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April 15, 2021

Mr. Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 East Seventh Place, Suite 350
St. Paul, MN 55101-2147

**RE: In the Matter of an Inquiry into CenterPoint Energy's Request for Approval of its
Advanced Metering Project
Docket No. G-008/M-21-48**

Reply Comments

Dear Mr. Seuffert:

CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Minnesota Gas ("CenterPoint Energy" or the "Company") respectfully submits reply comments to the Comments of the Minnesota Department of Commerce ("Department") and the Citizens Utility Board of Minnesota ("CUB"), filed on March 23, 2021 and March 29, 2021, respectively.

The Company thanks the Department and CUB for their analysis of the Company's proposal. In this filing, we respond to the comments filed; clarify the Phase 1 benefits; and withdraw our request for deferred accounting for the Phase 1 deployment.

Sincerely,

/s/ Amber Lee

Amber Lee
Director, Regulatory Affairs

C: Service List

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

121 Seventh Place East, Suite 350
St. Paul, MN 55101-2147

Katie Sieben
Valerie Means
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Joseph Sullivan
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Chair
Commissioner
Commissioner
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Commissioner

In the Matter of an Inquiry into
CenterPoint Energy's Request for Approval
Of its Advanced Metering Project

Docket No. G-008/M-21-48

REPLY COMMENTS

I. Introduction

CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Minnesota Gas, ("CenterPoint Energy" or the "Company") respectfully submits the following Reply Comments to the Minnesota Public Utilities Commission ("Commission") in response to the Comments of the Minnesota Department of Commerce ("Department") and the Citizens Utility Board of Minnesota ("CUB"), filed on March 23, 2021, and March 29, 2021, respectively.

On May 20, 2020, the Commission issued a Notice requiring rate regulated electric and natural gas utilities to file a list of investments that may assist in Minnesota's Economic Recovery from the COVID-19 Pandemic in Docket No. E,G-999/CI-20-492. As that docket progressed, the Company made several filings describing and refining a set of investments that may assist in Minnesota's economic recovery. Among the projects discussed, the Company proposed a rollout of advanced meters. On December 18, 2020, the Company filed a Petition with several project proposals for 2021 including a more limited advanced meter project. This docket was established for consideration of the Company's advanced meter project proposal.¹

On March 23, 2021, the Department submitted Comments on the Company's advanced meter proposal, recommending that the Commission deny approval of the proposal. The Department 1) questioned why the Company would move forward with the limited 2021 scope before completing the larger analysis and review that will be necessary to move forward with the full replacement in Phase 2; 2) recommended that the Commission deny the Company's request for deferred accounting, and 3) stated that the Department is "hesitant to recommend approval of future spending projects without a fuller understanding of the rate impact of the polar vortex."

¹ *In the Matter of an Inquiry into CenterPoint Energy's Request for Approval of Its Advanced Metering Project*, Docket No. G008/M-21-48, Notice of Comment Period (Jan. 15, 2021).

On March 29, 2021, CUB filed Comments also recommending denial of the limited scope 2021 proposal. Like the Department, CUB indicated they preferred to begin with an evaluation of the full Phase 2 proposal, rather than moving forward in 2021 with a more limited scope. CUB also referenced the February gas price spike as justification not to proceed with the proposed scope of work, questioned the magnitude of safety and other benefits of the advanced meters, particularly without also deploying an advanced communications system, and recommended the Commission deny the Company's request for deferred accounting.

In this filing, the Company responds to the comments received and

- 1) provides an update on its Phase 1 and Phase 2 advanced meter deployment plans and includes an updated cost estimate for Phase 1 and a description of the Phase 1 benefits, and
- 2) withdraws our request for deferred accounting.

Attached to this filing as Exhibit 1 to this filing is an updated response to CUB's Information Request No. 2.

