and Idaho utilities should give priority to conservation, energy efficiency, and demand response.
- ☐ All Idaho utilities should fully incorporate cost-effective conservation, energy efficiency, and demand response as the priority resources in their Integrated Resource Planning.
- ☐ The Idaho Public Utilities Commission (PUC) should establish annual targets for conservation achievement based on estimates of cost-effective conservation in the service territories of Idaho's investor-owned utilities.
- ☐ The Idaho PUC should establish and periodically update an avoided cost benchmark for each utility to be used in evaluating the cost effectiveness of conservation.
- ☐ The Idaho PUC should establish appropriate shareholder incentives for investor-owned utilities that achieve the conservation targets established by the PUC. Shareholder incentives may include, but are not limited to: recovery of revenues lost due to reduced sales resulting from conservation investments; capitalization of conservation expenditures; a share of the net societal benefits attributable to the utility's energy efficiency programs; an increase in the utility's return on equity for each year in which savings targets are met; or decoupling of utility revenues from sales.
- ☐ The Idaho PUC should support market transformation programs that provide cost-effective energy savings to Idaho citizens.
- ☐ The Idaho PUC and Idaho utilities should consider adopting rate designs that encourage more efficient use of energy.
- ☐ Idaho's municipal and cooperative utilities should annually report to the Energy Division their estimates of cost-effective conservation in their service territories, their plans for acquiring this resource, their conservation and energy efficiency expenditures, and their estimated savings in electrical energy (MWh) and peak capacity (kW) during the lifetime of the measures implemented.
- ☐ Idaho should offer an income tax incentive for investments in energy efficient technologies by Idaho businesses and households. Idaho should offer a sales and use tax exemption on the purchase of energy efficient technologies.

Iowa ("Charting our own course: Today's challenges, tomorrow's opportunities" -- Iowa Energy Independence Plan produced by the Office of Energy Independence in December 2008. The Iowa Power Fund Board, which includes legislative representatives, also reviews the plan. Iowa ranked 18th overall among the fifty states on the 2009 State Energy Efficiency Scorecard produced by the ACEEE. In 2006, Iowa's investor-owned utilities achieved 0.8 percent in incremental electric energy efficiency savings compared to retail sales. Rural electric cooperatives' savings were 0.6 percent and municipal utilities achieved savings of 0.15 percent.)

Iowa recommendations and policies:

- ☐ Energy efficiency must be a priority, before creating new generation. It's the most direct route to creating jobs while saving consumer dollars.
- ☐ Iowa should enact an energy efficiency portfolio standard and expand energy education. All utilities should be required to achieve annual energy savings of at least 1.5 percent of their retail energy sales. However, municipal utilities and rural electric cooperatives should be given reasonable time to develop their programs to achieve the required savings levels.
- ☐ Iowa should promote smart growth and support workforce development in energy. Iowa should cooperate with the public and private sectors in community development and

community planning principles as a means of conserving energy.

- ☐ Iowa should develop coordinated and more uniform core utility energy efficiency programs. The Office of Energy Independence recommends that the state develop goals for energy efficiency that apply to all Iowa utilities, including regional electric cooperatives and municipal utilities.
- ☐ Iowa should make energy efficiency the highest priority in utilities' planning processes. Utilities should be required to demonstrate that they have pursued all available energy efficiency and demand reduction resources that are cost effective before being given permission to build additional generation capacity.
- ☐ Iowa's investor-owned utilities are required to offer energy efficiency programs for their customers and have a long record of administering these programs successfully.

Background

Energy conservation refers to activities that reduce the amount of electricity used by a consumer -- like turning a light off when you leave the room. Energy efficiency results from technologies that are more efficient or use less energy -- like a compact florescent light bulb. Demand response is when customers temporarily alter their behavior in response to signals from a utility. An example is domestic hot water heaters that are cycled off by utility personnel during times of high electricity demand. The three (efficiency, conservation, and demand response) are often linked and simply referred to as "demand-side management" or DSM. Montana's current energy policy promotes energy conservation, energy efficiency, and demand-side management. For the purpose of background information for the Energy and Telecommunications Interim Committee (ETIC) discussion, the topics of efficiency and conservation have been combined with demand response.

Conservation is a simple concept—if you use less electricity, you lower your electricity bill. If a large block of customers use less electricity, it reduces the overall demand on the transmission and generation system, it reduces customer exposure to fuel and electric market prices, and it reduces the need to purchase or construct new generation and transmission facilities.

