



**MONTANA-DAKOTA**

UTILITIES CO.

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**Submitted via** email to [carbonpollutioninput@epa.gov](mailto:carbonpollutioninput@epa.gov)

U.S. Environmental Protection Agency  
Carbon Dioxide Standards Program

**Subject: EPA Solicitation for Input on Drafting Proposed Rule for Standards of Performance for Greenhouse Gas Emissions at Existing Electric Utility Generating Units**

Dear Administrator McCarthy:

Montana-Dakota Utilities Co. (Montana-Dakota) submits the following thoughts and suggestions on the U.S. Environmental Protection Agency's (EPA's) proposed rulemaking under Section 111(d) of the Clean Air Act (CAA) for developing guidance, and for states to develop standards of performance, for greenhouse gas (GHG) emissions reductions at existing stationary sources, referred to hereafter as the 111(d) GHG Rule. EPA plans to propose the 111(d) GHG Rule by June 1, 2014. Montana-Dakota appreciates the opportunity to provide input to EPA on the development of this rule.

Montana-Dakota generates, transmits and distributes electricity to more than 134,000 customers in 177 communities and adjacent rural areas in North Dakota, South Dakota, Montana and Wyoming. The total capacity of the company's owned electric generation is about 540 megawatts, and approximately 70 percent of this capacity is fueled by coal. Coal continues to be an economic electric generation resource option in the regions where Montana-Dakota operates, despite low natural gas prices. The company's coal-fired electric generating units (EGUs) provide cost effective and reliable electricity to customers. A 111(d) GHG Rule that does not allow states flexibility in developing standards could significantly impact Montana-Dakota's existing coal-fired electric generation facilities and operations.

An emissions reduction target and standard developed under a 111(d) GHG Rule must not significantly affect the affordability of electricity nor decrease reliability or adversely impact energy markets. EPA should be cautious in relying on environmental dispatch for emissions reductions. If environmental dispatch is considered as a method of reducing CO<sub>2</sub> emissions, EPA must explore how competitive electric markets would be impacted and work with independent system operators, Federal Energy Regulatory Commission (FERC), North American Electric Reliability Corporation (NERC) and utility companies to determine what may be needed to address pricing, unit availability, and reliability issues caused by a shift in electric generation dispatch.

Montana-Dakota believes there will be limited cost effective efficiency improvements at EGUs, since most cost effective improvements allowable under New Source Review/Prevention of Significant Deterioration rules are likely to have already been implemented. Further, no pollution control technology is adequately demonstrated and available to install on EGUs that would result in any meaningful decrease in global CO<sub>2</sub> emissions. Montana-Dakota believes the CAA is not the mechanism for regulating CO<sub>2</sub> emissions from EGUs and that legislative action addressing a nationwide energy policy would be the more appropriate regulatory mechanism for CO<sub>2</sub> emissions.

However, Montana-Dakota is aware that the President has instructed EPA to develop a 111(d) GHG Rule and we offer thoughts and suggestions on this rulemaking in this letter.

**List of suggestions for 111(d) GHG Rulemaking:**

1. Recognize early action

According to the Energy Information Administration's Annual Energy Outlook 2013, CO<sub>2</sub> emissions from power generation facilities are projected to be 14 percent below 2005 levels in 2020. This is important considering the President's goal of reducing US carbon dioxide emissions 17 percent below 2005 levels by 2020. This must be considered in creating an emissions reduction target as well as standard development, ensuring credit is given to utilities for past reductions.

2. Focus emission reduction target to achievable reductions from EGUs

An emission reduction target should be based on EGU emissions reductions only, those reductions that could reasonably occur from improvements or controls that have been adequately demonstrated and that are available to an EGU. States and regions will have the ability to further reduce emissions beyond EPA's target as they deem appropriate. Also, EPA should allow states the authority to develop flexible emissions reduction strategies that are not constrained by the emission reduction target approach used by EPA.

As EPA determines an emissions reduction target for EGUs, the agency should consider that many EGU efficiency improvement projects have already been implemented and not all improvements can be assumed to be applicable to every EGU. The assumption of a two to three percent heat rate improvement across EGUs is most likely not appropriate and a more realistic improvement may actually be much less.

