COMMERCE DEPARTMENT

December 4, 2024

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

RE: Reply Comments of the Minnesota Department of Commerce Docket No. E999/CI-20-800

Dear Mr. Seuffert:

Attached are the comments of the Minnesota Department of Commerce (Department) in the following matter:

In the Matter of a Commission Investigation on Grid and Customer Security Issues Related to Public Display or Access to Electric Distribution Grid Data.

The Department's provides attached reply comments and is available to answer any questions the Minnesota Public Utilities Commission may have.

Sincerely,

/s/ Peter Wyckoff, Ph.D. Deputy Commissioner, Division of Energy Resources

DT/DD/wp initials Attachment

COMMERCE DEPARTMENT

Before the Minnesota Public Utilities Commission

Comments of the Minnesota Department of Commerce

Docket No. E999/CI-20-800

I. INTRODUCTION

The Minnesota Department of Commerce (Department) provides its reply comments in response to the Commission's Notice of Supplemental Comment Period in Docket No. E999/CI-20-800.¹

The Department continues to support the use of the NARUC Framework and establishment of a standing workgroup, in tandem with the specific recommendations put forth in the Converge Report² for developing a data sharing process.

The Department asserts that the momentum and collaborative process of the recent workgroup sessions can be leveraged to develop a data sharing process for Minnesota. Progress in the arena of data access, even if incremental, stands to benefit the public interest, given the policy objectives of the state for renewable technology deployment and clean energy mandates. The continuation of this progress stands to benefit the stakeholders involved in this proceeding, as it balances the state's interests in both clean energy deployment and the security and safety of Minnesota's electric distribution infrastructure in an ever-changing security landscape.

II. PROCEDURAL BACKGROUND

June 7, 2023 The Minnesota Public Utilities Commission (Commission) issued an Order in Docket No. E999/CI-20-800 which, among other items, convened a work group to develop the record more fully for Commission consideration within 18 months and requested the Department retain specialty services to provide a recommendation on privacy and security and to participate in

¹ In the Matter of a Commission Investigation on Grid and Customer Security Issues Related to Public Display or Access to *Electric Distribution Grid Data*, Minnesota Public Utilities Commission, Notice of Supplemental Comment Period, October 9, 2024, Docket No. E999/CI-20-800, (eDockets) <u>202410-210840-01</u> (hereinafter "Notice").

² In the Matter of a Commission Investigation on Grid and Customer Security Issues Related to Public Display or Access to *Electric Distribution Grid Data*, Comments of the Minnesota Department of Commerce, November 12, 2024, Docket No. E999/CI-20-800, (eDockets) 202411-211847-01, Attachment, stating, at 2: "Converge Strategies, LLC (CSL) provides consulting services focused on the intersection of clean energy, resilience, and national security. CSL's mission is to integrate resilience and security as first principles in the clean energy transformation. CSL provides project facilitation services, policy design and research, and market strategy development.... In response to the Commission's 6/7/2023 Order Paragraph 6, CSL was hired to provide specialty services, conduct analyses and stakeholder engagement, and provide recommendations on privacy and security in the Commission's investigation."

	related analysis and stakeholder engagement. ³ The Department subsequently selected Converge Strategies, LLC (CSL or Converge) to provide the required specialty services.
July 2, 2024	The Commission issued a notice of work group to commence the process required by the 2023 Order for meetings later in the summer. ⁴
August 28, 2024 and October 4, 2024	The Commission issued draft notes of the three Commission-led workgroup meetings. ⁵
October 9, 2024	The Commission issued its mid-workgroup report with a summary of the discussions, conclusions, recommendations, next steps, and remaining points of disagreement. ⁶ The Workgroup Report formally submitted into the record the NARUC framework. ⁷ The Commission issued its Notice of Supplemental Comment Period in the present docket.
October 28, 2024	The Department convened the first workgroup session in parallel with the supplemental comment period, facilitated by CSL, to present CSL's initial findings and framework proposal and to plan for the proposed standing workgroup.
November 12, 2024	Comments were filed, in the current docket, by the Department and various other parties.

³ In the Matter of a Commission Investigation on Grid and Customer Security Issues Related to Public Display or Access to *Electric Distribution Grid Data*, Minnesota Public Utilities Commission, Order Establishing Work Group, June 7, 2023, Docket No. E999/CI-20-800, (eDockets) <u>20236-196417-02</u> (hereinafter "2023 Order").

⁴ In the Matter of a Commission Investigation on Grid and Customer Security Issues Related to Public Display or Access to Electric Distribution Grid Data, Minnesota Public Utilities Commission, Notice of Comment Period, October 30, 2020, Docket Nos. E999/CI-20-800, E002/M-19-685, (eDockets) <u>202410-210840-01</u>.

