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March 17, 2020

William Seuffert Executive Secretary Minnesota Public Utilities Commission 121 7th Place East, Suite 350 Saint Paul, MN 55101

RE: Docket No. E002/M-19-666 Xcel Energy 2020-2029 Integrated Distribution Plan

Dear Mr. Seuffert:

The City of Minneapolis ("Minneapolis") thanks the Commission for the opportunity to provide comments on Xcel Energy's ("Xcel" or "the Company") latest integrated distribution plan (IDP). Minneapolis recognizes and appreciates that the Company has invested a great deal of effort into the development of this second IDP.

Minneapolis participates in this proceeding to support accelerating the transition to a clean, reliable, and efficient energy future for the benefit of our residents and businesses. We respond to a number of the questions with the Commission's principles and planning objectives in mind:

- 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 and services, with opportunities for adoption of new distributed technologies;
- Ensure optimized use of electricity grid assets and resources to minimize total system costs; and
- Provide the Commission with the information necessary to understand Xcel's 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

Commission Questions

1. Should the Commission accept or reject Xcel Energy's Integrated Distribution Plan (IDP)?

Overall, the Xcel IDP process is an important step toward increasing transparency and advanced planning elements, including contemplating Non-Wire Alternatives (NWA), a central focus for City of Minneapolis. As Xcel notes, NWA markets are nascent, so practices to analyze and evaluate them are still being refined.

Xcel indicated that the methodology will be improved as grid modernization activities and investments (i.e.

¹ Order: Minnesota Integrated Distribution Planning Requirements for Xcel Energy. August 30, 2018.

the proposed Advanced Planning Tool) enable access to better data and tools.² It would be helpful to have more clarity regarding the proposed functionality and use of the proposed Advanced Planning Tool to support the utility's NWA process.

To support the iterative development of a robust NWA process, Minneapolis focuses on the NWA methodology outlined in the IDP and compares it to best practices from other jurisdictions.

City of Minneapolis recommends the Commission accept the Company's 2020-2029 plan with modifications and enhancements as described below.

2. Does the IDP filed by Xcel Energy achieve the planning objectives outlined in the filing requirements as amended by the Commission's July 16, 2019 Order?

Minneapolis believes that this plan will support several principles and planning objectives identified in the Order, including to:

- Maintain and enhance the safety, security, reliability, and resilience
- Move toward the creation of grid platforms for new products and services
- Enable greater customer engagement

It is less clear if the plan adequately addresses the following principles and objectives:

- Fair and reasonable costs, consistent with the state's energy policies;
- Greater customer empowerment;
- Optimizing use of electricity grid assets and resources to minimize total system costs;
- Providing the Commission with the information necessary to understand Xcel's short-term and longterm distribution system plans, the costs and benefits of specific investments, and a comprehensive analysis of ratepayer cost and value with opportunities for adoption of new distributed technologies.

Minneapolis' comments include recommendations to build upon this IDP in a way that addresses these objectives.

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

The information provided was extensive and of interest, but the following areas were especially valuable for the City of Minneapolis:

- The distribution system budget, exceeding \$2.5 billion in capital expenditures over the next five years.³
- The table with nine planned investments of \$2 million or more in the five-year planning period useful.⁴

We note that in this IDP Xcel did not identify any planned capacity investments in Minneapolis that exceed \$2 million.⁵ Minneapolis is concerned that this may result in underinvestment in our city at a time when we might expect distribution improvements associated with:

- Changes in Minneapolis zoning designed to increase density⁶
- Beneficial electrification trends in transportation⁷ and heating

² Xcel 2019 IDP. p. 88.

³ 2019 Xcel IDP. Tables 1 and 2. p.11-12.

⁴ 2019 Xcel IDP. Table 22. p. 98.

⁵ Id.

⁶ Minneapolis Comprehensive Plan 2040 eliminates single family zoning community wide.

⁷ Minneapolis had 1,488 registered electric vehicles as of April 2019, and this number is expected to increase with time.

• On-going significant construction in Minneapolis and a growing population⁸

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

City of Minneapolis focuses on possible modifications to filing requirements based on the Commission IDP Order Point 3 E.2, which requires (<u>emphasis added</u>):

Xcel shall provide a detailed discussion of all distribution system projects in the filing year and the subsequent 5 years that are anticipated to have a total cost of greater than two million dollars.

