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February 20, 2019

VIA ELECTRONIC FILING

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

Re: Minnesota Power's Industrial Demand Response Product
Docket No. E-015/M-18-735
Docket No. E-015/GR-16-664
Docket No. E-015/AI-17-568

Dear Mr. Wolf:

Enclosed please find Advanced Energy Management Alliance's Initial Comments on Minnesota Power's Industrial Demand Response Product. Feel free to contact me at 202-524-8832 or Katherine@aem-alliance.org with any questions related to this matter.

Respectfully,

A handwritten signature in black ink, appearing to read "Katherine Hamilton".

Katherine Hamilton
Executive Director
Advanced Energy Management Alliance

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

In the Matter of the Petition for Docket
Approval of Minnesota Power’s
Industrial Demand Response Product

No. E015/M-18-735
Initial comments by AEMA

I. INTRODUCTION

Advanced Energy Management Alliance (“AEMA”)¹ respectfully submits the following comments to the Minnesota Public Utilities Commission (“Commission”) regarding Minnesota Power’s proposed Rider for Large Power Demand Response (“Rider”). AEMA is a trade association under Section 501(c)(6) of the Federal tax code whose members include national distributed energy resource companies and advanced energy management service and technology providers, including demand response (“DR”) providers, as well as some of the nation’s largest demand response and distributed energy resources. AEMA members support the beneficial incorporation of distributed energy resources, including advanced energy management solutions, into utility planning processes and wholesale markets as a means to achieving electricity cost savings for consumers, contributing to system reliability and resilience, and ensuring balanced price formation. This filing represents the collective consensus of AEMA as an organization, although it does not necessarily represent the individual positions of the full diversity of AEMA member companies.

II. EXECUTIVE SUMMARY

AEMA appreciates the opportunity to provide comments on Minnesota Power’s Rider for Large Power Demand Response. AEMA understands this Rider is a result of detailed conversations between Minnesota Power (“MP”) and its large industrial customers² and is generally supportive of the Rider, which provides MP with a flexible, cost-effective, capacity and energy resource. AEMA specifically notes the following best practices, which we support and for which we commend Minnesota Power:

¹ For additional information, see AEMA website: <http://aem-alliance.org>.

² For purposes of this filing, “customer” refers to large commercial and industrial customers.

- Establishing a compensation level for Large Power DR Product B of \$84,000/MW-year that is close to the long-run cost of capacity; in Midcontinent Independent System Operator’s (“MISO’s”) Zone 1 that will equal \$88,460/MW-year for 2019/2020. This compensation level ensures that DR is valued similarly to generation, while providing a cost-effective resource and driving savings for all customers;
- Aligning the availability and response requirements for emergency dispatches with MISO’s requirements for accrediting emergency capacity. This alignment ensures MP can apply capacity under this Rider toward its MISO Resource Adequacy requirements;
- Allowing for economic dispatches that drive energy savings across MP’s system while providing for a buy-through option for customers that are unable to curtail load outside of certain emergency conditions. Customers are still required to respond to all emergency dispatches under this rider; and
- Developing a clear, transparent tariff rider that enables customers to easily understand the costs, benefits, and requirements of participating.

These best practices are positive steps toward developing a robust DR program. Additionally, AEMA recommends that MP incorporate the following program parameters to ensure both customer participation and public benefits are maximized under this Rider:

- **Allow customers the option to designate an MP-approved DR aggregator(s) to manage participation on their behalf.** Under the current tariff, customers face high risks and potential penalties from being unable to respond during emergency or economic dispatches. DR aggregators use their technologies, expertise, and business models to shield customers from risk. As a result, customers can protect themselves from out-of-pocket penalties and MP and its ratepayers receive a highly reliable program.; and
- **Raise the 150 MW cap on DR capacity under this rider to 400 MW.** MP currently receives up to 250 MW of capacity under its existing DR product and expects that the “newly proposed DR Product B will displace a portion of the 250 MW received today. . . .”³ AEMA agrees, and believes that MP could see a one-for-one shift in participation to the new product. Therefore, raising the cap is necessary to prevent a

³ *In re Petition for Approval of Minnesota Power’s Industrial Demand Response Product*, MPUC Docket No. E-015/M-18-735, Petition for Approval at 7 (Dec. 7, 2018).

possible reduction in DR on MP's system and allow 150 MW of net new DR that would reduce MP's reliance on generation. Product A, while uncapped, does not provide an attractive option to customers given the extremely low compensation of \$0.60/kW-month.

