



STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

November 25, 2014

Ms. Gina McCarthy, Administrator
U.S. Environmental Protection Agency
EPA Docket Center (EPA/DC)
Mail Code: 28221T
1200 Pennsylvania Avenue, N. W.
Washington, DC 20460

RE: Docket ID No. EPA-HQ-OAR-2013-0602 – Clean Power Plan

Dear Administrator McCarthy:

The Minnesota Public Utilities Commission (MPUC) submits the following comments on the U.S. Environmental Protection Agency's (EPA) proposed "Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units," rule (also known as the "Clean Power Plan" (Plan)) published in the *Federal Register* on June 18, 2014. The MPUC generally supports the joint comments to be filed by the Minnesota Pollution Control Agency and the Minnesota Department of Commerce, and submits these independent comments in order to emphasize our state's Integrated Resource Planning process (IRP) and how that interfaces with Plan requirements. In addition, the MPUC expands on several critical Plan compliance issues.

The MPUC appreciates the EPA's initiative in forging its Plan to reduce carbon emissions. Although the draft rules raise critical implementation questions, these should be manageable if the EPA continues to use the stakeholder process it has initiated and incorporates suggestions consistent with the Plan's goals. Minnesota hopes to continue to engage in that process, so it can demonstrate how it has been actively pursuing policies that already advance the goals of the Plan. We would expect Minnesota to continue to do its part. However, we also would expect the considerable work our state has already done to advance these policy goals would be appropriately included in the goal calculation and implementation schedule.

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We appreciate the opportunity to comment on the EPA's proposed Clean Power Plan. If you have any questions regarding the enclosed comments, please contact Sean Stalpes, at 651-201-2252 or sean.stalpes@state.mn.us.

Sincerely,



Beverly Jones Heydinger
Chair

Cc: Governor Mark Dayton, State of Minnesota
Commissioner Mike Rothman, Minnesota Department of Commerce
Commissioner John Linc Stine, Minnesota Pollution Control Agency
Deputy Commissioner Bill Grant, Minnesota Department of Commerce
Assistant Commissioner J. David Thornton, Minnesota Pollution Control Agency



STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

Comments of the Minnesota Public Utilities Commission on the Proposed Clean Power Plan

November 26, 2014

The Minnesota Public Utilities Commission (MPUC) submits enclosed comments on the U.S. Environmental Protection Agency's (EPA's) Clean Power Plan, referred to henceforth as the Proposed Rule. The MPUC generally supports the detailed comments filed by the Minnesota Department of Commerce and Pollution Control Agency. The Proposed Rule is technical and lengthy. Although the extension of the comment deadline was helpful, we have not been able to fully analyze the rule, its possible application to Minnesota's utilities, or the projected costs to Minnesota ratepayers. However, we appreciate the opportunity to comment, and would like to provide additional background for your consideration.

MPUC's Statutory Obligations

The MPUC is directed by state law to provide retail consumers of electric service in Minnesota with adequate and reliable services at reasonable rates, consistent with the financial and economic requirements of public utilities. The MPUC must set rates that are just and reasonable, not unreasonably preferential, prejudicial or discriminatory, and, to the maximum extent possible, set rates that encourage energy conservation and renewable energy use, and reduce the State's reliance on fossil fuels. *See* Minn. Stat. §§216B.01 and 216B.03. These directives guide the decisions of the MPUC as it addresses the utilities' requests to build or purchase new generation, refurbish or close existing facilities, develop incentives for energy efficiency, and monitor compliance with the statutory renewable energy and greenhouse gas reduction goals. Environmental stewardship is a key element of the Commission's decisions, balanced with the obligation to assure a reliable electric system and affordable rates. Thus, each decision of the MPUC takes into account the type and timing of change, as well as the cost. We urge the EPA to support this balanced approach to meeting carbon reduction goals.

The Integrated Resource Planning (IRP) Process

Minnesota's regulated utilities file a biennial IRP that evaluates the utility's projected load growth and the least-cost mix of demand and supply-side resources for that utility's service area over the 15-year planning period. Review of the IRP is a transparent process: the utility's modeling is tested and alternative scenarios are modeled, and the public and affected organizations and customers have the opportunity to question and comment.

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EPA references the Minnesota IRP Process in its Proposed Rule as an example of a “multi-pollutant, collaborative approach [that] enables utilities to determine the least cost way to meet long term and comprehensive energy and environmental goals.” This has been a very successful approach for Minnesota, allowing long-term planning to meet several legislative directives aimed at increasing energy savings, renewable energy, including solar energy, and greenhouse gas reduction.

