

—VIA ELECTRONIC FILING—

March 9, 2012

Dr. Burl W. Haar  
Executive Secretary  
Minnesota Public Utilities Commission  
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St. Paul, Minnesota 55101-2147

Bill Sierks  
MN Pollution Control Agency  
520 Lafayette Road N.  
St. Paul, Minnesota 55155

RE: IN THE MATTER OF ESTABLISHING AN UPDATED 2012  
ESTIMATE OF THE COSTS OF FUTURE CARBON DIOXIDE REGULATION ON  
ELECTRICITY GENERATION UNDER MINN. STAT. § 216H.06  
DOCKET NO. E999/CI-07-1199

Dear Dr. Haar and Mr. Sierks:

Northern States Power Company respectfully submits these comments in regard to the notice of comment period for establishing 2012 estimates of the cost of carbon dioxide regulation.

We do not object to the cost range recommended by the MPCA and the DOC of \$9 to \$34 per ton of CO<sub>2</sub> emitted. However, we do not believe there will be any move to actually assess these costs in 2012. There has been little recent activity at the federal or regional level suggesting that a CO<sub>2</sub> cost will be applied to emitters in the short term. As we discuss below, based on our review of forecasts of emissions costs, we recommend that 2020 be established as the year in which utilities should start including these costs for planning purposes.

As an alternate option to the MPCA recommendation, we would like to share the results of our recent research on CO<sub>2</sub> proxy prices. The Company has recently undertaken an effort to better estimate the likely risks and implications

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of potential future CO<sub>2</sub> policy. For these risk assessments, we have chosen an approach to forecast CO<sub>2</sub> pricing that relies on surveying the forecasts of well-regarded third-party energy forecasting firms. This method of creating a proxy price forecast is conceptually very similar to the method used in our resource planning efforts for purposes of forecasting natural gas prices and other major resource planning input assumptions.

To develop a CO<sub>2</sub> proxy price forecast, we blended the baseline CO<sub>2</sub> proxy price forecast from three different consulting firms: IHS Cambridge Energy Research Associates, PIRA, and Wood MacKenzie. These three firms develop forecasts of energy demand, supply, and other factors, including an anticipated CO<sub>2</sub> price. Many major energy companies in the US and worldwide rely on the forecasts of these firms to make strategic and planning decisions.<sup>1,2,3</sup>

We obtained the most recent CO<sub>2</sub> price forecast from each firm. Next, the prices were averaged by year for each year a price was available. The firms started their forecast CO<sub>2</sub> pricing between 2020 and 2022. Prior to 2021, only one firm forecast a CO<sub>2</sub> price, which reduced the blended or averaged result in that year. Also, no forecasts extend beyond 2035.

The resulting “3-Source” CO<sub>2</sub> proxy price forecast starts at \$5.00 per ton in 2020, and climbs to \$15.89 per ton in 2022 as all three consultant forecasts predict existence of a CO<sub>2</sub> price in 2022. From 2022 onward, it escalates at approximately 9% per year in nominal terms. The higher escalation rate stems from the consultants’ view that reduction targets under future CO<sub>2</sub> policy will get more stringent over time, as had been incorporated into previous federal CO<sub>2</sub> legislative proposals.

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<sup>1</sup> IHS Cambridge Energy Research Associates North American Gas and Power Scenarios product described at <http://www.ihs.com/products/cera/energy-research/north-america-gas-power.aspx>

<sup>2</sup> PIRA North American Environmental Markets Service product described at <http://www.pira.com/ClientServices/PIRAEnergyServicesBrochure.pdf>

<sup>3</sup> Wood Mackenzie North American Power Service described at <http://www.woodmacresearch.com/cgi-bin/wmprod/portal/energy/productMicrosite.jsp?prodID=140>

The 3-Source forecast is shown in the table below.

Nominal \$/Metric Ton	
Year	3-Source
2012	\$ -
2013	\$ -
2014	\$ -
2015	\$ -
2016	\$ -
2017	\$ -
2018	\$ -
2019	\$ -
2020	\$ 5.00
2021	\$ 9.03
2022	\$ 15.89
2023	\$ 17.37
2024	\$ 18.93
2025	\$ 20.58
2026	\$ 22.37
2027	\$ 24.33
2028	\$ 26.47
2029	\$ 28.80
2030	\$ 31.34
2031	\$ 34.11
2032	\$ 37.13
2033	\$ 40.42
2034	\$ 44.01
2035	\$ 47.92

In contrast to the prevailing thinking of a few years ago, when CO<sub>2</sub> cap and trade legislation was a major federal issue, the three consulting firms see significant delays in a CO<sub>2</sub> price being applied to emissions from the power sector in the near term. This view is buttressed by a general lack of political interest by the current Congress. The consultants' views also stem from a lack of clear support from the Obama administration, which has recently been quiet regarding cap and trade or direct charges on carbon emissions. The Republican Presidential candidates are cool toward the idea and neither oppose nor, openly support national CO<sub>2</sub> cap and trade or tax proposals.

Broadly speaking, the consultants we surveyed foresee the potential for some degree of greenhouse gas regulation from the U.S. Environmental Protection Agency (EPA) based upon Clean Air Act rules, a process the EPA has already

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begun. This process may actually further delay the onset of a price on CO<sub>2</sub>; the EPA regulation would not take the form of a CO<sub>2</sub> price mechanism, but would likely employ a less flexible set of rules requiring emissions reductions from power plants, perhaps beginning in the 2014-2016 timeframe. Then it is hypothesized that a future Congress might be interested in “reforming” such EPA regulations through a more efficient cap and trade or carbon tax. This might happen post-2015 and would likely allow a few years for the new legislated policy to begin, which pushes the beginning of carbon pricing into the 2020-2022 time frame.

Finally, due to significant uncertainty associated with whether and when carbon policy may come into force and apply a price to CO<sub>2</sub> emissions from Minnesota power plants, we also plan to submit planning scenarios with a \$0 carbon assumption in our future planning efforts.

Because the MPUC reviews these planning values annually, the start dates, prices, and other factors can be modified next year if better information is available later this year.

We have served all parties on the attached service list. If you have any questions regarding this submission, please call me at (612) 330-7975.

Sincerely,

/S/

SARA CARDWELL  
MANAGER  
REGULATORY ADMINISTRATION

cc: Service List

## CERTIFICATE OF SERVICE

I, Mark Suel, hereby certify that I have this day served copies or summaries of the foregoing document on the attached list of persons by delivery by hand, electronically or by causing to be placed in the U.S. mail at Minneapolis, Minnesota.

**DOCKET No. E999/CI-07-1199**

Dated this 9<sup>th</sup> day of March 2012

/s/  
Mark Suel

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