EGUs are fueled by different types of coal, each having different carbon intensities. Lignite coal, which is the predominant type of coal which fuels North Dakota EGUs, has an approximate 10 percent higher carbon intensity than other coals. EPA's emission reduction target and states' standards should recognize the varying carbon intensity of different coals.

Regarding EPA's consideration of environmental dispatch when setting the emissions reduction target for EGUs, the agency must explore how competitive markets would be impacted. An

example concern is that an EGU(s) may be withheld from the market a certain number of hours during the year or be limited in its range of dispatchable power output in order to comply with a CO<sub>2</sub> emissions standard. In the current energy market, if generation is withheld, there could be NERC reliability issues or market manipulation penalties assessed by FERC. These issues, and possibly others, need to be explored and resolved before EPA can contemplate CO<sub>2</sub> emission reductions from environmental dispatch and generation output restrictions.

3. No “one-size-fits-all” approach

EPA must not apply a “one-size-fits-all” CO<sub>2</sub> emission standard for states to implement. Also, it is unclear if EPA is allowed under 111(d) to define “best system of emissions reduction” as a flexible compliance mechanism, however, states may adopt a flexible compliance mechanism to meet state-specific challenges. A “one-size-fits-all” approach would conflict with the common sense electric generation resource decisions made in the past. Historic federal, regional and state energy policies have resulted in a predominance of coal-fired electric generation in the US, and especially in the region in which Montana-Dakota provides service. The abundance of low cost coal has made it the least cost choice for electric generation, with a high cost hurdle established when considering replacing coal-fired generation with other electric generation options.

4. Allow states to develop a flexible emissions reduction strategy

EPA must allow states the authority to develop flexible compliance strategies that are not constrained by the emissions reduction target approach and allow states the flexibility to apply a CO<sub>2</sub> emissions reduction strategy that has various approaches. States will need to assess reliability needs, costs and remaining useful life of plants, especially to prevent stranding of assets. These could include, but are not limited to, efficiencies for each plant, allowing existing and future renewables and lower CO<sub>2</sub> emitting generation to offset existing emissions, co-firing or fuel switching, transmission and distribution systems efficiencies, sulfur hexafluoride emissions reductions, customer demand response and energy efficiency improvements, credits for prevention of greenhouse gas emissions achieved through a variety of options, including, non-electric sector credits or emissions reductions (ie. landfill methane destruction and natural gas distribution system infrastructure replacement), and giving credit for early action. Also, emission reductions from plant retirements should be allowed for ongoing compliance.

States must have the ability to develop a cost containment mechanism to ensure cost effectiveness of reductions as supported in 111(d). Alternative compliance timing is also important to prevent multiple plant retirements from occurring in close proximity and from stranding assets. This is especially important considering the high cost retrofits being implemented in the 2015 to 2020 timeframe for MATS and other environmental rule compliance.

Montana-Dakota serves communities in the Bakken Oil Field of North Dakota and Montana. These areas are experiencing, and will continue to experience, high growth and utilities will need to further utilize the EGUs to their maximum electric output potential, as well as add new generation as needed. EPA and states must consider that as significant economic growth occurs, there will be an increase in need for additional generation from existing sources that may not now be operating at their maximum output.

Applying heat rate or emission rate standards requires further review. Rates may be appropriate to apply, but on a company fleet-wide basis and may not be appropriate for each individual unit. Compliance with a rate can create challenges with dispatching of units in the market if the rate is load limiting. Also, rates will degrade between unit outages. Limiting units to certain load points may create electric market instability, especially when managing loads during non-peak periods and for renewable generation load following. However, Montana-Dakota believes that "good combustion practices", which would apply a work practice standard for compliance, represents a "best system of emissions reduction" that is achievable and is technically and economically feasible for EGUs, and that states could apply this type of standard to EGUs on a case-by-case basis.

Mass emission standards may have a similar result as a rate standard for dispatch as mentioned above and may result in withholding generation from the market due to a compliance limit. These issues need to be understood further prior to implementing a standard.

Past history has shown the propensity for EPA to challenge State Implementation Plans (SIPs), going beyond what states have deemed adequate. EPA must create guidance for states that clearly explains the agency's own role in this process to prevent confusion between EPA and states from the outset.