- Greenhouse Gas Reduction Goal, Minn. Stat. §216H.02, subd. 4, establishing goals of achieving a 15 percent reduction in greenhouse gas emissions from **2005 levels** by 2015, a 30 percent reduction by 2025, and an 80 percent reduction by 2050;
- Minimum energy savings requirement, Minn. Stat. §216B.2401, stating that it is the energy policy of the State of Minnesota to achieve annual energy savings of 1.5 percent;
- Renewable Energy Standard (RES), Minn. Stat. §216B.1691, subd. 2a, requiring each electric utility to generate or procure 25 percent of total retail electric sales from eligible renewable energy technologies by 2025. Xcel Energy, Minnesota’s largest utility, has a 30 percent by 2020 renewable energy mandate; and
- Solar Energy Standard, Minn. Stat. §216B.1691, subd. 2f, which, in addition to the Minnesota RES, requires utilities to generate or procure at least 1.5 percent of total electric sales to retail customers in Minnesota from solar energy by the end of 2020.

Pursuant to the legislative directive the MPUC IRP Process has implemented a long-term, incremental transition to (1) replace aging coal-fired infrastructure with natural gas, renewable energy, energy efficiency, and large-scale hydropower and (2) retrofit newer coal-fired resources with multi-pollutant emissions control equipment.

Through utilization of the IRP Process, Minnesota has decreased its greenhouse gas emissions from electric generation by 13 percent between 2005 and 2010. It has increased energy efficiency, approved thousands of megawatts of wind power production, reduced mercury emissions, addressed regional haze and interstate air quality, closed some coal plants, converted others to natural gas, and approved some coal plant retrofits. Minnesota has made steady progress, while at the same time, giving appropriate consideration to the reliability of the grid system and the cost to ratepayers. Long planning horizons and clear direction are the hallmarks of Minnesota’s process.

The MPUC urges the EPA to assure that the transition to cleaner sources of energy does not compromise the thorough review the IRP Process entails, with its due consideration of reliability and rate impact. As others have observed, compliance with the Proposed Rule, particularly the interim target, could require steps that are not the most cost-effective path to meeting the goal and assuring the reliability of the system.

Setting Minnesota’s Target

EPA set Minnesota’s interim goal (the average of years 2020-2029) at 965 lbs. CO₂/MWh and Minnesota’s final goal at 873 lbs. CO₂/MWh by 2030. This means Minnesota will be required to reduce its carbon intensity at existing facilities by an additional 41 percent by 2030. Of this final

target, significant carbon reductions (84 percent of Minnesota's total compliance requirement) will be necessary by 2020 to meet the 2020/2029 interim goal.

The stringency of Minnesota's target appears to be tied to two dominant factors: (1) EPA's choice to use 2012 as the baseline year; and (2) EPA's 70 percent capacity factor for affected NGCC facilities. The 2012 baseline year disadvantages states like Minnesota that have taken proactive measures to reduce CO₂ emissions through early adoption of renewable energy and expanded energy efficiency standards. The 70 percent natural gas re-dispatch assumption in building block 2 also disadvantages states like Minnesota that have taken steps prior to 2012 to replace aging coal-fired facilities with NGCC facilities.

Under the Clean Air Act, the states are given broad flexibility in how 111(d) performance goals could be demonstrated. Overall, the MPUC appreciates the flexibility EPA provides in Proposed Rule, including the agency's support for regional implementation.

However, the emission targets are based on the building block calculations. Thus, if one or more of the four building blocks is not technically feasible, the targets themselves are built upon a flawed assumption, and the imposition of a rate-based standard premised on such assumptions may affect reliability if other allowable systems of emissions reductions are insufficient. The Minnesota Department of Commerce and Minnesota Pollution Control Agency have provided technical comments addressing the building blocks and their impact on our state's goal. We commend those comments to you.

Minnesota continues to evaluate the suitability of adding natural gas generation to the resource mix. Some Minnesota utilities are winter-peaking and the state is heavily dependent upon natural gas for heating. In very cold winters, the price of natural gas spikes, and may greatly exceed other fuel costs. This affects both electric and heating costs for our residents. In addition, increased natural gas generation is dependent upon adequate pipeline capacity. These variables are given serious consideration in the IRP Process to assure that additional natural gas generation is prudent and cost-effective, appropriately sited, and contributes to the reliability of the electric system. It would be beneficial for the EPA to include "safety valves" to allow utilities to ramp up a coal facility, rather than increase natural gas generation, to address short-term conditions when dictated by reliability and safety.

