Xcel Energy®

414 Nicollet Mall
Minneapolis, MN 55401

November 7, 2025

**—Via Electronic Filing—**

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

RE: COMMENTS
DISTRIBUTION COST SHARING FOR INTERCONNECTION
DOCKET NO. E002,E015,E017/CI-24-288

Dear Ms. Bergman:

Northern States Power Company, doing business as Xcel Energy, submits the enclosed Comments in response to the September 26, 2025 Notice of Comment Period in the above-referenced docket.

We have electronically filed this document with the Minnesota Public Utilities Commission, and copies have been served on the parties on the attached service list. Please contact Nathan Kostiuk at nathan.c.kostiuk@xcelenergy.com or contact me at brian.t.monson@xcelenergy.com if you have any questions regarding this filing.

Sincerely,

/s/

BRIAN MONSON
MANAGER, REGULATORY AFFAIRS

Enclosures
cc: Service List

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

| | |
|---|---|
| Katie J. Sieben | Chair |
| Hwikwon Ham | Commissioner |
| Audrey C. Partridge | Commissioner |
| Joseph K. Sullivan | Commissioner |
| John A. Tuma | Commissioner |

IN THE MATTER OF ESTABLISHING TARIFFS FOR DISTRIBUTION SYSTEM COST SHARING FOR INTERCONNECTION IN CONSTRAINED AREAS

DOCKET NO. E002,E015,E017/CI-24-288

**COMMENTS**

## INTRODUCTION

Northern States Power Company, doing business as Xcel Energy, submits these Comments in response to the September 26, 2025 Notice of Comment Period in the above-referenced docket. The Notice follows the conclusion of a Commission-led workgroup process: the Distributed Energy Resources (DER) Cost Sharing Workgroup met over a series of meetings to develop draft generic standards for the Distribution System Reactive Upgrade Process (DSRUP). The process results from Minnesota Session Laws – 2024, Regular Session, Chapter 126, Article 6, Section 53 (hereafter the "DSRUP statute").[1] The law requires the Commission to establish generic standards "for the sharing of utility costs necessary to upgrade a utility's distribution system by increasing hosting capacity or applying other necessary distribution system upgrades at a congested or constrained location in order to allow for the interconnection of distributed generation facilities." The Company appreciates the work of Commission Staff and Workgroup participants.

In 2024, the Minnesota Legislature recognized a market need that could increase distributed generation (DG) deployment in Minnesota in support of state policy goals, while protecting utility customers from cost-shifting. The DSRUP statute creates an avenue to support and grow the DG market for the benefit of all Minnesotans. In support of state law and policy, the Company suggests that effective DSRUP standards should:

[1] Available at https://www.revisor.mn.gov/laws/2024/0/126/laws.6.53.0#laws.6.53.0.

- *Protect non-participating customers*. The DSRUP Standards must strike a balance between enabling a market-driven program and protecting non-participating customers, who may – as allowed by the DSRUP statute – fund a portion of Upgrade projects. As we will explain, certain draft Standards provide ample customer protections, while others would place a high burden on non-participants. Managing administrative costs by leveraging existing tools and processes is also an important and straightforward way to mitigate adverse impacts on non-participants.
- *Align with statute and provide a clear path to cost recovery*. The DSRUP statute provides a robust starting point for the generic Standards. The Standards should provide the Company with a clear path to timely cost recovery of any costs not paid by Reactive Cost Share Participants. Minnesota law allows the Company "to recover on a timely basis the costs of upgrades that are not allocated to participating distributed generation facilities under the commission order issued in" this docket.[2] Consistent with the law, the Company should be able to recover costs without delay or deferral.
- *Balance flexibility and clarity*. The Standards should provide sufficient detail on processes and procedures to provide certainty for all parties. The Standards should also allow for flexibility to account for changes in the distribution system, differences among Minnesota's distribution utilities, and the innovative nature of the cost-sharing program.

We believe our preferred generic Standards, provided as Attachment 1 to these Comments, achieve these objectives.

In the remainder of these Comments, we respond to the questions raised in the Notice by:

- Highlighting key considerations for the Commission and the Company's priority areas of the Standards;
- Discussing one specific consideration regarding new substations, and our proposed revised definition of "Reactive Cost Share Distribution Upgrade";
- Providing comments on each section of the draft Standards and on the DSRUP Dispute Resolution Process (Attachments A and B to the Notice, respectively); and
- Explaining implementation considerations.

[2] Minn. Stat. 216B.16, subd. 7b(b)(6).

The following attachments are provided with this filing:

Attachment 1: Xcel Energy's Preferred DSRUP Standards
Attachment 2: Xcel Energy's Preferred DSRUP Dispute Resolution Process
Attachment 3: Xcel Energy's Position Matrix for DSRUP
Attachment 4: DSRUP Flow Chart

## COMMENTS

## I. What draft generic standards should the Commission adopt for the DSRUP?

### A. Priority Recommendations

Please refer to Attachment 3 to these comments, which contains a matrix that details the Company's perspective on specific requirements from Notice Attachment A and B, along with justifications for our positions. Attachment 1 provides the Company's preferred generic Standards. Attachment 4 provides a process flow chart to illustrate DSRUP.

We summarize here our highest priority recommendations:

*1. Protections for non-participating customers.*

As noted above, the DSRUP should protect non-participating customers. In our view, the Mobilization Threshold, Annual Ratepayer Cost Cap, and Upgrade Cost Thresholds are the most consequential requirements to consider in pursuit of customer protection:

- The Mobilization Threshold is the percentage of the estimated total Upgrade cost that must be committed by Reactive Cost Share Participants in order for construction of the Upgrade to move forward. The higher the Mobilization Threshold, the lower the percentage of Upgrade costs that may fall to non-participants.
- The Annual Ratepayer Cost Cap (ARCC) is the total rolling annual cost of Upgrades that are not paid for by Reactive Cost Share Participants and that may be recovered from non-participating customers. A low ARCC places a lower potential burden on non-participating customers, but also may limit the number of Upgrade projects that could be constructed. Conversely, a high

ARCC could adversely impact customers, but fund more Upgrades.

- The Upgrade Cost Threshold is the minimum level of Upgrade costs that a project must reach in order to be eligible to participate DSRUP. This minimum level is required by the DSRUP statute.[3]

The Mobilization Threshold and Annual Ratepayer Cost Cap are intertwined, and should be considered together to strike a balance between enabling market-driven Upgrades and protecting ratepayers. The relationship between the Mobilization Threshold and the ARCC can be viewed as an "Operational Budget" for DSRUP – the amount of money the Company could be managing for Upgrade projects, assuming the ARCC is reached.

To illustrate the relationship between the Mobilization Threshold and the Annual Ratepayer Cost Cap, Table 1 provides a comparison of the Operational Budget under different scenarios.

**Table 1**
**Relationship Between Mobilization Threshold and Annual Ratepayer Cost Cap**

| **Mobilization Threshold** | **80%*** | **25%**** | **80%*** | **25%**** |
|---|---|---|---|---|
| **Annual Ratepayer Cost Cap** | **$95 million†** | **$95 million†** | **$17.9 million‡** | **$17.9 million‡** |
| | | | | |
| **Operational Budget** = ARCC / (1-Mobilization Threshold) | **$475,000,000** | **$126,666,667** | **$91,500,000** | **$24,400,000** |

* 80% corresponds to Requirement F.1.b and is the Company's preferred Mobilization Threshold.
** 25% corresponds to Requirement F.1.a.
† $95 million corresponds to Requirement J.2.b.
‡ $17.9 million corresponds to Requirement J.2.a, which would set the ARCC at no more than 2% of the annual average of the utility's forecasted five-year distribution capital budget from its most recent Integrated Distribution Plan (IDP). The annual average of the Company's forecasted five-year distribution capital budget from our most recent IDP, filed October 31, 2025 in Docket No. E002/M-25-142, is $896.7 million.

As shown in Table 1, an Annual Ratepayer Cost Cap of $95 million could fund nearly half a billion dollars of Upgrade projects initially. While there may be demand over time for this level of Upgrades, managing potentially hundreds of millions of dollars in funds for the DSRUP program is impracticable. Administering a program of that size would require significant investment in tools and staff such that the administrative fee[4] paid by Interconnection Customers could well be higher than their pro rata cost-share amount. Further, a program of this level could pull the Company's limited design and construction resources away from other planned, strategic

[3] Minnesota Session Laws – 2024, Regular Session, Chapter 126, Article 6, Section 53(a)(3).
[4] See Requirements E.8.b and H.2.

investments and initiatives as outlined in the Company's Integrated Distribution Plan (IDP),[5] and have an over-sized impact on customer rates.