In a home, energy use is divided into heating and baseload energy. Heating is typically the greatest utility expense, with baseload consumption covering energy uses like refrigeration, lighting, and entertainment. **Figure 1** shows typical energy usage. Understanding how homes use energy is one of the first steps to moving efficiency or conservation measures forward.

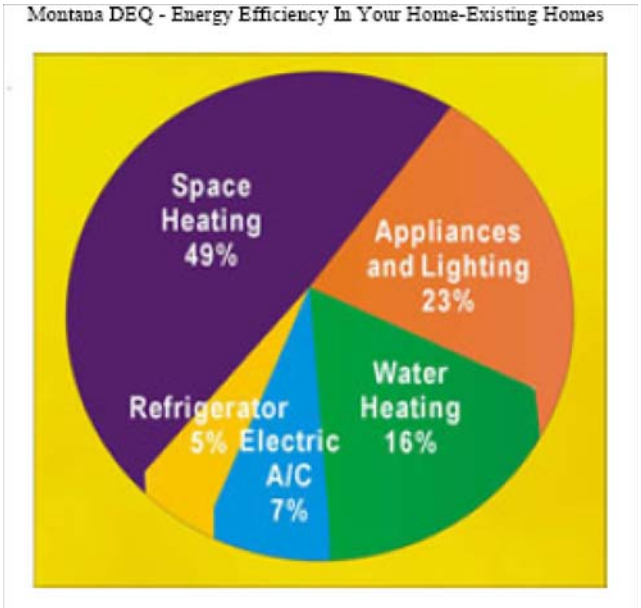

Figure 1

Montana ranked 31st overall among states on a 2009 State Energy Efficiency Scorecard produced by the ACEEE in terms of energy efficiency efforts. The 2009 report was authored by ACEEE, Humboldt State University, and the Natural Resources Defense Council. The rankings were based on six issues including: utility spending on energy-efficiency programs, state transportation policies, state building codes, combined heat and power, state government initiatives, and appliance efficiency standards. Both the ACEEE report and the Energy

Information Administration found that Montana utilities spent about $6.7 million on energy efficiency in 2007, saving 43,329 MWh.[1] These are savings that continue well beyond the year they are reported.

The Northwest Power and Conservation Council produces estimates of the amount of conservation that can be acquired cost effectively in the four state Pacific Northwest region. The most recent draft report released in September 2009 envisions that 58 percent of the new demand for electricity over the next five years could be met with energy efficiency. Over the entire 20-year horizon of the power plan, energy-efficiency could meet 85 percent of the Northwest's new demand for power[2]. In 2007 the Northwest set a record for gains in electric power efficiency. The Northwest Power and Conservation Council reported an annual energy conservation achievement reducing electricity use of 200 average megawatts, or 1,750 million kilowatt-hours. "This is the equivalent of enough electricity for approximately 146,000 Northwest homes."[3] Bonneville Power Administration is part of a Northwest Energy Efficiency Task Force that is focusing on efficient electricity use in the region.

In Montana, the DEQ provides information and resources on energy conservation to businesses and homeowners through its Energy and Pollution Prevention Bureau. Information is provided on energy conservation incentives, and other energy conservation opportunities in the residential, commercial, and public sectors. With energy prices increasing, the Public Service Commission (PSC) has increasingly encouraged Montana customers to reduce energy usage with conservation.

The PSC is currently considering implementing federal standards related to integrated resource planning, energy efficiency, smart grid investments, and smart grid information. The Energy Independence and Security Act of 2007 added four new federal electric utility standards and two new federal natural gas utility standards. The PSC is required to consider the federal standards and determine whether it is appropriate to implement the standard for each utility subject to its jurisdiction. The PSC is considering the federal rate design modifications to promote energy efficiency investments as well as requiring smart grid investments and information. The PSC is specifically contemplating whether it should require that an electric utility demonstrate that investments in qualified smart grid systems were contemplated prior to undertaking any investments in nonadvanced grid technologies. Smart grid delivers electricity from suppliers to consumers using digital technology that saves energy. In addition to smart grid standards, smart grid information is being contemplated. "Information" means providing consumers with access, either in written form or by electronic machine-readable means, to information about their electricity use, prices paid, and sources of generation.

To promote energy efficiency, the PSC is currently considering whether rates charged by an electric utility should promote efficiency and how to potentially align utility incentives to conserve (or sell less electricity). The PSC also is contemplating similar energy efficiency opportunities for natural gas utilities. Both NorthWestern Energy and Montana-Dakota Utilities (MDU) have filed written comments in response to the PSC on the topics of efficiency and smart grid, and both utilities discourage the PSC from adopting the federal standards. In terms of energy efficiency, both utilities note that current law, in terms of Universal System Benefits

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[1] http://www.aceee.org/energy/state/montana/mt_utility.htm

[2]"Draft Northwest 6th Power Plan", September 2009, Northwest Power and Conservation Council.