⁵ In the Matter of a Commission Investigation on Grid and Customer Security Issues Related to Public Display or Access to Electric Distribution Grid Data, Minnesota Public Utilities Commission, Notes from Workshops 1 and 2, August 19, 2024, Docket No. E999/CI-20-800, (eDockets) <u>20248-209599-01</u> (hereinafter "Meeting 1 and 2 Notes"); In the Matter of a Commission Investigation on Grid and Customer Security Issues Related to Public Display or Access to Electric Distribution Grid Data, Minnesota Public Utilities Commission, Workgroup Session 3 Notes, October 4, 2024, Docket No. E999/CI-20-800, (eDockets) <u>202410-210725-01</u> (hereinafter "Meeting 3 Notes").

⁶ In the Matter of a Commission Investigation on Grid and Customer Security Issues Related to Public Display or Access to *Electric Distribution Grid Data*, Minnesota Public Utilities Commission, Workgroup Report, October 9, 2024, Docket No. E999/CI-20-800, (eDockets) <u>202410-210841-01</u> (hereinafter "Workgroup Report").

⁷ Workgroup Report Attachment 1.

III. DEPARTMENT ANALYSIS

The current proceeding involves issues surrounding the provision of distribution grid data to enable the effective deployment of distributed energy resources (DER) while maintaining grid security and balancing the risk of grid data disclosure with the benefits from increased data access.

On November 12, 2024, various parties filed comments in response to the Commission's October 9, 2024 Notice of Supplemental Comment Period.⁸

In the following sections, the Department discusses the comments filed, on November 12, 2024, by other parties, and offers a response to some of the parties' recommendations.

A. DAKOTA ELECTRIC ASSOCIATION

Dakota Electric Association (DEA) makes the following recommendations, among its various other comments:

- DEA recommends continued use of the National Association of Regulatory Utility Commissioners (NARUC) playbook (also known as the NARUC framework) while maintaining flexibility.
- DEA recommends the adoption of the principle of "least data access," as a guideline if or when the Commission decides on potential data sharing frameworks or requirements.
- DEA recommends that the Commission ascertain how relevant grid data is without associated locational data. DEA recommends use of its internal DER screening too as a reasonable means to facilitate a collaborate approach.
- DEA recommends that the Commission continue to convene workgroup meetings to work through the issues relating to the provision of distribution grid data in the deployment of DER.⁹

⁸ The October 9, 2024 Commission Notice requested comments on the following three questions: (1) Do parties have additional comments on the workgroup recommendations filed with this notice? (2) What information from the DOE/NARUC collaborative framework (submitted into record on October 9th, 2024 as an attachment to the workgroup report) is applicable to decisions being made in this record? Should the Commission approve the framework for use by a standing workgroup to consider data sharing and security issues between parties as recommended by the workgroup? (3) Was there any specific information provided by security experts and other new parties during the workgroup meetings that would help inform Commissioners in their decision making? Information already in the record does not need to be resubmitted.

⁹ In the Matter of a Commission Investigation on Grid and Customer Security Issues Related to Public Display or Access to Electric Distribution Grid Data, Comments of Dakota Electric Association, November 12, 2024, Docket No. E999/CI-20-800, (eDockets) <u>202411-211800-01</u>, at 2-4.

B. MINNESOTA POWER

Minnesota Power (MP) makes the following recommendations, among its other comments:

- MP recommends adoption of the NARUC framework for use by the Commission's standing work group. However, MP believes the NARUC framework should be used flexibly rather than as a binding manual of operations.
- MP believes the workgroup should be able to pursue mutually agreed upon best practices outside the framework with the following language adjustment should be made to the Commission's October 9, 2024 recommendations: "to determine the security methods to be employed the NARUC Grid Data Sharing Framework when feasible."
- MP recommends that the Commission declare a need for a mechanism for assurance of security of data provided to developers, given Commission's limits of control over non-regulated businesses.
- MP states that it is unconvinced that it is possible to develop a template for a non-disclosure agreement given the need for flexibility due to the diversity of utility sizes, business models and regional DER demand.¹⁰

C. OTTER TAIL POWER COMPANY

Otter Tail Power (OTP) supports the creation of a standing workgroup for continued discussions on the provision of distribution grid data to enable the effective deployment of DER while allowing for a degree of flexibility, enabling adaptation to evolving threats, implementing robust security measures to protect critical infrastructure, and meeting stakeholder needs.¹¹

D. NOKOMIS ENERGY

Nokomis Energy (NE) makes the following recommendations:

- NE states that the workgroup has a long road ahead if it has not yet identified its ostensible motivating purpose.
- NE notes that no party in the workgroup has substantiated a security risk that might be remedied or improved through further restraints in data sharing.
- NE discusses the Federal Energy Regulatory Commission's (FERC's) Order 792, which obligates all utilities to share certain specified information in pre-application reports. Given that FERC reports are a routine process, controlled by non-disclosure agreements and limited distribution, NE recommends that if any party is opposed to sharing the information required to be shared by the FERC Order, the workgroup should discuss this issue.¹²

¹⁰ In the Matter of a Commission Investigation on Grid and Customer Security Issues Related to Public Display or Access to Electric Distribution Grid Data, Comments of Minnesota Power, November 12, 2024, Docket No. E999/CI-20-800, (eDockets) <u>202411-211824-01</u>, at 3-6.