In consideration of this interplay between the Mobilization Threshold and Annual Ratepayer Cost Cap – and the Upgrade Cost Threshold – the Company strongly recommends:

- A Mobilization Threshold of 80 percent for all DSRUP-qualifying Upgrades.[6] This higher Mobilization Threshold ensures that most Upgrade projects are nearly fully utilized and funded by DSRUP participants before ratepayer funds would be needed to cover the remaining 20 percent of costs. With an 80 percent threshold, non-participating customers would have a lower exposure to the risk of paying for stranded or underutilized assets.
- That the Annual Ratepayer Cost Cap be set as part of the Company's tariff filing after approval of the DSRUP generic Standards,[7] rather than setting an ARCC or formula in the Standards themselves, to allow for flexibility over time and among the different utilities.[8]
    - If the Commission wishes to set the ARCC before the Company's tariff filing, the Company supports a maximum level of 2 percent of the annual average of the Company's five-year forecasted distribution capital budget from its most recent IDP.[9]
    - A $95 million ARCC[10] most importantly places too high a risk on our non-participating customers. A high ARCC may also lead to an unmanageable number of Upgrade projects and costs.
    - The Company recommends an Upgrade Cost Threshold of $2.5 million.[11] Not all Upgrade projects require cost sharing; indeed, the market has demonstrated its ability and willingness to pay for upgrades without cost sharing. The DSRUP should be used to clear the largest roadblocks to interconnection by enabling system upgrades that would generally be cost-prohibitive for a single project. A lower threshold may cause the ARCC to be reached more quickly, being filled with more small projects and thus precluding larger, more beneficial projects from participating within the ARCC.

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[5] Docket No. E002/M-25-142.
[6] Requirement F.1.b.
[7] Requirement J.1.
[8] Requirement J.1.
[9] Requirement J.2.a.
[10] Requirement J.2.b.
[11] Requirement C.1.c.

- An Upgrade Cost Threshold of at least $2.5 million, as discussed in Section C below.[12]

In addition, the Company's ability to recover its costs of administering the program should be covered through an additional administrative fee paid by Reactive Cost Share Participants, as in Requirements E.8.a and H.2.

*2. Cost recovery.*

The Standards should provide the Company with a clear path to timely cost recovery of any costs not paid by Reactive Cost Share Participants, as allowed by Minnesota law.[13] The Company's priority recommendations in this area are as follows:

- *A rebuttable presumption of prudence.* Under the draft Standards, the Commission will not approve individual Upgrade projects; rather, the Standards themselves – including the prioritization criteria – will dictate the Upgrade projects. This approach is appropriate because the Standards and tariffs should clearly establish selection criteria that ensure customers contribute toward the most beneficial, cost-effective Upgrades. Use of the selection criteria and prioritization process, when approved by the Commission, should establish a clear path to cost recovery. Requiring preapproval from the Commission of each reactive Upgrade project would create unnecessary procedural burden and project delays. The clear path to cost recovery through the selection criteria is memorialized as Requirement G.5 in the draft Standards: "Approval through the prioritization process chosen in Section G shall create a rebuttable presumption of prudence in any cost recovery proceeding." We strongly support the prioritization criteria in Requirement G.1 and the rebuttable presumption of prudence standard in Requirement G.5.
- *Timely recovery.* Consistent with the law, the Company should be able to recover any remaining costs timely, without deferral or delay. The draft Standards offer options that are counter to the law, and the Commission should reject them out of hand. In particular, we strongly oppose Requirement K.1, which would prohibit the Company from recovering costs until five years after the Upgrade is in service.
- *Fulsome recovery.* We oppose Requirements D.3 and D.4, which would bar the Company from recovering Upgrade costs above 125 percent of the Company's indicative cost estimate provided to the Reactive Cost Share Participant before

[12] Requirement C.1.c.
[13] Minn. Stat. 216B.16, subd. 7b(b)(6) as modified by Minnesota Session Laws - 2025, 1st Special Session, Chapter 7, S.F. No. 2.

the detailed design process. Actual costs can be higher than the indicative estimate for many reasons, and some cost increases are outside the Company's control, and the Company should be able to recover all costs. Furthermore, these draft Requirements are not aligned with the statute, which requires a DG facility's share of cost be based on its pro rata share of the utility's *total* cost of upgrades; the statute does not cap cost recovery, and the Standards should not cap cost recovery.

*3. Process efficiency and consistency.*

The DSRUP standards should align with existing policies and processes as much as possible. Leveraging existing frameworks and processes where possible will help streamline implementation for the Company and our Interconnection Customers. While implementation of DSRUP will still require new tools, processes, and procedures, we believe it is most efficient to maintain consistency. For example, dispute resolution processes under the Minnesota DER Interconnection Process (MN DIP) and DSRUP should be compatible with each other because DSRUP projects are also subject to MN DIP. The draft DSRUP Dispute Resolution Process, is in essence an overlay on top of the MN DIP process, maintaining a consistent, effective process. Likewise, cost recovery and cost allocation frameworks and policies have robust practice and precedent; deviations from existing frameworks are not necessary. Utilizing approved cost allocations in cost recovery proceedings, as in Requirement L.1, is reasonable and efficient to administer.

## B. Excluding Construction of New Substations from DSRUP

As DER levels continue to increase on the system, new substations will be needed. While new substations typically serve multiple purposes – improving reliability and resilience, serving new or increasing load, and enabling DER – it is possible that DG interconnection alone could necessitate construction of a new substation, outside the Company's planning process.

New substations driven exclusively by new DG should be excluded from reactive cost-sharing because costs for new substations would have an outsize adverse impact on non-participating customers. In particular, ongoing operations & maintenance (O&M) expenses associated with substations would need to be paid by someone – potentially non-participating customers. Typically, substation O&M costs are recovered from all customers through general rate cases. However, in this context, it would be more appropriate for DG projects to pay these costs upfront. This would ensure recovery of all future O&M expenses attributable to the DG project, even decades after it ceases operation, because the substation was constructed solely to support the DG and would not have been needed otherwise, yet its ongoing costs will continue to accrue. We further note that the DSRUP statute does not explicitly address the recovery of long-term O&M costs through the program. Ratepayers should not pay for decades of O&M for a substation that exists solely to serve DG interconnections and from which they are not necessarily benefiting. Furthermore, a new substation would include transmission-related cost components that we believe would not qualify for cost-sharing under the DSRUP statute, which applies to "… the sharing of utility costs necessary to upgrade a utility's distribution system by increasing hosting capacity or applying other necessary distribution system upgrades." (Subd. 1). Additionally, a new substation likely would take several years to plan and build, and those behind in queue would be placed on hold during this time period. This would likely not result in any near-term benefit to DG projects. Finally, construction of a new substation would take up a considerable amount of the Company's limited design and construction resources that would otherwise be used on projects and initiatives identified through the Company's robust planning process.

For these reasons, new substations should be excluded from DSRUP. The Company recommends a modification to the definition of "Reactive Cost Share Distribution Upgrade (Upgrade)" reflected in Requirement B.16:

> Reactive Cost Share Distribution Upgrade (Upgrade): A distribution Upgrade made under the DSRUP. This type of Upgrade must be a modification of a Utility's distribution system at a specific location that is necessary to allow the interconnection of Distributed Generation Projects by increasing Hosting Capacity at the applicable location, including but not limited to installing or modifying equipment at a substation or along a distribution line. Upgrade does not mean an expansion of hosting capacity dedicated solely to the interconnection of a single Distributed Generation Project. Upgrade does not mean construction of a new substation for the sole purpose of allowing the interconnection of Distributed Generation Projects.

We clarify that upgrades within existing distribution substations – such as transformer upgrades – could still qualify as an Upgrade under this modified definition.

## C. Draft Standards

Each section of the draft Standards includes important process details as well as broader policy topics. We briefly address each section of the draft Standards below to highlight the most crucial and consequential elements for the Commission to consider.

*1. Section A: Background*

Section A provides helpful background information on the origin of the DSRUP and statutory requirements. We suggest that this background information need not be included in the final Standards.