[3]Bonneville Power Administration, 2008 Annual Report, page 24.

(USB) activities, resource planning and procurement, and specific utility rate filings, allow the PSC to consider the costs and benefits of conservation and efficiency. (These issues are discussed later in this report.)

MDU says, in general terms, it supports smart grid. However, "Montana-Dakota believes that it is premature to adopt a standard for smart grid investments and smart grid information when the technology for such a grid is not yet fully developed, and the costs are unknown." NorthWestern Energy is part of a regional program that will conduct its own smart grid demonstration project in the Helena-area to learn more about potential costs and benefits. Using stimulus money, the regional, pilot, demonstration project may provide data on the usefulness of smart grid specific to Montana utility and cooperative customers.

The Consumer Counsel also raises concerns about the costs of providing real time information to customers about their energy consumption and its market value. Large customers would be more likely to use the information, according to the Counsel, because the benefits of changing consumption would be greater. "It is questionable whether any significant numbers of residential customers have the time, interest, or potential savings to warrant investment in providing smart grid information."

The PSC received American Recovery and Reinvestment Act grant money to add staff and help the agency consider issues related to efficiency, renewable resources, energy storage, smart grid, decoupling, and transmission issues. One specific project identified in the project grant is assessing the current effectiveness of energy efficiency, conservation, renewables, and smart grid efforts of Montana's major regulated electric utilities. The PSC is currently working with the Budget Office to bring on the new staff.

Each year, electric cooperatives, MDU and NorthWestern submit USB reports to the Department of Revenue and to the ETIC. Large customers typically oversee their self-directed USB expenditures. The USB program, Title 69, chapter 8, part 4, MCA, requires Montana utilities (cooperatives and investor-owned utilities) to spend money on activities related to low-income energy assistance, energy conservation, and renewable energy. For electricity, the funding for this comes from a fixed rate set in state law of 2.4 percent of the utility's annual retail sales in Montana for calendar year 1995. For natural gas, a charge is established by the PSC, and a minimum of .42 percent of a utility's annual revenue from the previous year must be dedicated to low-income activities.

As noted, the utility can use the USB money or direct it to the DEQ to administer for energy conservation. Each utility or cooperative also can run the low-income programs itself or turn the funds over to the Montana Department of Public Health and Human Services to administer. The Department of Revenue reviews the reports to ensure self-directed money is being spent on qualifying programs.

In March 2009, NorthWestern Energy provided its USB report showing about $1.86 million focused on energy conservation programs. NorthWestern, for example, provides an energy audit program for residential customers. In 2008 more than 2,750 on-site audits were funded with electric USB funds. MDU reported $905,482 in USB funds collected, with $11,922 directed to energy conservation programs.

An increased number of people are taking part in NorthWestern's E+ Audit program, according to the company. A decision by the PSC in 2008, increased natural gas USB funding, which freed up electric USB money allowing NorthWestern to increase its audit budget. With the increase and increased interest in the audits, NorthWestern expects to perform more than 4,000 audits in 2009. NorthWestern also reports growing interest in the E+ Natural Gas program. The E+ Electric Savings program is targeted to a narrow audience because of the low saturation of electric space heater and electric water heat in NorthWestern's customer base.

Electric cooperatives can pool their USB expenditures, so each of Montana's

cooperatives do not have to meet the minimum funding level. Some of the cooperatives expense for conservation is attributed to their purchase of power produced through conservation activities completed by the Bonneville Power Administration. The minimum spending amount pooled for 2008 was about $3.7 million. Cooperatives' USB spending above the pooled amount was $7.1 million, so, for example, Flathead Electric Cooperative reported spending about $5.5 million on energy conservation and Yellowstone Valley reported spending $772,758. Many western Montana cooperatives are served by the Bonneville Power Administration. That means they are included in Northwest Power and Conservation Council and Northwest Energy Efficiency Alliance activities.