¹¹ In the Matter of a Commission Investigation on Grid and Customer Security Issues Related to Public Display or Access to Electric Distribution Grid Data, Comments of Otter Tail Power Company, November 12, 2024, Docket No. E999/CI-20-800, (eDockets) <u>202411-211854-01</u>, at 1-2.

¹² In the Matter of a Commission Investigation on Grid and Customer Security Issues Related to Public Display or Access to *Electric Distribution Grid Data*, Comments of Nokomis Energy, November 12, 2024, Docket No. E999/CI-20-800, (eDockets) <u>202411-211863-01</u>, at 1-2.

E. XCEL ENERGY

Xcel Energy (Xcel) makes the following points, among its various other comments:

- The NARUC playbook is an excellent tool to guide discussions. The NARUC playbook should be used flexibly and should be evaluated using Xcel's proposed Roadmap for Evaluating Grid Data.
- Only essential grid data should be shared using robust security measures to mitigate risks.
- The workgroup should ensure the most effective and up to date security measures are established.
- The standing workgroup should continue to review future data sharing issues.
- The Commission should clarify the federal requirements (along with state requirements and priorities) to be included in discussion.
- The Commission should clearly define its authority regarding data security given that it lacks regulatory oversight to mandate that parties, receiving the data, maintain the security of the data. The workgroup's recommendations provide a solid foundation for enhancing grid data sharing practices.
- A zero-trust model should be used for handling data.
- Utilities should have the discretion to withhold data from parties who do not meet the established security standards.
- Privacy issues should be included in the issues considered by the workgroup.
- Xcel's raises issues regarding the potential public sharing of all data points within the October 8, 2024 spreadsheet and the ability of recipients to protect the data should be addressed by the workgroup.¹³
 - F. MINNESOTA GRID ACCESS ADVOCATES

Minnesota Grid Access Advocates (MGAA) represents the Minnesota Solar Energy Industries Association (MnSEIA), Cooperative Energy Futures (CEF) and other interested members related to the issues raised in the Commission's October 9, 2024 Notice of Comment Period. In its November 12, 2024 comments, MGAA makes the following points, among its other comments:

- MGAA supports using the NARUC framework, with its systematic approach, along with a security framework such as the Synapse report or the Converge report (if it is approved by the Commission).
- MGAA recommends the following clarification in the text of the October 9, 2024 notice (at page 3 in the recommendations): "From the workshop, the parties requested Commission guidance on a few items. They recommended the Commission affirm that the minimum necessary data should be shared with requestors (including individual property owners, as well as third-party DER developers), and that it should be shared securely if a reasonably heightened security treatment is justified. They recommended authorizing the workgroup to determine the security

¹³ In the Matter of a Commission Investigation on Grid and Customer Security Issues Related to Public Display or Access to Electric Distribution Grid Data, Comments of Xcel Energy, November 12, 2024, Docket No. E999/CI-20-800, (eDockets) 202411-211827-01, at 2-11.

methods to be employed via the NARUC Grid Data Sharing Framework, subject to a party's right to appeal that determination to the Commission [...]." This proposed change is intended to clarify who can access grid data and that data should be subject to heightened security treatment only if security treatment is necessary (and not default).

- MGAA recommends that the Commission issue an Order, in the current docket, finding that each of the data elements (listed in Table 2 Sample Grid Data Elements on page 6 of the MGAA comments) have been found to be generally relevant to DER development and interconnection. Under MGAA's proposal, there would be a rebuttable presumption of relevance for datarequest disputes.
- MGAA recommends the Commission expand its focus, in the current docket, to include data quality in conjunction with an expanded focus on data security.
- MGAA recommends that the Commission issue an Order, in the current docket, acknowledging that the following Minnesota statute provisions enumerate the state goals and priorities relevant to enabling DER adoption and development: Minn. Stat. §§ 216B.1691, subd. 2F(e), 216B.1691, subd. 2g, 216B.1691, subd. 2(h), 216b.164, sub. 1, 216B.1611, subd. 2.
- MGAA recommends that the Commission and working group implement the NARUC playbook so as to prevent protectionist data-sharing tactics that deepen information asymmetry between electric utilities and the public.
- To avoid risk of over-implementation, MGAA recommends that the Commission place the burden of proof on utilities and require utilities proposing to limit access to grid data to develop a complete, public, and transparent record of relevant, factual information documenting the specific security risks of public access to data before approving redaction or limiting access to data.
- MGAA recommends that the Commission look to the example set in other states, such as those established by the California Public Utilities Commission (CPUC), including its decision-making on utility requests to broadly classify large categories of grid data as confidential. Among the policies that MGAA recommends should be drawn from decisions of the CPUC (i) are requiring clear and transparent evidence to support a utility's claims that sharing grid data would lead to adverse impacts to the distribution system and (ii) requiring utilities to provide clear and transparent evidence documenting why access to data, which has been publicly available in for several years, must now be removed or restricted to avoid adverse impacts to the distribution system. MGAA also recommends looking at the example set by the New York Public Utilities Commission.
- The workgroup should be cognizant that Minnesota state policy as provided in both the Minnesota Distributed Energy Resources Interconnection Process (MN DIP) and Minnesota law already requires distribution utilities to reveal certain enumerated categories of grid data to a prospective DER customer or developer upon request.
- MGAA recommends that the workgroup should be deferential to FERC's security classification for a given category of grid data only when parties to a dispute have provided relevant material evidence to support the divergent security classification.
- MGAA recommends that the Commission require utilities to develop a complete, public, and transparent record documenting specific security risks before approving any redaction or limitation of data access. When utilities request to designate grid data as Critical Energy/Electric