*2. Section B: Definitions*

Section B provides important definitions the Commission can choose to adopt for purposes of the Standards. Where applicable, the definitions align with MN DIP and the DSRUP statute.

As discussed above, we offer an addition to the definition of "Reactive Cost Share Distribution Upgrade (Upgrade)" to reflect our recommendation that construction of new substations necessitated solely by DG projects be excluded from this process.

*3. Section C: Upgrade Cost Thresholds*

The DSRUP statute requires that the standards "establish a minimum level of upgrade costs an expansion of hosting capacity must reach in order to be eligible to participate in the cost-share process and below which a trigger project must bear the full cost of the upgrade."[14]

As discussed above, the DSRUP should be used to clear the largest roadblocks to interconnection by enabling system upgrades that would generally not be feasible under the standard interconnection process due to high costs. Therefore, the Company recommends an Upgrade Cost Threshold of $2.5 million.[15] A lower threshold would lead to more DSRUP-qualifying Upgrades (with a lower average cost per Upgrade because of the lower threshold), which would likely result in the Company reaching its Annual Ratepayer Cost Cap more quickly (because more Upgrade projects would qualify for DSRUP). This would result in DSRUP funding lower-cost Upgrade projects that would likely be possible even without cost-sharing, and due to the cap being reached more quickly, further higher-cost Upgrades would not have funding available from the DSRUP program. As a point of reference, for 530 Community Solar Gardens (CSGs) and similarly sized DG projects interconnecting between 2014 and 2024, interconnection upgrade costs ranged from less than $3,000 to nearly $1.5 million, demonstrating that Interconnection Customers have been willing and able to fully fund a wide range of Upgrades. The Low and

[14] Minnesota Session Laws – 2024, Regular Session, Chapter 126, Article 6, Section 53(a)(3).
[15] Requirement C.1.c.

Moderate-Income Accessible (LMI-Accessible) CSG program is available for projects up to 5 MW, which would indicate an ability to absorb higher interconnection costs than those associated with a 1 MW DG project. Once the Annual Ratepayer Cost Cap is reached, other potentially more beneficial Upgrade projects would need to reach a 100 percent Mobilization Threshold in order to participate in DSRUP,[16] or wait for space in the cap to become available again. A higher Upgrade Cost Threshold of $2.5 million would serve as an important customer protection, ensuring that non-participating customers contribute only to larger Upgrades – such as transformer upgrades and new feeders – that create additional capacity on the system for future projects.

### 4. *Section D: Pro Rata Cost Calculations*

The DSRUP statute requires that the Standards "establish a distributed generation facility's pro rata cost-share amount as the utility's total cost of the upgrade divided by the incremental capacity resulting from the upgrade, and multiplying the result by the capacity of the distributed generation facility seeking interconnection." The law is clear, and Requirements D.1 and D.2 of the draft Standards provide important process clarity for DSRUP.

Requirements D.3 and D.4 would bar the Company from recovering Upgrade costs above 125 percent of the Company's indicative cost estimate provided to the Reactive Cost Share Participant before the detailed design process. These draft Requirements are not aligned with the statute. The statute requires the DG facility's share of cost be based on its pro rata share of the utility's total cost of the upgrade. The statute does not put a cap on this, such as limiting the contribution to 125 percent of the indicative cost estimate. The Standards need to align with the statute. The draft requirements D.3 and D.4 are inconsistent with the statute.

The Company provides all Interconnection Customers with a good-faith, best estimate. This "indicative estimate" is provided before the detailed design process, during which the Company talks to local Authorities Having Jurisdiction (AHJs) and completes other design details that affect cost, and may cause subsequent detailed design cost estimates or actual costs to deviate from good-faith estimates. Further, many factors outside the Company's control can cause deviations from the indicative estimate (e.g., local mandates, supply chain constraints, etc.). The Company must be able to plan and complete Upgrade projects to its safety, quality, and reliability standards. If adopted, these requirements would disincentivize the Company from providing indicative estimates as accurately as possible. If the final Reactive Cost

[16] Requirement J.5 and Xcel J.5.

Share Contributions are capped, we would not be able to recover those costs from the Reactive Cost Share Participant, causing the Company's overall cost of service to increase, even if that extra cost could not be recovered directly from non-participating customers, in violation of cost-causation principles.

### *5. Section E: Interconnection Process*

The draft Standards in Section E provide important process details regarding applications, studies, queue mechanics, and Interconnection Agreements.

Of note, Section E includes requirements regarding the DSRUP Agreement and administrative fee. The DSRUP Agreement[17] is the agreement between an Interconnection Customer and the Company that states the Interconnection Customer's intent to participate in an Upgrade and to provide a Reactive Cost Share Contribution. Under Requirement E.8.a, the Interconnection Customer would pay the administrative fee at this time. The administrative fee is an important component of the program, enabling the Company to cover its costs of implementing and running DSRUP, without increasing the cost of service for non-participating customers.

### *6. Section F: Mobilization Threshold and Window*

The Mobilization Threshold is the percentage of the estimated total Upgrade cost that must be committed by Reactive Cost Share Participants in order for construction of the Upgrade to move forward. The Mobilization Window is the time period during which additional projects (after the Trigger Project) can commit to pay for Upgrade costs and those commitments will count towards the Upgrade's Mobilization Threshold.

The Mobilization Threshold is an important customer protection that should strike a balance between enabling Upgrade projects to move forward and mitigating the risk of stranded assets. Section F of the draft Standards presents options for the Mobilization Threshold. The Company recommends a mobilization threshold of 80 percent for all DSRUP-qualifying Upgrades.[18] An 80 percent Mobilization Threshold ensures that most Upgrade projects are nearly fully utilized and funded by DSRUP participants before customer funds would be needed. With an 80 percent threshold, more Upgrades could be funded under the same Annual Ratepayer Cost Cap, and the risk to non-participating customers of stranded or underutilized assets would be

[17] The DSRUP Agreement is formally defined in Section B of the draft Standards.
[18] Requirement F.1.b.

reduced. The Mobilization Threshold should also be the same for all Upgrades regardless of cost or size, which would streamline the implementation process.

Requirement F.2 importantly acknowledges the potential need for additional cluster studies, which may be necessary to ensure accuracy and necessity of the Upgrade and to provide Cost Share Participants with the most up-to-date information.

Section F also provides important process details, and we offer two additional requirements as Xcel F.7 and Xcel F.8 for clarity regarding the Mobilization Window and associated process:

> Xcel F.7 (New): The Mobilization Window shall close if the Mobilization Threshold is not reached within two years.

> Xcel F.8 (New): The Mobilization Window shall close if all Reactive Cost Share Participants withdraw.

The Mobilization Threshold and the Annual Ratepayer Cost Cap are functionally intertwined and should be considered together, as we discuss above.

### 7. *Section G: Upgrade Prioritization*

First, we offer some background to the Commission on the Workgroup process and our view of the evolution of the purpose of Upgrade Prioritization.

In initial Workgroup meetings and draft framework documents, it was envisioned that Upgrades would be completed on a first-come, first-offered basis, and prioritization process and criteria would be needed only for the very first DSRUP Upgrades, until the existing capacity constrained locations are addressed through DSRUP. After that, the prioritization process would be used only if necessitated by the utility's resource limitations. This introductory description remains in the draft generic Standards (Attachment A) provided with the Notice. Some of the draft Requirements, however, reflect an evolving discussion in the Workgroup and contemplate that the prioritization criteria would be used on an ongoing basis and required for all Upgrades.[19]

[19] In a scenario where only one Upgrade is ready to go through the regularly scheduled prioritization process, the prioritization process would become effectively moot, and the Upgrade would move forward in the process. A six-month prioritization cadence (Requirement G.3.b) may help limit this scenario and ensure that more Upgrades are prioritized against one another.

