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March 5, 2018

**VIA E-FILING**
Mr. Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101-2147

Re: In the Matter of Establishing an Estimate of the Costs of Future Carbon Dioxide Regulation on Electricity Generation under Minn. Stat. § 216H.06
**Docket Nos.: E999/DI-17-53** and **E999/CI-07-1199**

Dear Mr. Wolf:

Please find enclosed Minnesota Power's Reply Comments in the above-referenced Dockets. Please contact me at the number provided above with any questions or concerns.

Yours truly,

Lori Hoyum

LH:sr
Attach.

**STATE OF MINNESOTA**
**BEFORE THE**
**MINNESOTA PUBLIC UTILITIES COMMISSION**

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In the Matter of Establishing an Estimate of the Costs of Future Carbon Dioxide Regulation on Electricity Generation Under Minn. Stat. § 216H.06

Docket No. E999/CI-17-53
E999/CI-07-1199

**MINNESOTA POWER'S REPLY COMMENTS**

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The Minnesota Public Utilities Commission ("Commission") issued a Notice of Comment Period ("Notice") in Docket No. E999/DI-17-53, and Docket No. E-999/CI-07-1199 on January 23, 2018, specific to the January 19, 2018 filing to the Commission by the Minnesota Pollution Control Agency and the Minnesota Department of Commerce, Division of Energy Resources (collectively "the Agencies"), of the Agencies' Analysis and Recommendations regarding the 2018 update to the range of costs estimates for the future cost of carbon dioxide ("$CO_2$") regulation on electricity generation, as required by Minn. Stat. § 216H.06. The Agencies recommended that the Commission establish the range of likely costs of $CO_2$ regulation at \$5 to \$25 per ton of $CO_2$ emitted, to be used in electric resource acquisition proceedings for planning year 2025 and beyond. The Notice identified the topics open for comment, as well as information requested from the utilities that filed Initial Comments on September 22, 2017, in Docket No. E999/DI-17-53. The Clean Energy Organizations ("CEO"), Xcel Energy ("Xcel"), Otter Tail Power ("OTP"), Great River Energy ("GRE"), Large Industrial Group ("LIG") and Minnesota Power each filed Initial Comments in response to Notice. Minnesota Power (or "the Company") respectfully provides its Reply Comments to the initial comments submitted by the CEO.

**Adoption of Agencies' Recommendations**

In the Company's February 20, 2018 Initial Comments, Minnesota Power recommended that the Commission should not adopt the Agencies' recommendations due to its misalignment with what the current carbon market is forecasting for the likely range of future costs for $CO_2$ regulation and the timeframe for its implementation. Instead, the Company continues to support using third-party vendor forecast data that Minnesota utilities use for resource planning purposes (such as IHS or Wood Mackenzie) to develop an updated range of costs of future $CO_2$ regulation.

As was noted by Xcel in their February 20, 2018 Initial Comments, the Environmental Protection Agency's ("EPA") Clean Power Plan ("CPP"), finalized in October 2015, was stayed by the U.S. Supreme Court in February 2016, and remains stayed pending the ongoing legal challenge at the U.S. D.C. Circuit Court of Appeals. The latter court has held this litigation in abeyance pending EPA's review of the rule. In December 2017, the EPA issued an Advance Notice of Proposed Rulemaking ("ANPR") requesting comment on whether it should issue a replacement to the CPP and if so, what form a replacement rule should take. The comment period on the ANPR closed February 26, 2018, and it's unknown whether EPA will ultimately replace the CPP and to what extent a revised rule will reflect the original CPP. With this said, and in light of the current uncertainty that surrounds federal $CO_2$ regulation, Minnesota Power is agreeable to adopting the Agencies' recommended $CO_2$ values until more certainty exists on future $CO_2$ regulation, but the Commission should retain flexibility for utilities to determine which value within the range best represents current outlooks for $CO_2$. Minnesota Power also notes that existing programs like RGGI[1] and the California cap and trade program have a history of posting lower carbon values over time, reflecting how participants in those programs provide for $CO_2$ reduction supply measures that can go beyond achievement of reduction targets. While "floor" pricing may be instilled by regulators to prop up trading markets, it can still be uncertain as to whether lower $CO_2$ exchange pricing is due to regulatory pricing floors, subsidies/incentives in power markets, unrelated market forces or delivery of excess $CO_2$ emission reductions beyond program goals.