AEMA has provided sample language that we urge MP to adopt to incorporate these two program parameters. That language is shown in red-line format at Appendix A, attached hereto. AEMA thanks the Commission for consideration of these two recommendations, and expands on them below.

III. THE RIDER SHOULD ALLOW CUSTOMERS TO DESIGNATE AN MP-APPROVED DR AGGREGATOR TO MANAGE PARTICIPATION UNDER THE TARIFF ON THEIR BEHALF

DR Aggregators add value to DR programs by enabling greater customer participation, increasing reliability, and lowering overall costs to serve. Aggregators are particularly important when customers face high costs and the risk of penalties from their participation in DR programs. The penalties under MP's Rider can be severe. Failure to respond to an emergency dispatch could result in penalties equal to 200% of program payments and failure to respond to economic dispatches could result in penalties in excess of MP's hourly incremental energy costs—potentially hundreds of dollars per MWh during peak periods.

While these penalties are generally appropriate to ensure program reliability, the risk of out-of-pocket penalties and uncertain costs dissuade customers and make their budget and profit forecasts challenging. Commercial and industrial customers are focused on running their businesses, not participating in DR programs; they need to easily understand potential costs and benefits in order to participate in them. The possibility of exposure to 600 hours of buy-through pricing, with limited clarity regarding when MP will dispatch its programs, along with exposure to MISO penalties, makes the net benefits of participation uncertain and potentially unattractive.

DR aggregators can protect customers from out-of-pocket penalties through their portfolio strategies, contract structures and their technologies and expertise that ensure reliable programs. When working through an aggregator, customers still have significant incentives to perform during DR dispatches in order to receive capacity payments and revenue under the tariff. Customers rely on this revenue and often build it into their annual forecasts. However, DR

aggregators can assume the risk of non-delivery, eliminating the primary obstacle to a customer participating in the type of tariff MP is proposing. When customers have the choice to participate directly in a DR program or through an aggregator, the majority of customers choose to participate through an aggregator for these reasons.⁴ This is true even for the largest and most sophisticated industrial customers.

In order to facilitate customer participation under this tariff, MP should add tariff language that enables MP customers to designate an MP-approved aggregator(s) to manage participation on their behalf, including directly receiving payments under the tariff and receiving dispatch signals from MP. Recently, Kansas City Power and Light (“KCP&L”) Missouri submitted revisions to its DR tariff to facilitate customer participation through aggregators;⁵ AEMA has provided redlines based on KCP&L’s tariff as Appendix A. MP can either qualify a limited number of aggregators to participate under the tariff or issue an RFP for a single aggregator. Numerous MISO utilities, such as both KCP&L and Ameren in Missouri, have done so or have discussed plans to do so in 2018 alone.

IV. MINNESOTA POWER SHOULD RAISE THE PARTICIPATION CAP UNDER THIS RIDER TO 400 MW TO ENSURE GROWTH OF DR ON ITS SYSTEM

Minnesota Power proposes to limit participation under the rider to 150 MW of DR capacity. In doing so, MP acknowledges that it has historically received between 100 MW and 260 MW of participation under its existing annual DR program over the past five MISO planning years, and states that it “expects the 150 MW of the newly proposed DR Product B will displace a portion of the 250 MW of DR received today in the one year commitment product.”⁶

The newly proposed rider and MP’s existing one-year commitment product serve essentially identical functions, although the new product is likely more attractive to customers given its compensation, long-term contract stability, and program design clarity. MP is correct to expect a shift in participation from the existing rider into the new one. Given that MP receives

⁴ Eighty-three percent of DR capacity throughout the PJM region came from DR aggregators in the 2018/2019 Delivery Year. *2019 Demand Response Operations Markets Activity Report: February 2019* at 7, <https://www.pjm.com/-/media/markets-ops/dsr/2019-demand-response-activity-report.ashx?la=en>

⁵ *In re Kansas City Power & Light Company’s Notice of Intent to File an Application for Authority to Establish a Demand-Side Programs Investment Mechanism*, MO Public Service Commission Docket No. EO-2019-0132, MEEIA Cycle 3 2019-2022 Filing, Appendix 8.1 Program Tariff Sheets at 46 (Nov. 29, 2018)

⁶ *In re Petition for Approval of Minnesota Power’s Industrial Demand Response Product*, MPUC Docket No. E-015/M-18-735, Petition for Approval, at 7 (Dec. 7, 2018).

