

January 22, 2014

North Dakota Public Service Commission Climate Regulation Symposium Brynhild Haugland Room State Capitol 600 E Boulevard Ave Bismarck, ND

Statement of Minnesota Power (ALLETE) Regulating Carbon Dioxide Emissions from Existing Power Plants under Section 111(d) of the Clean Air Act

Good morning. My name is Michael Cashin, Environmental Policy Manager for Minnesota Power (ALLETE). Minnesota Power (MP) is an investor owned electric utility serving customers in Minnesota and Wisconsin. MP also has a long history working in North Dakota, both for supplying North Dakota lignite coal from BNI Coal for electric power generation and for supply of this affordable and reliable North Dakota coal-based generation to help serve the needs of our customers. More recently, MP has established a significant role for North Dakota based wind energy for serving our customer electricity service needs for while helping to satisfy the Minnesota regulatory demand for renewable energy. MP emphasizes the delivery of reliable, affordable and environmentally responsible energy services to our customers, recognizing how our energy intensive industrial customers need to remain cost competitive in international markets just as all our customers benefit when energy services are well balanced and managed.

Minnesota Power welcomes this opportunity to provide input to North Dakota as consideration is given to State comments development for consideration by the United States Environmental Protection Agency as EPA addresses prospective regulation of carbon dioxide (CO₂) emissions from new and existing electric generating units. EPA has distributed questions to the States that help give focus to stake holder feedback for these listening sessions. Minnesota Power has reviewed and supports the comments addressing EPA's questions from the Edison Electric Institute, Utility Air Regulatory Group, Lignite Energy Council, the Minnesota and US Chambers of Commerce and the National Association of Manufacturers.

Minnesota Power wishes to call out two areas for EPA consideration when proposing regulation of existing unit CO₂ emissions under Clean Air Act provisions.

1. "Within the fence line" emissions regulation. Minnesota Power (MP) notes that determining the Best System of Emission Reduction (BSER) for regulating CO₂ emissions from existing electric utility units requires that definition be given to the entity EPA is proposing to regulate: plant specific CO₂ emissions from "within the fence" of a power plant; collective emissions from groups of existing utility units; collective emissions from the entire electric utility sector; or some mix thereof. MP also recognizes that, while EPA might consider setting up guidelines allowing for States to include a broad array of utility sector CO₂ emission control measures when defining what should be established as the best system of emission reductions for existing utility units, there are constraints from power industry market practices, property ownership boundaries and the exchange of power across State borders that warrant EPA limiting existing unit CO₂ compliance standards to what can be delivered

for compliance by each existing utility unit within its fence line. Once EPA has established guidelines for State Implementation Plans that assign CO_2 emission regulations on existing utility units, the States can then exercise their authority under the Clean Air Act Section 111(d) to provide for compliance flexibility, reaching into the broader array of CO_2 emissions mitigating measures available within the electric utility sector.

Examples:

A. Individual electric generating units are the core component for utility ownership. A utility might only be of size where a single unit or a portion ownership of a single unit comprises the total of the utility's generation capacity up through a size where a single utility might own or operate multiple generating units in multiple States. In either case, the existing unit might be in a rate regulated State where cost recovery might be assured or in a merchant power market situation, where the market clearing price can determine whether enough revenue is received to service unit costs. Further, individual units across the US operate with variations in design fuel type, installed emissions performance and operating duty cycle for electricity dispatch. If EPA chooses to guide compliance targets to what might be achieved by averaging the group of units CO₂ emissions performance, some of the units in the grouping can be expected to have had their Best System of Emission Performance set based on performance levels the unit cannot achieve and that unit would become dependent upon disparate units, prospectively owned by third parties with interests contrary to supporting balanced electricity services meeting utility customer needs. In contrast, limiting regulatory measures on existing utility units to the Best System of Emission Reductions that can be achieved at each unit considering unit installed design, maintenance and operational performance enables clear regulatory criteria to be established for inclusion in the unit's operating permit that make compliance a feasible prospect for all existing units. Once compliance standards are set based on what individual unit performance can deliver, States might then use their authority under Section 111(d) to provide for more economic and feasible operational compliance that better meets the needs of electric utility customers.