We believe it is imperative that Upgrades go through the prioritization process using the criteria outlined in G.1. The prioritization process:

- *Serves as an important protection for non-participating customers.* The most cost-effective and beneficial Upgrades would be prioritized, ensuing that non-participating customers contribute to the cost of these Upgrades before less effective, lower-benefit Upgrades. Importantly, prioritizing such Upgrades reduces the risk of stranded or underutilized Upgrades that may not see follow-on DG projects interconnecting and thus contributing to the remaining cost of the Upgrade.
- *Provides clear, standardized, objective criteria.* The use of standardized criteria ensures that prioritization is completed in an objective and consistent way.
- *Balances market needs and customer protections.* The prioritization process will still have an element of "first come, first offered" because the prioritization process would take place on a regular cadence.
- *Provides a reasonable path to cost recovery.* Use of clear, standardized, objective, and Commission-approved prioritization criteria for Upgrades should create a rebuttable presumption of prudence in any cost recovery proceeding. Under Requirement G.5, approval through the prioritization process in Requirement G.1 would create this rebuttable presumption of prudence.

We support the Requirements that allow for ongoing use of the prioritization process for all Upgrades.

As shown in the process flow chart in Attachment 4, after the Mobilization Threshold is reached, the Upgrade would enter the prioritization process outlined in Requirement G.1:

> When there are multiple eligible Upgrades that have reached the Mobilization Threshold, their construction shall be prioritized based on the below-listed criteria. In the case different upgrades are tied or equal in a given criterion, the upgrade will be prioritized by the next following criterion. The criteria used to evaluate the upgrades shall adhere to the following order:
>
> a. The Upgrade with the highest percentage of developer-funded Upgrade cost
> b. Lowest cost per megawatt of capacity added by the Upgrade
> c. Most capacity constraints
> d. Clear optimization benefits for the grid

We support these criteria as written. This process would take place at a regular interval. The Company recommends that the process to review Upgrades against the prioritization criteria be completed every six months[20] to allow time for studies to be completed. This would also allow time for more Upgrades to reach the Mobilization Threshold and enter the prioritization process at the same time, making the process more meaningful to ensure the most beneficial Upgrades are prioritized.

As noted above, a Commission-approved prioritization process should create a rebuttable presumption of prudence in any cost recovery proceeding, as in Requirement G.5. Because the Commission will not review or approve individual projects and the Company will not choose projects for this market-driven program, Requirement G.5 is imperative for the Company.

We oppose Requirement G.6, which states that complaints regarding the prioritization process shall be addressed through the Formal Complaint process rather than the DSRUP dispute resolution process. If adopted, this requirement would function as a *prohibition* on any other avenue for resolving disputes regarding prioritization, and would be unnecessarily burdensome for the Commission and other parties.

#### *8. Section H: Payment Details*

The Requirements in Section H provide important process clarity. We support the Requirements that align with MN DIP, where applicable, from a policy and efficiency standpoint.

Section H also includes a requirement related to the Company's proposed capacity reservation for projects under 40 kWac: Under Requirement H.11, Interconnection Applications under 40 kWac would be exempt from paying a Reactive Cost Share Contribution if hosting capacity is available under the capacity reservation. While the framework and details regarding a potential capacity reservation are being addressed through Phase 2 of the Proactive Distribution Grid Upgrades (PDGU) workgroup,[21] the concept of a capacity reservation has broader implications for proactive and reactive cost sharing and queue processing. We briefly explain the capacity reservation concept here in the context of DSRUP.

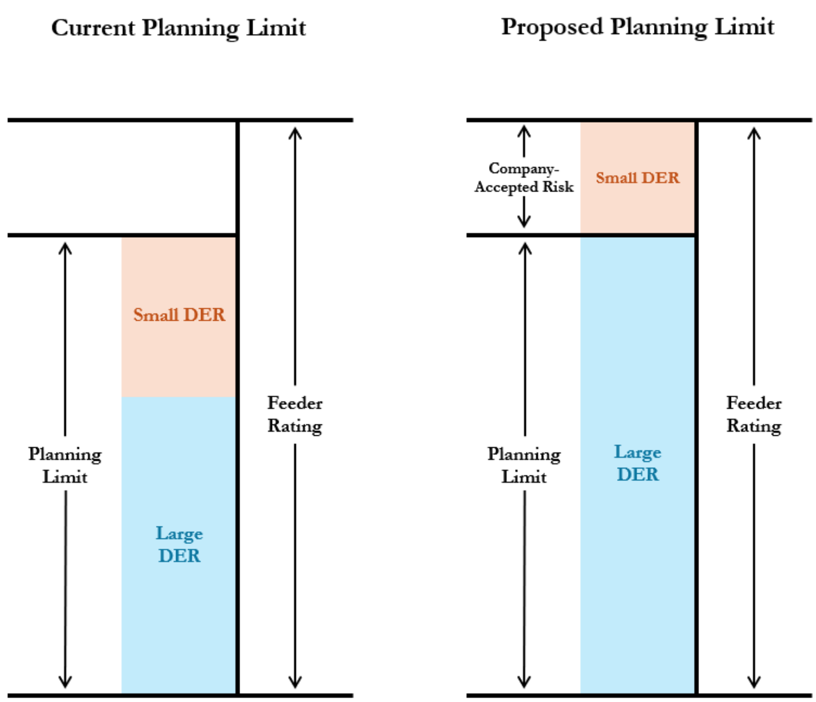
Our proposed capacity reservation would adjust the way we plan for DER, which is currently known as the Technical Planning Standard.[22] This modification allows

[20] Requirement G.3.b.
[21] Docket No. E002/CI-24-318. See ORDER ESTABLISHING FRAMEWORK FOR PROACTIVE DISTRIBUTION GRID UPGRADES (September 2, 2025), Order Point Nos. 4 and 5.
[22] The Technical Planning Standard is defined as 80 percent of the continuous rating plus daytime minimum load.

Priority Queue DG to exceed the planning limit, but not the feeder thermal rating, as an accepted risk for the distribution system.

Exceeding the planning limit, even temporarily, presents risk to the broader distribution system and must be managed carefully. However, this risk is acceptable for Priority Queue DG because these DG resources are smaller and associated with localized load, which helps mitigate some of the impacts on the distribution system. Additionally, exceeding the planning limit for DER would be a temporary condition, as the DSRUP program and PDGU framework create viable paths to upgrade the system back within the planning limit. Figure 1 below shows a visual comparison of our current and proposed planning limit.

**Figure 1**
**Planning Limit Comparison**




A capacity reservation would benefit small and large projects in the interconnection queue, and projects seeking to participate in DSRUP. A system-wide capacity reservation for small DG would facilitate more efficient queue processing, allowing the Priority Queue (as detailed on tariff sheet 10-81.5) and the large DER queue to be processed concurrently, so that one does not materially hold up the other, and so that small DER customers in the Priority Queue are not forced to withdraw due to the cost of system impact studies when the system is capacity constrained by the planning limit provided that the total capacity of DER does not exceed asset ratings. This will also allow large DERs to enter system impact studies for the utility to determine necessary capacity upgrades that would then qualify under DSRUP. This will benefit both small and large DERs, and all customers, because small DER that qualify for the Priority Queue will be able to interconnect seamlessly more frequently, while large DER will be able to participate in cost sharing and more quickly meet the Mobilization Threshold for the Upgrade.

The Commission can adopt Requirement H.11 now without prejudging the outcome of Phase 2 of the proactive grid upgrades workgroup; should a capacity reservation not become reality, Requirement H.11 would simply become moot.

Requirement H.12 would allow participants to use other cost sharing programs to fund their Reactive Cost Share Contribution. While this requirement as written is not specific to projects under 40 kWac, its origin is consideration of the small DER cost sharing program.[23] In addition, the Company suggests that DSRUP could be another option for using the $10 million DER System Upgrades program funded through the Renewable Development Account.[24] The $10 million could be used for small DG projects to fund their Reactive Cost Share Contributions for DSRUP Upgrades. In the future, the capacity reservation would help limit when small DG projects would need to bear a share of the Upgrade cost, but in cases where a small project would need to contribute to an Upgrade, this requirement leaves open options to ease the burden on small projects.

We strongly support Requirements H.11 and H.12.

*9. Section I: Payback Period*

The Payback Period is the period of time after the Mobilization Threshold is reached, allotted for the full value of the Upgrade to be paid by Reactive Cost Share Participants.

The Payback Period should aim for a maximum duration that allows new projects to participate and contribute to Upgrade costs, but reflects the realities of the dynamic nature of the distribution system; a 10-year maximum duration is appropriately balanced.[25] An extended duration of more than ten years could create a scenario in

[23] See ORDER APPROVING IMPLEMENTATION OF COST SHARING PLAN AS MODIFIED, Docket No. E002/M-18-714 (December 19, 2022).
[24] See Minnesota House File 2310, 93rd Legislature (2023), version 4, article 11, § 2, subd. 10. Available at https://www.revisor.mn.gov/bills/93/2023/0/HF/2310/versions/4/.
[25] Requirement I.1.d.

which the distribution system has changed so much that the original Upgrade is no longer necessary or beneficial for future projects.