For any forthcoming project or project in the filing year, which cost two million dollars or more, provide an analysis on how non-wires alternatives compare in terms of <u>viability</u>, <u>price</u>, <u>and long-term value</u>.

Xcel shall provide information on the following:

• <u>Project types</u> that would lend themselves to non-traditional solutions (i.e. load relief or reliability)

• A <u>timeline</u> that is needed to consider alternatives to any project types that would lend themselves to non-traditional solutions (allowing time for potential request for proposal, response, review, contracting and implementation

• <u>Cost threshold</u> of any project type that would need to be met to have a non-traditional solution reviewed

• A discussion of a <u>proposed screening process</u> to be used internally to determine that non-traditional alternatives are considered prior to distribution system investments are made.⁹

Minneapolis notes that for the second year in a row, "analysis performed by Xcel Energy has determined that the cost of incorporating DERs as the primary risk mitigation is at this time still more costly than traditional solutions."¹⁰ Xcel explains:

Most capacity projects budgeted at greater than \$2 million are intended to solve larger numbers of risks – this vastly increases the complexity of the problems to solve with an NWA, and in turn increases the amount of resources required to conduct the analysis. Projects with fewer capacity risks to solve are more localized and therefore more straightforward. We also look for any opportunities to utilize resources to solve more than one risk, such as optimally placing them at key locations on the system.¹¹

The City of Minneapolis provides suggestions for expanding the screening criteria for NWAs to resolve some of the barriers identified by Xcel in the current IDP, some of which are based on the *Non-Wires*

⁸ Minneapolis processed permit applications for ~4,900 residential units in 2019, with 4,700 associated with multi-family buildings.

⁹ 18-251 IDP Commissioner Order. August 30, 2018.

¹⁰ 2019 Xcel IDP p.90.

¹¹ Xcel 2019. p. 98.

Solutions Implementation Playbook: A Practical Guide for Regulators, Utilities, and Developers¹² and with consideration of the filing requirements for Xcel.

1. Modify the criteria used to screen for NWA projects as follows:

a. **Project types**: While we believe that 'capacity projects' are one reasonable focus as candidates for NWA, omission of 'asset health projects' could result in the exclusion of potentially viable investments. Further, excluding asset health projects could disadvantage cities with older infrastructure, such as in urban areas, unintentionally creating inequities in NWA opportunities. This approach has proven problematic in Rhode Island, for instance, where screening out asset health projects has resulted in most potential projects being excluded from NWA analysis.¹³ It would be better for Xcel to include analysis of some 'asset health' projects as candidates for NWAs as is done in New York, California, and Vermont to avoid prematurely narrowing the field of NWA opportunities.¹⁴

b. **Project timing**: The proposed 3-year timing criteria is not responsive to Order Point 3 E2 and could miss opportunities for rapid NWA deployments where solutions like energy storage can be deployed extremely quickly. Recent examples of rapid storage deployment include South Australia's Tesla battery and California's Aliso Canyo*n*.¹⁵

c. **Cost threshold**: Xcel identified 22 capacity projects planned between 2022-2024 and found that nine of them exceed the \$2 million threshold outlined in IDP Requirement 3.E.2. However, a review of capacity projects ranked in the IDP showed a tenth project, "Install Louise LOU TR2 & Feeders (\$3.5 million).¹⁶ It is unclear why this project was not included in the NWA analysis.

Four projects fell within the 2022-2024 timeframe exceeding \$1 million. While Xcel was not obligated to analyze these projects, it demonstrates that a range of costs might be more appropriate as a cost threshold in the future, and that identification of candidates should involve more than just a financial threshold.¹⁷

We agree with Xcel that more work is needed to establish meaningful cost thresholds. Instead of a single value of \$2 million, Xcel could differentiate project cost thresholds for different types of projects. A differentiated cost approach for NWA is used in New York, Rhode Island, and Vermont, for example.¹⁸ Minneapolis asks for consideration of whether \$1 million - \$2 million or some other threshold would address the issue that Xcel raised with the current threshold.