II. Phase 1 Meter Deployment and Benefits

The Company expects to install 15,200 advanced meters in 2021 with an incremental cost of approximately \$1.2 million. The expected annual impact of this project to a residential customer with average usage is \$0.10 in 2022.² The number of meters for deployment in Phase 1 have been reduced to ensure that we utilize the remaining stock of meters before transitioning to the new meters going forward. Due to fewer meters planned to be installed, the total incremental costs of Phase 1 has also been reduced from the previously projected \$1.5 million to \$1.2 million.³ CenterPoint Energy intends to begin installing the Intelis residential meters in 2021 and continue using the Intelis meters for all new residential service and to replace damaged, obsolete, or failed residential meters going forward.

The Company also withdraws its request for deferred accounting with respect to this project. Instead, CenterPoint Energy requests that the Commission approve the Phase 1 advanced meter project as consistent with the Commission's request for proposals that could assist with economic recovery in the May 22, 2020, Order in Docket No. E,G-999/CI-20-425 and find that the acceleration of this project should not be a basis for any disallowance of cost recovery in the future. The Company intends to move forward with Phase 1 activities beginning in 2021 and the costs will be included in the next general rate case filing. In that proceeding, interested parties

² The timing and details of these rate impacts will depend on the timing of when CenterPoint Energy files its next general rate case.

³ Updated cost estimates were also used in the current projections. The difference in the per meter cost from CenterPoint Energy's December 18, 2020 filing is due to the lower number of meters planned for implementation.

and the Commission will have an opportunity to evaluate the reasonableness and prudence of the costs.

Below, the Company clarifies the benefits that will occur immediately with the installation of these meters in Phase 1. As CUB rightly points out, there are additional benefits that can be realized if the meters are connected to a communication network, but the benefits listed below will occur upon the installation of these meters without a communication network.

a. Benefits of Phase 1 Deployment

i. Safety Benefits

The proposed Itron Intelis meters have three major safety features that will provide benefits upon Phase 1 deployment and allow the Company to change how it will respond to leaks and other events and issues that require meters to be shut off.

- 1) Automatic Shutoff – High Gas Flow: The Intelis meter features a built-in high flow alarm that identifies potentially dangerous conditions such as open fuel lines, automatically triggering shutoff.
- 2) Automatic Shutoff – High Temperature: The meter incorporates a temperature sensor that automatically triggers shutoff.
- 3) Remote Shutoff – These meters can be remotely shut off using current radio technology from within 1,000 feet of the meter.

Table 1 below identifies specific situations in which these features would increase safety for customers, Company field personnel, and the communities we serve.

Table 1. Scenarios of Enhanced Safety

| Scenario | Benefit of Advanced Meters |
|--|---|
| 1) Major gas leak inside a customer premise due to damaged/severed customer-owned natural gas piping | The meter will automatically shut off gas to the home in the case of high gas flows. In cases where the automatic shutoff is not triggered (based on the flow of the gas), a technician can shut off the flow of gas from a safe distance using the meter's remote shutoff capability. |
| 2) A fire near the meter | The meter will automatically shut off gas flow to the home if it senses high temperatures such as during a fire. |

| Scenario | Benefit of Advanced Meters |
|---|--|
| 3) A fire that is not in the immediate vicinity of the meter | The flow of gas can be shut off by a technician from a safe distance due to the remote shutoff capability. |
| 4) A safety or operational issue that requires CenterPoint Energy to shut off gas flow to more than one meter (e.g., because of construction error, fire, explosion, or other threat) | The Company can shut off meters by vehicle drive-by, rather than having personnel visit each meter, meaning that the Company will be able to stop the flow of gas to the area and respond to the emergency situation more quickly. |

There is also a safety benefit in that the Itron Intelis meters are approximately 70 percent lighter than the residential meters the Company has previously installed. As a result of the lighter weight and smaller size, there is a lower risk of injury to technicians and warehouse personnel from handling, moving, and installing these meters.