Setting a *minimum* Payback Period duration is unnecessary and confusing because the costs of the Upgrade could be fully paid by Reactive Cost Share Participants before the end of a Payback Period.

### *10. Section J: Annual Ratepayer Cost Cap*

The ARCC is the maximum amount that may be recovered from non-participating customers each year at any given point in time. The Annual Ratepayer Cost Cap is always in place – each year at no point in time can ratepayer-eligible costs exceed the ARCC.

As discussed above, a low ARCC places a lower potential burden on non-participating customers, but also may limit the number of Upgrade projects that could be constructed. Conversely, a high ARCC could adversely impact customers, but fund more Upgrades.

A balanced ARCC is important, and the most appropriate ARCC will be different for each utility and reflective of its system size, customer base, DG market, design and construction resources, etc. Therefore, the generic Standards should not include an ARCC; rather, the Commission should determine each utility's ARCC in a subsequent DSRUP tariff filing.[26]

That said, if the Commission wishes to set the maximum ARCC as part of the generic Standards, Requirement J.2 offers two options: two percent of the annual average of the utility's forecasted five-year distribution capital budget from its most recent IDP, or $95 million for Xcel Energy.

As discussed above, $95 million places a high burden on non-participating customers and would be impracticable to implement. The Company has limited design and construction resources, so resources that are needed for DSRUP Upgrade projects will be unavailable to work on important projects and initiatives identified as part of the Company's robust planning process, as detailed in our IDP.[27]

We believe 2 percent is a reasonable ARCC. Using a percentage of our five-year budget, rather than a flat number, is an important way to be able to adjust the ARCC

[26] Requirement J.1.
[27] Docket No. E002/M-25-142.

over time and ensure it scales appropriately with our available design and construction resources. We would intend to put forward approximately 2 percent in our subsequent tariff filing; however, this level may not be appropriate for all utilities or into the future, so we recommend the Commission adopt J.1 only and not adopt either part of Requirement J.2.

Even if the ARCC is reached, projects should still be able to participate in cost sharing, but without ratepayer contributions. Within DSRUP, this requires the Mobilization Threshold to change to 100 percent after the ARCC is reached.[28]

As discussed above in our Priority Recommendations, the Mobilization Threshold and the Annual Ratepayer Cost Cap are functionally intertwined and should be considered together.

#### 11. *Section K: Cost Recovery*

As discussed above, the Standards should provide the Company with a clear path to timely cost recovery of any costs not paid by Reactive Cost Share Participants, as allowed by Minnesota law.[29] Some of the options in Section K run counter to the law, and we strongly oppose any requirement that would not allow the Company to recover costs timely.[30] The Requirements we support are simple, clear, consistent with the law, and aligned with standard practice.[31]

#### 12. *Section L: Cost Allocation*

DRSUP costs should be recovered from customers consistent with approved rate case allocators.[32] Deviating from this standard practice would create policy uncertainty and be unnecessarily burdensome to implement.[33]

We note that as always, the Company supports protecting non-participating customers from adverse bill impacts; however, a specific requirement in DSRUP is not necessary and potentially confusing.[34] The Mobilization Threshold and Annual

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[28] Requirement J.5; we offer Xcel J.5 as a modification, for clarity.
[29] Minn. Stat. 216B.16, subd. 7b(b)(6) as modified by Minnesota Session Laws - 2025, 1st Special Session, Chapter 7, S.F. No. 2.
[30] We oppose Requirement K.1, which would not allow the Company to recover costs for five years after the Upgrade's in-service date.
[31] We support Requirements K.5.a, K.5.b, and K.6.a.
[32] Requirement L.1.
[33] We oppose Requirement L.2.
[34] We oppose Requirement L.3.

Ratepayer Cost Cap are relevant and effective ways to mitigate impacts on non-participating customers, including under-resourced customers and small businesses.

We further note that we anticipate many projects that will be eligible for and opt to participate in DSRUP will be LMI-Accessible CSG projects. These projects provide higher bill credits to LMI customers. If DSRUP enables more LMI-Accessible CSG projects to come online, LMI customers will benefit.

### *13. Section M: Publication of DSRUP Information and Data*

Providing fulsome, up-to-date information on DSRUP will be important for the program's efficiency. Publication requirements should be as straightforward as possible, allowing for flexibility in how the Company provides and publishes information.

We do not support a requirement to include DSRUP information in our Hosting Capacity map.[35] As stated in our 2025 Hosting Capacity Program Report, we are planning to organize an additional developer refresher workshop in 2026 that will solely focus on how to effectively use the HCA and other interconnection tools such as the Hosting Capacity map.[36] Not adopting this requirement would not preclude us from adding the information to the Hosting Capacity map in the future.

### *14. Section N: Reporting and Process Evaluation*

The Commission and stakeholders should stay informed as the DSRUP progresses. We believe any reporting to the Commission should be necessary and additive and seek to avoid unnecessary duplication. New annual compliance filings[37] as well as the annual Transmission Cost Recovery Rider filing will provide ample opportunity for the Company to provide information and for the Commission and parties to track progress and updates; further additions to IDP are unnecessary and duplicative.[38]

Section N also provides a dedicated opportunity for process evaluation. Filing an evaluation after four years is appropriate.[39]

[35] Requirement M.2.
[36] Docket No. E002/M-25-404 (October 31, 2025).
[37] Requirement N.1 and N.2.
[38] Requirement N.3.
[39] Requirement N.4.

### *15. Section O: Dispute Resolution*

As noted above, leveraging existing processes wherever possible is efficient for all parties. The DSRUP Dispute Resolution Process is appropriately layered on top of the MN DIP process and adds important clarifications on DSRUP-specific processes. The Company supports the Dispute Resolution process as written in Attachment B of the Notice with one important exception: Disputes related to DSRUP should not be counted in the Company's complaint thresholds towards triggering service quality payments.[40] DSRUP is a new process, required by law, that was not considered when the Company's complaint thresholds or penalties were set. Any changes to the Company's Quality of Service Plan tariff should be reviewed holistically in that docket.

Attachment 2 provides the Company's preferred Dispute Resolution process.

### *16. Section P: Tariff Implementation*

Section P provides clarity that utility-specific tariffs should memorialize the Standards and DSRUP Agreement. We support both Requirements in section P as important clarifications.

## II. Do the draft standards address and accomplish the goals and requirements described in the Minnesota Session Laws - 2024, Regular Session, Chapter 126—S.F.No. 4292, Article 6, Section 53?

Yes, the draft Standards are robust and provide the level of detail necessary to ultimately implement the DSRUP through utility tariffs in order to meet the goals and requirements in statute. We list the statutory goals and requirements in relation to the Standards requirements in Table 2 below.

[40] Requirement 5.3.3 part 2. We offer a modification, as Xcel 5.3.3 part 2, in Attachments 2 and 3.