250 MW of DR capacity today, limiting capacity under the new rider to 150 MW could result in an overall loss of capacity on MP's system.

MP's proposed rider is cost-effective, drives public benefits for all customers, provides option value and flexibility as an alternative to putting steel in the ground, is environmentally friendly, and has been requested by customers interested in participating in new DR opportunities. For these reasons, incremental DR participation above MP's existing levels should be encouraged.

While the 150 MW limit appears to correspond to a base case of DR capacity that was included in MP's 2017 update to its Integrated Resource Plan ("IRP") as part of the Nemadji Trail Energy Center ("NTEC") gas plant proceedings, there is no current justification for proposing that limit. MP's participation in the MISO market allows DR programs to drive value for customers even when MP has no immediate capacity need, by freeing up excess generation for MP to sell to the market. As Ameren Missouri noted in its testimony for its recently-approved DR programs, the result is a "decrease in net costs to customers to any reduction in load, regardless of whether or not the Company has sufficient resources in its portfolio to satisfy the MISO planning reserve requirement."⁷

In addition to the immediate cost-savings, Ameren Missouri further describes in its testimony how DR resources continually add value as an alternative to supply-side resources, explaining that:

"Demand-side resource implementation is much more flexible. It can be adjusted over time to account for changes in performance and cost effectiveness. Construction of new supply-side resources represents a much firmer commitment and cannot be 'dialed back' once completed; once the utility owns a 600 MW unit, it owns it. Demand-side resources are generally much more cost-effective than supply side resources and generate net benefits to an extent that most supply-side resources cannot."⁸

In order to ensure the growth of DR on its system as an alternative to supply-side generation, MP should raise the cap on participation under this rider to 400 MW. The existing cap is unnecessary and risks driving existing DR out of the market, reducing MP's access to a valuable emergency resource. MP should raise the cap in order to ensure that DR

⁷ *In re Union Electric Company d/b/a Ameren Missouri's 3rd Filing to Implement Regulatory Changes in Furtherance of Energy Efficiency as Allowed by MEEIA*, MO Public Service Commission Docket No. EO-2018-0211, Surrebuttal Testimony of Matt Michel, at 6 lines 13-20 (Sept. 17, 2018).

⁸ *Id.* at 13-14.

drives value in MP's resource planning processes and that customers—both current customers and new customers that may want to join MP's system—have access to DR opportunities. AEMA has provided redlines to this effect in Appendix A.

V. CONCLUSION

MP's Rider for Large Power Demand Response Service is a well-designed tariff that would drive significant benefits and savings for all of MP's customers. In order to ensure that customers are able to participate to the full extent possible, the Commission should direct MP to allow customers to elect a DR aggregator to manage participation on their behalf and raise the cap on program participation to 400 MW. AEMA has provided redlines to MP's Rider that incorporate these changes, and would be happy to discuss with interested parties in more detail. Additionally, we respectfully request that the Commission establish a deadline for MP to file its petition to approve DR products for its commercial and residential customers. We thank the Commission for its time and the opportunity to comment on the future of DR in MP's territory.

Respectfully Submitted,



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February 20, 2019

APPENDIX A: REDLINES TO PROPOSED RIDER

RIDER FOR LARGE POWER DEMAND RESPONSE SERVICE

APPLICATION

Applicable to any customer taking service under Large Power Service Schedule 74, having a minimum contract term of at least the duration of the respective demand response product, and subject to the Conditions below.

A Customer may participate under this Rider directly through the Company or a Company-approved Aggregator ("Aggregator"). An Aggregator is a curtailment service provider, appointed by a customer to act on behalf of said Customer with respect to all aspects of the Program, including but not limited to: a) the receipt of notices from the Company under this Program; and b) the receipt of incentive payments from Minnesota Power. Aggregator will be responsible for establishing independent business to business (B:B) contracts and administering the participation of said customer.

The total availability of Product B under this Rider is limited to 400 MW of demand response. In the event that Customers request a total of more than 400 MW of Product B, the Company shall apply an appropriate methodology to allocate the MW based on number of months under contract and typical customer service requirement.

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NO CHANGES TO REST OF RIDER