Low-income electricity programs also are funded with federal money allocated to the state or through USB. The Low Income Energy Assistance Program (LIEAP) is a federal program administered by the state that pays a portion of eligible households' winter heating costs. In most cases, payments are made directly to utility companies and fuel vendors. The state Department of Public Health and Human Services administers LIEAP throughout Montana. LIEAP is operated by 10 private, nonprofit Human Resource Development Councils and one Area Agency on Aging. Eligibility for LIEAP funds is limited to those at or below 175 percent of the federally defined poverty level. The maximum amount that a family of four can earn in order to be eligible for LIEAP funds in 2009 is $37,100. Energy Share of Montana is a nonprofit organization funded by USB dollars and private and corporate donations. Energy Share helps Montanans faced with energy emergencies meet their needs by providing bill assistance, furnace safety, weatherization, and refrigerator replacements. Energy Share's private funds have no income eligibility restrictions. In order to receive USB assistance from Energy Share, an individual or family must have an annualized income of 150 percent of the defined poverty level or less, with documented exceptions. The recommended maximum amount of financial assistance from Energy Share is $700. Assistance from Energy Share is provided only once in a lifetime, unless there are unusual or extreme circumstances or a portion of assistance is repaid.

The amount of USB funding dedicated by Montana's two regulated utilities to conservation has decreased, as conservation programs are moved from the USB program into default supply portfolio planning. NorthWestern completes an Electric Supply Resource Procurement Plan every two years, the plan evaluates "the full range of cost-effective electricity supply and demand-side management options." In the plan, an annual demand-side management goal of 5 megawatts per year is in place. NorthWestern also has entered into a contract with the National Center for Appropriate Technology to assist with demand-side management programs. NorthWestern also works with Kema, an energy consultant. MDU's Integrated Resource Plan shows that in 2007, the company spent $349,274 on its demand-side management program and $386,910 in 2008. Montana law also allows the PSC to add 2 percent to the authorized rate of return for demand-side management investments. At this time, Montana utilities have not utilized this option.

In addition to resource planning requirements and USB, additional focus has been put on energy conservation and efficiency in Montana. In late 2007, Governor Brian Schweitzer announced an initiative to reduce energy use at each executive agency by 20 percent by 2010. Capital projects, including energy conservation projects in state-owned facilities, such as those under the "State Building Energy Conservation" are being used to help meet the goal. By the end of 2010, the state should have information about conservation in state buildings and whether the goal has been achieved.

More recently energy conservation and efficiency also have gained support from the Western Governor’s Association. In July 2007, the Western Governors’ Association brought together stakeholders from building and energy industries, government, public interest groups and utilities to discuss opportunities for improving energy efficiency. Recommendations

included:

- The federal government, states, local jurisdictions and utilities should increase the number of incentive options available to consumers and builders who make energy-efficient choices.
- Decoupling and public benefits charges should be considered as mechanisms to fund large-scale energy efficiency programs in all Western states.[4]

Profits for investor-owned utilities are tied to electricity sales, so decoupling can encourage or reward utilities to promote reduced sales and increased conservation. In some states public utility commissions encourage utilities to invest in efficiency and conservation by "decoupling" electricity sales and revenues. Utilities can then compensate for lost sales through rate adjustments. NorthWestern Energy is currently working with stakeholders to look at decoupling. NorthWestern Energy's decoupling program could, for example, tie revenue to the number of utility customers, as opposed to kilowatt hours sold.

In NorthWestern Energy's proposed rate case, which is now before the PSC, an inclining block rate is proposed in the design of residential retail rates. The proposed block rate would allow NorthWestern Energy to charge customers one rate for the first block of kilowatt hours used. That rate would then increase for kilowatt hours used beyond the block. The proposed rate structure is intended to promote conservation by sending a price signal to customers that is consistent with the incremental costs the utility incurs to supply electricity for the last kilowatt hours the customer uses.

Energy efficiency resources standards, similar to renewable resource standards for utilities are also being used in some states. Texas was the first state to establish an energy efficiency resource standard, requiring utilities to offset 10 percent of load growth through efficiency. In 2007, the Texas Legislature increased the goal to 15 percent by 2009 and 20 percent by 2010. Montana does not have a standard.

Montana has tax incentives in place to encourage energy efficiency retrofits. The tax credit available to residential property owners who invest in energy conservation is increasingly being used by Montanans. Tax returns in 2006 show that 19,041 taxpayers claimed the credit for a total of $8.1 million. In 2007, that increased to 19,115 taxpayers claiming about $8.3 million. The Department of Revenue also provided estimates of the amounts claimed by corporations for investments in energy conservation. The Department of Revenue indicated that it rarely sees the deduction claimed in Montana, and estimated 10 corporate returns a year might include the deduction. (There are about 14,200 total corporate returns in a year). Using the estimate of 10 corporations claiming the deduction, about $18,000 to $36,000 is deducted against taxable income. Using the tax rate for most corporations, the estimated total reduction in tax liability due to the tax deduction is only between $1,215 and $2,430.

