

September 21, 2018

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101

RE: **PUBLIC Comments of the Minnesota Department of Commerce, Division of Energy Resources**
Docket Nos. E015/M-18-545

Dear Mr. Wolf:

Attached are the **PUBLIC** comments of the Minnesota Department of Commerce, Division of Energy Resources (Department) in the following matter:

Minnesota Power's Petition for Approval of a 250 MW Nobles 2 Wind Power Purchase Agreement.

The Petition was filed on August 22, 2018 by:

Susan Ludwig
Policy Manager
Minnesota Power
30 West Superior Street
Duluth, MN 55802

The Department recommends that the Minnesota Public Utilities Commission (Commission) **reject the petition and set requirements regarding Minnesota Power's future power purchase agreements**. The Department is available to respond to any questions the Commission may have.

Sincerely,

/s/ STEVE RAKOW
Analyst Coordinator

SR/jl
Attachment

Before the Minnesota Public Utilities Commission

Comments of the Minnesota Department of Commerce Division of Energy Resources

Docket No. E015/M-18-545

I. INTRODUCTION

On July 18, 2016 in Docket No. E015/RP-15-690 the Minnesota Public Utilities Commission (Commission) issued its *Order Approving Resource Plan With Modifications* (2016 Order). The 2016 Order required that, “By the end of 2017, Minnesota Power shall initiate a competitive-bidding process to procure 100–300 MW of installed wind capacity.”

On July 27, 2016, Minnesota Power, a public utility operating division of ALLETE, Inc. (MP or the Company) issued a request for proposals (RFP) for up to 300 MW of nameplate wind capacity.¹

On July 28, 2017, MP filed a petition for approval of the Company’s *EnergyForward* Resource Package (see Docket No. E015/AI-17-568). The *EnergyForward* Resource Package encompassed three projects:

- 1) a power purchase agreement (PPA) with the 250-MW Nobles 2 wind project in southwestern Minnesota;
- 2) a PPA with the 10-MW Blanchard Solar Project in central Minnesota; and
- 3) affiliated-interest agreements proposing to dedicate 48% of the proposed 525-MW Nemadji Trail Energy Center (NTEC) natural gas combined cycle project in Superior, Wisconsin to MP.

On September 19, 2017 the Commission issued its *Order Referring Gas Plant for Contested Case Proceedings, and Notice and Order for Hearings* (Docket Nos. E015/AI-17-568 and E015/RP-15-690) which directed the Company to refile the wind PPA and solar PPA in separate dockets.

On August 22, 2018 MP filed the Company’s *Petition for Approval of a 250 MW Nobles 2 Wind Power Purchase Agreement* (Petition). Among other things, the Petition requested that the Commission approve the *Amended and Restated Wind Power Purchase Agreement for 250 MW*

¹ The RFP is available in Appendix P of MP’s July 28, 2017 petition in Docket No. E015/RP-17-568.

*of Renewable Generation (Amended PPA).*² The Petition notes that a condition precedent in the Amended PPA is approval by the Commission within ten months of filing the Petition.

Below are the comments of the Minnesota Department of Commerce, Division of Energy Resources, Energy Regulation and Planning (Department) regarding the Petition.

II. DEPARTMENT ANALYSIS

A. GOVERNING STATUTES AND RULES

The Company filed the Petition pursuant to Minnesota Statutes § 216B.1691 (Renewable Energy Objectives Statute, or RES), which states in part:

... each electric utility shall generate or procure sufficient electricity generated by an eligible energy technology to provide its retail customers in Minnesota, or the retail customers of a distribution utility to which the electric utility provides wholesale electric service, so that at least the following standard percentages of the electric utility's total retail electric sales to retail customers in Minnesota are generated by eligible energy technologies by the end of the year indicated:

- | | | |
|-----|------|-------------|
| (1) | 2012 | 12 percent |
| (2) | 2016 | 17 percent |
| (3) | 2020 | 20 percent |
| (4) | 2025 | 25 percent. |

The Company also filed the Petition pursuant to Minnesota Statutes § 216B.1645, which states in part:

