

ENVIRONMENTAL LAW & POLICY CENTER

Protecting the Midwest's Environment and Natural Heritage

April 10, 2020

Will Seuffert Executive Secretary Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101

RE: Reply Comments of the Environmental Law & Policy Center and Vote Solar

Docket No. E002/M-19-666

Dear Mr. Seuffert,

Please find enclosed the *Reply Comments of the Environmental Law & Policy Center and Vote Solar*. These documents have been electronically filed and served through the eFiling system and by First Class USPS Mail to those who have requested paper service.

Please feel free to contact me with any questions you may have regarding this filing.

Respectfully submitted,

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STATE OF MINNESOTA BEFORE THE PUBLIC UTILITIES COMMISSION

Katie Sieben)	Chair
Valerie Means)	Commissioner
Matthew Schuerger)	Commissioner
Joseph T. Sullivan)	Commissioner
John Tuma)	Commissioner
)	
In the Matter of Xcel Energy's 2019)	PUC Docket No. E002/M-19-666
Integrated Distribution Plan (IDP) and)	
Advanced Grid Intelligence and Security)	
Certification Request)	

REPLY COMMENTS OF THE ENVIRONMENTAL LAW & POLICY CENTER AND VOTE SOLAR

 \mathbf{ON}

XCEL ENERGY'S INTEGRATED DISTRIBUTION PLAN AND ADVANCED GRID INTELLIGENCE AND SECURITY CERTIFICATION REQUEST

April 10, 2020

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I. GENERAL OVERVIEW

The Environmental Law & Policy Center (ELPC) and Vote Solar (collectively ELPC/VS) respectfully submit these reply comments to comments filed by other parties regarding Xcel Energy's 2019 Integrated Distribution Plan (IDP) and Advanced Grid Intelligence and Security (AGIS) Certification Request, pursuant to the Minnesota Public Utilities Commission's April 1, 2020 Notice of Extended Reply and Supplemental Comment Period in Docket No. E-002/M-19-666.

A number of groups filed initial comments in the initial round of comments including:

- Department of Commerce
- Xcel Large industrials
- Environmental Law & Policy Center and Vote Solar
- Interstate Renewable Energy Council, Inc.
- Clean Energy Economy Minnesota
- IPS Solar Group
- City of Minneapolis
- Office of the Attorney General Residential Utility Division
- Citizens Utility Board of Minnesota
- Fresh Energy

In these reply comments, ELPC/VS address certain but not all comments filed by other parties. We focus on parties' comments addressing the linkage between this IDP and other Commission proceedings; Xcel's rate design as it relates to its distribution system plan; Xcel's non-wires alternatives analysis; and Xcel's request for certification. We conclude with a summary of our recommendations and highlight revisions to our recommendations based on parties' initial comments. Our silence in response to any party's comment does not constitute an endorsement of that position, and we reserve the right to respond to any comment in supplemental reply.

As we described in our initial comments, ELPC/VS are committed to the proposition that effective and thorough distribution system planning can lead to better outcomes for the Company, ratepayers, and all with an interest in a high-performing, clean, and efficient electric distribution system. The transition to a clean energy economy will have significant benefits for all stakeholders in the system but must be managed in a deliberate and thoughtful way to ensure that the benefits from that transition are fully realized and applied equitably.

II. LINKAGES TO OTHER PROCEEDINGS BEFORE THE COMMISSION

Certain commenters addressed the connection (or lack of clear connection) between Xcel's IDP, its certification request, and other proceedings before the Commission and made recommendations that are relevant to those linkages.

CUB recommends that Xcel align its Multiyear Rate Plan (MYRP), IDP, and Integrated Resource Plan (IRP) cycles, "such that an approved or accepted IRP or IDP action plan informs the setting of base rates or target revenues for the subsequent MYRP control period." CUB Comments at 10. CUB further explains that:

Such harmonization and calibration should help to ensure that the IDP and IRP processes are directly and contemporaneously translated into customer benefits through the revenue recovery process. More specifically, Xcel's investment plans – both on the generation side, as informed by the IRP, and the distribution side, as informed by the IDP - should inform a multi-year investment plan to outline a revenue requirement forecast which is a key component of the MYRP. By linking the IDP and IRP action plans more directly to the Company's MYRP rate case, the Commission can achieve far greater awareness of the customer bill impacts and investment prioritizations that result from these action plans. The Commission could also help to ensure that key benefits articulated in the respective plans are realized at the same time as costs for the investments are recovered. . . . Finally, such an approach could be paired with metrics to ensure that major projects are subject to the same types of performance incentives as other parts of the Company's business.