Minnesota Power agrees with the Agencies and other utilities that a starting date in the mid to later 2020s is more realistic than in 2022 as proposed by CEO. The Company supports the Agencies' recommendation to begin applying the $CO_2$ regulatory range in its resource planning in 2025. Additionally, Minnesota Power supports OTP's recommendation that this range and start date be applied for a two-year time period covering both 2018 and 2019. The Commission can reopen the Docket prior to 2020 if action on the CPP or other $CO_2$ regulation warrants it.

[1] Regional Greenhouse Gas initiative ("RGGI').

**State-level, Regional-level or National-level Cost of Compliance**

Minnesota Power's position remains unchanged from its Initial Comments and continues to advocate that a national-level future cost of $CO_2$ compliance is appropriate, recognizing that $CO_2$ cost projections may be considering multiple applicable state or regional $CO_2$ regulation programs.

**Inclusion of an Escalation Rate**

The CEO recommend that the Commission should escalate its regulatory cost values at a rate greater than inflation. Specifically, the CEO recommend that if the Commission does not adopt their proposed regulatory cost values, the Commission should set the escalation rate for its chosen values at 5 percent above inflation, which would be consistent with the escalation rate used in the RGGI and WCI[2] programs. Minnesota Power recommends that the Commission, as part of its evaluation, continue to apply a general rate of inflation, similar to how externalities values have been escalated, to the $CO_2$ regulation cost in effect today.

**Use of Regulatory Values in the Reference of Base Case Scenarios**

The CEO recommend that the Commission order all utilities to use the mid-point of the adopted range in the reference case as well as providing low and high regulatory cost runs as sensitivities, just as is done with other variable future costs. Minnesota Power disagrees with the CEO that the Commission should order all utilities to use the mid-point of the adopted range in the reference case. Minnesota Power recommends that the Commission grants flexibility in choosing the appropriate regulatory cost to include in a base scenario (or "Future") that best represents the current outlook for $CO_2$ regulation cost based on a third party outlook. It would be the utilities responsibility to support the $CO_2$ regulatory cost used in a base scenario and would be within the Commission approved low, mid and high regulation cost. The regulatory cost ranges not used in the base scenarios would be included as sensitivities.

[2] Western Climate Initiative ("WGI").

**Inclusion of Externality Costs in Excess of Regulatory Costs in Resource Planning**

The CEO continue to advocate for the inclusion of both the recently adopted externality costs for $CO_2$[3] and $CO_2$ regulatory values in resource planning. Specifically, the CEO recommend that "in each year when the Commission-adopted externality value is greater than the regulatory value for that year, the utility should provide an externality sensitivity run that includes those extra societal costs." In essence, the CEO are requesting to use the higher of the two values in the utility's resource planning analysis. Minnesota Power remains firm in its position that there is no reason for the Commission to re-assess its decision to apply only the regulatory cost value or the externality value, but not both, to emissions in a given planning year. The current legislation provides a mechanism for accounting for the impact of $CO_2$ emissions when making resource planning decisions. Externality values will be applied until such time a $CO_2$ regulation is implemented. Once a $CO_2$ regulation is implemented, it will account for the $CO_2$ regulatory cost imposed on utilities when making resource planning decisions. Nothing has occurred that would warrant duplicate accounting through application of a regulatory cost value and an externality value for the impact of $CO_2$ emissions in the resource planning process. The Company strongly believes that the regulatory cost value and externality values should be used to inform a resource decision, but a resource decision should not be made based solely on the regulatory cost value and externality values.