Subdivision 1. Commission authority. Upon the petition of a public utility, the Public Utilities Commission shall approve or disapprove power purchase contracts, investments, or expenditures entered into or made by the utility to satisfy the wind and biomass mandates contained in sections 216B.169, 216B.2423, and 216B.2424, and to satisfy the renewable energy objectives and standards set forth in section 216B.1691

² The PPA is between MP and Nobles 2 Power Partners, LLC (Nobles 2), an affiliate of Tenaska, Inc. On May 10, 2017, the Company executed a PPA with Nobles 2 for a 250-MW wind project. On July 20, 2017, the Company executed the First Amendment to the PPA with Nobles 2. On August 20, 2018, the *Amended and Restated Power Purchase Agreement For 250 MW of Renewable Generation* with Nobles 2 was signed. The August 20, 2018 agreement is included in the Petition.

...

Subd. 2a. Cost recovery for utility's renewable facilities. (a) A utility may petition the Commission to approve a rate schedule that provides for the automatic adjustment of charges to recover prudently incurred investments, expenses, or costs associated with facilities constructed, owned, or operated by a utility to satisfy the requirements of section 216B.1691, provided those facilities were previously approved by the Commission under section 216B.2422 or 216B.243, or were determined by the Commission to be reasonable and prudent under section 216B.243, subdivision 9. For facilities not subject to review by the Commission under section 216B.2422 or 216B.243, a utility shall petition the Commission for eligibility for cost recovery under this section prior to requesting cost recovery for the facility.

...

(b) A petition filed under this subdivision must include:

- (1) a description of the facilities for which costs are to be recovered;
- (2) an implementation schedule for the facilities;
- (3) the utility's costs for the facilities;
- (4) a description of the utility's efforts to ensure that costs of the facilities are reasonable and were prudently incurred; and
- (5) a description of the benefits of the project in promoting the development of renewable energy in a manner consistent with this chapter.

MP's Petition requests that the Commission confirm the Amended PPA to be a reasonable and prudent way for the Company to continue to meet its obligations under the RES and the 2016 Order.

The Department reviewed the Petition for compliance with the completeness requirements of Minnesota Statutes § 216B.1645, subd. 2a (b). In addition, the Petition qualifies as a miscellaneous tariff filing. Minnesota Rules part 7829.1300 contains the completeness requirements for miscellaneous filings. The Department reviewed the Petition for compliance with the completeness requirements of Minnesota Rules and Minnesota Statutes and concludes that the Petition is complete.

B. CONSISTENCY WITH INTEGRATED RESOURCE PLAN

1. Expansion Plan

As mentioned above, in the Company's most recent integrated resource plan (IRP) (Docket No. E015/RP-15-690) the Commission directed MP to begin a process to acquire 100 to 300 MW of wind capacity. In the Petition MP provided additional analysis demonstrating that changed circumstances since the 2016 Order have not changed the underlying conclusion that additional wind capacity should be part of MP's expansion plan.

The Department did not review the capacity expansion modeling in the Petition because the Company, the Clean Energy Organizations, and the Department all provided new modeling information quite recently in the proceeding regarding MP's NTEC proposal.³ The result of all three modeling approaches was that additional wind resources were selected. Given these robust, recent modeling results and the prices discovered by MP through the RFP process, the Department concluded that additional IRP analysis was unnecessary.

2. RES Compliance

Beyond the results of the recent IRP analyses, the Department reviewed MP's long-term compliance with the RES in Docket No. E015/RP-15-690, MP's most recent IRP. The Department's analysis indicated that, on a cumulative basis, MP had sufficient Renewable Energy Credits (RECs) for compliance with the RES through the end of the IRP—2028. However, the IRP analysis determined that MP's existing annual renewable generation would be less than the annual RES requirement beginning in 2020. Further, the ending cumulative REC balance, while positive, was minimal. Therefore, the Department's IRP analysis demonstrated that MP would need additional renewable resources for compliance beyond 2028.

Under Minnesota Statutes § 216B.1691, subd. 1 Nobles 2's facility would qualify as an "eligible energy technology" and thus could provide RECs that contribute towards RES compliance. Under section 2.3 of the Amended PPA MP would receive the RECs. Therefore, the Department concludes that the PPA with Nobles 2 would enable the Company to continue to meet its obligations under the RES subsequent to 2028.