Id. (emphasis added). In a similar vein, the Office of Attorney General recommends that Xcel cross-file any cost recovery proposals related to its AGIS projects in the Company's ongoing performance metrics docket, in order to make sure that ratepayers are not paying twice for the same set of benefits. OAG Comments at 4.

These recommendations speak to the value in examining the linkage between Xcel's planning processes (distribution, transmission, and resource)¹; cost recovery mechanisms; and performance measurement and reporting processes. As a general matter, ELPC/VS agree that the Commission, interested stakeholders and in particular Xcel's customers stand to benefit from that examination. CUB's recommendation—that Xcel's MYRP, IDP and IRP process cycles be aligned going forward—is reasonable, and we recommend that the Commission adopt it. We note however that in ELPC/VS's view, aligning these cycles does not mean simultaneous filing, nor does it require filing each with the same frequency. Rather it would mean that the Company harmonizes its ratemaking and planning cases such that the Company's revenue requirement during the cost control period is derived from an approved, stakeholder-informed investment plan. The Company should reference in its MYRPs the investment plans and justifications that it advances in its planning processes.

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¹ Note that under Filing Requirement 3.A.5, Xcel explains the relationship between its distribution, transmission, and resource planning efforts, lays out its long-term view for the integration of those efforts, and identifies what it views as the material differences between the three planning paradigms. *See* IDP at 265-272.

ELPC/VS also support the OAG's recommendation—that Xcel cross-file any cost recovery proposals in its ongoing performance metrics docket, to the extent those proposals are predicated on improvements in the outcomes at issue in that docket. As ELPC/VS pointed out in their initial comments, by aligning planning and performance evaluation, the Commission can help promote transparency and ensure that the planning process is informed by the outcomes established in the Company's performance metrics dockets (Docket E002/CI-17-401 and E002/M-19-261). ELPC/VS Comments at 17.

III. ADVANCED RATE DESIGN ROADMAP

Fresh Energy and CUB highlight the interplay between Xcel's distribution grid modernization efforts and goals, and rate design. As CUB explains: "Xcel's grid modernization efforts can serve as a pathway to enable additional value from DER and create opportunities for customers to more fully participate in the energy system. These opportunities cannot be fully realized without dynamic rate options and programs that help align customer behavior with grid needs." CUB Comments at 16. Both Fresh Energy and CUB recommend that Xcel develop a roadmap to guide future efforts to achieve goals through rate design. (Fresh Energy calls for a Draft Rate Design Roadmap and CUB calls it an Advanced Rate Design Roadmap.)

Those commenters emphasize that the Company's Rate Design Roadmap should explain how it will leverage the technological and data capabilities of advanced meters—a foundational component of Xcel's grid modernization effort—through rate design to benefit customers and support the Company's distribution system planning and operations. Indeed, the business case for the AMI and the Field Area Network components of the Company's request for certification in this proceeding are at least in part dependent on the Company's ability to leverage the value of those technologies through rate design. A recent report by the American Council for an Energy-Efficient Economy (ACEEE) found that the value of utility AMI implementation can vary greatly depending on the rate design (and associated supportive programs and enabling technologies, such as customer education programs and smart thermostats rebates) that utilities introduce to leverage AMI capabilities. ²

ACEEE Report at 41-42.

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² Gold, Rachel; Waters Corri; and York, Dan, *Leveraging Advanced Metering Infrastructure to Save Energy*, American Council for an Energy-Efficient Economy, Report U2001, Revised January 27, 2020. The ACEEE report described the strategic uses of AMI and supporting technologies (such as the FAN, data management systems, etc.) including:

[•] Enhancing the quality of insights on energy use from near-real-time feedback;

[•] Providing time-varying pricing that reflects fluctuating energy costs at different times of day and year. Near-real-time feedback, combined with communications and possible automation, can better inform and motivate customers to respond to pricing signals and change their energy use accordingly;

[•] Targeting customers for programs best suited to their energy use profiles;

Promoting grid-interactive efficient buildings that extract more grid value from customer programs by providing more flexible demand;

[•] Supporting energy procurement and meter-based pay-for-performance (P4P);

[•] Producing granular data needed for advanced measurement and verification of customer energy and demand savings (M&V 2.0.);

[•] Enabling conservation voltage reduction (CVR) on electricity distribution networks to reduce demand and energy use.

