



January 29, 2020

VIA ELECTRONIC FILING

Ryan Barlow, Acting Executive Secretary

Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101-2147

Re: Dockets E-111/M-19-674, E-111/CI-18-255 - In the Matter of Distribution System Planning for Dakota Electric Association

Clean Energy Economy Minnesota (CEEM) respectfully submits these comments on Integrated Distribution System Planning for Dakota Electric Association. Our mission at CEEM is to provide educational leadership, collaboration, and policy analysis that accelerates clean energy market growth and smart energy policies. We work to support and expand clean energy jobs and the economic opportunities provided by clean, reliable, and affordable energy on behalf of all Minnesotans.

Please feel free to contact us with any questions that you may have. We hope that the comments below provide you with useful insights.

Regards,

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State of Minnesota
Before the
Minnesota Public Utilities Commission

In the Matter of Distribution System Planning for
Dakota Electric Association

Dockets E-111/M-19-674
E-111/CI-18-255

COMMENTS

Introduction

Clean Energy Economy Minnesota (CEEM) appreciates the opportunity to provide these comments in response to the Minnesota Public Utilities Commission’s (hereafter PUC or Commission) Notice of Comment Period on Dakota Electric Association’s (DEA) Integrated Distribution Plan (IDP) filed October 31, 2019.

CEEM is an industry-led 501(c)(3) nonprofit representing the business case for clean energy in Minnesota. CEEM provides a unified voice for clean energy business across the state. Our mission is to provide educational leadership, collaboration, and policy analysis that accelerates clean energy market growth and smart energy policies CEEM works to support and expand clean energy jobs and the economic opportunities provided by clean, reliable, and affordable energy on behalf of all Minnesotans. We are focused on sharing the stories and perspectives of clean energy businesses and employees, and are committed to working across industries and political divides to support a prosperous economy for Minnesotans.

CEEM is fueled by support of our member businesses, partners, and individuals working across Minnesota’s sustainable energy economy. CEEM’s members and partners represent a wide array of businesses providing and seeking energy solutions, and across energy technologies and business models. CEEM staff has significant experience in participating in regulatory reform, grid modernization, and “utility of the future” discussions and regulatory proceedings as well as educating state utility regulatory professionals across the country.

Background

The Minnesota PUC is viewed as a national leader in distribution planning. The Commission identified objectives, and considered the capabilities of clean energy technologies in meeting those objectives. We commend the Commission’s efforts in continuing to create comprehensive and coordinated IDP processes for Minnesota’s regulated utilities. We are encouraged by this leadership, guided by sound principles and planning objectives, including to:

- Maintain and enhance the safety, security, reliability, and resilience of the electricity grid, at fair and reasonable costs, consistent with the state’s energy policies;
- Enable greater customer engagement, empowerment, and options for energy services;
- Move toward the creation of efficient, cost-effective, accessible grid platforms for new products, new services, and opportunities for adoption of new distributed technologies; and,

- Ensure optimized utilization of electricity grid assets and resources to minimize total system costs.
- Provide the Commission with the information necessary to understand short-term and long-term distribution system plans, the costs and benefits of specific investments, and a comprehensive analysis of ratepayer cost and value.¹

The Commission’s February 20, 2019 Order outlined filing requirements for DEA’s IDP. Those requirements include baseline distribution system and financial data, preliminary hosting capacity data, distributed energy resource scenario analysis, long-term distribution system modernization and infrastructure investment plan, and a non-wires (non-traditional) alternatives analysis.² On June 25,, 2019 DEA held an informational hearing, prior to the October 31, 2019 filing of the IPD to obtain input from the public. CEEM attended that workshop and appreciated DEA’s thoughtful engagement of stakeholders. On December 4, 2019, the Commission issued a Notice of Comment Period, identifying topics open for comment.

Distribution system planning will continue to evolve as changes in policy, markets, and technologies influence the design of modern grids across Minnesota. Utility customers will benefit from this evolution, including increasing customer enrollment in utility programs designed to meet a variety of customer objectives, and adoption of distributed energy resources.³ Minnesota continues to lead discussions about system evolutions and changes, establishing nation-leading regulatory practices, from discussions of Grid Modernization (2015-16) and the development of filing new requirements for IDP processes for the state’s regulated utilities. We commend the Commission and stakeholders for their collective efforts, and CEEM greatly appreciates the opportunity to participate in this proceeding.