C. ALTERNATIVES ANALYSIS

1. Summary of RFP Process

³ See the *Direct Testimony of Eric Palmer* on behalf of MP, the *Direct Testimony of Anna Sommer* on behalf of the Clean Energy Organizations, and the *Direct Testimony and Attachments* of Dr. Steve Rakow on behalf of the Department in Docket No. E015/AI-17-568.

a) Background

The Commission-approved five-year action plan from MP's most recent IRP (Docket No. E015/RP-15-690) included the solicitation of proposals for 100 MW to 300 MW of wind. Consistent with that action plan, on July 27, 2016, MP issued an RFP for up to 300 MW of nameplate wind capacity.

MP announced the wind RFP through a variety of mediums, including news media and industry-related publications and websites.⁴ The RFP was open to wind projects up to 300 MW and of various ownership structures. Commercial operation dates anytime between January 1, 2018 and December 31, 2020 were considered. For a locational requirement, proposals were required to offer capacity that is accreditable in Midcontinent Independent System Operator, Inc. (MISO) Local Resource Zone 1 under current MISO resource adequacy procedures.

Sedway Consulting, Inc. (Sedway) was retained by MP to oversee the wind RFP process and provide an independent evaluation of the offers. In response to the wind RFP, MP received **[TRADE SECRET DATA HAS BEEN EXCISED]**

b) Completeness Review

In the first phase of the RFP, Sedway performed a completeness review of all of the proposals. According to the wind RFP, the intent of the completeness review was to ensure compliance with all bid submittal requirements. Offers with marginal deficiencies were allowed to provide the missing information or appropriate clarifications.

During the completeness review **[TRADE SECRET DATA HAS BEEN EXCISED]**

The completeness review left **[TRADE SECRET DATA HAS BEEN EXCISED]** projects under consideration.⁵ During the completeness review **[TRADE SECRET DATA HAS BEEN EXCISED]**

Thus, the total number of projects eligible for shortlisting was **[TRADE SECRET DATA HAS BEEN EXCISED]**

⁴ See page 7 of the Petition.

⁵ See the Petition's Appendix B *Sedway Consulting Wind RFP Evaluation Report*, at page A-2.

c) Quantitative Analysis

In the second phase, Sedway calculated the levelized cost of energy (LCOE) for all offers that remained after the completeness phase. The LCOEs were calculated using a model developed by Sedway and contained three separate elements:

- bid price;
- debt equivalence cost;⁶ and
- project energy sales value.

The bid price and debt equivalence cost established the basic cost of the offer while the project energy sales value represented the revenue expected from the project based upon the estimated hourly energy production and the long-term market energy price forecast. Offers were ranked based upon the resulting net LCOE and **[TRADE SECRET DATA HAS BEEN EXCISED]** were passed on to the qualitative analysis phase. See Table A-2 in Appendix B of the Petition for the quantitative rankings.

d) Qualitative Analysis

In the third phase, Sedway performed a qualitative review⁷ by scoring the proposed projects in five different areas including:

[TRADE SECRET DATA HAS BEEN EXCISED]

Initially **[TRADE SECRET DATA HAS BEEN EXCISED]** See Table A-3 in Appendix B of the Petition for the qualitative rankings. Sedway then reviewed the rankings with MP. Appendix B of the Petition explains that, **[TRADE SECRET DATA HAS BEEN EXCISED]**

After this qualitative review, MP determined which projects to advance to the short list. The short list included the following projects: **[TRADE SECRET DATA HAS BEEN EXCISED]**

Note that a negative net LCOE value indicates that expected revenues from the project's energy sales are greater than the expected costs due to the bid price and debt equivalence cost.

e) Negotiations and Due Diligence

All bidders were notified of their shortlisting status on **[TRADE SECRET DATA HAS BEEN EXCISED]** on back-up status.

⁶ Calculated as the cost to MP of adding additional equity to offset the imputed debt of a long-term PPA.

⁷ See section 3.9.3 of Attachment B to the Supplement.