To date, Xcel has not provided a coherent rate design roadmap in coordination with its distribution plan, although it has proposed certain advanced rate design proposals in previous cases. The Company's Time of Use Rate Pilot, for instance, was approved in the Company's first Grid Modernization Plan in Docket No. E002/M-17-776. The TOU Pilot involves the installation of Advanced Metering Infrastructure in two communities. When fully implemented, it will provide valuable information to the Commission, the Company and stakeholders on the effectiveness of rate design in achieving desired behavioral changes. A complete roadmap not only describing pilot offerings, but also laying out a forward-looking plan for how rate design will leverage grid modernization investments on the time-scale contemplated by the IDP, would be valuable.

Rate design will also be an important tool for achieving goals established in the Commission's proceeding on performance incentives.³ In that proceeding the Commission identified five outcomes for measuring and potentially incentivizing utility performance. ELPC/VS note that parties to that proceeding have discussed rate design as an important tool available to the utility in achieving the desired environmental performance and in achieving the cost-effective alignment of generation and load (two of the outcomes identified in that proceeding). However, in order for the Company to achieve the desired performance goals, it should clearly define the role that rate design can play. For this reason, CUB and Fresh Energy's recommendation that Xcel develop a deliberate and comprehensive plan to consider rate design issues (and develop that plan in consultation with stakeholders) is reasonable.

ELPC/VS therefore strongly support CUB and Fresh Energy's proposals and urge the Commission to require a Rate Design Roadmap in Xcel's next IDP filing. Specifically, we recommend that the Commission add the following filing requirement (adapted from Fresh Energy Comments at 7-8, but modified to include an eighth component):

3.D.4. (new) Rate Design Roadmap

Xcel shall provide a rate design roadmap that includes the following components:

- 1. A summary of the Company's current advanced rate designs and demand management programs, advanced rate designs in development, and relevant industry best practices.
- 2. A timeline for offering updated dynamic rates and/or demand management programs for all customer classes.
- 3. Potential rate and program design strategies to support low-income participation in these offerings.
- 4. A discussion of opportunities for utilizing distributed energy resources and/or beneficial electrification technologies in conjunction with planned dynamic rates and/or demand management programs.
- 5. Enrollment mechanisms for convenient customer participation in the advanced rate offerings.

³ In the Matter of a Commission Investigation to Identify Performance Metrics, and Potentially, Incentives for Xcel Energy's Electric Utility Operations, Docket No. E002/CI-17-401

- 6. Implementation plans for offering advanced rates, including education and outreach to customers.
- 7. Evaluation plans for monitoring, verifying, and improving the effectiveness of advanced rate designs.
- 8. A discussion of supportive programs (such as customer education) and enabling technologies (such as smart thermostats) that are associated with the Company's rate design strategy.

IV. NON-WIRES ALTERNATIVES

Several commenters addressed Xcel's non-wires alternatives analysis. At a high level, those commenters recommended that Xcel continue to improve its methodology for analyzing NWAs—including the screening, evaluation, and cost assessments embedded in that analysis. That position is generally consistent with ELPC/VS's comments, in which we noted that "several of the processes involved in Xcel's NWA analysis must improve in order to reasonably allow DERs to address distribution grid needs." ELPC/VS Comments at 9. While we do not respond to every filed comment pertaining to Xcel's NWA analysis, ELPC/VS address certain specific comments below.

A. Screening Criteria

IPS Solar and the City of Minneapolis each recommend that Xcel lower the \$2M cost threshold in its screening criteria to \$1M. IPS Solar Comments at 2; City of Minneapolis Comments at 10.

The City of Minneapolis further suggests that Xcel differentiate its project cost screening threshold by type of project. City of Minneapolis Comments at 4.