Infrastructure Information (CEII) data, they should bear the burden of justifying their request and explaining why the information is not already publicly known.

- MGAA believes that the "minimum necessary data" standard may prove insufficient in areas with high DER penetration. Instead, we advocate for data-sharing models that align with Minnesota's needs and clean energy goals.
- MGAA recommends that use of security measures such as non-disclosure agreements, secure portals, and specific cybersecurity protocols must be thoughtfully implemented to avoid creating excessive barriers to access, particularly for smaller developers.¹⁴

G. DEPARTMENT REPLY COMMENTS

The parties and the Department generally support the flexible use of the NARUC playbook and the continued use of the workgroup process as a collaborative means for reaching agreement on grid data sharing issues. However, Xcel has proposed the use of a "Roadmap" for evaluating grid data that appears to be an interpretation of the NARUC playbook. Further discussion on Xcel's proposed "Roadmap" is necessary to determine how it will impact the use of NARUC's playbook in working through grid data access issues.

Two parties, DEA and Xcel, have proposed restrictions on the handling of data. DEA recommends the adoption of the principle of "least data access" and Xcel recommends adoption of the principle of "zero trust" as guidelines for the Commission as it considers potential data sharing frameworks. With respect to "least data access" and "zero trust" principles, the Department questions what minimum security standards DEA and Xcel propose to apply to providers. Likewise, Xcel proposes to apply a principle that provides utilities with discretion to withhold data from parties who do not meet these proposed security standards. If Xcel seeks the discretion to withhold data, the utility should first specify whether there are any industry certification programs, which Xcel recommends for use in verifying the minimum cyber security safeguards used by prospective DER providers. To the extent DER providers have cyber security safeguards in place, guidelines must still be established in the event that the cyber security safeguards fail and grid distribution data is leaked to unauthorized parties.

In its comments NE notes that no party in the workgroup has substantiated a security risk that might be mitigated by implementing further restraints on data sharing. However, the Department believes DER developers, such as NE, may not have access to the same threat intelligence data from federal agencies knowledgeable about security issues as utilities do. Consideration should be given to providing DER developers with briefings on information relating to distribution grid data security issues.

¹⁴ In the Matter of a Commission Investigation on Grid and Customer Security Issues Related to Public Display or Access to *Electric Distribution Grid Data*, Comments of the Minnesota Grid Access Advocates, November 12, 2024, Docket No. E999/CI-20-800, (eDockets) <u>202411-211860-01</u>, pages 2-17.

Xcel proposes that customer privacy issues be considered by the workgroup. A review of the NARUC playbook indicates that privacy risks have been excluded from consideration within the framework because they are protected by rules and laws, data aggregation techniques, business practices, and other means.¹⁵

NE and MGAA recommend that the Commission direct utilities to share the same information, which they are currently obligated to share under FERC's Order 792.¹⁶ The Department notes that Section 215 of the Federal Energy Policy Act¹⁷ has no jurisdiction over what information is shared at the state/distribution level. Data covered by FERC is already provided freely available to developers pursuant to federal statue, but Section 215 of the Federal Energy Policy Act does not control distribution data. Therefore, any reference to the Section 215 requirements is irrelevant given the data in question is not derived from federally regulated systems.

In its comments, MGAA requests that the Commission acknowledge the goals and priorities enumerated in certain sections of Minn. Stat. Ch. 216B.¹⁸ The Department believes this proposal is unnecessary given that the requirements of Minn. Stat. Ch. 216B are already factored into the process in the current docket.