On March 17, 2017, MP [TRADE SECRET DATA HAS BEEN EXCISED]

On March 24, 2017 [TRADE SECRET DATA HAS BEEN EXCISED]

On May 10, 2017, the Company executed the *Wind Power Purchase Agreement For 250 MW of Renewable Generation* (First PPA) with Nobles 2 for a 250 MW Wind Project.

2. *Analysis of MP's RFP*

a) *Process Review*

To review the process the Department largely relied upon Sedway's report as documented in Appendix B of the Petition. Sedway concluded that "Sedway Consulting believes that MP selected the best wind project for meeting its IRP requirements." Based upon the information discussed above and in the report, the Department agrees with Sedway that, through the signing of the First PPA, the wind RFP process was reasonable. The significant problems identified by the Department (as discussed below) are confined to the period after the First PPA was signed.

b) *Project Selection Review*

As discussed above, Sedway analyzed the offers received in response to MP's RFP in three phases—completeness, quantitative review, and qualitative review. Department Information Request Nos. 3 and 4 obtained summary information from Sedway's models and documentation supporting the quantitative and qualitative reviews. After reviewing the information provided by Sedway, the Department concludes that reasonable decisions were made regarding the projects advanced to the next phase (completeness review to quantitative review and quantitative review to qualitative review).

Sedway's Report notes that one part of the value of a wind project was excluded from consideration during the RFP process:

In past MP wind solicitations, Sedway Consulting has also ascribed a value to the capacity of proposed wind resources. In consultation with MP, it was decided that such capacity valuation was not necessary in the current evaluation in that it was dependent on MISO capacity accreditation rules that may change, was likely to be quite similar across all wind projects (and thus would not be a differentiating benefit), and might be inappropriately influenced by bidder-supplied generation profiles.

The Department does not agree that the fact that MISO capacity accreditation rules may change supports the exclusion of considering capacity benefits. All of MISO's processes are continually reviewed and subject to change; potential change is not limited to capacity accreditation. Further, it is not clear how capacity accreditation is more "inappropriately influenced by bidder-supplied generation profiles" than some of the other factors that were considered. For example, the project's energy value **[TRADE SECRET DATA HAS BEEN EXCISED]**

However, the Department agrees that capacity accreditation is likely to be similar across wind projects (and may not be a differentiating factor). Specifically, page 14 of MISO's *Planning Year 2018-2019 Wind Capacity Credit* (dated December 2017) provides a table showing the capacity accreditation percentage for each node in MISO.⁸ The vast majority of nodes are between 10% and 20% capacity accreditation. The accreditation for projects in a subset of MISO (for example, Local Resource Zone 1) would likely have a lesser degree of differentiation. In any event, a 10 percentage point difference in accreditation, applied to a hypothetical 200-MW wind project, would result in a 20-MW accreditation difference. At recent capacity prices in MISO's annual capacity auction the resulting economic value would be negligible.

While the impact at this time may be not be a distinguishing factor, the Department recommends that, in future wind resource acquisition processes the Commission require MP to ascribe a value to the capacity of proposed wind resources unless MP can demonstrate that pursuit of capacity accreditation is not expected to be economic. For the current process, considering the potential impact, the Department concludes that MP and Sedway made reasonable selections in choosing which projects were to be placed on the short list.

c) *Transaction Structure*

The Department notes that the Company is not neutral when comparing PPA transactions to Company or affiliate project ownership. In the context of the instant docket, the concern is that MP might place a premium upon one offer in order to obtain a utility-owned, affiliate-owned, or build-transfer project rather than a long-term power purchase agreement. In this case the Company did not ultimately select a utility-owned, affiliate-owned, or build-transfer project through the RFP.⁹ Therefore, this concern is not applicable to this RFP selection.

⁸ The report is available at [MISO Wind ELCC Study](#).

⁹ Note that, *subsequent to the RFP*, MP and Tenaska took actions that converted the PPA into a project partially owned by an affiliate of MP.

D. POST-RFP ACTIONS

1. Sequence of Events

Sedway's Report, and thus the RFP process, provides an assessment of MP's wind resource solicitation from the initial phase of the solicitation (i.e., the issuance of the RFP) through the execution of the first PPA on May 10, 2017. The main actions taken by MP subsequent to the RFP process are outlined below.