ELPC/VS share IPS Solar's observation that a \$2M screening threshold selects for more complex projects with measurably more risks to mitigate. As we noted in our initial comments, "as technology matures, and as options to aggregate energy efficiency, demand response, or behind-the-meter solar +storage systems to provide smaller scale benefits across the system evolve, it may make sense to loosen the screening criteria (and lower the project value threshold) to allow "smaller" grid needs to pass the screen." ELPC/VS Comments at 9. While ELPC/VS did not specifically recommend the Commission take any action with respect to Xcel's NWA screening criteria in this proceeding, we would not object to a revision of the screening criteria that lowers the project cost threshold to \$1M. Recognizing, however, that—as the City of Minneapolis points out—a more sophisticated and differentiated approach to screening potential projects based on costs may be helpful, we encourage the Company and the Commission to continue to explore the question of whether screening projects based on a single financial threshold is appropriate (through the NWA Stakeholder Advisory Group we describe in our initial comments and herein).

City of Minneapolis recommends that Xcel modify its screening criteria to include asset health projects. City of Minneapolis Comments at 4.

The City notes that screening out Asset Health projects from Xcel's NWA analysis runs the risk of "prematurely narrowing the field of NWA opportunities." City of Minneapolis Comments at 4. In its IDP, Xcel explains that it filtered out Asset Health projects because those projects "affect every part of the distribution system and is essential to maintaining reliability." IDP at 92. While Capacity projects may be better suited to NWA than Asset Health projects are at this time, ELPC/VS agree that it would be premature (and potentially inequitable) to strictly filter out Asset Health projects as a part of the project screening process. ELPC/VS recommend that the Company continue to explore opportunities to reliably defer or avoid Asset Health (and other non-Capacity) projects through NWAs, in consultation with an NWA Stakeholder Advisory group (described in these and our initial comments).

B. Estimating NWA Costs

IPS Solar recommends that the Commission inquire into the "several values" that may offset NWA costs. IPS Solar Comments at 2.

IPS Solar rightly note that Xcel's NWA methodology, which focuses on equipment cost comparison, does not consider the range of avoided costs that an NWA can create, and therefore undervalues NWA solutions. *Id.* at 2. The City of Minneapolis similarly notes that third parties can help offset some costs by "value-stacking", and that therefore the "costs to the utility could be lower than the assumed installed costs." City of Minneapolis Comments at 6. ELPC/VS agree with these comments. As we pointed out in our comments, Xcel's approach to NWA cost estimation inflates the true cost of NWA solutions by ignoring the other values beyond solving a distribution grid need (such as providing energy, capacity, or ancillary services) that an NWA might provide. ELPC/VS Comments at 10-11. To ensure that NWAs are assessed more fairly, ELPC/VS recommend the Company consider all revenue streams available when developing NWA cost estimates, and that the Commission modify the Company's IDP filing requirements accordingly. *Id.* at 11.

The City of Minneapolis recommends that Xcel update storage and solar costs to reflect current market costs. City of Minneapolis Comments at 6.

To the extent that Xcel continues to calculate the cost of an NWA solution rather than ascertaining market prices through a third-party solicitation, ELPC/VS agree with this recommendation. As IPS Solar point out, costs of certain technologies that might comprise NWAs (such as battery storage) are dynamic and rapidly falling. IPS Solar Comments at 2. Whether or not Xcel's current estimates for storage and solar costs are reasonable, ELPC/VS agrees that for the purposes of Xcel's next IDP, those costs may need to be updated.

The City of Minneapolis recommends that Xcel issue an RFP for third parties to participate in identifying NWA solutions and propose market-based costs. City of Minneapolis Comments at 10.

The City of Minneapolis comments that the best practice for procurement is to allow third parties to competitively package proposed solutions, and that resulting bids can be compared to traditional solutions to evaluate cost-effectiveness. City of Minneapolis at 4-5. ELPC/VS agree with this comment. As we point out, the Company should solicit third-party NWA proposals

instead of defining its own NWA solutions (and that the Commission should modify Xcel's filing requirements accordingly) because this process will both more accurately reveal prices and also allow the market to provide creative solutions to grid needs. ELPC/VS Comments at 10.

C. NWA Solution Development

City of Minneapolis recommends that Xcel explore the opportunity to combine NWAs and wire 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. City of Minneapolis Comments at 10.