MGAA's comments also recommend applying a rebuttable presumption of relevance for data request disputes involving certain data elements (i.e., the data elements listed in Table 2 Sample Grid Data Elements on page 6 of the MGAA comments). Even to the extent that the Commission and the parties may agree on the application of a rebuttable presumption of relevance for certain specified grid data elements, disputes may still arise and may hinge on the manner to which data is to be shared rather than the actual data element. Therefore, summarily declaring certain data elements to be de facto "relevant," may not automatically resolve potential disputes. Also, the data elements listed in Table 2 of MGAA's comments represent the issues that the workgroup will resolve, though a collaborative process, in coming meetings. Therefore, the Department does not believe that MGAA's proposal to apply a rebuttable presumption of relevance to data request disputes would achieve its stated goal.

¹⁵ NARUC Brid Data Sharing Playbook (Fall 2023), <u>E2E50FD7-CD1B-62D5-1071-8D8362AD1E6D</u>. Page 20 states "Consumer privacy risks are protected by rules and laws, data aggregation techniques, business practices, and other means. Security risks are addressed by industry standards and management practices." Page 31 states "In prior decisions, the commission has affirmed that state-level security and commercial privacy standards and practices are in place for utility-held grid data." Page 35 states "Privacy – Risks can be minimized by ensuring the utility does not share customer-identifiable data and personally identifiable information."

¹⁶ In the Matter of a Commission Investigation on Grid and Customer Security Issues Related to Public Display or Access to *Electric Distribution Grid Data*, Comments of Nokomis Energy, November 12, 2024, Docket No. E999/CI-20-800, (eDockets) <u>202411-211863-01</u>, at 2 and the Minnesota Grid Access Advocates, November 12, 2024, Docket No. E999/CI-20-800, (eDockets) <u>202411-211860-01</u>, page 12.

¹⁷ Energy Policy Act of 2005 (<u>E:\PUBLAW\PUBL058.109</u>)

¹⁸ In the Matter of a Commission Investigation on Grid and Customer Security Issues Related to Public Display or Access to *Electric Distribution Grid Data*, Comments of the Minnesota Grid Access Advocates, November 12, 2024, Docket No. E999/CI-20-800, (eDockets) <u>202411-211860-01</u>, pages 8-9.

IV. RECOMMENDATION

The Department continues to recommend that the Commission adopt the following recommendations, as stated in the Department's November 12, 2024 comments:

- The Department continues to recommend the Commission approve a standing workgroup to consider data sharing and security issues.
- The Department continues to recommend the Commission require the workgroup to provide its final recommendations regarding a data sharing process for DER interconnection within six months of the issue date of the Order.
- The Department continues to recommend the Commission approve the use of the NARUC framework by a standing workgroup.
- The Department continues to recommend the use of the framework put forth by Converge supporting specific lines of inquiry for the additional work group sessions, as discussed in the Converge Report.