In their Comments, CUB questions the value of the Intelis meter’s remote shutoff capability based on their review of Company data regarding leaks requiring dispatch of CenterPoint Energy personnel.⁴ While it is CenterPoint Energy’s practice to dispatch a technician to investigate leak calls or leaks detected through the Company’s proactive monitoring program, the Intelis meter’s automatic shut-off feature can respond more quickly to certain types of inside leaks and fires. In other scenarios, CenterPoint Energy personnel can shut off the meter from a safe distance rather than being required to shut off gas at the meter. These additional response capabilities reduce the risks to our employees, customers, and communities, especially when the meter is located within the home.

ii. Other Phase 1 Benefits

⁴ CUB Comments at 2-3 (stating that only about 10 percent of yearly gas leaks have led to manual shutoffs). CenterPoint Energy clarifies that the Company dispatches personnel to all leaks that are identified. The data included in the Table on page 3 of CUB’s comments, which were taken from CenterPoint Energy’s responses to CUB’s Information Request Nos. 7 and 12, reflect the number of third-party damage related incidents that require dispatch to a home or business, and so would not include dispatch to any leaks that are not in a home or business or dispatches unrelated to third-party damage. The data referenced by CUB includes leaks that do not occur inside a home or business and therefore would not involve the manual shutoff of a customer meter. CenterPoint Energy clarifies that we do not separately track other instances where we send someone to a home or a business.

In addition to the safety benefits, Phase 1 deployment yields other benefits, as summarized in Table 2.

Table 2. Other Operational Benefits of Phase 1 Deployment

| Benefit | Value |
|------------------------------|---|
| Environmental Benefits | <p>Reduced methane emissions due to meters automatically shutting off in response to a gas leak.</p> <p>Environmental benefits in transporting the meters due to smaller size and lower weight as compared to traditional meters.⁵</p> |
| Measurement Accuracy | <p>State-of-the art ultrasonic metrology allows for enhanced measurement accuracy and reduced unaccounted-for gas.</p> |
| Improved Reliability | <p>Reduced service interruption duration due to reduced time and effort needed to shut off a meter.</p> |
| Notification of Meter Issues | <p>Alerts from the meter can notify the Company to issues with the meter including those caused by meter tampering.⁶</p> |

CUB contends that the advanced meter project “does not meet the goals or conditions the Commission established when opening the Economic Recovery Docket.”⁷ For instance, CUB suggests that beginning to install advanced meters in the ordinary course of business may exacerbate existing inequalities as new meters will be installed disproportionately in newer homes. CenterPoint Energy clarifies that, in fact, we replace approximately twice as many meters per year as we install new ones.⁸ Because the meters being replaced are nearing the end of their useful life, more replacements will be installed in older homes.

⁵ In addition to being approximately 70 percent lighter than a traditional residential meter, 144 Itron Intelis meters can be shipped on a single pallet. Approximately 40 traditional residential meters fit onto one pallet. This difference in size will result in cost savings and a lower carbon footprint for transportation and warehousing.

⁶ With an advanced communications system, it would be possible to receive these alerts in real time. However, without the advanced communications system the Company can receive these alerts when a drive by meter reading is conducted and can use the information to plan meter inspections and repairs.

⁷ CUB comments at 5.

⁸ CUB Comments at 3. CUB bases this concern on the Company’s response to CUB’s second Information Request which provided historical numbers for meter replacements and new meter installations. The Company realized in preparing these Reply Comments that it had made an error in that Information

The Company has outlined above and in previous filings how the Phase 1 deployment will address the parameters established by the Commission. First and foremost, the benefits of these automatic safety features of these meters cannot be understated. The Company believes it is prudent to deploy this technology to enhance safety for our customers, employees, and communities. Because the meters incorporate built-in high flow and temperature sensors, along with integrated shutoff valves, they are able to detect potentially dangerous conditions such as open fuel lines or fires and automatically trigger shutoff. As a result, methane emissions can also be avoided. Additionally, the lighter weight and smaller size of the meters will result in reduced carbon emissions arising from the transportation of the meters themselves. Further, Itron has a substantial Minnesota workforce that will be supported by CenterPoint Energy's purchase of Itron Intelis meters. For all of these reasons the Company believes our Phase 1 deployment furthers the Commission's objectives articulated in this economic recovery docket.

b. Benefits of Advanced Meters that Require an Advanced Communications System

In addition to the immediate benefits of installing individual meters, other benefits could result if the meters are connected to a communication network, and CUB was correct to point out that there are several advantages of the advanced meters that would be available only in conjunction with an advanced communications system. Some additional features of the meters that would be enabled by advanced communications infrastructure are as follows:

- Potential future integration with on-premise methane detection devices that will allow meter to shut off if methane is detected.
- Shutoff capability from a distant central location.⁹
- Ability to receive alerts from the meter at a distant central location.
- Meter reading from a distant central location.