2. Certain aspects of the proposed NWA methodology and analytical assumptions require clarification to support shared understanding and assessment of the reasonableness of the process:

a. **Cost assumptions:** Xcel did not find any NWAs to be cost-effective in its 2019 IDP, but it is unclear where the assumptions used for NWA technology costs came from. The best practice for procurement is to allow third parties to competitively package proposed

¹² Prince, Jason, Jeff Waller, Lauren Shwisberg, and Mark Dyson. The Non-Wires Solutions Implementation Playbook: A Practical Guide for Regulators, Utilities, and Developers. Rocky Mountain Institute, 2018. http://www.rmi.org/insight/non-wires-solutionsplaybook/

¹³ Rocky Mountain Institute, Non-Wires Solutions Implementation Playbook, p. 57-58.

¹⁴ Asset health projects were ruled out for NWA on p. 90 of the IDP.

¹⁵ Rocky Mountain Institute, Non-Wires Solutions Implementation Playbook, p. 55.

¹⁶ 2019 IDP Attachment E. p. 6 of 7.

¹⁷ 2019 IDP. p. 97.

¹⁸ Rocky Mountain Institute, Non-Wires Solutions Implementation Playbook, p. 55-56

solutions.¹⁹ Resulting bids can be compared to traditional solutions to evaluate cost effectiveness.

b. **Evaluation parameters**: Stakeholders need more clarity on the framework Xcel is using to evaluate NWA than is provided in the current IDP to assess whether distribution investments are prudent. This is necessary for a transparent evaluation.

i. Xcel appears to have considered only a limited set of technologies as potential contributors to NWA. We recommend expanding the solution set evaluated to include additional NWA technologies using a portfolio approach, including energy efficiency, solar, energy storage, and demand side management deployed in combination with each other.

ii. In addition to competitive procurements, Xcel should consider opportunities to source NWAs through customer program offerings, which might be better suited and more expeditious (e.g., overlaying a geo-targeted incentive onto an existing customer demand response program).

iii. Xcel can explore the opportunity to combine NWAs and wires solutions so that the latter can be right-sized and complemented by NWAs in instances where an NWA may be unable to meet the full need.,

iv. Xcel can provide more clarity regarding the proposed functionality and use of its proposed Advanced Planning Tool to support the utility's NWA process.

c. **Pilot**: An important element of NWA is allowing the market to propose creative solutions, not just having the utility consider solutions. A pilot can improve the accuracy of cost estimates by incorporating market data points and soliciting feedback from the market and stakeholders. For instance, Xcel could issue a pilot Request for Proposals to solicit responses from the market to determine what solutions are possible. NWA projects can be structured to enable scaling based on lessons learned.

Review of Xcel's NWA Analysis Methodology

Xcel's NWA analysis examines N-0 (overload) and N-1 (contingency) risks for each project. N-0 risks are normal overloads on an existing substation transformer or distribution feeder.²⁰ N-1 risks drive NWA costs up significantly in the analysis because they result in an overload spanning several hours, requiring longerduration storage.²¹ For each risk associated with a project, Xcel aggregates historical peak load curves from individual feeders and substation transformers to develop a demand forecast for 2022. For N-0 risks, Xcel then applies demand response and existing solar to reduce forecasted load and develop a final demand value.²² This value is used to calculate how much battery storage (and in some cases additional solar) is needed to meet the associated overload.²³ Xcel assumes that the cost of battery storage is \$400,000/MWh and that the cost of solar PV is \$2,000,000/MW.

In the "Reinforce Kasson TR1 and Feeders" example, Xcel indicates there are five feeder risks and two substation transformer risks (a mix of N-0 and N-1). It concludes that two energy storage systems are needed to address all risks: the largest would need to be capable of reaching 6.6 MW at peak and discharging 31.5

¹⁹ Rocky Mountain Institute, Non-Wires Solutions Implementation Playbook.

²⁰ For the nine projects analyzed in 2019, there is an average of about five risks per project.

²¹ IDP, p. 95.

²² Xcel does not apply DR when analyzing N-1 risks, on the basis that long overload durations make these unsuitable for DR.