CERTIFICATE OF SERVICE

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

Minnesota Department of Commerce Reply Comments

Docket No. E999/CI-20-800

Dated this **4**th day of **December 2024**

/s/Sharon Ferguson

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Roxanne	Achman	rachman@co.benton.mn.us			531 Dewey Street Foley MN, 56329 United States	Electronic Service		No	20- 800Official
2	Chad	Adams	chada@swmhp.org	Southwest Minnesota Housing Partnership		2401 Broadway Ave Slayton MN, 56172 United States	Electronic Service		No	20- 800Official
3	Michael	Ahern	ahern.michael@dorsey.com	Dorsey & Whitney, LLP		50 S 6th St Ste 1500 Minneapolis MN, 55402- 1498 United States	Electronic Service		No	20- 800Official
4	Michael	Allen	michael.allen@allenergysolar.com	All Energy Solar		721 W 26th st Suite 211 Minneapolis MN, 55405 United States	Electronic Service		No	20- 800Official
5	Arnie	Anderson	arnieanderson@minncap.org	Minnesota Community Action Partnership		MCIT Building 100 Empire Drive, Suite 202 St. Paul MN, 55103 United States	Electronic Service		No	20- 800Official
6	Kristine	Anderson	kanderson@greatermngas.com	Greater Minnesota Gas, Inc.		1900 Cardinal Lane PO Box 798 Faribault MN, 55021 United States	Electronic Service		No	20- 800Official
7	Sarah	Anderson	sa@bomampls.org	Greater Minneapolis BOMA		Suite 610 121 South 8th Street Minneapolis MN, 55402 United States	Electronic Service		No	20- 800Official
8	Nichol	Beckstrand	nichol.beckstrand@mmha.com	Minnesota Multi Housing Association		1600 W 82nd St Ste 110 Minneapolis MN, 55431 United States	Electronic Service		No	20- 800Official
9	James J.	Bertrand	james.bertrand@stinson.com	STINSON LLP		50 S 6th St Ste 2600 Minneapolis MN, 55402 United States	Electronic Service		No	20- 800Official
10	Martin S.	BeVier	bevi0022@umn.edu			4001 Grand Ave South # 3 Minneapolis MN, 55409 United States	Electronic Service		No	20- 800Official
11	Jon	Braman	jbraman@brightpower.com	Bright Power, Inc.		11 Hanover Square, 21st floor New York NY, 10005 United States	Electronic Service		No	20- 800Official
12	Sheri	Brezinka	sbrezinka@usgbcmn.org			701 Washington Ave. N Suite 200 Minneapolis MN, 55401 United States	Electronic Service		No	20- 800Official
13	Annika	Brindel	abrindel@nhtinc.org	National Housing Trust		1101 30th Street NW Ste 100A	Electronic Service		No	20- 800Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						Washington DC, 20007 United States				
14	Matthew	Brodin	mbrodin@allete.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	20- 800Officia
15	James	Canaday	james.canaday@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	Suite 1400 445 Minnesota St. St. Paul MN, 55101 United States	Electronic Service		No	20- 800Officia
16	Richard	Carter	rick.carter@lhbcorp.com			2780 Shadywood Rd Excelsior MN, 55331- 9599 United States	Electronic Service		No	20- 800Officia
17	Brent	Christensen	brentc@mnta.org	Minnesota Telecom Alliance		1000 Westgate Drive, Ste 252 St. Paul MN, 55114 United States	Electronic Service		No	20- 800Officia
18	Andrew	Clearwater		Future of Privacy Forum		1400 I St NW Ste 450 Washington DC, 20005- 6503 United States	Paper Service		No	20- 800Officia
19	John	Coffman	john@johncoffman.net	AARP		871 Tuxedo Blvd. St, Louis MO, 63119-2044 United States	Electronic Service		No	20- 800Officia
20	Roger	Colton	roger@fsconline.com			34 Warwick Road Belmont MA, 02478 United States	Electronic Service		No	20- 800Officia
21	Sheri	Comer	sheri.comer@ftr.com	Frontier Communications Corporation		1500 MacCorkle Ave SE Charleston WV, 25396 United States	Electronic Service		No	20- 800Officia
22	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		Yes	20- 800Officia
23	George	Crocker	gwillc@nawo.org	North American Water Office		5093 Keats Avenue Lake Elmo MN, 55042 United States	Electronic Service		No	20- 800Officia
24	Stacy	Dahl	sdahl@minnkota.com	Minnkota Power Cooperative, Inc.		5301 32nd Ave S Grand Forks ND, 58201 United States	Electronic Service		No	20- 800Officia
25	Steve	Downer	sdowner@mmua.org	MMUA		3025 Harbor Ln N Ste 400 Plymouth MN, 55447- 5142 United States	Electronic Service		No	20- 800Officia