In addition, although some benefits of the meters will not be achieved except with installation of advanced communications infrastructure, the future potential of this technology is relevant to the decision of whether to continue to install old style meters in 2021. For example, advanced

Request response. A revised response to CUB's Information Request No. 2 is attached to these Reply Comments as Exhibit 1.

⁹ Under Minn. R. 7820.2500, Service may be disconnected only in conjunction with a personal visit by a representative of the utility to the address where the service is rendered and an attempt to make personal contact with the customer at the address. Under Minn. R. 7820.1100, service may be disconnected without notice in the event of unauthorized use, tampering, or a hazardous situation. CUB noted that they have concerns about the possibility of remotely shutting off customers for non-payment. An advanced communications system would make it technically possible to remotely disconnect a customer for nonpayment from a central location. The Company understands CUB's concerns and notes that even if we continue to use an in-person visit before disconnections, remote disconnections from a central location could reduce costs for disconnection, assuming we did not need to send an experienced field technician to conduct the in-person outreach for collection. The Company will quantify the potential cost savings for remote disconnection in our full business case for Phase 2 and looks forward to additional discussion on this topic.

meters coupled with an advanced communications infrastructure would enable conservation and demand response programs that are currently out of reach for the Company. While CenterPoint Energy will not realize such benefits in 2021, we are in a better position to eventually realize those benefits if we install these advanced meters now, in the ordinary course of replacing meters, rather than continuing to install older technology.

III. Phase 2 Planning

The Department suggests that further analysis, including an evaluation of alternatives, should be completed and presented before Phase 2 of the advanced meter project moves forward. CenterPoint Energy agrees that such detailed analysis and evaluation is necessary before proceeding with Phase 2 and intends to provide additional details and discussion regarding a proposed plan, costs, and alternatives. CenterPoint Energy will explore the cost and benefits of possible implementation of an advanced communication system as part of Phase 2 and will provide additional details regarding that evaluation and available alternatives in a future filing.

IV. Conclusion

As discussed above and consistent with objectives the Commission identified in its May 20, 2020, Notice in Docket No. E,G999/CI-20-492, Phase 1 of the advanced meter project provides important utility system benefits in the form of increased safety. These safety benefits are significant. Other system benefits include state-of-the-art meter accuracy, notification of tampering and other meter problems, and reductions in carbon and methane emissions.

The Company appreciates the opportunity to respond to the Comments of the Department and CUB. As discussed above, the Company respectfully requests that the Commission find that the Phase 1 advanced meter project is consistent with the Commission's request for proposals that could assist with economic recovery in the May 22, 2020 Order in Docket No. E,G999/CI-20-425 and that deployment of this project in 2021 should not be a basis for any disallowance of cost recovery.

**State of Minnesota
Citizens Utility Board of Minnesota**

Utility Information Request

Docket Number: G-008/M-21-48 - Advanced Metering
Requested From: CenterPoint Energy Minnesota Gas

Date of Request: 2/26/2021
Response Due: 3/12/2021

Analyst Requesting Information: Brian Edstrom

Type of Inquiry: Other

If you feel your responses are trade secret or privileged, please indicate this on your response.