Comments and Review of Dakota Electric Association’s Inaugural IDP

In its Notice of Comment Period, the Commission offered the following topic(s) open for comment:

- Should the Commission accept or reject Dakota Electric Association’s Integrated Distribution Plan (IDP)?
- Does the IDP filed by Dakota Electric Association achieve the planning objectives outlined in the filing requirements approved in the Commission’s February 20, 2019 Order?
- What IDP filing requirements provide the most value to the process and why?
- Are there filing requirements that are not informative and/or should be deleted or modified, and why?
- Are there other issues or concerns related to this matter?

Should the Commission accept or reject Dakota Electric Power’s Integrated Distribution Plan?

The Commission should accept DEA’s Integrated Distribution plan. DEA’s inaugural IDP represents a solid foundation for facilitating stakeholder dialogue related to grid modernization. DEA provides an

¹ MN PUC ORDER APPROVING INTEGRATED DISTRIBUTION PLANNING FILING REQUIREMENTS FOR XCEL ENERGY (August 30, 2018), Docket. No. E-002/CI-18-251

² MN PUC ORDER ADOPTING INTEGRATED DISTRIBUTION-PLAN FILING REQUIREMENTS (February 20, 2019), Docket. No. E-015/CI-18-254

³ We define DER broadly to include energy efficiency, demand response, distributed generation of all types, energy storage, electric vehicles and microgrids.

accessible narrative and thought process to engage stakeholders and the Commission as the company invests in foundational grid modernization technologies. Stakeholders, utilities, and the Commission are in a unique position with inaugural IDP filings to create a learning process. For example, the Commission may choose to provide guidance to DEA and stakeholders on expectations for desired changes and/or expected improvements for future IDP filings. CEEM offers some of our perspective on future improvements within these comments.

The Commission could help to clarify what approval of an IDP means in terms of impacts on and connections with those other proceedings. Should stakeholders be considering what relation utility IDPs have or will have to more formal dockets, such as rate cases, certification requests, and other processes? This is a concern CEEM raised in previous IDP discussion.⁴ In Michigan, for example, the Public Service Commission used distribution system plans to gather additional input from regulated utilities, consider how plans can inform ratemaking and other regulatory processes, and to consider the role of performance-based metrics.⁵

In total, DEA's IDP filing combined with the company's efforts to engage with stakeholders represent a solid starting point. We recommend that the Commission approve the IDP and utilize the outputs from the plans to inform related Commission processes and proceedings.⁶ We suggest that the plan approval should not constitute any formal finding of prudence, nor any pre-approval commitment.⁷

Does the IDP filed by Dakota Electric Association achieve the planning objectives outlined in the filing requirements approved in the Commission's February 20, 2019 Order?

IDPs should discuss both a philosophy and method toward grid modernization. We would point to the Commission's definition of grid modernization:

"A modernized grid assures continued safe, reliable, and resilient utility network operations, and enables Minnesota to meet its energy policy goals, including the integration of variable renewable electricity sources and distributed energy resources. An integrated, modern grid provides for greater system efficiency and greater utilization of grid assets, enables the development of new products and services, provides customers with necessary information and

⁴ Comments of Clean Energy Economy Minnesota to Minnesota PUC - Docket E002/CI-18-251 In the Matter of the Distribution System Planning for Xcel Energy – February 20, 2019 at pg. 3 ([LINK](#))

⁵ 9 Michigan Public Service Commission. Order of April 18, 2018 Case No. U-18383 – In the matter on the Commission's own motion to implement the provisions of Sections 173 and 183(1) of 2016 PA 342, and Section 6a(14) of 2016 PA 341.1 ([LINK](#))

⁶ For example, as noted in Minnesota Power's IDP filing requirements, this effort should directly connect with other planning, including integrated resource plans and planned modifications to existing process to improve coordination and integration between the two plans

⁷ Pre-approval of an action, such as "approving" a distribution system plan, assumes the appropriateness of costs may be determined later. This embeds risk that approval of plans implies spending, in some cases. Regulatory approval should be thoughtfully crafted and clear. See Hempling, S., & Strauss, S. H. (2008). Pre-Approval Commitments: When and under What Conditions Should Regulators Commit Ratepayer Dollars to Utility-Proposed Capital Projects.

tools to enable their energy choices, and supports a standards-based and interoperable utility network.”⁸

As we noted, the DEA filing provides a solid foundation for activities and decisions DEA is considering related to grid modernization.