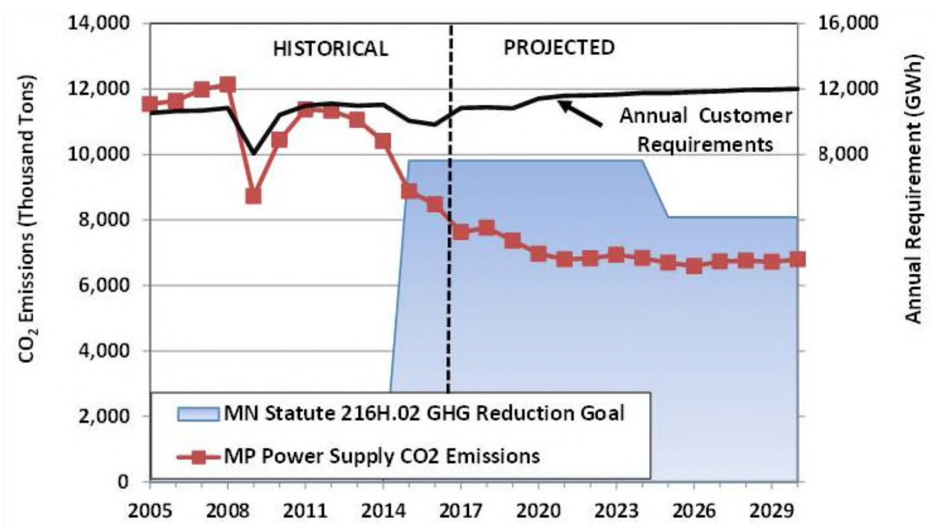
It is true that the $CO_2$ regulatory costs are projected to be lower than the recently adopted externality costs for $CO_2$. These values are not based on the societal costs as are the externality costs. These values reflect regulation imposed on the utility and are intended to incentivize utilities to take corrective action to lower their carbon profile. With that in mind, it makes sense that utilities would get credit for actions taken to offset the potential regulatory penalty associated with emitting $CO_2$ while not being subject to externality values considerations that seek to overlay burdens beyond that chosen by policy makers when establishing $CO_2$ regulations. Minnesota Power has done just that. Since 2005, the Company has committed to adding carbon-minimizing resources to its generation fleet. As load continues to grow, Minnesota Power has kept to this strategy and is continually reducing the carbon emissions in its power supply. With the company's

[3] Docket No. E999/CI-14-643.

recently announced Energy***Forward*** Resource Package,[4] Minnesota Power will continue reshaping nearly 2,200 MW of generation in the Company's supply portfolio by 2025 and will continue to replace the energy and capacity lost due to removing nearly 700 MW of coal-fired generation from the power supply. This transition includes the addition or build of renewable energy generation, including over 850 MW of wind, 33 MW of solar, 250 MW from the Manitoba Hydro power purchase agreement, and 70 MW from Thomson Hydro Station rebuild; the reduction to coal-fired generation, including the phasing out of power purchases from Young 2 (227 MW), refueling Laskin Energy Center with natural gas (110 MW); ceasing coal operations at Taconite Harbor Energy Center by 2020 (225 MW), and retiring Boswell Energy Center Units 1 and 2 (135 MW) by the end of 2018; and adding 250 MW of combined-cycle natural gas (Nemadji Trail Energy Center) by 2025.

These actions represent a significant transformation to less carbon-intensive resources for a utility with a current peak demand of nearly 1,800 MW. Minnesota Power is well positioned to demonstrate its carbon reduction impact. As shown in Figure 1, the Company has exceeded the 2015 goal of a 15 percent reduction from 2005 levels, and will exceed the 2025 goal of a 30 percent reduction from 2005 levels. Utilities such as Minnesota Power should be given credit for actions taken to reduce $CO_2$ emissions.

**Figure 1: Greenhouse Emission Reductions Achieved with Energy*Forward* Resource Package, Including NTEC**




[4] Docket No. E015/AI-17-568.

In summary, Minnesota Power recommends Commission approval of the Agencies' recommended values and the starting date of 2025, but that the Commission grant utilities flexibility in determining the appropriate value range to be used in a base scenario. Minnesota Power also supports OTP's recommendation that this range and start date be applied for a two-year time period covering both 2018 and 2019. The Company recommends that the Commission continue with status quo in all other aspects at this time until there is more certainty at the federal level with $CO_2$ regulation. Minnesota Power appreciates the opportunity to provided comments in above-referenced Docket.

Dated: March 5, 2018

Respectfully submitted,

Lori Hoyum

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| STATE OF MINNESOTA | ) | AFFIDAVIT OF SERVICE VIA |
| | ) ss | ELECTRONIC FILING |
| COUNTY OF ST. LOUIS | ) | |

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Susan Romans of the City of Duluth, County of St. Louis, State of Minnesota, says that on the **5th** day of **March, 2018**, she served Minnesota Power's Comments in **Docket Nos. E999/CI-17-53** and **E999/CI-07-1199** on the Minnesota Public Utilities Commission and the Energy Resources Division of the Minnesota Department of Commerce via electronic filing. The persons on E-Docket's Official Service List for this Docket were served as requested.

Susan Romans

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Susan Romans

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