| Request No. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|------------|-------------|------------|------|--------|-----|------|-------|-----|------|-------|-------|------|--------|-------|------|-------|-------|------|-------|-------|------|-------------|------------|------|--------|-------|------|--------|-------|
| CUB 02 - S | <p>For each of the past five years (2015-2020), please identify:</p> <ul style="list-style-type: none">a. the number of damaged, obsolete, or failed meters that CenterPoint has replaced within its Minnesota service territory by customer class; andb. the number of new meters that CenterPoint has installed within its Minnesota service territory by customer class. <p>Response:</p> <ul style="list-style-type: none">a. The number of damaged, obsolete, or failed meters the Company replaced are included in Table 1. <p>Table 1</p> <table border="1"><thead><tr><th>Year</th><th>Residential</th><th>Commercial</th></tr></thead><tbody><tr><td>2020</td><td>10,995</td><td>836</td></tr><tr><td>2019</td><td>9,426</td><td>923</td></tr><tr><td>2018</td><td>8,964</td><td>1,037</td></tr><tr><td>2017</td><td>10,020</td><td>1,479</td></tr><tr><td>2016</td><td>7,489</td><td>1,584</td></tr><tr><td>2015</td><td>8,144</td><td>1,650</td></tr></tbody></table> <ul style="list-style-type: none">b. The number of new meters installed by the Company are included in Table 2. <p>Table 2</p> <table border="1"><thead><tr><th>Year</th><th>Residential</th><th>Commercial</th></tr></thead><tbody><tr><td>2020</td><td>14,484</td><td>2,073</td></tr><tr><td>2019</td><td>16,624</td><td>2,243</td></tr></tbody></table> | Year | Residential | Commercial | 2020 | 10,995 | 836 | 2019 | 9,426 | 923 | 2018 | 8,964 | 1,037 | 2017 | 10,020 | 1,479 | 2016 | 7,489 | 1,584 | 2015 | 8,144 | 1,650 | Year | Residential | Commercial | 2020 | 14,484 | 2,073 | 2019 | 16,624 | 2,243 |
| Year | Residential | Commercial | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2020 | 10,995 | 836 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2019 | 9,426 | 923 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2018 | 8,964 | 1,037 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2017 | 10,020 | 1,479 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2016 | 7,489 | 1,584 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2015 | 8,144 | 1,650 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Year | Residential | Commercial | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2020 | 14,484 | 2,073 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2019 | 16,624 | 2,243 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Response By: Seth DeMerritt
Title: Manager, Regulatory Affairs
Department: Mng Smr Reg Svc Rev Re
Telephone: 612-321-4423

| | | |
|------|--------|-------|
| 2018 | 17,940 | 2,159 |
| 2017 | 20,723 | 2,320 |
| 2016 | 25,487 | 2,272 |
| 2015 | 24,639 | 2,328 |

Supplemented 4/13/21:

The Company discovered an error in its original response to CUB Information Request No. 2. Below is the corrected information.

- a. The number of damaged, obsolete, or failed meters the Company replaced are included in Table 1 below.

Table 1

| Year | Residential | Commercial |
|------|-------------|------------|
| 2020 | 14,484 | 2,073 |
| 2019 | 16,624 | 2,243 |
| 2018 | 17,940 | 2,159 |
| 2017 | 20,723 | 2,320 |
| 2016 | 25,487 | 2,272 |
| 2015 | 24,639 | 2,328 |

- b. The number of new meters installed by the Company are included in Table 2 below.

Table 2

| Year | Residential | Commercial |
|------|-------------|------------|
| 2020 | 10,995 | 836 |
| 2019 | 9,426 | 923 |
| 2018 | 8,964 | 1,037 |
| 2017 | 10,020 | 1,479 |
| 2016 | 7,489 | 1,584 |
| 2015 | 8,144 | 1,650 |

CERTIFICATE OF SERVICE

Erica Larson served the above Reply Comments and Exhibits of CenterPoint Energy to all persons at the addresses indicated on the attached list by having the document delivered by electronic filing.

/s/

Erica Larson
Counsel
CenterPoint Energy

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| Bruce | Gerhardson | bgerhardson@otpc.com | Otter Tail Power Company | PO Box 496 215 S Cascade St Fergus Falls, MN 565380496 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
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| Robert | Harding | robert.harding@state.mn.us | Public Utilities Commission | Suite 350 121 7th Place East St. Paul, MN 55101 | Electronic Service | No | OFF_SL_21-48_M-21-48 |