²³ IDP, p. 98

MWh throughout the day, while a second would need to discharge at 16.82 MWh.²⁴ It concludes that an additional 15 MW of solar would be needed to charge the first battery. It calculates the cost of these systems to be \$49.3 million, compared to the budgeted \$2.85 million for the planned substation transformer and new feeder.²⁵

As an alternative approach, the City of Minneapolis makes the following recommendations:

- Storage and solar costs should be refined. Xcel's current assumptions of \$400/kWh for storage and \$2/W for solar seem too high.
- Since third-parties can help offset some costs by value stacking, costs to the utility could well be lower than the assumed installed costs.
- Clarification is needed on how demand response (including type) and energy efficiency are considered in the modeling.

Taken together, these recommendations are intended to resolve the issues Xcel has encountered with identifying NWA options and support the Commission's objectives of fair and reasonable costs; greater customer empowerment; optimizing use of electricity grid assets and resources to minimize total system costs; and providing the Commission with the information necessary to understand opportunities for adoption of new distributed technologies.

5. Should the Commission accept Xcel Energy's request to file the next IDP no later than November 1, 2021? Should the Commission move from an annual to biennial IDP filing for the Company going forward?

City of Minneapolis appreciates that a great deal of work goes into the IDP report, and we are open to a biennial filing requirement being appropriate. We agree with Xcel that it is important to build on the learnings from the previous IDP processes in the interim.²⁶ As highlighted in the Commission's IDP Order, this process presents an opportunity to identify an NWA pilot project that allows the market to propose creative solutions. An NWA pilot in lieu of a November 2020 full IDP report would represent a positive step forward in terms of the practical application of the 2019 IDP.

Minneapolis recommends that if Xcel does not file the next IDP until 2021, Xcel will propose an NWA pilot by November 1, 2020.

6. Are there other issues or concerns related to this matter?

The 5-year Action Plan should include a detailed discussion of the underlying assumptions (including load growth assumptions) and more granularity into the costs of distribution system investments planned for the next five years.

Public Policy considerations for the communities served by Xcel

As with the 2018 IDP, Minneapolis views the following statement within the 2019 IDP as problematic as it speaks to a lack of customer empowerment that is being realized in other markets:

The good news from a distribution planning perspective is that Minnesota is presently at comparatively low levels of DER penetration that can reasonably be expected to remain stable in the near-term.²⁷,²⁸

However, distributed energy resources (DERs) are a public policy priority in City of Minneapolis, where we

²⁴ IDP, Attachment H, p. 3

²⁵ (31.5 MWh * \$400,000) + (16.82 MWh * \$400,000) + (15 MW * \$2,000,000)

²⁶ 2019 Xcel IDP, Attachment B p.8.

²⁷ 2018 Xcel Integrated Distribution Plan. Nov. 1, 2018. p. 188

²⁸ 2019 Xcel IDP. p. 19, 182, and 192-193.

want more people, including low income households, to have access to the benefits of on-site generation. Xcel points to its Minnesota tariff as a barrier:

Minnesota has a cost-causation regulatory construct for DER, which requires the "cost causer" to pay the costs – shielding other customers from the costs. As such, individuals or developers proposing to interconnect DER to the system may incur costs for necessary system changes to accommodate the DER. Based on our regulatory requirements in our Section 10 tariff, the customer or developer who installs a system pays for the cost of any necessary upgrade or modification necessary for DER integration. In some cases the developer or customer chooses not to pursue the modification and the project does not move forward. This construct limits the amount of negative impacts that DER can cause on the distribution system, enabling the Company to continue to provide safe and reliable service. It also protects the majority of customers from incurring costs generated by a few.²⁹

This tariff issue that Xcel flagged may be part of the reason that DER adoption in Xcel's Minnesota territory lags that of other states. City of Minneapolis maintains that the distribution grid is a critical part of public infrastructure. Equitable access to the grid that is paid for and maintained by all Minnesota customers is imperative to meet our public policy goals of beneficial electrification and 10% locally sourced generation goals. The IDP is an appropriate place to plan for and accommodate increasing interest in electric vehicle charging and rooftop solar by our residents and businesses.