Enabling customers’ experiences should be part of IDP short-term objectives, with clear plans to enable or develop customer programs. DEA notes foundational investments, such as the implementation of the Advanced Grid Initiative (AGi) project “will greatly enhance the visibility at each of the member services.”⁹ Further, the AGi project “includes a member portal where the member may view and utilities the information about the energy usage” and “will support members being able to download the information and allow the member to share information about their usage with third parties, if they wish.”¹⁰ This is an important step, and the Commission should ensure all utilities are considering how energy data will connect consumers to the distribution grid in evaluating IDP filings. A well designed customer information system investment should produce engaged customers. Engaged customers could lower demands on the distribution system. Thus, customer-facing investment may alter the costs and benefits of alternative spending on DEA distribution systems.

Use of customer energy data directly advances customer engagement and choice. Access should be timely, actionable, and enable the customers to self-manage or engage third-parties to meet their energy usage objectives. Many utilities have ensured energy data is shared with authorization in line with responsible data practices and within appropriate technical requirements.

DER adoption forecasts will and must become more refined than the current filing. This statement applies to all utilities filing IDPs, and we understand that methodologies to forecast DER adoption are still being developed. That being said, the IDP’s DER discussion provides a solid starting point for stakeholder input, and DEA’s approach provides transparency in how the company approaches scenarios. DEA develops DER scenarios based several factors that should also be part of other utilities’ IDPs. For example, DEA’s mention of FERC Order 841 (pgs 54-55) shows foresight for energy storage. Further, DEA notes two related questions at pg 55:

- At what level does DER adoption cause technical issues with the distribution system affecting reliability, safety or power quality, and
- Can distribution planning rely on existing or forecasted DER owned and operated by other entities to delay or eliminate distribution projects?

The DER adoption forecast is said not to include demand management, owing to DEA “implemented a significant amount of Load Management...” noting “very low probability for Dakota electric to have the ability to increase the penetration levels of demand management.” (pg. 52) Additionally, DEA notes that appliances efficiency will further erode demand opportunities. Future IDPs may note that with higher DER scenarios that demand management may prove valuable beyond the concepts of traditional

⁸ Minnesota Public Utilities Commission Staff Report on Grid Modernization. March 2016.

<https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=showPopup&documentId={E04F7495-01E6-49EA-965E-21E8F0DD2D2A}&documentTitle=20163-119406-01>

⁹ at pg. 19

¹⁰ at pg. 77

programs or current technologies. Increased grid communications may prove that demand side opportunities increase or provide services that could enable greater DER penetration.

Non-wires alternatives (NWA) will receive more examination in future filings. DEA's filing presents a solid examination of how the company may consider NWAs going forward. DEA provides various options the company may pursue in NWA's and notes the benefits and potential for a variety of technologies. DEA also provides clear examples of projects and clear problem statements for gathering solutions. This discussion provides a good example for utility IDP filings going forward.

The cost-benefit framework is nascent in the inaugural filing. In describing grid modernization categories, DEA does provide some cost/benefit considerations. For future IDPs, Cost-benefit analysis plays a critical role in transparent IDP discussions and decision-making. Future plans should provide stakeholders and the Commission with more explicit information on cost-benefit conceptualization, methodologies and/or calculations.

Lastly, we encourage DEA to provide more detail for its vision in future filings. This filing represents a foundation and initial evaluation. We look forward to DEA refining its vision in future IDP proceedings.

What IDP filing requirements provide the most value to the process and why?