| First Name | Last Name | Email | Company Name | Address | Delivery Method | View Trade Secret | Service List Name |
|------------|------------------|------------------------------|----------------------------------|--|--------------------|-------------------|----------------------|
| Annete | Henkel | mui@mnuilityinvestors.org | Minnesota Utility Investors | 413 Wacouta Street #230 St.Paul, MN 55101 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Shane | Henriksen | shane.henriksen@enbridge.com | Enbridge Energy Company, Inc. | 1409 Hammond Ave FL 2 Superior, WI 54880 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Corey | Hintz | chintz@dakotaelectric.com | Dakota Electric Association | 4300 220th Street Farmington, MN 550249583 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Michael | Hoppe | lu23@ibew23.org | Local Union 23, I.B.E.W. | 445 Etna Street Ste. 61 St. Paul, MN 55106 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| MJ | Horner | mj.horner@xcelenergy.com | | N/A | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Lori | Hoyum | lhoyum@mnpower.com | Minnesota Power | 30 West Superior Street Duluth, MN 55802 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Travis | Jacobson | travis.jacobson@mdu.com | Great Plains Natural Gas Company | 400 N 4th St Bismarck, ND 58501 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Alan | Jenkins | aj@jenkinsatlaw.com | Jenkins at Law | 2950 Yellowtail Ave. Marathon, FL 33050 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Richard | Johnson | Rick.Johnson@lawmoss.com | Moss & Barnett | 150 S. 5th Street Suite 1200 Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Sarah | Johnson Phillips | sarah.phillips@stoel.com | Stoel Rives LLP | 33 South Sixth Street Suite 4200 Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| | | | | | | | |

| First Name | Last Name | Email | Company Name | Address | Delivery Method | View Trade Secret | Service List Name |
|------------|-----------|------------------------------------|--|--|--------------------|-------------------|----------------------|
| Stacey | Karels | skarels@local563.org | Mankato Area Bldg & Construction Trades Council | 310 McKinzie St Mankato, MN 56001 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Mark J. | Kaufman | mkaufman@ibewlocal949.org | IBEW Local Union 949 | 12908 Nicollet Avenue South Burnsville, MN 55337 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Thomas | Koehler | TGK@IBEW160.org | Local Union #160, IBEW | 2909 Anthony Ln St Anthony Village, MN 55418-3238 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Michael | Krikava | mkrikava@taftlaw.com | Taft Stettinius & Hollister LLP | 2200 IDS Center 80 S 8th St Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Nicolle | Kupser | nkupser@greatermngas.com | Greater Minnesota Gas, Inc. & Greater MN Transmission, LLC | 1900 Cardinal Ln PO Box 798 Faribault, MN 55021 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| James D. | Larson | james.larson@avantenergy.com | Avant Energy Services | 220 S 6th St Ste 1300 Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Douglas | Larson | dlarson@dakotaelectric.com | Dakota Electric Association | 4300 220th St W Farmington, MN 55024 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Peder | Larson | plarson@larkinhoffman.com | Larkin Hoffman Daly & Lindgren, Ltd. | 8300 Norman Center Drive Suite 1000 Bloomington, MN 55437 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Erica | Larson | erica.larson@centerpointenergy.com | CenterPoint Energy | 505 Nicollet Avenue P.O. Box 59038 Minneapolis, Minnesota 55459-0038 | Electronic Service | Yes | OFF_SL_21-48_M-21-48 |
| Amber | Lee | Amber.Lee@centerpointenergy.com | CenterPoint Energy | 505 Nicollet Mall Minneapolis, MN 55402 | Electronic Service | Yes | OFF_SL_21-48_M-21-48 |