Minneapolis notes that the Commission's IDP order point 3.A.32 requires Xcel to report "Information on areas of existing or forecasted high DER penetration. Include definition and rational for what the Company considers "high" DER penetration. "³⁰ And order point 7 from July 16, 2019 states that Xcel shall make the development of enhanced load and DER forecasting capabilities, as well as, tracking and updating of actual feeder daytime minimum loads, a priority in 2019 and include a detailed description of its progress in the Company's 2019 IDP.

The Company did not respond fully to these two order points, explaining:

We are not able to forecast DER in terms of its expected geography. As we discuss elsewhere in this IDP, tools to perform or services available to purchase forecasts such as this are very limited at this time. Additionally, due to the Company's cost causation regulatory construct that requires interconnecting parties to mitigate potential system issues prior to interconnecting, DER is not expected to impact system operation.³¹

But several of the communities Xcel serves in Minnesota, including Minneapolis, Brooklyn Park, Saint Paul, and Saint Louis Park have local solar energy generation and equity goals that the distribution system could more cost effectively support if the utility takes these goals into consideration during its planning process. The utility is a critical partner for communities if we are to achieve our goals. It is a less than optimal use of resources if Xcel disregards the official energy policy of the communities it serves.

Public utilities are entrusted to make decisions about how to best invest billions of their customers money to meet the needs of the people they serve. It is a tremendous responsibility because as Xcel notes, it can make the difference for whether a family, a business, or a school is able to cost effectively interconnect their

²⁹ *id.* p. 216.

³⁰ Order 2018 IDP Aug 30, 2018.

³¹ *id*. p. 191-192.

own rooftop solar system or have electric vehicle charging on-site.³²

We recommend that Xcel be required to consider the energy and climate goals of the Minnesota communities it serves along with customer preference trends when responding to the Commission's Aug 2018 IDP order point 3.A.32 and July 2019 IDP order point 7 in future IDPs.

AGIS Certification Request Questions

7. Should the Commission approve, modify, or deny certification of the following investments which are components of Xcel Energy's Advanced Grid Intelligence and Security (AGIS) Initiative at this time:

- a. Advanced Metering Infrastructure (AMI)
- b. Field Area Network (FAN)
- c. Fault Location, Isolation, and Service Restoration (FLISR)
- d. Integrated Volt-Var Optimization (IVVO)

Minneapolis appreciates and is supportive of the Company's planned AGIS plan. We believe that cost recovery should be analyzed and addressed through the multi-year rate plan (MYRP) as a matter of equitable cost recovery from customers, where some of the cost will be part of the variable costs associated with energy and demand.

Minneapolis highlights a concern that the benefit to cost ratio of the AMI project for customers is just 0.83³³, which we understand to mean that the cost being borne by customers exceeds the value of benefits they will receive. A focus on customer empowerment that goes beyond customer engagement is essential to deliver a favorable value proposition for customers. If the AGIS plan does not empower people to more cost effectively integrate renewables and level 2 electric vehicle charging and access and share data easily, the system costs should not be recovered from customers.

8. Should the Commission certify the Advanced Distribution Planning Tool (APT) at this time? It would be helpful and necessary to have more clarity regarding the proposed functionality and use of its proposed Advanced Planning Tool to support the utility's NWA process.

9. What, if anything, should the Commission set as conditions or clarify if granting certification of these distribution projects?

City of Minneapolis recommends the Commission assign consumer protections and conditions as a requirement for AGIS cost recovery within the MYRP. For example, the City appreciates the following AGIS features and would want to see these features as well as others required to be functional to fully recover costs:

Green Button Connect (GBC) and Home Area Network (HAN) functionality are enabled by the advanced meter and are two products that may be included in the Day 1 experience. GBC allows customers to share their energy usage data seamlessly with their approved third-parties. This is an enhancement to the existing system, Green Button Download, because it allows a customer to share their data regularly with a third-party without needing to take proactive

³² Xcel 2019 IDP. p. 215 "Based on our regulatory requirements in our Section 10 tariff, the customer or developer who installs a system pays for the cost of any necessary upgrade or modification necessary for DER integration. In some cases the developer or customer chooses not to pursue the modification and the project does not move

forward."

³³ Attachment M1 Table 10. p. 165

action to share that data. For customers with third-party services that help them manage their energy usage this will allow them to work with their chosen third-party to more effectively manage their energy.