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
26	John	Farrell	jfarrell@ilsr.org	Institute for Local Self-Reliance		2720 E. 22nd St Institute for Local Self- Reliance Minneapolis MN, 55406 United States	Electronic Service		No	20- 800Officia
27	Trent	Fellers	trent.fellers@windstream.com	Windstream		1440 M St Lincoln NE, 68508 United States	Electronic Service		No	20- 800Official
28	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101- 2198 United States	Electronic Service		No	20- 800Official
29	Jenny	Glumack	jenny@mrea.org	Minnesota Rural Electric Association		11640 73rd Ave N Maple Grove MN, 55369 United States	Electronic Service		No	20- 800Official
30	Bill	Gullickson	wdgvc76@yahoo.com			1819 Colfax Avenue S Minneapolis MN, 55403 United States	Electronic Service		No	20- 800Official
31	Adam	Heinen	aheinen@dakotaelectric.com	Dakota Electric Association		4300 220th St W Farmington MN, 55024 United States	Electronic Service		No	20- 800Officia
32	Michael	Норре	lu23@ibew23.org	Local Union 23, I.B.E.W.		445 Etna Street Ste. 61 St. Paul MN, 55106 United States	Electronic Service		No	20- 800Official
33	Caroline	Horton	chorton@aeonmn.org	Aeon		901 N 3rd St Ste 150 Minneapolis MN, 55401 United States	Electronic Service		No	20- 800Official
34	Alan	Jenkins	aj@jenkinsatlaw.com	Jenkins at Law		2950 Yellowtail Ave. Marathon FL, 33050 United States	Electronic Service		No	20- 800Official
35	Craig	Johnson	cjohnson@lmc.org	League of Minnesota Cities		145 University Ave. W. Saint Paul MN, 55103- 2044 United States	Electronic Service		No	20- 800Official
36	Richard	Johnson	rick.johnson@lawmoss.com	Moss & Barnett		150 S. 5th Street Suite 1200 Minneapolis MN, 55402 United States	Electronic Service		No	20- 800Official
37	Sarah	Johnson Phillips	sjphillips@stoel.com	Stoel Rives LLP		33 South Sixth Street Suite 4200 Minneapolis MN, 55402 United States	Electronic Service		No	20- 800Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	Trade	Service List Name
38	Nicolle	Kupser	nkupser@greatermngas.com	Greater Minnesota Gas, Inc .		1900 Cardinal Ln PO Box 798 Faribault MN, 55021 United States	Electronic Service		No	20- 800Official
39	Brenda	Kyle	bkyle@stpaulchamber.com	St. Paul Area Chamber of Commerce		401 N Robert Street Suite 150 St Paul MN, 55101 United States	Electronic Service		No	20- 800Official
40	Peder	Larson	plarson@larkinhoffman.com	Larkin Hoffman Daly & Lindgren, Ltd.		8300 Norman Center Drive Suite 1000 Bloomington MN, 55437 United States	Electronic Service		No	20- 800Official
41	Annie	Levenson Falk	annielf@cubminnesota.org	Citizens Utility Board of Minnesota		332 Minnesota Street, Suite W1360 St. Paul MN, 55101 United States	Electronic Service		No	20- 800Official
42	Todd	Liljenquist	todd.liljenquist@mmha.com	Minnesota Multi Housing Association (MHA)		1600 West 82nd Street, Suite 110 Minneapolis MN, 55431 United States	Electronic Service		No	20- 800Official
43	Kavita	Maini	kmaini@wi.rr.com	KM Energy Consulting, LLC		961 N Lost Woods Rd Oconomowoc WI, 53066 United States	Electronic Service		No	20- 800Official
44	Sarah	Marquardt	smarquardt@mcknight.org	The McKnight Foundation		710 S 2nd St Minneapolis MN, 55401 United States	Electronic Service		No	20- 800Official
45	J.B.	Matthews		Cushman & Wakefield/NorthMarq		3500 American Blvd W - #200 Minneapolis MN, 55431 United States	Paper Service		No	20- 800Official
46	Craig	McDonnell	craig.mcdonnell@state.mn.us		Minnesota Pollution Control Agency	520 Lafayette Road St. Paul MN, 55101 United States	Electronic Service		No	20- 800Official
47	Matthew	Melewski	matthew@theboutiquefirm.com	Nokomis Energy LLC & Ole Solar LLC		2639 Nicollet Ave Ste 200 Minneapolis MN, 55408 United States	Electronic Service		No	20- 800Official
48	Joseph	Meyer	joseph.meyer@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	Bremer Tower, Suite 1400 445 Minnesota Street St Paul MN, 55101-2131 United States	Electronic Service		No	20- 800Official
49	Stacy	Miller	stacy.miller@minneapolismn.gov	City of Minneapolis		350 S. 5th Street Room M 301 Minneapolis MN, 55415 United States	Electronic Service		No	20- 800Official
50	David	Moeller	dmoeller@allete.com	Minnesota Power			Electronic Service		No	20- 800Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
51	Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP		33 South Sixth St Ste 4200 Minneapolis MN, 55402 United States	Electronic Service		No	20- 800Official
52	Pouya	Najmaie	najm0001@gmail.com	Cooperative Energy Futures		3416 16th Ave S Minneapolis MN, 55407 United States	Electronic Service		No	20- 800Official
53	David	Niles	david.niles@avantenergy.com	Minnesota Municipal Power Agency		220 South Sixth Street Suite 1300 Minneapolis MN, 55402 United States	Electronic Service		No	20- 800Officia
54	Samantha	Norris	samanthanorris@alliantenergy.com	Interstate Power and Light Company		200 1st Street SE PO Box 351 Cedar Rapids IA, 52406- 0351 United States	Electronic Service		No	20- 800Official
55	Logan	O'Grady	logrady@mnseia.org	Minnesota Solar Energy Industries Association		2288 University Ave W St. Paul MN, 55114 United States	Electronic Service		No	20- 800Official
56	Carol A.	Overland	overland@legalectric.org	Legalectric - Overland Law Office		1110 West Avenue Red Wing MN, 55066 United States	Electronic Service		No	20- 800Official
57	Greg	Palmer	gpalmer@greatermngas.com	Greater Minnesota Gas, Inc .		1900 Cardinal Ln PO Box 798 Faribault MN, 55021 United States	Electronic Service		No	20- 800Official
58	Eric	Pasi	ericp@ips-solar.com	IPS Solar		2670 Patton Rd Roseville MN, 55113 United States	Electronic Service		No	20- 800Official
59	Jennifer	Peterson	jjpeterson@mnpower.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	20- 800Official
60	Kristen	Peterson	kristenp@ips-solar.com	New Energy Equity		2670 Patton Road Roseville MN, 55113 United States	Electronic Service		No	20- 800Official
61	Gordon	Pietsch	gpietsch@grenergy.com	Great River Energy		12300 Elm Creek Blvd. Maple Grove MN, 55369- 4718 United States	Electronic Service		No	20- 800Official
62	Phyllis	Reha	phyllisreha@gmail.com			3656 Woodland Trail Eagan MN, 55123 United States	Electronic Service		No	20- 800Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	Trade Secret	Service List Name
63	Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	1400 BRM Tower 445 Minnesota St St. Paul MN, 55101-2131 United States	Electronic Service		Yes	20- 800Officia
64	Kevin	Reuther	kreuther@mncenter.org	MN Center for Environmental Advocacy		26 E Exchange St, Ste 206 St. Paul MN, 55101-1667 United States	Electronic Service		No	20- 800Officia
65	Christine	Schwartz	regulatory.records@xcelenergy.com	Xcel Energy		414 Nicollet Mall FL 7 Minneapolis MN, 55401- 1993 United States	Electronic Service		No	20- 800Officia
66	Will	Seuffert	will.seuffert@state.mn.us		Public Utilities Commission	121 7th PI E Ste 350 Saint Paul MN, 55101 United States	Electronic Service		Yes	20- 800Officia
67	Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates		7400 Lyndale Ave S Ste 190 Richfield MN, 55423 United States	Electronic Service		No	20- 800Officia
68	Bria	Shea	bria.e.shea@xcelenergy.com	Xcel Energy		414 Nicollet Mall Minneapolis MN, 55401 United States	Electronic Service		No	20- 800Officia
69	Ken	Smith	ken.smith@districtenergy.com	District Energy St. Paul Inc.		76 W Kellogg Blvd St. Paul MN, 55102 United States	Electronic Service		No	20- 800Officia
70	Peggy	Sorum	peggy.sorum@centerpointenergy.com	CenterPoint Energy		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	20- 800Officia
71	Sky	Stanfield	stanfield@smwlaw.com	Shute, Mihaly & Weinberger		396 Hayes Street San Francisco CA, 94102 United States	Electronic Service		No	20- 800Officia
72	Byron E.	Starns	byron.starns@stinson.com	STINSON LLP		50 S 6th St Ste 2600 Minneapolis MN, 55402 United States	Electronic Service		No	20- 800Officia
73	Richard	Stasik	richard.stasik@wecenergygroup.com	Minnesota Energy Resources Corporation (HOLDING)		231 West Michigan St - P321 Milwaukee WI, 53203 United States	Electronic Service		No	20- 800Officia
74	Kristin	Stastny	kstastny@taftIaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 South 8th Street Minneapolis MN, 55402 United States	Electronic Service		No	20- 800Officia