On May 10, 2017, as the last step in the RFP process, the Company executed the First PPA for the Nobles 2 wind project; this is the first PPA between the parties. One of the Seller's (Tenaska) conditions precedent is contained in section 1.3.4:

[TRADE SECRET DATA HAS BEEN EXCISED] and shall thereafter have no further liability to Buyer, by Notice to MP if on or before the last Day on which the 115th United States Congress is in session (the "Material Tax Legislation Deadline Date"), changes to the United States Internal Revenue Code shall have been enacted into law which changes Seller, in its sole discretion, determines could adversely impact the economics of the Facility to Seller and its ultimate owner(s)...

On July 20, 2017, the Company executed the First Amendment to the First PPA, which included the language above in section 1.3.4.

The Tax Cut and Jobs Act (TCJA) was enacted into federal law in December 2017 to be effective January 2018. The Department notes that the impact of the TCJA on the cost of a wind project would be to decrease the present value of the costs by decreasing federal corporate income tax costs but increase the present value of the costs by decreasing the present value of production tax credits. Thus, it is not clear to the Department whether the TCJA would make any one wind project more or less expensive on a present value basis. Nonetheless, section 1.3.4 of the First PPA provides Tenaska the right to terminate the 250-MW PPA if, in its sole discretion, Tenaska determines that material tax legislation could adversely impact the economics of the facility.

In early 2018, after passage of the TCJA, MP received notice that Tenaska was considering exercising its right to terminate the First PPA based on tax reform changes unless the Company agreed to revise the pricing.¹⁰

After using the condition precedent and threatening to terminate the First PPA unless the price was renegotiated, the next post-RFP event is described in the Petition at page 19:

¹⁰ See the Petition at page 8 and 17.

As Minnesota Power was renegotiating the terms of the PPA to accommodate these changes, Tenaska approached the Company about becoming an equity investor in the project. As a result, a non-regulated subsidiary of ALLETE is finalizing an agreement with Tenaska on the terms on which the ALLETE subsidiary will make a minority equity investment in Nobles 2 Power Partners, LLC.
[Emphasis added]

On August 20, 2018 the Company signed the *Amended and Restated Power Purchase Agreement For 250 MW of Renewable Generation (Amended PPA)* with the Nobles 2 Wind Project. This Amended PPA is the subject of the Petition's requests.

According to the Petition, Tenaska (and MP) benefited from two significant changes from the First PPA to the Amended PPA. MP and Tenaska:

- Renegotiated the terms of the PPA to increase costs, supposedly due to impacts of federal tax reform; and
- **[TRADE SECRET DATA HAS BEEN EXCISED]**

The impact of the renegotiated PPA base price is provided in Table 1 below.

Table 1: Price in First PPA vs. Amended PPA

July 28, 2017 Petition in E015/AI-17-568, Appendix D at EXHIBIT B		August 22, 2018 Petition in E015/M-18-545, Appendix A at EXHIBIT B	
CONTRACT ENERGY PRICE SCHEDULE [20 YEARS]		CONTRACT ENERGY PRICE SCHEDULE [20 YEARS]	
Contract Year	Contract Energy Price (\$/MWh) First PPA	Contract Year	Contract Energy Price (\$/MWh) Amended PPA
1	[TRADE SECRET DATA HAS BEEN EXCISED]	1	[TRADE SECRET DATA HAS BEEN EXCISED]
2			
3			
4			
5			
6			
7			
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12			
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A comparison of the change in **[TRADE SECRET DATA HAS BEEN EXCISED]** is provided in Table 2 below.

Table 2: [TRADE SECRET DATA HAS BEEN EXCISED]

]

In other words, MP negotiated an Amended PPA that would benefit its affiliate and cost ratepayers more. For context regarding the dollar amounts in question, using a **[TRADE SECRET DATA HAS BEEN EXCISED]** Thus, the additional revenue that MP negotiated for its affiliate is up to **[TRADE SECRET DATA HAS BEEN EXCISED]**.¹¹

Regarding the potential for significant costs due to the generator interconnection process, the Petition notes “The magnitude of projects applying during the August 2016 study period (amounting to approximately 5,600 MW) indicates that transmission upgrade costs could be significantly higher than initially anticipated.” For clarity, the Department notes that the size of the August 2016 Definitive Planning Phase (DPP) study group likely would have announced sometime in August or September, 2016 around the time bids were due (September 7, 2016).