And for demand side management:

We are developing multiple new programs for Day 1 deployment. These include: virtual energy audits; whole facility monitoring and continuous commissioning; and Enhanced Saver's Switch.³⁴

The AGIS system will collect an enormous amount of data and has the potential to add value to customers depending, on how AGIS is implemented. In keeping with the Commission goals of customer empowerment and cost effectiveness, reasonable consumer protections include withholding cost recovery until the following criteria are satisfied:

- AGIS budget is subject to an in-depth review to ensure that costs are reasonable and capped appropriately
- Demonstration of full functionality that enables **customer empowerment**, including but not necessarily limited to:
 - Fully functional 'Green Button Connect My Data" that allows from Day 1³⁵
 - Ease of access to data by customer'
 - Ease of on-going data sharing with third parties;
 - Virtual energy audits;
 - Whole facility monitoring and continuous commissioning;
 - Enhanced Saver's Switch;
 - Better integration of DER³⁶

11. At the stage of certification, what consideration should the Commission give to subsequent cost recovery, via either the Transmission Cost Recovery rider or general rate case, for each of the AGIS investments? Minneapolis notes that the Commission's Utility Rates Study offers some guidance for criteria for certification outside a rate case:

The risk to incentives is especially significant when special recovery is allowed for cost categories that do not inherently pose a danger of severe financial risk; i.e., costs that are not always outside the control of the utility, unpredictable or substantial. In those instances, allowing automatic recovery would also be expected to erode incentives for cost control.

Moreover, making certain cost categories subject to automatic recovery removes them from inclusion in the overall review of costs (those that decrease as well as those that increase) when a general rate case is ultimately filed. It effectively takes them "off the table" in a rate case review and thereby constricts the Commission's rate-making authority. And while special recovery will have the effect of dampening the magnitude of rate requests that utilities make when they do ultimately file a rate case petition, the reality is this effect merely masks the full rate implications for ratepayers.³⁷

³⁴ Xcel IDP Attachment M1. p. 128.

³⁵ *id*. p. 127-130.

³⁶ *id*. p. 128.

³⁷ MN Public Utilities Commission. Utility Rate Study. Jun 2010. p.8. <u>https://mn.gov/puc/assets/012854_tcm14-5188.pdf</u>

City of Minneapolis does not believe that the AGIS project meets these parameters, therefore we support cost recovery that is accomplished through rates. We look forward to reading others' thoughts on the specific AGIS investments.

City of Minneapolis Summary of Recommendations

City of Minneapolis recommends the Commission accept the Company's 2020-2029 plan with modifications and enhancements as described below.

1. Modify the criteria used to screen for NWA projects as follows:

a. Project types: should include both capacity and health asset categories.

b. **Project timing**: Should follow the Commission order by covering each of the first 5 years of the plan timeframe so as not to miss opportunities for energy storage.

c. **Cost threshold**: Reduce the project cost threshold to \$1 million to address the issues that Xcel raised with the current threshold.

2. The proposed NWA methodology and analytical assumptions require clarification:

a. Cost assumptions: Xcel should:

i. Update storage and solar costs to reflect current market costs.

ii. Issue an RFP for third-parties to participate in identifying NWA solutions and propose market-based costs.

iii. Clarify and expand how demand response (including type) and energy efficiency are considered in the modeling.

b. Evaluation parameters:

- i. expand the solution set evaluated to include additional NWA technologies using a portfolio approach, including energy efficiency, solar, energy storage, and demand side management deployed in combination with each other
- ii. In addition to competitive procurements, Xcel should consider opportunities to source NWAs through customer program offerings (for example, overlaying a geotargeted incentive onto an existing customer demand response program).
- iii. In future IDPs, Xcel should explore the opportunity to combine NWAs and wires solutions so that the latter can be right-sized and complemented by NWAs in instances where an NWA alone may be unable to meet the full need.

c. **Pilot**: An important element of NWA is allowing the market to propose creative solutions, not just having the utility consider solutions. A pilot can improve the accuracy of cost estimates by incorporating market data points and soliciting feedback from the market and stakeholders. For instance, Xcel could issue a pilot Request for Proposals to solicit responses from the market to determine what solutions are possible. NWA projects can be structured to enable scaling based on lessons learned.