**Table 2**
**Statutory Topics in Relation to DSRUP Standards**

| Topic | Section(s) in DSRUP Standards |
|---|---|
| 1. Accelerate the expansion of hosting capacity at multiple points on a utility's distribution system by ensuring that the cost of upgrades is shared fairly among owners of distributed generation projects seeking interconnection on a pro rata basis according to the amount of the expanded capacity utilized by each interconnected distributed generation facility; | D. Pro Rata Cost Calculation |
| 2. Reduce the capital burden on owners of trigger projects seeking interconnection; | D. Pro Rata Cost Calculation<br>H. Payment Details<br>I. Payback Period |
| 3. Establish a minimum level of upgrade costs an expansion of hosting capacity must reach in order to be eligible to participate in the cost-share process and below which a trigger project must bear the full cost of the upgrade; | C. Upgrade Cost Thresholds |
| 4. Establish a distributed generation facility's pro rata cost-share amount as the utility's total cost of the upgrade divided by the incremental capacity resulting from the upgrade, and multiplying the result by the capacity of the distributed generation facility seeking interconnection; | D. Pro Rata Cost Calculation |
| 5. Establish a minimum proportion of the total upgrade cost that a utility must receive from one or more distributed generation facilities before initiating constructing an upgrade; | F. Mobilization Threshold and Window |
| 6. Allow trigger projects and any other distributed generation facilities to pay a utility more than the trigger project's or distributed generation facility's pro rata cost-share amount only if needed to meet the minimum threshold established in clause (5) and to receive refunds for amounts paid beyond the trigger project's or distributed generation facility's pro rata share of expansion costs from distributed generation projects that subsequently interconnect at the applicable location, after which pro rata payments are paid to the utility for distribution to ratepayers; | H. Payment Details<br>I. Payback Period<br>K. Cost Recovery |
| 7. Prohibit owners of distributed generation facilities from using any unsubscribed capacity at an interconnection that has undergone an upgrade without the distributed generation owners paying the distributed generation owner's pro rata cost of the upgrade; and | E. Interconnection Process |
| 8. Establish an annual limit or a formula for determining an annual limit for the total cost of upgrades that are not allocated to owners of participating generation facilities and may be recovered from ratepayers under section 216B.16, subdivision 7b, clause (6). | J. Annual Ratepayer Cost Cap |

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

### A. Implementation Costs and Timing

Implementing and operationalizing the complex new process of DSRUP will take time and require investments in technology and labor resources.

We are currently undertaking a project to migrate the full interconnection process technology. We expect to be able to leverage this technology for DSRUP, implementing and automating the workflow shown in Attachment 4 as much as possible.

We plan to update the scope of the project to include the DSRUP process. Initial discussions indicate that adding the DSRUP process to the project scope will take approximately three months and add approximately $80,000 in cost. We intend that the administrative fee for DSRUP, which would be included in our tariff filing, will reflect this technology cost.

As the technology project progresses, we can manage the DSRUP semi-manually, leveraging existing MN DIP processes and tools where possible and adding manual steps where necessary.

DSRUP is a new process that could drive an increase in interconnection applications and require additional staff to complete necessary studies and manage the process. This estimate does not include additional program management costs that would be necessary to enable additional studies and overall DSRUP management. We will evaluate the costs associated with DSRUP as we implement the process and update the administrative fee as necessary.

We will work as quickly as possible to begin DSRUP implementation after a Commission Order. In addition to the generic Standards, the Company's DSRUP tariff will need to be approved before we can fully implement the program. Upon Commission approval of the generic Standards, the Company will develop and calculate the necessary components of the tariff: the DSRUP agreement contract language, the administrative fee, and the Annual Ratepayer Cost Cap.[41] This tariff development will take time, so we request that the Commission set a follow-on procedural schedule such that a Commission hearing on the Company's tariffs can be scheduled no earlier than the third quarter of 2026. We aim to ensure a smooth

[41] If Requirement J.1 is adopted.

process for all Interconnection Applicants and Reactive Cost Share Participants as we implement DSRUP.

## CONCLUSION

We appreciate the time and dedication of Commission Staff and DSRUP workgroup participants. The collaborative Workgroup has created robust draft generic Standards. While some important questions and considerations remain, we believe there is agreement among parties on many pieces of the draft generic Standards. The DSRUP can support Minnesota's energy policy goals, meet market needs, and protect non-participating customers.

We respectfully request that the Commission:

- Adopt the Company's preferred DSRUP generic Standards and preferred DSRUP Dispute Resolution Process in Attachments 1 and 2, respectively.
- Set a procedural schedule for the filing of proposed tariffs such that a Commission hearing to set the terms of the tariffs can be scheduled no sooner than the third quarter of 2026.

Dated: November 7, 2025

Northern States Power Company

Attachment 1: Xcel Energy Preferred Standards for the Distribution System Reactive Upgrade Process (DSRUP)

# Reactive DER Upgrade Cost Sharing Standards

## B. Definitions

Defined terms from the MN DIP have the same meanings here and are capitalized throughout the Standards below. Additionally, the Commission adopts the following definitions for the purposes of this proceeding:

1. Annual Ratepayer Cost Cap: The total rolling annual cost of Upgrades that are not paid for by Reactive Cost Share Participants and that may be recovered from ratepayers under Commission-approved cost recovery methods.

2. Distributed Generation Project (Project): An energy generating system with a capacity no greater than ten megawatts.

3. Distribution System Reactive Upgrade Process (DSRUP or Process): The process and operation of the "generic standards" envisioned by Section 53 of the 2024 Minnesota Session Laws, Regular Session, Chapter 126, Article 6 and approved by the Minnesota Public Utilities Commission.

4. Distribution System Reactive Upgrade Process Cost Share Agreement (DSRUP Agreement): The agreement between an Interconnection Customer and the Utility providing the Interconnection Customer's intention to participate in an Upgrade and to provide a Reactive Cost Share Contribution for an Upgrade with an open Mobilization Window.

5. Hosting Capacity: The maximum capacity of a utility distribution system to transport electricity at a specific location without compromising the safety or reliability of the distribution system.

6. Interconnection Application: An application that has been submitted to a utility for interconnection under MNDIP.

7. Interconnection Customer: A Distributed Generation Project owner that has submitted an Interconnection Application.

8. Minnesota Distributed Energy Resource Interconnection Agreement (MN DIA): The Agreement intended to provide for the Interconnection Customer to interconnect at the Point of Common Coupling and operate a Distributed

Energy Resource with a Nameplate Rating of 10 Megawatts (MW) or less in parallel with the Area EPS at the location identified above and in the Interconnection Application. MN DIP Section 1.1.5 details when the Uniform Statewide Contract may replace the need for the MN DIA.

9. Minnesota Distributed Energy Resource Interconnection Process (MN DIP): The generic, statewide standards for the interconnection and parallel operation of distributed energy resources of no more than 10 MW. All regulated Area Electrical Power System (EPS) Operators are subject to the MN DIP.

10. Mobilization Threshold: The percentage of the estimated total Upgrade cost that must be committed in order for construction of the Upgrade to move forward.

11. Mobilization Window: When the Trigger Project by itself does not meet the Mobilization Threshold, the time period during which additional projects can commit to pay for Upgrade costs and those commitments will count towards the Upgrade's Mobilization Threshold.

12. Outstanding Costs: Any Reactive Cost Share Distribution Upgrade costs that are unrecovered from Reactive Cost Share Participants at any given time, after a Mobilization Threshold has been met and before the Payback Period has been closed.

13. Payback Period: The period of time, after the Mobilization Threshold has been met, allotted for the full value of the Upgrade to be paid for by Reactive Cost Share Participants.

14. Pro Rata Cost: The $/kWac rate calculated by dividing the total costs of the eligible Upgrade by the total kilowatts of Hosting Capacity created by the Upgrade.

15. Reactive Cost Share Contribution: The contribution made by an Interconnection Customer toward an Upgrade. The amount is determined by multiplying the Pro Rata Cost by the kWac capacity of the facility seeking interconnection.

16. Reactive Cost Share Distribution Upgrade (Upgrade): A distribution Upgrade made under the DSRUP. This type of Upgrade must be a modification of a Utility's distribution system at a specific location that is necessary to allow the

interconnection of Distributed Generation Projects by increasing Hosting Capacity at the applicable location, including but not limited to installing or modifying equipment at a substation or along a distribution line. Upgrade does not mean an expansion of hosting capacity dedicated solely to the interconnection of a single Distributed Generation Project. Upgrade does not mean construction of a new substation for the sole purpose of allowing the interconnection of Distributed Generation Projects.

17. Reactive Cost Share Participant: An Interconnection Customer who elects to participate in a Reactive Cost Share Distribution Upgrade with an open cost-share window and is responsible for paying a cost-share contribution.

18. Reactive Upgrade Workgroup: The workgroup created in Docket 24-288 to create the draft standards of the DSRUP.

19. Trigger Project: The initial Interconnection Application for interconnection for a Distributed Generation Project that alerted a Utility that an Upgrade is needed in order to accommodate the Trigger Project and any future interconnections at the applicable location.

20. Utility: A public utility, as defined in Minnesota Statutes, section 216B.02, subdivision 4, that provides electric service.

## C. Upgrade Cost Thresholds

1. To qualify for the DSRUP, an Upgrade must have total project costs of at least

   c. $2,500,000.