- B. Performance characteristics for each unit and its power market conditions are unique. Unit ownership, State and regional energy resource option differences make it critical that EPA not attempt a "one-size-fits-all" approach to existing utility unit regulation. For example, some utility units or even collective State power generation are net exporters of fossil fueled electricity to serve neighboring State electricity customer needs through power market mechanisms. Similarly, some utilities may primarily produce non-fossil fueled electricity. In either case, customers being serviced may be depending on market purchased power sourced from third party generation resources or be receiving services through operating units from which their utility may have provided for agreed power supply. Yet these mechanisms can carry no direct linkage of a utility's owned power supply to another utility's customer base beyond the clearing of power at the Independent System Operator (ISO) marginal dispatch price. Assignment of a Best System of Emission Reduction CO₂ emissions compliance requirement anywhere beyond the fence line of each existing unit would effectively be calling for cooperative collaboration between parties dispatching to power markets, compromising the structure of measures designed to deliver reliable electricity power services to customers at an affordable cost.
- 2. EPA and State acknowledgement and credit for State CO₂ reduction friendly measures already planned or deployed. Some States, including Minnesota, are deploying measures meeting State authorized requirements for CO₂ emission friendly electricity system operating practices. These include renewable energy performance standards, conservation improvement standards and measures improving both power production and customer consumption, energy efficiency measures. These measures have served to suppress customer demand for electricity during both on and off peak periods, have reduced the utility system or regional emissions of CO₂ emitting fossil fuels and have reduced demand for construction of new power generation facilities. Within those

power supply and consumption provisions, State utilities are providing for emission control performance and control retrofits to comply with an array of other environmental compliance measures that combined with CO₂ emission friendly measures, have already delivered the sort of energy supply environmental performance supported by Best System of Emission Reductions. Consequently, EPA should consider how compliance with EPA's proposed regulation of existing unit CO₂ emissions may have already been achieved in practice through these State based measures.

Examples:

- A. Pre 2005 State CO₂ reduction measures should not be forfeit. During the period of the first US Climate Action Plan through 2005, Minnesota Power provided for conservation and energy efficiency improvements that contributed to avoided CO₂ emissions amounting to over 7% of total utility emissions. A good portion of these improvements were accomplished working cooperatively with energy intensive industry customers. Since 2005, Minnesota has been deploying a 25% by 2025 renewable energy performance standard for which some Minnesota utilities are deploying renewable resources earlier than required, has augmented the renewables standard with solar energy targets and is calling for 1.5% year-on-year improvements through conservation and energy efficiency measures. Minnesota Power encourages EPA to provide that none of these proactive State measures are lost to receiving credit or consideration in the event that EPA chooses to regulate utility CO₂ emissions "beyond the fence line".
- B. Minnesota Power's EnergyFORWARD Strategy seeks a long term shift from 2005 generation of 95% coal and about 5% renewable energy to 1/3 coal, 1/3 renewable energy and 1/3 natural gas. EPA should assure that such measures that serve to reduce CO₂ emissions associated with electricity generation carry standing for satisfying compliance with EPA's proposed requirements for existing units. States like Minnesota already require that utilities file and receive approval of their integrated resource plans and Minnesota is among those States that required consideration of future CO₂ emission costs when selecting resources approved for deployment and cost recovery. An overlay of EPA CO₂ regulation on existing units can serve to "double count" the role of CO₂ emissions in electricity unit deployment and dispatch in States like Minnesota and creates risk that EPA's measures will prematurely compel changes in resource planning that can create stranded investment or just simply add unwarranted cost to energy customer services.

Minnesota Power thanks you for this opportunity to provide input to the North Dakota Public Service Commission as North Dakota addresses EPA's prospective regulation of CO₂ emissions under Clean Air Act Section 111 (d). I will be glad to answer any questions you may have related to these Minnesota Power comments.

Regards, Mike Cashin

Michael G. Cashin, PE
Environmental Policy Manager
Minnesota Power (ALLETE)
30 West Superior Street
Duluth, MN 55802
218-355-3339 mcashin@mnpower.com