Compliance

A. Credit for Early Action

Renewable Procurement

According to the Proposed Rule (at § 60.5750(a)(3) and (4)), EPA establishes a June 18, 2014, cut-off date for "existing requirements, programs, and measures" that can be included in state plans. The Proposed Rule states:

(1) Actions taken pursuant to an existing state program, requirement, or measure, such as compliance with a regulatory obligation or initiation of an action related to a program or measure, must occur after June 18, 2014. (Emphasis added.)

The MPUC is very concerned about the expected impact of this requirement and requests that EPA clarify this statement. The MPUC approved more than 1,000 MW of wind projects in 2013 and early-2014 that advance the goal of carbon reduction, enhance reliability and reduce cost. These decisions were made pursuant to the IRP Process. Minnesota should get credit for these early actions.

In addition to counting renewable energy investments that occur from 2012 to June 18, 2014, the MPUC believes all renewable energy and energy efficiency procured from 2012 to 2020 should be measured and counted toward the Best System of Emission Reductions (BSER). In the Proposed Rule, EPA proposes that actions taken by states after June 18, 2014, could count toward compliance efforts, but they will only be measured from 2020.

In 2013, the Minnesota Legislature enacted a Solar Energy Standard (SES), which, in addition to Minnesota's RES, requires utilities to generate or procure at least 1.5 percent of total electric sales to retail customers in Minnesota from solar energy by the end of 2020. The MPUC envisions SES compliance unfolding incrementally, through multiple processes with gradually increasing amounts of solar on utility systems. The IRP Process will attempt to balance the risk of potentially expiring tax credits with the possibility of technology improvements that could reduce the levelized cost of solar systems. The MPUC believes all of Minnesota's distributed solar, which will be added gradually in 2014-2020, should be measured and counted toward its BSER as a credit for early action.

Banking Credits

Some stakeholders have proposed that EPA set up a banking system to give states compliance credit for taking early action in the 2012-2020 timeframe. The MPUC supports this idea. If states generate more renewable energy and achieve energy savings above 1.5 percent in 2012-2020, the MPUC requests that EPA allow Minnesota to bank this generation to avoid noncompliance in future years. These banked credits could be necessary to prepare for unknown future circumstances, such as extreme weather, as well as compliance beyond the 2030 date of the final goal.

A prime example of how banked credits could be beneficial relates to Minnesota's nuclear generation. There are three Minnesota nuclear units with licenses scheduled to expire in 2030, 2033, and 2034 (Monticello Unit 1, Prairie Island Unit 1, and Prairie Island Unit 2, respectively). The impending expiration of these nuclear licenses raises reliability and compliance issues that could be mitigated if early action earns compliance credits that may be used after 2030.

Pre-2020 Coal Plant Retirements in the Final Goal Calculation

The MPUC requests similar approval for early coal plant retirements. Minnesota has already been on a path of early coal-fired plant retirements through its IRP Process. The following is a list of coal-fired affected facilities under 111(d) that have retirement dates:

- Minnesota Power, Laskin Unit 1 (2015)
- Minnesota Power, Laskin Unit 2 (2015)
- Minnesota Power, Taconite Harbor Unit 3 (2015)
- Otter Tail Power, Hoot Lake Plant Unit 2 (2020)
- Otter Tail Power, Hoot Lake Plant Unit 3 (2020)
- Xcel Energy, Black Dog Unit 3 (2015)
- Xcel Energy, Black Dog Unit 4 (2015)

The MPUC requests that EPA clarify how affected facilities retired before the compliance period (pre-2020) will be treated in the compliance calculation. It is important that coal-fired facilities retired in 2015-2020 do not simply disappear from the equation, but are treated as an emissions reduction for the purposes of state compliance. For example, according to EPA's technical support documents, Xcel Energy's Black Dog units 3 and 4 units generated approximately 2,680,500 MWh's in 2012. These two units will be retired in April 2015. The MPUC requests EPA clarify: (1) whether this retirement will be treated as a reduction from 2,680,500 MWh's to zero for the purposes of 111(d) compliance; or (2) whether the Final Goal will calculate the carbon intensity of only those affected units remaining in operation during the 2020-2030 compliance period.