## D. Pro Rata Cost Calculation

1. When a Trigger Project elects to initiate the DSRUP and become a Reactive Cost Share Participant, the Utility shall calculate the estimated Pro Rata Cost defined as the total estimated costs of the eligible Upgrade divided by the total kilowatts of Hosting Capacity created by the Upgrade.

2. The estimated Pro Rata Cost shall be considered an estimate in the calculation of a particular Reactive Cost Share Customer's Reactive Cost Share Contribution until a final Pro Rata Cost is determined after the final bill of actual costs for the Upgrade is issued consistent with MN DIP 5.6.4.1. The

Utility shall either refund any excess fees paid or assess each Reactive Cost Share Participant the remaining amount, based on the final Pro Rata Cost of the Upgrade. Refunded amounts shall be issued by the Utility within 30 Business Days after the issuance of the final bill of actual costs. Additional assessments shall be paid by Reactive Cost Share Participants within 30 Business Days after the issuance of the final bill of actual costs. Interconnection Customers that elect to become a Reactive Cost Share Participant following construction of the Upgrade will be assessed a Reactive Cost Share Contribution based on the final Pro Rata Costs.

## E. Interconnection Process

1. The DSRUP can only be initiated when a Distributed Energy Project completes a Facilities Study, and the results of the study indicate an eligible Upgrade is required. The Interconnection Customer will be given 20 Business Days after a signature-ready MN DIA and signature-ready DSRUP Agreement are provided to the Interconnection Customer to choose one of the following options:

    a. Participate in the DSRUP and act as a Trigger Project by signing and funding the DSRUP Agreement; or
    b. Pay the full cost of the Upgrade as described in Section F2 by signing and funding the DSRUP Agreement; or
    c. Withdraw its application

2. An Interconnection Application that triggers an Upgrade shall have the option to pay for the full Upgrade, foregoing the cost sharing process and thus paying in full for the additional capacity beyond their project's need. Should the Interconnection Customer choose to fund the full Upgrade cost and forgo the cost sharing process they shall not be entitled to use excess capacity created by the Upgrade or receive any compensation from future Interconnection Customers utilizing the capacity created by the Upgrade.

3. Interconnection Applications with capacity no greater than 40 kWac and do not have available Hosting Capacity to interconnect shall be informed prior to Initial Review of the likely need ~~offered the opportunity~~ to participate in the DSRUP ~~prior to Initial Review~~. These projects are still subject to the MN DIP process for reviewing, studying, and processing their Interconnection Application.

Xcel Energy modifications noted in red.

Attachment 1: Xcel Energy Preferred Standards for the Distribution System Reactive Upgrade Process (DSRUP)

4. An Interconnection Application with a nameplate rating more than 40 kWac is eligible to participate in an active Mobilization Window:

    b. After all applicable MN DIP studies have been completed.

5. Utilities shall streamline System Impact Studies for Interconnection Applications in queue behind a Trigger Project in Upgrades with an active Mobilization Window to the extent practicable. For Interconnection Applications starting a System Impact Study after a Mobilization Threshold has been met, the Utility shall utilize the Trigger Project's System Impact Study to the extent practicable.

6. Interconnection Agreements for Reactive Cost Share Participants shall not be tendered for signature until after the Mobilization Threshold has been met and any applicable cluster studies have been completed.

7. Utility shall countersign all Interconnection Agreements within 5 business days after receiving all signed Interconnection Agreements from all Reactive Cost Share Participants that are participating in the Upgrade.

8. Interconnection customers that elect to be a Reactive Cost Share Participant shall have their queue status updated to "Awaiting Cost Share Upgrade Selection" until the Interconnection Agreements for all Reactive Cost Share Participants that are participating in the Upgrade have been signed and countersigned by the Utility.

    a. Interconnection Applications in the "Awaiting Cost Share Upgrade Selection" status will maintain their queue position, and the next-in-queue project will be processed and studied through MN DIP. After completion of the System Impact Study and, if necessary, Facilities Study, next-in-queue projects will be notified by the Utility with a signature-ready DSRUP agreement. Next-in-queue projects must sign the DSRUP Agreement and pay the administrative fee within 10 Business Days of receiving notification from the Utility, or withdraw
    b. Next-in-queue projects will not be allowed to pay the entire cost of the upgrade under section E.2.
    c. If the System Impact Study and Facilities Study for a next-in-queue project determines that a new eligible Upgrade is required that does not fit within the scope of the existing Upgrade, then that next-in-queue

project may choose to become a Trigger Project for the new upgrade following E.1 of the Standards.

d. Interconnection Applications that are processed as a next-in-queue project and have a capacity no greater than 40 kWac may proceed with interconnection if no upgrades are required and Hosting Capacity is available for applications with a capacity no greater than 40 kWac through a capacity reservation.

9. After all Interconnection Agreements for all Reactive Cost Share Participants that are participating in an Upgrade are countersigned by the Utility, the Upgrade will proceed to detailed design and construction. Reactive Cost Share Participants will have their queue status updated to “Cost Share Upgrade In Progress.” Until the Upgrade has been placed in-service. Interconnection Applications will have the estimated Reactive Cost Share Contribution included as an interconnection upgrade cost in the Interconnection Agreement. The Interconnection Agreement must be signed and timely paid consistent with MN DIP timelines.

10. After an Upgrade has been placed in-service and before the Payback Period has closed, the queue will be processed following MN DIP. Interconnection Applications that are Deemed Complete during this time will have the estimated Reactive Cost Share Contribution, or the final Reactive Cost Share Contribution if available, included as an interconnection upgrade cost in the Interconnection Agreement. The Interconnection Agreement must be signed and timely paid consistent with MN DIP timelines.

## F. Mobilization Threshold and Window

1. The Mobilization Threshold for an individual Upgrade is set at:

    b. 80 percent of total Upgrade costs.

2. The Mobilization Window for an Upgrade shall remain open until an alteration in the electric distribution system requires a new distribution System Impact Study to confirm the accuracy or necessity of the previously identified Upgrade. When the Mobilization Threshold is met the Utility may conduct a new mandatory cluster study with the costs assigned to the relevant Cost Share Participants consistent with a Utility’s Cluster Study guidelines and timelines. Refusal by a Reactive Cost Share Participant to pay for its share of the study cost will constitute withdrawal.

3. If either of the scenarios described in 3a or 3b occurs in the steps following an Upgrade being selected in the Upgrade prioritization process, the Utility will issue notice to the Reactive Cost Share Participants participating in the Upgrade that the Upgrade will be moved back to an open Mobilization Window. Within 20 Business days from the issuance of the notice by the Utility, the Reactive Cost Share Participants may elect to pay more than their project's Reactive Cost Share Contribution in order to reach the Mobilization Threshold, or the Upgrade will be moved back to an open Mobilization Window. After an Upgrade is moved back to an open Mobilization Window, when the Mobilization Threshold has been met again, the Upgrade will advance to the prioritization selection process.

    a. A Reactive Cost Share Participant withdraws such that the mobilization threshold is no longer reached.
    b. The final cluster study cost estimate varies from the previous estimate such that the mobilization threshold is no longer reached.

4. If either of the scenarios described in 4a or 4b occurs in the steps following an Upgrade being selected in the Upgrade prioritization process, the Upgrade will be reprioritized against the criteria in G.1 of the Standards. If the reprioritization results in the Upgrade no longer maintaining its priority, it will be reconsidered in the next prioritization process as described in G.4 of the Standards before proceeding.

    a. A Reactive Cost Share Participant withdraws.
    b. The final cluster study cost estimate varies from the previous estimate by more than 20%.

5. If an Upgrade is moved back to an open Mobilization Window after estimated Reactive Cost Share Contributions have been paid by a Reactive Cost Share Participant, the Utility shall issue refunds of the estimated Reactive Cost Share Contributions within 30 Business Days from the date the Utility notifies the Reactive Cost Share Participants that the Mobilization Window is being reopened.

7. The Mobilization Window shall close if the Mobilization Threshold is not reached within two years.

Xcel Energy modifications noted in red.