2. *Analysis of Events*

The actions taken by MP and Tenaska—specifically, Tenaska triggering a renegotiation and then requesting MP to become a minority partner during negotiations, along with MP’s acceptance of Tenaska’s offer—placed both sides negotiating the Amended PPA in the position of benefiting from establishing a new price that is as high as possible. Thus, MP’s assertion that the result of the negotiations was that the Amended PPA’s price was set at a level that MP believes is “competitive with the wind projects still available today that were evaluated within the 2016 competitive RFP” is not credible.

In essence, the Petition demonstrates that, under the Amended PPA, **[TRADE SECRET DATA HAS BEEN EXCISED]**

Second, even if the comparison were considered to be relevant, MP’s comparison is incomplete because the Company did not compare the qualitative aspects of the projects. In particular, the Petition’s Figure 5, which compares the Nobles 2 project with “competing wind projects still currently available in the RFP,” assumes that the project’s qualitative scores in general and the transmission upgrade costs in particular are similar. In MISO, transmission costs are allocated on a project-specific basis. Therefore, transmission risks and costs associated with one project do not apply to other projects, even if they are part of the same DPP study group. Such information needs to be examined in considering projects.

¹¹ Calculated as **[TRADE SECRET DATA HAS BEEN EXCISED]**

Third, at the time of the renegotiation the RFP process was over. Therefore, the third-party evaluator, Sedway, was no longer involved. MP's comparison provides no evidence that another outside party was involved. Thus, even if the prices and risks of Nobles 2 and the alternatives are similar, MP's Petition indicates that no outside party was involved and no other processes were instituted to ensure that reasonable, arms-length actions were being taken when the Amended PPA was being negotiated between the owners of the Nobles 2 project (MP and Tenaska). In the situation described by MP, the lack of an outside monitor or any other controls is a significant problem because MP's actions undermine the validity of the selection and negotiation processes.

Overall, the result of MP accepting Tenaska's offer to become a minority partner is that, after accepting the offer, MP has had an incentive to increase costs as much as possible. In this case, MP appears to have determined that, rather than ensuring that its ratepayers would pay a cost-based rate for wind from a facility that MP intends to own in part, **[TRADE SECRET DATA HAS BEEN EXCISED]** Given the flawed nature of the process used to arrive at the Amended PPA, the Department recommends that the Commission reject MP's Petition. In addition, further conditions are necessary to guide subsequent actions and are discussed below.

3. *Balancing Incentives*

In addition to rejecting the Petition, the Department concludes that it is necessary for the Commission to take further steps to ensure that MP does not make similar, flawed decisions in the future. The necessity can be demonstrated through the use of expected values. An expected value is calculated as the sum of all possible values, each multiplied by the probability of that value's occurring. Generically, an expected value calculation is illustrated in Formula 1 below.

Formula 1: Sample Expected Value Calculation

$$\text{Expected Value} = (\text{Probability of Option}_1 * \text{Value of Option}_1) + (\text{Probability of Option}_2 * \text{Value of Option}_2) + \dots$$

The key to proper and effective regulation in this case is to ensure that, in the future, MP calculates a negative expected value for accepting an offer such as that made here by Tenaska. To delineate how these incentives played out in this proceeding, consider the following.

First, in this case, MP had two choices, accept Tenaska's offer to become a minority partner or reject Tenaska's offer, **[TRADE SECRET DATA HAS BEEN EXCISED]** and pursue other competitive options for wind power. If MP would have rejected Tenaska's offer, no problems—in terms of incentives to increase costs for MP's ratepayers—would have ensued because MP would not

receive (directly or indirectly) payments from the Amended PPA. However, given that MP accepted Tenaska's offer reached an agreement, MP submitted the resulting PPA to the Commission.

