GREAT RIVER ENERGY™

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RE: Comments on the Department of Commerce's Inquiry into Fuel Switching

Great River Energy appreciates the opportunity to submit comments on the Department's inquiries into fuel switch and appreciates your consideration.

The current fuel switching discussion can be viewed through all of Minnesota's current energy policy goals, these are outlined broadly in Minnesota statutes:

Energy policy goals.

1. It is the energy policy of the state of Minnesota that:
2. Annual energy savings equal to at least 1.5 percent of annual retail energy sales of electricity and natural gas be achieved through cost-effective energy efficiency;
3. The per capita use of fossil fuel as an energy input be reduced by 15 percent by the year 2015, through increased reliance on energy efficiency and renewable energy alternatives;
4. 25 percent of the total energy used in the state be derived from renewable energy resources by the year 2025; and
5. Retail electricity rates for each customer class be at least five percent below the national average.

Carbon Dioxide Emissions Reduction Goals

- 15% below 2005 levels by 2015
- 30% below 2005 levels by 2025
- 80% below 2005 levels by 2050

The requirements of utilities to build renewable energy portfolios and provide energy efficiency programs to their end use consumers are components of these broader goals. The specific details of which are laid out in other statutes.

While the long-standing approach to the states Conservation Improvement Program has been to reduce kWh and therms of natural gas, the achievement of these goals have been driven by the availability of technology that provided a broad suite of benefits to consumers. While LED technologies can be viewed as the poster child of efficiency success, in terms of energy savings, there are other benefits that are delivered by this technology that cause consumers to install advanced lighting systems. These include increased light quality, lower operations and maintenance costs, and enhanced control and automation integration. If we look at the Minnesota Energy Savings Policy Goal, it would appear that cost-effective

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approaches to fuel switching are consistent with the aspirations of this policy. Technologies that move consumers from gasoline to electricity, or propane to electricity, or wood to electricity, can all meet the objectives of the Energy Savings Policy Goal if we view energy more broadly. By looking at all of Minnesota's policy through the lens of energy, and not just electricity or natural gas, there appears to be ample room for the Department to broadly permit cost effective fuel switching.

216B.2401 ENERGY SAVINGS POLICY GOAL.

The legislature finds that energy savings are an energy resource, and that cost-effective energy savings are preferred over all other energy resources. The legislature further finds that cost-effective energy savings should be procured systematically and aggressively ***in order to reduce utility costs for businesses and residents, improve the competitiveness and profitability of businesses, create more energy-related jobs, reduce the economic burden of fuel imports, and reduce pollution and emissions that cause climate change.*** Therefore, it is the energy policy of the state of Minnesota to achieve annual energy savings equal to at least 1.5 percent of annual retail energy sales of electricity and natural gas through cost-effective energy conservation improvement programs and rate design, energy efficiency achieved by energy consumers without direct utility involvement, energy codes and appliance standards, programs designed to transform the market or change consumer behavior, energy savings resulting from efficiency improvements to the utility infrastructure and system, and other efforts to promote energy efficiency and energy conservation.

Much of the intended goal of CIP programs is to provide end users with economic benefit. These economic benefits are directly realized by individual participants by reducing up front cost of energy efficient technologies and lowering ongoing energy bills, as well as indirectly by reducing overall energy system costs through avoided energy infrastructure. However, there is an acknowledgement in statutes that this need not be accomplished solely through load reduction. Energy productivity improvements that increase productivity are allowable energy efficiency improvements, even if they increase overall energy use. Waste heat utilization, whether for conversion to electricity, or use in combined heat and power strategies are allowable, even though they result in a reduction of overall energy consumption.

Acknowledging that energy is broader than simply reductions in electricity or natural gas will enable utilities to pursue evolving and emerging technologies that reduce residential, commercial, industrial and agricultural operating costs and allow them to use energy in a manner that improves productivity and overall energy utilization. The right technology approaches can also generate significant emissions benefits, all of these approaches are consistent with Minnesota's existing energy policy goals.

Using electric vehicles as an example, this is a technology that reduces gasoline consumption, increases electricity use, improves the efficiency of transportation significantly, and reduces emissions. Utilities

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can provide rates and incentives that reduce the impact of charging, moving charging times to off-peak periods, or working to deploy smart charging that can adjust to the dynamics of the grid. These utility strategies would help to reduce the costs of integrating electric vehicles on the grid, generating indirect system benefits that accrue to all end users.

Viewing "energy" more holistically would also allow fuel switching activities to count towards utility energy savings goals. Energy savings goals for Municipal and Cooperative Associations are established in Minnesota Statute 216B.241, Subd. 1c., and state;

Each individual utility and association shall have an energy-savings goal equivalent to 1.5 percent of gross annual retail energy sales unless modified by the commissioner under paragraph (d).

Key to this statement is the term "equivalent." The Department could view equivalence broadly, the overall energy savings goal is calculated based on retail energy sales, but the measures and activities that result in overall energy reductions through fuel switching could be considered. Utility achievements that increase electricity use but result in a reduction in total energy could be calculated on an equivalent basis with existing efficiency measures. Such activities are consistent with Minnesota Energy Policy Goals and allow for greater utilization of renewable energy while reducing costs and improving productivity for Minnesota consumers.

While there are many details to be worked out regarding the programmatic implications of these initiatives, moving forward with a more holistic approach to energy use is imperative. Our current energy efficiency programs have realized tremendous success through the advancement of energy efficient technologies that have reduced electricity and natural gas use. As new technologies advance and enable more significant reductions in fossil fuels, utilities should be allowed to work within the context of CIP to integrate these technologies as effectively as possible.

Sincerely,

/s/Jeffrey Haase

Jeffrey Haase
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Great River Energy