Conservation and Energy Efficiency Taxation and Incentives

69-8-402, MCA, universal system benefits

Among other things, provides for the continued funding of and new expenditures for cost-effective local energy conservation and low-income weatherization. When Montana restructured its electric industry, it created a USB charge and fund to ensure funding for these types of electricity conservation. Public utilities, cooperatives, and large customers can self-direct and receive credit for cost-effective local energy conservation and low-income weatherization.

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[4] "Building an Energy-Efficiency Future", Western Governors' Association, Policy recommendations for energy efficient buildings, January 2008.

15-32-103, MCA, tax deduction

Allows a deduction from gross corporate income for computation of net income for expenditures for capital investments in buildings for energy conservation purposes in accordance with a specific schedule set forth in the statute.

15-32-109, MCA, tax credit

Provides a resident individual taxpayer with a credit not to exceed $500 against state income tax for expenditures for capital investments in a building for energy conservation purposes.

Title 17, chapter 6, part 3 MCA, "Montana In-State Investment Act of 1983"

Expresses legislative policy and purposes of the permanent coal tax trust fund, which are to: (1) compensate future generations for the depletion of resources caused by coal development; and (2) develop a strong economy for Montana. The Act states that the Board of Investments shall endeavor to invest 25% of the fund in the Montana economy, with special emphasis on local enterprises. Title 17, chapter 6, part 3, MCA, also sets forth authorized investments, limitations on investments, and preferences for investments of revenue from the coal tax trust fund, which, under 17-6-309(1)(d), MCA, expressly includes energy efficiency investments.

Title 69, chapter 3, part 7, MCA, utilities purchase of conservation

Authorizes utilities to purchase conservation or directly engage in conservation investments that have been approved by the PSC, with the cost-effective conservation measures to be at the customer's discretion, installed by either a private firm, the customer, or the utility. The statutes also authorize the PSC to make onsite audits to ensure compliance with the criteria set out in Title 69, chapter 3, part 7, MCA, and prohibit a utility that has placed the conservation in its rate base from claiming a conservation tax credit.

90-4-201, MCA, low-income weatherization

Appropriates to Department of Public Health and Human Services (DPHHS) all federal funds and grants available under the U.S. Department of Energy low-income weatherization assistance program, U.S. Department of Health and Human Services low-income home energy assistance program, or any similar federal program designed to increase the energy efficiency of dwellings inhabited by low-income individuals. The DPHHS is directed to allocate at least 5% of funds received from the U.S. Department of Health and Human Services low-income home energy assistance program, if federal law allows. (90-4-201, MCA)

Title 90, chapter 4, part 3, MCA, energy supply emergency powers

Establishes the necessary planning, information gathering, and energy emergency powers for the Governor and defines the conditions under which these powers are to be exercised. The regular monitoring of energy supplies and demand is provided for. Title 90, chapter 4, part 3, MCA, is intended to enable the Governor and other state agencies to deal with possible energy shortage or energy price emergency situations. The Governor is granted emergency powers that are intended to enable the Governor's Office to gather information, to regularly monitor energy supplies and demand, to formulate plans, and to institute appropriate emergency measures designed to reduce or allocate the usage of energy.

Title 90, chapter 4, part 10, MCA, energy policy

Montana's current energy policy promotes energy conservation, energy efficiency, and demand-side management.

Title 90, chapter 4, part 4, MCA, Northwest Power and Conservation Council

Expresses legislative agreement to participate in the Pacific Northwest Electric Power Planning and Conservation Act and the Pacific Northwest Electric Power and Conservation Planning Council. The Governor is authorized to appoint two members to the Council.

75-25-101, MCA, alternative energy revolving loan program

Provides loans to individuals, small businesses, units of local government, units of the university system, and nonprofit organizations to install alternative energy systems that generate energy for their own use or for capital investments for energy conservation purposes when done in conjunction with alternative energy systems. Loans up to a maximum of $40,000 must be repaid within 10 years. The rate for 2009 is 3.5%. If loans are made by the DEQ using stimulus money received through the American Recovery and Reinvestment Act of 2009, loans of up to $100,000, with a 15 year payback may be available.

Title 90, chapter 4, part 11, MCA, energy performance contracts

Allows state agencies and local government such as county, city, school districts, and community colleges to enter into energy performance contracts that conserve energy for buildings and vehicles that those local government units operate.