



**GREAT
RIVER
ENERGY™**

Clean Power Plan Position

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On August 3, 2015, the U.S. Environmental Protection Agency (EPA) issued its final Clean Power Plan (CPP) regulating carbon dioxide (CO₂) emissions from existing power plants. Although Great River Energy staff are still studying the CPP and analyzing its impact, it is clear the rule imposes stringent requirements on power plants across the nation, including Coal Creek, Stanton and Spiritwood Stations.

Great River Energy's approach to the business issue of climate change and carbon regulation

Great River Energy has long recognized that impending carbon regulation is a business issue of the first magnitude. For that reason we have taken steps to prepare for regulation and have actively engaged in the debate. Our view has been that we will be better able to create value for our members if we engage in the process. We want to help ensure CO₂ regulation is implemented in a way that best preserves reliability and affordability for our members. And we believe engagement is more important than ever now that the final CPP has been issued.

Regardless of whether the CPP survives court challenges, CO₂ emissions from power plants will be regulated. After the U.S. Supreme Court ruled in 2007 that greenhouse gases are pollutants under the Clean Air Act, the EPA became obligated to begin the process of regulating CO₂. If the CPP is overturned, another regulation will take its place. Although the CPP is stringent, it will at least provide our industry with needed clarity.

In the absence of any certainty, we have implemented approaches we believe are effective in any scenario, such as accelerating depreciation on Coal Creek and Stanton Stations. In addition, without CO₂ regulation at the federal level, states like Minnesota have filled the void with a patchwork of laws to address climate change. We believe federal guidance and a consistent approach regarding CO₂ regulation are preferable to state-by-state approaches. Today, we are faced with many decisions, such as the strategic evolution of our portfolio, which will be clearer once we see how the states implement the CPP.

For all of these reasons, we believe the wisest course is to continue to engage in the process. Therefore, we are devoting our resources to understanding the CPP and finding opportunities to minimize its cost impacts.

Great River Energy is well positioned to thrive in a carbon constrained environment

The CPP sets North Dakota's CO₂ intensity goal at 1,305 lbs/MWh, which is tied for the least stringent in the United States, but still substantially below current state levels. Great River Energy owns three of the most efficient power plants in North Dakota, positioning us well to comply with the CPP.

- Coal Creek Station emitted CO₂ at a rate of 2,276 lbs/MWh in 2014, due in part to the DryFining™ coal refining technology.
- Stanton Station emitted 2,154 lbs/MWh of CO₂ in 2014. Its lower rate is due in part to the use of Powder River Basin coal.
- Spiritwood Station is the most efficient plant of all. Due to its combined heat and power (CHP) design, and based on EPA's own methodology for determining the CO₂ efficiency of CHP plants, we project Spiritwood will emit CO₂ in a range of 1,100 to 1,300 lbs/MWh, which is below the goal the CPP sets for North Dakota.

The final CPP recognizes the importance of baseload coal to reliability. As stringent as the CPP is, after full compliance with the CPP in 2030 most of the nation's coal plants would still be operating. Those plants that survive – the last plants standing – will be the most efficient.

The CPP identifies trading as a preferred method of achieving the substantial CO₂ emissions reductions required by the rule. In the case of CO₂ intensity, or rate-based State Implementation Plans (SIPs), the commodity traded would be something EPA is calling emissions rate credits (ERCs). In the case of mass-based SIPs that regulate total CO₂ emissions, CO₂ allowances would be traded. Because Great River Energy's plants are among the most CO₂ efficient, we will have to purchase fewer ERCs or CO₂ allowances, thus giving our plants a cost advantage in the market. Great River Energy has long believed an approach to CO₂ regulation that relies on markets, rather than a command and control structure, is the most economically efficient way to implement CO₂ regulation.

The CPP also promotes renewable energy as a way to reduce CO₂ intensity or to replace some power from coal plants. The Upper Midwest has some of the best wind resource opportunities in the country. We will study the impact of taking advantage of wind opportunities as a potential CPP compliance mechanism.

Great River Energy has been preparing for CO₂ regulation, and the CPP did not catch us by surprise. The Great River Energy board adopted a resolution in 2013 that called for:

- Acceleration of depreciation on Coal Creek and Stanton Stations to keep our options open
- Substantial reduction in our reliance on coal
- Meeting our growth requirements with conservation, energy efficiency, renewables, natural gas and the energy market.

We have made progress on all three objectives, including reducing the use of coal-based energy in our portfolio.

Litigation

The CPP will be challenged in court by a host of parties. It is very likely the U.S. Supreme Court will ultimately determine the validity of the CPP. EPA's authority to regulate CO₂ emitted by existing power plants is derived from Section 111(d) of the Clean Air Act. Section 111(d) is a poor vehicle for CO₂ regulation. The question of whether EPA exceeded the legislative authority granted in the Clean Air Act is a legitimate one for the courts to answer. Nevertheless, until and unless the CPP is stayed or overturned by the courts, our primary effort will be devoted to complying with the CPP and working with North Dakota officials and others to shape the state's SIP in a way that promotes reliability and affordability for our members.

Great River Energy's plan going forward

We continue to digest the 1,560 pages of the CPP and analyze its impact on Great River Energy. We are also learning more about the CPP through the National Rural Electric Cooperative Association, the Coalition for Innovative Climate Solutions (an electric utility industry group of which we are a member), the Midwestern Power Sector Collaborative (a group facilitated by Great Plains Institute that includes utilities, government officials and non-governmental organizations), the Lignite Energy Council and others.

We will continue our work with North Dakota and Minnesota government officials and utilities on the states' SIPs. The structure of the Clean Air Act states that EPA creates a guideline (the CPP), each state proposes a SIP to implement the CPP, and EPA reviews the SIP and replaces it with a Federal Implementation Plan (FIP) if EPA determines the SIP does not satisfactorily implement the CPP. As a result, the states will be focusing on their SIPs. It is extremely important to be at the table as that occurs to influence the SIP, especially in North Dakota, where our resources covered by the CPP are located. In Minnesota, where we have no power plants covered by the CPP, our focus will be to encourage the state to participate in multi-state trading to implement the CPP.

Conclusion

Our members are the sole focus of our engagement in the CO₂ regulation debate. We believe the approach we have laid out is the best way to ensure Great River Energy continues to provide reliable, affordable wholesale power to our members in an environmentally sound manner.