

August 22, 2019

Minnesota Department of Commerce
Division of Energy Resources
85 7th Place East, Suite 500
St. Paul, MN 555101

Filed via e-mail to: mtburr@burrenergy.com

Re: Comments regarding CIP Fuel-switching Stakeholder Meeting #1 (June 26, 2019).

Missouri River Energy Services (MRES) is a municipal power agency that provides wholesale power and other services to 61 municipal electric utilities in four states; 25 of those members are located in Minnesota. MRES and its municipal electric utility members are all not-for-profit, customer-owned and customer-controlled. We appreciate the opportunity to provide comments in regard to the first 2019 CIP fuel-switching discussion.

The Department of Commerce seeks written comments from stakeholders interested in Minnesota's policy on electric and gas utility fuel-switching programs and the Minnesota Conservation Improvement Program (CIP). This request for comments follows the first of a series of stakeholder meetings, convened by the Department on June 26, 2019, (meeting summary attached) to address issues and options for fuel switching in Minnesota.

Please consider the following topics and **submit written comments via email to mtburr@burrenergy.com by close of business on Thurs., Aug. 22.**

- 1) During Meeting #1, several stakeholders discussed the need for a deeper analysis of various use cases and technology solutions that may result in utility fuel switching activity (between natural gas and electric utilities) that is prohibited for CIP incentives. Please describe:
 - a. Potential energy-saving measures that could result in fuel switching, and that you believe should be made eligible for CIP incentives;
 - [Missouri River Energy Services \(MRES\) offers a wide range of energy efficiency programs that assist our members in compliance with present statutes. Our program design and tracking system both use the Minnesota Technical Resource Manual \(TRM\) for assumptions of demand and energy savings. Our modeling procedures assume that we are replacing electric equipment with higher efficiency equipment. Future changes to the TRM will be adopted into our portfolio as approved by the Minnesota Department of Commerce, Division of Energy Resources.](#)
 - b. Noteworthy benefits, factors, and considerations involving these use cases and technologies.
 - [MRES does not conduct in-depth research and development into potential program penetration in non-electric markets. Any considerations of benefits would be](#)

- anecdotal. Our programs specifically focus on electric-to-electric retrofits. MRES members do contribute funding into the MN-DOC Conservation Applied Research & Development grant programs. We expect that energy savings and environmental impacts from new adaptations in DSM programs would be vetted and approved by the TRM committee. Future TRM measures would need to spell out savings per ‘optimized retrofit.’
- The most noteworthy benefit for expanded fuel switching within CIP programs may be the potential for significant reduction in carbon emissions. In order to realize this potential, CIP statutes would have to specifically recognize carbon reductions as a metric of performance for CIP expenditures.
- c. Uncertainties and unintended consequences related to these use cases or technologies that should be addressed in the policy process.
- Requests for comments have excluded a discussion on electrification of the transportation industry. The transportation industry will have the greatest opportunity for fuel switching. Electric vehicle (EV) transportation already provides benefits by lowering emissions, creating higher efficiencies, reducing costs for customers, and enhancing utilization of the electric distribution system and grid if the energy use is primarily off-peak. Given these benefits, the utility should not be penalized with an increased CIP energy saving goal due to increased sales from the electrification of transportation.
 - Water heaters and EVs have the potential to store energy. A better understanding of how surplus renewable energy could be used to charge these technologies on an off-peak basis will need to be explored. Beneficial electrification and load controlling could allow an electric utility to optimize low-carbon electricity and peak load control.
- 2) Not all fuel-switching use cases involve switching between utility energy supplies. For example, implementing some energy-conservation measures can lead to increased utility sales and decreased sales of non-utility delivered propane and fuel oil. Please describe:
- a. Use cases and technologies exemplifying potential energy-saving measures that you believe should be addressed in State energy policies (within CIP or otherwise);
- Transformation of the transportation industry with beneficial electrification would lead to increased energy sales. This may not directly affect the delivered fuels industry but would lead to a discussion on how to quantify net energy savings on a fuel-neutral basis. Incentives could include residential in-home EV charging, commercial charging stations, public transportation, short-range delivery vehicles, etc.
 - Expanded use of high efficiency water heaters to store carbon-free energy. Some utilities offer dedicated programs that charge water heaters using renewable energy. This additional beneficial electrification and control of water heater load would allow an electric utility to optimize low-carbon electricity when renewable resources are plentiful.

- b. Noteworthy factors and considerations involving these use cases and technologies;
- The most noteworthy benefit for expanded fuel switching within CIP programs is the potential for significant reduction in carbon emissions. In order to realize this potential, CIP statutes would have to specifically recognize carbon reductions as an allowable CIP metric. Future TRM measures would need to spell out those savings per ‘optimized retrofit.’ The CIP statutes would have to codify switching criteria.
 - Transportation industry transformation with beneficial electrification to reduce carbon emissions. Incentives could include residential in-home charging, commercial charging stations, public transportation, short-range delivery vehicle, etc.
- c. Uncertainties and unintended consequences related to these use cases or technologies that should be addressed in the policy process.
- Fuel switching does have the potential to reduce overall carbon emissions and influence climate change. However, consumers must be educated that in order to maintain reliability existing systems may have to remain in place. Heating systems that shift to air-source heat pumps – even units designed for cold climates – will still need either resistance electric or fossil fuels as a backup.
- 3) Criteria for allowing fuel-switching in CIP may be influenced by requirements and factors affecting specific high-impact use cases. Please comment on which fuel-switching use cases you believe will have the greatest beneficial impact on the State of Minnesota, and therefore should merit the highest priority in policymaking.
- Electrification of the Transportation industry probably has the greatest beneficial impacts for carbon reduction and climate change. Personal electric vehicles, public transport, short range and long-range delivery vehicles and industrial forklifts could all be electrified. This will require additional discussions on how to quantify *net* energy savings on a fuel-neutral basis. Utility incentives could include residential in-home EV charging, commercial charging stations, public transportation, short-range and long-range delivery vehicle charging and industrial forklift strategic planning.

Thank you for considering these comments. We look forward to continuing MRES’s participation in the fuel-switching stakeholder process.

Sincerely,

Rob Scott-Hovland
State Legislative Representative