5. Emissions reduction standards must be applied to EGUs on a case-by-case basis.

An emissions reduction standard must consider, but not be limited to consideration of, coal type, boiler type, existing and applicable improvements and efficiencies, and remaining useful life of an EGU on a case-by-case basis. For example, lignite coal, having a higher CO<sub>2</sub> emissions intensity than other coals, is the predominant coal utilized in Montana-Dakota's coal-fired EGUs. This must be considered when states apply a standard.

Additionally, the remaining useful life of units must be considered, especially as expensive pollution control technologies have, and are still being, installed for air, waste and water regulation compliance.

6. Baseline years are recommended to be 2003 to 2006

The emissions baseline must be from a range of years prior to the economic downturn in 2008 to 2009. We recommend using an average of emissions from 2003 to 2006. When considering baseline emissions from specific EGUs or a company EGU fleet, we recommend using a multiyear average baseline instead of a single year due to outage schedules and demand variability.

7. Compliance date should be after 2020, possibly 2025.

EPA must consider the time needed by states to explore multiple flexible emissions reductions with assistance from various state regulatory stakeholders, and conduct case-by-case evaluations of EGUs when setting the compliance effective date. The process is expected to be equally, if

not more, complicated than the states' evaluations under the Regional Haze Rule which took several years.

For investor-owned utilities to incorporate cost effective resource option decisions into required public utility regulatory resource planning processes, the compliance date should align with the compliance timelines for additional control requirements in the next round of Regional Haze, as well as with the Coal Combustion Residuals Rule, 316(b) Cooling Water Intake Rule and Effluent Limitations Guidelines. Montana-Dakota believes the compliance date to meet a standard should be five to ten years after EPA approves the respective state implementation plan as was provided in Regional Haze determinations, with the compliance date in the timeframe of 2020 to 2025 .

8. CCS is not the “best system of emissions reduction”

Carbon capture and storage (CCS) has not been commercially demonstrated at utility scale and is not the “best system of emissions reduction”. An example of a potential “best system of emissions reduction” would be “good combustion practices” and utilization of a work practice standard to demonstrate an EGU-specific efficiency.

9. Maintain fuel diversity and grid reliability

The 111(d) GHG Rule should not limit fuel diversity in the electric generating fleet, to ensure reliable, least-cost electricity. Grid reliability was also discussed in items 2 and 4 above.

10. Modified and reconstructed sources must not be regulated under the 111(b) standard

EPA must ensure that modified and reconstructed sources are not subject to the new source standards under 111(b) since there are no control technologies available for existing sources to meet the new source standards. This is especially important as pollution control modifications are implemented to comply with other environmental regulations.

11. No model rule recommended

EPA should not draft a model rule since it could serve to limit the flexibility of state- and region-specific emission reduction strategies.

**Conclusion:**

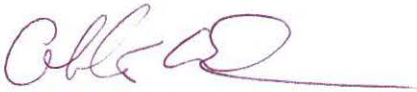
Promulgating a 111(d) GHG Rule for existing EGUs is expected to be complex, both from a technical and legal perspective, and therefore, it is important that EPA devote sufficient time to address any electric market, cost and reliability concern as the agency publishes a proposed rule. With this in mind, Montana-Dakota believes EPA must focus on an emission reduction target that is achievable from EGUs and recognize actions already taken by the electric industry to reduce GHG emissions. The agency must allow states to develop a flexible emissions reduction strategy and not require a “one-size-fits-all” approach. CCS is not the “best system of emissions

reduction”, whereas an adequately demonstrated standard would be “good combustion practices”. Also, no model rule is recommended since this could serve to limit states’ flexibility.

Montana-Dakota believes a baseline period for emissions to be from 2003 to 2006, with an effective compliance date to be in the timeframe of 2020 to 2025. In conclusion, implementation of a 111(d) GHG Rule for existing EGUs must allow for continued fuel diversity in the electric generating fleet and grid reliability must be maintained.

Montana-Dakota appreciates that EPA is reaching out to stakeholders for input before drafting the 111(d) GHG Rule for existing EGUs. If you have any questions or would like to discuss our suggestions, please contact me at (701) 222-7844.

Sincerely,



Abbie Krebsbach  
Environmental Director

cc: Andrea Stomberg, Vice President of Electric Supply  
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