Second, from MP's perspective, one possible outcome of this proceeding is that the Commission approves the PPA; if so, MP would then be better off because the Company would receive a portion of the (now inflated) payments. If the Commission rejects the PPA, MP would be indifferent because the Company would financially be in the same position as before the Commission decision.¹² If the Company believes those are the only two possible outcomes, then as long as the Company attaches a non-zero probability to the Commission approving the PPA, the overall expected value must be positive and thus the Company will be better off accepting Tenaska's offer to become a minority partner. The expected value must be positive because, in MP's estimation, there are no potential outcomes that would have a negative expected value and some potential outcomes would have a positive expected value.

However, the above does not considered the costs to the public of MP's choices. Public costs include:

- 1) the fact that another wind developer was passed over in favor of MP's ownership,
- 2) MP's ratepayers are expected to pay higher rates than under the First PPA, and
- 3) the structure of the Amended PPA encourages accepting higher transmission costs than under the First PPA, **[TRADE SECRET DATA HAS BEEN EXCISED]** to **[TRADE SECRET DATA HAS BEEN EXCISED]** before **[TRADE SECRET DATA HAS BEEN EXCISED]**.

To address some, but not all, of these concerns, as noted above, the Department recommends that the Commission reject the PPA, at a minimum.

The Commission may also wish to consider imposing a condition on MP with financial consequences to balance out the incentive the Company has to engage in this unreasonable behavior. For example, in this case, rather than pursuing the **[TRADE SECRET DATA HAS BEEN EXCISED]** under the First PPA, MP pursued an alternative that could cost MP's ratepayers up to **[TRADE SECRET DATA HAS BEEN EXCISED]** more. If the Commission required MP to reimburse its ratepayers for some or all of these costs as a condition of approving the PPA, at least the second and third public costs would be addressed.

¹² For purposes of this discussion the Department is ignoring the potential that the back-up project or the project selected in a subsequent RFP is a Company- or affiliate-owned project, potentially placing the Company in a position of being financially better off after Commission rejection. This potential also raises other issues such as the impact of the Company's duty to make good-faith efforts to obtain approvals and so on. The complications far outweigh any benefits for these purposes.

Further, such action would give MP a reasonable incentive to take a more balanced approach. As long as MP believes Formula 2 holds:

<p>Formula 2: Condition for Reasonable Decision</p> $\begin{aligned} &[(\text{Probability of Commission Approval}) * (\text{Benefit of Minority Ownership})] \\ &< \\ &[(\text{Probability of Commission Rejection}) * (\text{Cost of Commission Imposed Financial} \\ &\quad \text{Disincentive})] \end{aligned}$

the Company, as a rational economic actor, would not accept Tenaska's offer to become a minority partner because the expected value of accepting the offer would be negative—the Company would lose money on an expected value basis.

4. Conditions to Apply

Having established that some disincentives or conditions are necessary for MP, the question then becomes what level of disincentives are required to ensure that MP takes a balanced approach and makes acceptable economic decisions. This is a question that cannot be answered with certainty and involves a policy judgement. However, to connect the Commission-imposed disincentives to the actions, it is clear that the disincentives must be established in this proceeding.

The Department recommends that the Commission order MP to file, in the Company's next IRP, a proposed bidding process for the Commission's consideration and potential approval under Minnesota Statutes § 216B.2422 subd. 5. Note that this issue has been raised in Docket No. E015/AI-17-568.

5. Subsequent Process

The remaining question is how MP is to procure the additional wind resources ordered by the Commission and how to protect MP's ratepayers from the potential for increased costs that the Company's unreasonable actions have created.

The Department recommends that the Commission structure a set of incentives and allow MP to determine a course to take—either negotiating with bids from the 2016 RFP, starting a new RFP, or some other method. First, the Department recommends that the Commission require quarterly updates from MP regarding progress made towards acquiring the additional wind resources previously ordered by the Commission.