ELPC/VS agree with this recommendation. As we pointed out in our comments, several of the projects evaluated in Xcel's NWA analysis involve multiple risks, including N-0 and N-1 risks. Requiring the projected NWA solution to address all N-1 risks associated with the candidate project drives up the estimated costs of that NWA solution. The Company should therefore explore hybrid approaches to addressing NWA candidate projects, including addressing N-0 risks with DER while employing traditional solutions to address the N-1 risks that might not be cost-effectively addressed by NWAs (at this time). *See* ELPC/VS Comments at 10.

D. Xcel's Future NWA Analysis

The City of Minneapolis recommends that Xcel propose an NWA pilot by November 1, 2020 (assuming Xcel does not file its next IDP until 2021). City of Minneapolis at 10.

DOC recommends that while the Commission require Xcel to move to a biennial IDP filing going forward, it require Xcel to file an annual update of its non-wires analysis. DOC Comments at 14.

ELPC/VS note that both the City and DOC's recommendations reflect the relative importance of the NWA analysis component within Xcel's broader IDP, and the relative value in dedicating focused resources towards refining and strengthening the Company's NWA analysis. For similar reasons, ELPC/VS have recommended that the Commission initiate a separate docket to address Xcel's NWA analysis, and direct the Company to form a separate NWA Stakeholder Advisory Group to inform and advance the Company's NWA analysis moving forward. ELPC/VS Comments at 12. As we have explained, under this proposal, while Xcel would still be required to describe its NWA analysis in its IDPs moving forward, the methodologies and processes constituting that analysis would be discussed in and informed by the NWA Stakeholder Advisory Group and would be litigated and evaluated in the separate NWA docket. *Id.* This approach would allow stakeholders to dedicate attention to some of the technical questions identified by parties in their comments—including, for example, NWA screening criteria and grid need identification. A dedicated NWA docket could, in concept, constitute the proceeding in which Xcel files its annual NWA analysis filing as DOC recommends, and an NWA pilot proposal as the City of Minneapolis recommends.

V. CERTIFICATION

The comments filed reveal significant uncertainty over the standard the Commission should apply to Xcel's certification requests, and whether certification is even appropriate for the

types of investments Xcel has proposed in this proceeding. *See e.g.* DOC Comments at 18; Fresh Energy Comments at 4; Clean Energy Economy Minnesota Comments at 10. That uncertainty underscores the potential value of the Commission establishing a set of certification criteria in this proceeding, to the extent that the Commission finds it appropriate to consider Xcel's certification request as a part of this proceeding. ELPC/VS reiterates its recommendation that the Commission evaluate Xcel's request for certification under Commissioner Schuerger's proposed certification criteria (articulated in his proposed motions for the Commission's May 25, 2016 Agenda meeting)—an approach that Fresh Energy supports. *See* ELPC/VS Comments at 7-8; Fresh Energy Comments at 5-7.

VI. CONCLUSION AND RECOMMENDATIONS

ELPC/VS appreciate the opportunity to provide reply comments in this proceeding. As ELPC/VS emphasize in these and our initial comments, and as other commenters also note, Xcel's IDP effort shows promise but must continue to improve in certain key areas. We respectfully request that the Commission adopt our recommendations, which we believe will improve not only the value that Xcel's IDP *presentation* provides, but also strengthen the underlying planning *processes*. Our recommendations are summarized below, with recommendations added through these reply comments included in red.

We recommend that the Commission make the following modifications to Xcel's IDP filing requirements (modifications bolded and underlined):

- 3.C.3. Distributed Energy Resource Scenario Analysis. Provide a discussion of the processes and tools that would be necessary to accommodate the specified levels of DER integration, including whether existing processes and tools would be sufficient. Provide a discussion of the system impacts and benefits that may arise from increased DER adoption, potential barriers to DER integration, and the types of system upgrades that may be necessary to accommodate the DER at the listed penetration levels. Inverters, above and beyond the autonomous functions associated with smart inverters, would be necessary to ensure the safe and reliable operation of the grid at the listed penetration levels.
- 3.D.4. (new) Rate Design Roadmap

 Xcel shall provide a rate design roadmap that includes the following components:
 - 1. A summary of the Company's current advanced rate designs and demand management programs, advanced rate designs in development, and relevant industry best practices.
 - 2. A timeline for offering updated dynamic rates and/or demand management programs for all customer classes.
 - 3. Potential rate and program design strategies to support low-income participation in these offerings.
 - 4. A discussion of opportunities for utilizing distributed energy resources and/or beneficial electrification technologies in conjunction with planned dynamic rates and/or demand management programs.