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|------------|---------------|--------------------------------|-------------------------------------|--|--------------------|-------------------|----------------------|
| Kevin | Lee | klee@bluegreenalliance.org | BlueGreen Alliance | 2701 University Ave SE Ste. 209 Minneapolis, MN 55414 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Annie | Levenson Falk | annief@cupminnesota.org | Citizens Utility Board of Minnesota | 332 Minnesota Street, Suite W1360 St. Paul, MN 55101 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Susan | Ludwig | sludwig@mnpower.com | Minnesota Power | 30 West Superior Street Duluth, MN 55802 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Kavita | Maini | kmairi@wi.rr.com | KM Energy Consulting, LLC | 961 N Lost Woods Rd Oconomowoc, WI 53066 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Pam | Marshall | pam@energycents.org | Energy CENTS Coalition | 823 7th St E St. Paul, MN 55106 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Brian | Meloy | brian.meloy@stinson.com | STINSON LLP | 50 S 6th St Ste 2600 Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Peder | Mewis | pmewis@cleangridalliance.org | Clean Grid Alliance | 570 Asbury St. St. Paul, MN 55104 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Joseph | Meyer | joseph.meyer@ag.state.mn.us | Office of the Attorney General-RUD | Bremer Tower, Suite 1400 445 Minnesota Street St Paul, MN 55101-2131 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Stacy | Miller | stacy.miller@minneapolismn.gov | City of Minneapolis | 350 S. 5th Street Room M 301 Minneapolis, MN 55415 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| David | Moeller | dmoeller@allete.com | Minnesota Power | 30 W Superior St Duluth, MN 558022093 | Electronic Service | No | OFF_SL_21-48_M-21-48 |

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|------------|-----------|----------------------------------|--|--|--------------------|-------------------|----------------------|
| Andrew | Moratzka | andrew.moratzka@stoel.com | Steel Rives LLP | 33 South Sixth St Ste 4200 Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| David | Niles | david.niles@avantenergy.com | Minnesota Municipal Power Agency | 220 South Sixth Street Suite 1300 Minneapolis, Minnesota 55402 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Samantha | Norris | samanthanorris@alliantenergy.com | Interstate Power and Light Company | 200 1st Street SE PO Box 351 Cedar Rapids, IA 524060351 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Nate | OReilly | nate@iron512.com | Ironworkers Local #512 | 851 Pierce Butler Route St Paul, MN 55104 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Matthew | Olsen | molsen@otpco.com | Otter Tail Power Company | 215 South Cascade Street Fergus Falls, MN 56537 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Carol A. | Overland | overland@legalectric.org | Legalelectric - Overland Law Office | 1110 West Avenue Red Wing, MN 55066 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| John | Pacheco | johnpachecojr@gmail.com | | N/A | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Greg | Palmer | gpalmer@greatermngas.com | Greater Minnesota Gas, Inc. & Greater MN Transmission, LLC | 1900 Cardinal Ln PO Box 798 Faribault, MN 55021 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Ben | Passer | Passer@fresh-energy.org | Fresh Energy | 408 St. Peter Street Ste 220 Saint Paul, MN 55102 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Jose | Perez | jose@hispanicsinenergy.com | | 1017 L Street #719 Sacramento, CA 95814 | Electronic Service | No | OFF_SL_21-48_M-21-48 |

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|----------------|--------------------------------|---------------------------------------|---|---|--------------------|-------------------|----------------------|
| Jennifer | Peterson | jjpeterson@mnpower.com | Minnesota Power | 30 West Superior Street Duluth, MN 55802 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Catherine | Phillips | Catherine.Phillips@wecenergygroup.com | Minnesota Energy Resources | 231 West Michigan St Milwaukee, WI 53203 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Kevin | Pranis | kpranis@liunagroc.com | Laborers' District Council of MN and ND | 81 E Little Canada Road St. Paul, Minnesota 55117 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Generic Notice | Residential Utilities Division | residential.utilities@ag.state.mn.us | Office of the Attorney General-RUD | 1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131 | Electronic Service | Yes | OFF_SL_21-48_M-21-48 |
| Kevin | Reuther | kreuther@mncenter.org | MN Center for Environmental Advocacy | 26 E Exchange St, Ste 206 St. Paul, MN 551011667 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Susan | Romans | sromans@allete.com | Minnesota Power | 30 West Superior Street Legal Dept Duluth, MN 55802 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Richard | Savelkoul | rsavelkoul@martinsquires.com | Martin & Squires, P.A. | 332 Minnesota Street Ste W2750 St. Paul, MN 55101 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Larry L. | Schedin | Larry@LLSResources.com | LLS Resources, LLC | 332 Minnesota St, Ste W1390 St. Paul, MN 55101 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Elizabeth | Schmiesing | eschmiesing@winthrop.com | Winthrop & Weinstine, P.A. | 225 South Sixth Street Suite 3500 Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-48_M-21-48 |