In a broad sense, CEEM thinks that IDPs should improve discussion of costs and benefits of potential system designs and associated investments. Further, the Commission, the Department of Commerce, and stakeholders can work with utilities to provide cost-benefit quantification and analysis related to important policy outcomes. Also, other states and industry players are considering cost-benefit frameworks. For example, E4TheFuture, published the National Standard Practice Manual (NSPM)¹¹ in 2017, which provides a framework to evaluate energy efficiency resources. A National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources is expected in 2020.¹² Further, the National Association of Regulatory Utility Commissioners and National Association of State Energy Officers formed a task force to develop new approaches to better align planning processes in 2018.¹³ This and similar efforts are working to provide guidance for state regulators and policymakers to develop and implement tests that are consistent with sound principles, while providing flexibility to ensure appropriate application to each state's distinct needs and interests.

We encourage the Commission to continue to refine expectations related to NWA assessment for future IDPs. The non-wires alternatives discussion warrants examination across all utilities. The proliferation of DERS across the US is providing new options for grid operators to replace infrastructure. NWAs are often chosen to replace or defer replacement of upgrades. The definitions of NWAs vary, as do regulators' expectations of utilities related to NWAs. Noting what may be ambiguity in what assessment of NWAs means, we encourage stakeholders and the Commission to monitor trends and continue to refine NWA

¹¹ National Energy Efficiency Screening Project (NESP) (2017). The National Standard Practice Manual for Assessing Cost-Effectiveness of Energy Efficiency Resources. <https://nationalefficiencyscreening.org/national-standard-practice-manual/>

¹² Project overview from December 2019 currently available - <https://nationalefficiencyscreening.org/wp-content/uploads/2019/06/NSPM-for-DERs.pdf>

¹³ NARUC and NASEO Establish New Joint Task Force on Comprehensive Electricity Planning (November 13, 2018). <https://www.naruc.org/about-naruc/press-releases/naruc-and-naseo-establish-new-joint-task-force-on-comprehensive-electricity-planning/>

approaches. For example, Navigant Research has a Non-Wires Alternatives Tracker which follows projects across the US.¹⁴

Are there filing requirements that are not informative and/or should be deleted or modified, and why?

This question will be answered as stakeholders gain further experience with IDP processes. The filing requirements will warrant review and revision, but subsequent experience is needed before suggesting removal of any filing requirements.

Are there other issues or concerns related to this matter?

To this end, we encourage the Commission to consider not only compliance with filing requirements, but other outcomes of IDP processes. In particular, there are opportunities to highlight where clean energy delivers significant public benefits, to focus on customer empowerment alongside operational expertise, and to create communities of practice around a modern grid.

It is important to prioritize efforts to identify where clean energy delivers the most public benefits. Planning for a future includes concerns for equitable deployment of energy infrastructure. Performing hosting capacity analysis and DER forecasts should also identify potential deployment scenarios that would deliver benefits to disadvantaged, vulnerable and low-income communities. The clean energy transition should create opportunities across the state and across territories of regulated public utilities.

It is vital to focus simultaneously on customer opportunities and operational excellence. While we agree with a gradual approach to grid modernization, we must consider when direct customer empowerment is prioritized in system planning.

We also encourage the Commission to use the IDP process to create communities of practice. It is vital that the stakeholder community, the Commission, and utilities all learn with and from each other as IDP evolves. The IDP can help serve as a basis for stakeholders to cooperate outside of formal processes. The IDP can help facilitate value creation for customers and system operators alike.

CONCLUSION

We applaud the Commission for beginning the important discussion with Minnesota's utilities and stakeholders through the IDP process. We hope to learn from DEAL's inaugural IDP filing, and by their efforts to engage a broad set of stakeholders. IDP filings will provide more detail on how utilities view grid modernization. We thank the Commission and staff for their continued hard work to make system planning more transparent. Minnesota's electricity grids deliver essential services to the businesses and citizens of the state. The distribution system infrastructure that delivers electricity will continue to change to adapt to trends related to technology changes, public policy objectives, and market activity.

¹⁴ Navigant Research (2019) Non-Wires Alternatives Tracker 3Q19.
<https://www.navigantresearch.com/reports/non-wires-alternatives-tracker-3q19> Accessed 1/9/2020