- 5. Enrollment mechanisms for convenient customer participation in the advanced rate offerings.
- 6. Implementation plans for offering advanced rates, including education and outreach to customers.
- 7. Evaluation plans for monitoring, verifying, and improving the effectiveness of advanced rate designs.
- 8. A discussion of supportive programs (such as customer education) and enabling technologies (such as smart thermostats) that are associated with the Company's rate design strategy.
- 3.E.1 Non-Wires (Non-Traditional) Alternatives Analysis. 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 each distribution system project satisfying those criteria, Xcel shall explain the hour(s) and day(s) during which an NWA would be called upon to deliver energy and demand, if an NWA were to defer or avoid the project. 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 viability, price, and long-term value. In determining how non-wires alternatives compare to forthcoming projects or projects in the filing year in terms of price, Xcel shall consider all revenue streams available to the non-wires alternative project. For projects that involve N-0 risks, Xcel shall issue a request for proposals soliciting NWA solutions addressing those risks.
- 3F (new): Locational Reliability and Equity.
 - 1. Xcel shall provide a map that illustrates the reliability of the Company's distribution system at a feeder-level.
 - 2. <u>Xcel shall describe how its proposed reliability investments will prioritize those portions of its system with poor reliability performance.</u>
 - 3. <u>Xcel shall explain how its proposed reliability investments will</u> advance equity across its service territory.

Beyond changes to Xcel's filing requirements, we also recommend that the Commission take the following actions in this proceeding, in order to make the IDP process more effective:

- We recommend that the Commission initiate a separate docket to address Xcel's NWA analysis, and direct the Company to form a separate NWA Stakeholder Advisory Group that can inform and advance the Company's NWA analysis moving forward, including the Company's NWA screening criteria and investment deferral opportunity assessment.
- We encourage the Commission to consider aligning the IDP process with the performance metrics framework by requiring Xcel to include, in its IDP, a report of its performance on metrics relevant to its distribution system including at minimum system-wide reliability, locational reliability and equity. Further, Xcel should file, in its performance metrics docket, any cost recovery proposals that it justifies based on improvements in the metrics developed in that docket.

- We suggest that the Commission request the Staff or the Company to compile its IDP filing requirements as amended by Commission Orders.
- We do not object to Xcel Energy's request to move to a biennial IDP filing (and file its next IDP no later than November 1, 2021).
- We recommend that Xcel align its MYRP, IDP, and IRP filings going forward.

Finally, with respect to Xcel's request for certification of certain distribution system investments, ELPC/VS recommend that the Commission adopt and apply the specific set of certification requirements that Commissioner Schuerger suggested in his proposed motions for the Commission's May 25, 2016 Agenda meeting in Docket E-002/M-15-962. Further, ELPC/VS recommend that the Commission require Xcel to explain, in a supplemental filing, why the investments for which it requests certification are of such importance that they warrant cost recovery through a rider while the project is being executed rather than cost recovery in a rate case after the project has been completed.

Respectfully submitted,

April 10, 2020

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CERTIFICATE OF SERVICE

Docket No. E002/M-19-666

I, Rebecca Lazer, hereby certify that I have served a true and correct copy of the *Reply Comments of the Environmental Law & Policy Center* to all persons at the addresses indicated on the attached service list by electronic filing, electronic mail, or by depositing the same enveloped with postage paid in the United States Mail at Chicago, Illinois for those who have requested paper service.

April 10, 2020

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Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.	12700 West Dodge Road PO Box 2047 Omaha, NE 68103-2047	Electronic Service	No	OFF_SL_19-666_M-19-666
John	Coffman	john@johncoffman.net	AARP	871 Tuxedo Blvd. St, Louis, MO 63119-2044	Electronic Service	No	OFF_SL_19-666_M-19-666