Second, regarding the timeliness of MP's wind resources, the latest in-service date that MP's RFP allowed was December 31, 2020.¹³ Therefore, the Department recommends that the Commission indicate to MP an expectation of a December 31, 2020 in-service date. If new wind resources are not operational by that date, the Department recommends that the Commission credit MP's ratepayers with energy costs of 83,333 MWh per month times the rates from the First PPA, starting January, 2021.¹⁴

Third, regarding protecting ratepayers, the Department recommends that the Commission establish a cap on the Company's recovery (of costs from the replacement wind resource) from ratepayers for the replacement wind project equal to the base price shown in the July 28, 2017 Petition in E015/AI-17-568, Appendix D at Exhibit B, reproduced in Table 1 above. The actual costs associated with the Company's July 28, 2017 petition in Docket No. E015/AI-17-568, Appendix D at sections 3.3.2 and 1.2.3, reproduced in Table 2 above, should be added to the base price.

E. PPA TERMS

In resource acquisition proceedings the Department typically reviews the terms of any PPA to ensure that ratepayers are protected from various risks. Given the significant flaws in the process followed by MP, the Department concludes that, regardless of the terms, the resulting PPA cannot be reasonable. Therefore, the Department did not review the PPA presented in the Petition.

III. DEPARTMENT RECOMMENDATION

The Department recommends that the Commission reject the Petition. The Department also recommends that the Commission impose the following conditions:

- in future wind resource acquisition processes MP is required to ascribe a value to the capacity of proposed wind resources unless MP can demonstrate that pursuit of capacity accreditation is not expected to be economic;

¹³ See Appendix P (the Company's *Request for Proposals For Wind Resource* Released: July 27, 2016) at section 2.3; provided as part of the Company's July 28, 2017 petition in Docket No. E015/AI-17-568.

¹⁴ The 83,333 MWh per month is derived as follows:

- the maximum output from a project selected via the RFP would be about 1.3 million MWh annually—calculated as 300 MW (the RFP ceiling) times an assumed maximum wind capacity factor of 50%;
- the minimum output from a project selected via the RFP would be about 0.8 million MWh annually—calculated as 200 MW times an assumed minimum wind capacity factor of 45%; and
- the average of the minimum and maximum would be about 1 million MWh annually, or about 83,333 MWh per month.

- until such time as a Commission-approved bidding process is in place, MP is to pursue an RFP to investigate the possible procurement of any generation resources needed to meet the Company's energy and capacity requirements, with no presumption that any Company-owned generation identified in that bidding process will be approved by the Commission;
- MP shall provide quarterly updates regarding progress made towards acquiring the additional wind resources previously ordered by the Commission;
- the RFP shall provide an expectation of a December 31, 2020 in-service date;
 - If new wind resources are not operational by December 31, 2020, MP shall credit ratepayers with energy costs of 83,333 MWh times the rates from the First PPA per month starting January, 2021.
- for the replacement wind resource, the Company's cost recovery from ratepayers shall be capped at:
 - the base price shown in the July 28, 2017 petition in E015/AI-17-568, Appendix D at Exhibit B, reproduced in Table 1 above; plus
 - the actual costs assuming the pricing structure shown in the Company's July 28, 2017 petition in Docket No. E015/AI-17-568, Appendix D at sections 3.3.2 and 1.2.3, reproduced in Table 2 above.

/jl

CERTIFICATE OF SERVICE

I, Sharon Ferguson, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

**Minnesota Department of Commerce
Public Comments**

Docket No. E015/M-18-545

Dated this 21st day of September 2018

/s/Sharon Ferguson

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Greg	Chandler	greg.chandler@upm.com	UPM Blandin Paper	115 SW First St Grand Rapids, MN 55744	Paper Service	No	OFF_SL_18-545_M-18-545
David	Chura	dchura@mnpower.com	Minnesota Power	30 West Superior Street Duluth, MN 55802	Electronic Service	No	OFF_SL_18-545_M-18-545
Paul	Ciesielski	Paul.Ciesielski@arcelormittal.com	ArcelorMittal	3300 Dickey Road East Chicago, IN 46312	Electronic Service	No	OFF_SL_18-545_M-18-545
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_18-545_M-18-545
Riley	Conlin	riley.conlin@stoel.com	Stoel Rives LLP	33 S. 6th Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_18-545_M-18-545
Ian	Dobson	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_18-545_M-18-545
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James	Jarvi	N/A	Minnesota Ore Operations - U S Steel	P O Box 417 Mountain Iron, MN 55768	Paper Service	No	OFF_SL_18-545_M-18-545

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_18-545_M-18-545