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
75	Cary	Stephenson	cstephenson@otpco.com	Otter Tail Power Company		215 South Cascade Street Fergus Falls MN, 56537 United States	Electronic Service		No	20 - 800Official
76	James M	Strommen	jstrommen@kennedy-graven.com	Kennedy & Graven, Chartered		150 S 5th St Ste 700 Minneapolis MN, 55402 United States	Electronic Service		No	20- 800Official
77	Eric	Swanson	eswanson@winthrop.com	Winthrop & Weinstine		225 S 6th St Ste 3500 Capella Tower Minneapolis MN, 55402- 4629 United States	Electronic Service		No	20- 800Official
78	Jason	Торр	jason.topp@lumen.com	Qwest Communications Company, LLC.		200 S 5th St Ste 2200 Minneapolis MN, 55402 United States	Electronic Service		No	20- 800Official
79	Jenna	Warmuth	jwarmuth@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802-2093 United States	Electronic Service		No	20- 800Official
80	Sarah	Whebbe	swhebbe@mnseia.org	MnSEIA		445 Minnesota Street Suite 730 St. Paul MN, 55101 United States	Electronic Service		No	20- 800Official
81	Patricia	Whitney	patricia@pwhitneylaw.com	St. Paul Assn of Responsible Landlords		627 Snelling Avenue South St. Paul MN, 55116 United States	Electronic Service		No	20- 800Official
82	Joseph	Windler	jwindler@winthrop.com	Winthrop & Weinstine		225 South Sixth Street, Suite 3500 Minneapolis MN, 55402 United States	Electronic Service		No	20- 800Official
83	Robyn	Woeste	robynwoeste@alliantenergy.com	Interstate Power and Light Company		200 First St SE Cedar Rapids IA, 52401 United States	Electronic Service		No	20- 800Official
84	Yochi	Zakai	yzakai@smwlaw.com	SHUTE, MIHALY & WEINBERGER LLP		396 Hayes Street San Francisco CA, 94102 United States	Electronic Service		No	20- 800Official
85	Curtis	Zaun	czaun@mnseia.org	MnSEIA		PO Box 8141 Saint Paul MN, 55108 United States	Electronic Service		No	20- 800Official
86	Kurt	Zimmerman	kwz@ibew160.org	Local Union #160, IBEW		2909 Anthony Ln St Anthony Village MN, 55418-3238 United States	Electronic Service		No	20- 800Official
87	Patrick	Zomer	pat.zomer@lawmoss.com	Moss & Barnett PA		150 S 5th St #1200 Minneapolis MN, 55402 United States	Electronic Service		No	20- 800Official