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Generic Notice	Commerce Attorneys	commerce.attorneys@ag.st ate.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_19-666_M-19-666
Riley	Conlin	riley.conlin@stoel.com	Stoel Rives LLP	33 S. 6th Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_19-666_M-19-666
George	Crocker	gwillc@nawo.org	North American Water Office	PO Box 174 Lake Elmo, MN 55042	Electronic Service	No	OFF_SL_19-666_M-19-666
Arthur	Crowell	Crowell.arthur@yahoo.com	A Work of Art Solar	14333 Orchard Rd. Minnetonka, MN 55345	Electronic Service	No	OFF_SL_19-666_M-19-666
David	Dahlberg	davedahlberg@nweco.com	Northwestern Wisconsin Electric Company	P.O. Box 9 104 South Pine Street Grantsburg, WI 548400009	Electronic Service	No	OFF_SL_19-666_M-19-666
James	Denniston	james.r.denniston@xcelen ergy.com	Xcel Energy Services, Inc.	414 Nicollet Mall, Fifth Floor Minneapolis, MN 55401	Electronic Service	No	OFF_SL_19-666_M-19-666
Curt	Dieren	curt.dieren@dgr.com	L&O Power Cooperative	1302 S Union St Rock Rapids, IA 51246	Electronic Service	No	OFF_SL_19-666_M-19-666
Carlon	Doyle Fontaine	carlon.doyle.fontaine@sen ate.mn	MN Senate	75 Rev Dr Martin Luther King Jr Blvd Room G-17 St Paul, MN 55155	Electronic Service	No	OFF_SL_19-666_M-19-666

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Kristen	Eide Tollefson	healingsystems69@gmail.c om	R-CURE	28477 N Lake Ave Frontenac, MN 55026-1044	Electronic Service	No	OFF_SL_19-666_M-19-666
Rebecca	Eilers	rebecca.d.eilers@xcelener gy.com	Xcel Energy	414 Nicollet Mall - 401 7th Floor Minneapolis, MN 55401	Electronic Service	No	OFF_SL_19-666_M-19-666
Bob	Eleff	bob.eleff@house.mn	Regulated Industries Cmte	100 Rev Dr Martin Luther King Jr Blvd Room 600 St. Paul, MN 55155	Electronic Service	No	OFF_SL_19-666_M-19-666
Betsy	Engelking	betsy@geronimoenergy.co m	Geronimo Energy, LLC	8400 Normandale Lake Blvd Suite 1200 Bloomington, MN 55437	Electronic Service	No	OFF_SL_19-666_M-19-666
Oncu	Er	oncu.er@avantenergy.com	Avant Energy, Agent for MMPA	220 S. Sixth St. Ste. 1300 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_19-666_M-19-666
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John	Farrell	jfarrell@ilsr.org	Institute for Local Self-Reliance	2720 E. 22nd St Institute for Local Self- Reliance Minneapolis, MN 55406	Electronic Service	No	OFF_SL_19-666_M-19-666

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Nathan	Franzen	nathan@geronimoenergy.c om	Geronimo Energy, LLC	8400 Normandale Lake Blvd Suite 1200 Bloomington, MN 55437	Electronic Service	No	OFF_SL_19-666_M-19-666
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Janet	Gonzalez	Janet.gonzalez@state.mn. us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 55101	Electronic Service	No	OFF_SL_19-666_M-19-666
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Tony	Hainault	anthony.hainault@co.henn epin.mn.us	Hennepin County DES	701 4th Ave S Ste 700 Minneapolis, MN 55415-1842	Electronic Service	No	OFF_SL_19-666_M-19-666

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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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Annie	Levenson Falk	annielf@cubminnesota.org	Citizens Utility Board of Minnesota	332 Minnesota Street, Suite W1360 St. Paul, MN 55101	Electronic Service	No	OFF_SL_19-666_M-19-666
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Samuel	Mason	smason@beltramielectric.c om	Beltrami Electric Cooperative, Inc.	4111 Technology Dr. NW PO Box 488 Bemidji, MN 56619-0488	Electronic Service	No	OFF_SL_19-666_M-19-666
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John	McWilliams	John.McWilliams@Dairylan dPower.com	Dairyland Power Cooperative	3200 East Ave SPO Box 817 La Crosse, WI 54601-7227	Electronic Service	No	OFF_SL_19-666_M-19-666
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	OFF_SL_19-666_M-19-666
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Andrew	Moratzka	andrew.moratzka@stoel.co m	Stoel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_19-666_M-19-666
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Generic Notice	Residential Utilities Division	residential.utilities@ag.stat e.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_19-666_M-19-666
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