- 3. If Xcel does not file the next IDP until 2021, the Commission should require Xcel to propose an NWA pilot by November 1, 2020.
- 4. Xcel be required to consider the energy and climate goals of the Minnesota communities it serves along with customer preference trends when responding to the Commission's Aug 2018 IDP order point 3.A.32 and July 2019 IDP order point 7 in future IDPs.

5. We believe that cost recovery should be analyzed and addressed through the multi-year rate plan (MYRP) as a matter of equitable cost recovery from customers, where some of the cost will be part of the variable costs associated with energy and demand.

Reasonable consumer protections include withholding cost recovery until the following criteria are satisfied:

- AGIS budget is subject to an in-depth review to ensure that costs are reasonable and capped appropriately
- Demonstration of full functionality that enables **customer empowerment**, including but not necessarily limited to:
 - Fully functional 'Green Button Connect My Data" that allows from Day 1³⁸
 - Ease of access to data by customer'
 - Ease of on-going data sharing with third parties;
 - Virtual energy audits;
 - Whole facility monitoring and continuous commissioning;
 - Enhanced Saver's Switch'
 - Better integration of DER³⁹

The City of Minneapolis appreciates the opportunity to review and offer input into the Company's latest distribution system planning. Thank you for your consideration of these comments.

Sincerely,

R.W. Havg

Mr. Kim W. Havey, LEED AP, AICP Division of Sustainability

³⁸ Xcel IDP Attachment M1. p. 127-130.

³⁹ *Id,* p. 128.

STATE OF MINNESOTA)) ss.CERTIFICATE OF SERVICECOUNTY OF HENNEPIN)

I, Kim W. Havey, of the City of Minneapolis, County of Hennepin, State of Minnesota, affirm that on the 17th day of March 2020, I served a copy of the following via e-mail and/or via U.S. Mail:

Comments of the City of Minneapolis regarding Docket No. 19-666

at the last known mailing addresses and email addresses of said entities/individuals on the attached Service List. If by U.S. Mail, I placed said document in postage prepaid envelope and placed same in the U.S. Post Office in Minneapolis, Minnesota for delivery by the United States Postal Service.

K.W. Havg

Kim W. Havey

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Allen	Michael	michael.allen@allenergysolar. com	All Energy Solar	Electronic Service	No
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Bailey	John	bailey@ilsr.org	Institute For Local Self-Reliance	Electronic Service	No
Baldwin Auck	Sara	sarab@irecusa.org	Interstate Renewable Energy Council, Inc.	Electronic Service	No
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Brama	Elizabeth	ebrama@taftlaw.com	Taft Stettinius & Hollister LLP	Electronic Service	No
Brekke	Jon	jbrekke@grenergy.com	Great River Energy	Electronic Service	No
Briggs	Sydney R.	sbriggs@swce.coop	Steele-Waseca Cooperative Electric	Electronic Service	No
Bring	Mark B.	mbring@otpco.com	Otter Tail Power Company	Electronic Service	No
Brusven	Christina	cbrusven@fredlaw.com	Fredrikson Byron	Electronic Service	No
Bull	Michael J.	mbull@mncee.org	Center for Energy and Environment	Electronic Service	No
Burdette	Jessica	jessica.burdette@state.mn.us	Department of Commerce	Electronic Service	No
Burwen	Jason	j.burwen@energystorage.org	Energy Storage Association	Electronic Service	No
CLOBES	LORI	lclobes@mienergy.coop	MiEnergy Cooperative	Electronic Service	No
Canaday	James	james.canaday@ag.state.mn. us	Office of the Attorney General-RUD	Electronic Service	No
Carnival	Douglas M.	dmc@mcgrannshea.com	McGrann Shea Carnival Straughn & Lamb	Electronic Service	No

Choquette	Ray	rchoquette@agp.com	Ag Processing Inc.	Electronic Service	No
Coffman	John	john@johncoffman.net	AARP	Electronic Service	No
Colburn	Kenneth A.	kcolburn@symbioticstrategies. com	Symbiotic Strategies, LLC	Electronic Service	No
Commerce Attorneys	Generic Notice	commerce.attorneys@ag.state .mn.us	Office of the Attorney General-DOC	Electronic Service	Yes
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