B. Meeting the Interim Goal

As previously noted, 84 percent of Minnesota's total carbon reduction occurs by 2020, under the EPA's proposed approach. Given the stringency of the requirements applied to Minnesota, the MPUC expects that both additional infrastructure and unit retirements with replacements to be a part of Minnesota's compliance plan. Minnesota must have the flexibility to meet timelines while maintaining reliability and assessing prudent investment.

In MISO's comments on the Proposed Rule, MISO states that "Application of the 2020-2029 interim emissions performance period and the associated interim emissions performance levels established in the proposed rule will negatively impact reliability and resource adequacy in the MISO region starting in 2020. The interim performance requirements create an untenable and infeasible timeline for reliable compliance, and would cause states and MISO member companies to make decisions on a severely truncated timeline."

The MPUC shares MISO's concerns that the need to take action by 2020 may impede states' ability to implement least-cost compliance strategies and may degrade reliability.

Given Minnesota's recent experience with the time requirements of Xcel Energy's MERP initiative for coal-to-gas replacement and the CapX2020 transmission initiative, the MPUC

believes the Proposed Rule's interim goal should be more flexible. MERP and CapX2020 are reasonable proxies for determining the appropriate interim compliance level, and each one took years to plan, develop, permit, construct and bring into operation. Xcel Energy's MERP initiative began in 2001 and was completed in 2009. Minnesota's portion of the CapX2020 initiative began with the planning phase in 2004, and the construction of those lines is still ongoing.

As noted in the comments of the Minnesota Department of Commerce and Pollution Control Agency, the interim goal fails to account for the manner in which large energy generation shifts occur and is at odds with Minnesota's energy planning. Therefore, MPUC believes that flexibility with the interim compliance level is essential for Minnesota's least-cost compliance plan.

C. Stranded Costs

The MPUC shares other stakeholders' concerns regarding possible stranded costs from early retirement of baseload units that have been substantially retrofitted within the last decade. Of the remaining affected coal-fired facilities in Minnesota, most, if not all, have had emissions reductions equipment installed within the previous ten years. Given the stringency of Minnesota's rate-based standard, some coal-fired resources would need to be curtailed too soon to recover their fixed operations and maintenance costs. Since these changes were made to fully comply with existing EPA rules, and took into account the costs and useful life of the retrofits, early replacement will shift extra costs to ratepayers that can be avoided by careful, long-term planning.

It will be easier to manage stranded costs if the interim goal is eliminated. In the alternative, the final rule could provide states with the flexibility and authority to conduct its own unit-level evaluations through IRP and rate cases so that state commissions could take depreciation adjustments and rate impacts into account when submitting a state compliance plan.

It is not clear in the Proposed Rule how the EPA will account for the rate impacts of previously retrofitted coal facilities. Thus, the MPUC requests EPA provide more clarity concerning the rate impact methodology for facilities that have had major equipment installations to comply with mercury, regional haze, and interstate air quality rules. The MPUC notes that to properly estimate the rate impacts of early retirement, capital budgets for retired assets need to be modified to reflect a shorter operating life, and capital depreciation schedules changed to match the modeled retirement date. Also, the recovery of decommissioning costs would need to be adjusted so that sufficient funds would be available to remove and remediate the sites. This is unit-specific information that does not appear to exist in EPA's technical support documents.

To summarize the MPUC's comments on compliance, the MPUC requests EPA:

1. Provide credit for early action, particularly for renewable energy and energy efficiency investments made since 2012;

2. Work with the states to design a banking system that encourages early investments in renewable energy and energy efficiency;
3. Clarify that states will get credit for early coal retirements;
4. Allow states that require new infrastructure investments a minimum of ten years to reach the interim goal, or eliminate the interim goal;
5. Provide greater flexibility for phasing out facilities with recent investments made to comply with EPA rules.

Conclusion:

In conclusion, the MPUC reiterates its general support for the comments to be submitted by the Minnesota Department of Commerce and Pollution Control Agency and is committed to complying with state and federal requirements to reduce carbon emissions. Our IRP Process has successfully guided this state's substantial progress, and we urge the EPA to support its continued use so that reliability, cost and environmental goals are fully evaluated.

The MPUC appreciates that EPA staff have offered several opportunities to ask questions, and we look forward to final rules that we can fully support and implement.