| First Name | Last Name | Email | Company Name | Address | Delivery Method | View Trade Secret | Service List Name |
|------------|-----------|--------------------------------------|--|---|--------------------|-------------------|----------------------|
| Will | Seuffert | Will.Seuffert@state.mn.us | Public Utilities Commission | 121 7th Pl E Ste 350 Saint Paul, MN 55101 | Electronic Service | Yes | OFF_SL_21-48_M-21-48 |
| David | Shaffer | dshaffer@mNSEIA.org | | N/A | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Colleen | Sipiorski | Colleen.Sipiorski@wecenergygroup.com | Minnesota Energy Resources Corporation | 700 North Adams St Green Bay, WI 54307 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Ken | Smith | ken.smith@districtenergy.com | District Energy St. Paul Inc. | 76 W Kellogg Blvd St. Paul, MN 55102 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Amanda | Smith | amanda.smith@state.mn.us | MN Pollution Control Agency | 520 Lafayette Rd N St. Paul, MN 55155 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Peggy | Sorum | peggy.sorum@centerpointenergy.com | CenterPoint Energy | 505 Nicollet Mall Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Jamez | Staples | jstaples@renewablepartners.com | Renewable Energy Partners | 3033 Excelsior Blvd S Minneapolis, MN 55416 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Byron E. | Starns | byron.starns@stinson.com | STINSON LLP | 50 S 6th St Ste 2600 Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Richard | Stasik | richard.stasik@wecenergygroup.com | Minnesota Energy Resources Corporation (HOLDING) | 231 West Michigan St - P321 Milwaukee, WI 53203 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Kristin | Stastny | kstastny@taftlaw.com | Taft Stettinius & Hollister LLP | 2200 IDS Center 80 South 8th St Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-48_M-21-48 |

| First Name | Last Name | Email | Company Name | Address | Delivery Method | View Trade Secret | Service List Name |
|------------|------------|-------------------------------------|--|--|--------------------|-------------------|----------------------|
| Cary | Stephenson | cStephenson@otpc.com | Otter Tail Power Company | 215 South Cascade Street Fergus Falls, MN 56537 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| James M | Strommen | jstrommen@kennedy-graven.com | Kennedy & Graven, Chartered | 150 S 5th St Ste 700 Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Eric | Swanson | eswanson@winthrop.com | Winthrop & Weinstine | 225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Stuart | Tommerdahl | stommerdahl@otpc.com | Otter Tail Power Company | 215 S Cascade St PO Box 496 Fergus Falls, MN 56537 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Thomas | Tynes | ijazynka@energyfreedomcoalition.com | Energy Freedom Coalition of America | 101 Constitution Ave NW Ste 525 East Washington, DC 20001 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Analeisha | Vang | avang@mnpower.com | Minnesota Power | 30 W Superior St Duluth, MN 558022093 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Lisa | Veith | lisa.veith@ci.stpaul.mn.us | City of St. Paul | 400 City Hall and Courthouse 15 West Kellogg Blvd. St. Paul, MN 55102 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Samantha | Williams | swilliams@nrdc.org | Natural Resources Defense Council | 20 N. Wacker Drive Ste 1600 Chicago, IL 60606 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Laurie | Williams | laurie.williams@sierraclub.org | Sierra Club | Environmental Law Program 1536 Wynkoop St Ste 200 Denver, CO 80202 | Electronic Service | No | OFF_SL_21-48_M-21-48 |

| First Name | Last Name | Email | Company Name | Address | Delivery Method | View Trade Secret | Service List Name |
|------------|-----------|-------------------------------|--|--|--------------------|-------------------|----------------------|
| Justin | Wilson | justin.wilson@chargepoint.com | ChargePoint | 240 East Hacienda Ave. Campbell, CA 95008 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Joseph | Windler | jwindler@winthrop.com | Winthrop & Weinstine | 225 South Sixth Street, Suite 3500 Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-48_M-21-48 |
| Patrick | Zomer | Pat.Zomer@lawmoss.com | Moss & Barnett a Professional Association | 150 S. 5th Street, #1200 Minneapolis, MN 55402 | Electronic Service | No | OFF_SL_21-48_M-21-48 |