8. The Mobilization Window shall close if all Reactive Cost Share Participants withdraw.

## G. Upgrade Prioritization

1. When there are multiple eligible Upgrades that have reached the Mobilization Threshold, their construction shall be prioritized based on the below-listed criteria. In the case different upgrades are tied or equal in a given criterion, the upgrade will be prioritized by the next following criterion. The criteria used to evaluate the upgrades shall adhere to the following order:

    a. The Upgrade with the highest percentage of developer-funded Upgrade cost
    b. Lowest cost per megawatt of capacity added by the Upgrade
    c. Most capacity constraints
    d. Clear optimization benefits for the grid

2. Notwithstanding the criteria listed in G1, where supply chain issues, permitting issues, or other issues that may delay an Upgrade by one year or longer are encountered, the Utility may remove the Upgrade from consideration until the next Upgrade prioritization review, and instead select the next highest priority Upgrade using the prioritization criteria.

3. Following tariffed process initiation, every ____ the Utility shall review Upgrades that have met the Mobilization Threshold during the previous ____ months and prioritize them based on criteria in G1.

    b. Six Months

5. Approval through the prioritization process chosen in Section G shall create a rebuttable presumption of prudence in any cost recovery proceeding.

## H. Payment Details

1. Interconnection Customers that have elected to participate in an Upgrade during an open Mobilization Window shall have an executed DSRUP Agreement to pay their Reactive Cost Share Contribution at the time the Interconnection Agreement is signed and paid consistent with MN DIP timelines.

2. Interconnection Customers shall pay a non-refundable administrative fee with each executed DSRUP Agreement to participate in an Upgrade during an open Mobilization Window. The Interconnection Customer may exit the DSRUP Agreement at any time but will not be refunded the administrative fee.

3. A DSRUP Agreement shall not be contingent upon any other DSRUP Agreement for another Upgrade.

4. Reactive Cost Share Participants may withdraw after all Interconnection Agreements for all Reactive Cost Share Participants that are participating in an Upgrade are countersigned by the Utility but shall not receive a refund of their Reactive Cost Share Contribution.

8. Any Reactive Cost Share Participant may pay more than their project's Reactive Cost Share Contribution in order to reach the Mobilization Threshold of an Upgrade. This payment beyond their project's calculated Reactive Cost Share Contribution shall be refunded if additional Reactive Cost Share Contributions are received prior to the Payback Period closing. A refund shall be issued to the overpaying Reactive Cost Share Participant within 30 business days from the date a new Reactive Cost Share Contribution is collected by the Utility. The amount refunded to overpaying Reactive Cost Share Participant is determined by the Reactive Cost Share Contribution collected from the new Reactive Cost Share Participant, not exceeding the amount of excess payment remaining to be refunded. Any remaining excess payment is not refundable once the Payback Period closes. Once the Payback Period closes or the over-payer has been fully refunded the excess payment, all funds from subsequent Reactive Cost Share Participants shall be credited to ratepayers.

9. If two or more Reactive Cost Share Participants pay more than their projects' Reactive Cost Share Contribution obligations for a single Upgrade, the Utility shall refund such excess amounts in the order in which the excess payments were received. The reactive cost Share Participant whose excess payment was received first shall be refunded in full prior to the issuance of any refund to the Participant whose excess payment was received subsequently, and this sequence shall continue accordingly until all excess payments have been refunded.

10. There may be cases where a Utility collects greater than 100% of the final Upgrade costs and over-paying Reactive Cost Share Participants have already

been refunded. If this occurs the excess will be returned to ratepayers by reducing the Utility's total recovery of distribution capital costs of the DSRUP the next time it seeks recovery for Process's costs.

11. Interconnection Applications under 40 kWac are exempt from paying a Reactive Cost Share Contribution if Hosting Capacity is available for Interconnection Applications under 40 kWac through a capacity reservation.

12. Reactive Cost Share Participants may use other, Utility-specific, cost sharing programs to fund their Reactive Cost Share Contribution where applicable and with subsequent approval in those relevant Utility-specific cost sharing program docket proceedings.

## I. Payback Period

1. The Payback Period shall remain open once the Mobilization Threshold is reached and remains open for:

    d. No more than ten years from the Upgrade's in-service date

2. The Payback Period shall end if:

    a. The Hosting Capacity created by the Upgrade is fully utilized by Reactive Cost Share Participants and all over-payers have been fully refunded the amounts above their Reactive Cost Share Contribution, or~~.~~
    b. The duration of the Payback Period defined in I.1 has elapsed.

3. All Interconnection Applications that are in the Deemed Complete state within the Payback Period shall be subject to paying their Reactive Cost Share Contribution.

## J. Annual Ratepayer Cost Cap

1. The Commission shall decide the Annual Ratepayer Cost Cap for Utility in a tariff filing upon approval of that Utility's DSRUP.

3. The Commission intends that the Annual Ratepayer Cost Cap will remain in place for at least 24 months since the most recent change to the cost cap went into effect before the Commission considers modifications. A Utility, prospective Trigger Projects, and ratepayer advocates may request a

modification to the Annual Ratepayer Cost Cap. In determining whether to change the Annual Ratepayer Cost Cap, the Commission shall consider, at a minimum, previous and future ratepayer costs and risks arising from the Utility's DSRUP, total pending cost share contributions, and the demand for new Upgrades.

4. The Outstanding Costs of constructed Upgrades that have not been paid for by Reactive Cost Share Contributions shall count towards the Annual Ratepayer Cost Cap.

    a. Costs of Upgrades that have not been paid for by Reactive Cost Share Participants upon the Payback Period closing shall be removed from the Annual Ratepayer Cost Cap.

5. Once the Annual Ratepayer Cost Cap is reached, the Mobilization Threshold for all pending Upgrades is set to 100 percent until the total amount recoverable from ratepayers drops below the cap. ~~As available space opens up within the cost cap, projects transitioning back to the standard Mobilization Threshold shall follow existing prioritization processes.~~

## K. Cost Recovery

5. A Utility may petition to recover outstanding costs through any or all of the following (but without any double recovery):

    a. Through a general rate case.
    b. Through its Transmission Cost Recovery Rider pursuant to Minn. Stat. 216B.16, Subd. 7b, paragraph (b), clause 6.

6. All Reactive Cost Share Contributions collected from Reactive Cost Share Participants shall be collected during the Payback Period and shall be:

    a. Returned to ratepayers as an offset to the revenue requirements of Reactive Cost Share Distribution Upgrade.

## L. Cost Allocation

1. Costs recovered from ratepayers shall be treated consistent with the most recently approved rate case allocators and established revenue requirement procedures. Parties to a Utility's rate case or other cost recovery proceeding

may request that the Commission establish a different cost allocation and procedures for DSRUP Upgrades.

## M. Publication of DSRUP Information and Data

1. Utilities shall make all reasonable efforts to publish the feeders and/or substations that have an open Mobilization Window and the availability of potential Upgrades where there is an open Mobilization Window as well as where there is an Upgrade already constructed that still has available hosting capacity remaining. Utilities shall publish the following information on a monthly basis for each active Upgrade location:

    a. The $/kW Pro Rata Cost to participate in the Upgrade[1]
    b. Start and end dates of the Mobilization Window
    c. Start and end dates of the Payback Period
    d. The feeders and/or substations that have an open Mobilization Window
    e. The maximum amount of distribution capacity that could be created by the Upgrade
    f. Status of the Mobilization Threshold
        i. How many projects have opted in
        ii. The capacity they have taken up
        iii. The progress, in percentage, towards the Mobilization Threshold

3. The information in M1 shall be listed on a spreadsheet.

## N. Reporting and Process Evaluation

1. Utilities shall file an annual compliance filing in Docket 24-288 the following reporting requirements:

    a. List of ongoing projects by feeder and status (waiting for Mobilization Threshold to be reached, Upgrades in progress, post-construction Mobilization Window)
    b. Status of the Annual Ratepayer Cost Cap (how much $ space is available)
    c. Revenue requirements

[1] This does not include any upgrades in addition to the DSRUP Upgrade an individual DER project may require

Attachment 1: Xcel Energy Preferred Standards for the Distribution System Reactive Upgrade Process (DSRUP)

  d. Impact to the Annual Ratepayer Cost Cap from each project including a forecast of cap space (assuming no new cost share customers interconnect)
  e. Total costs allocated to ratepayers by the DSRUP
  f. Total capacity (kWac) added by the DSRUP
  g. Total cumulative capacity (kWac) added by DSRUP
  h. Total amount funded by Reactive Cost Share Contributions
  i. Details about each individual Upgrade made, including
     i. Capacity added
     ii. Total Cost (estimated, final), Pro Rata Cost (estimated, final)
     iii. Trigger date, construction date, etc. (length to Mobilization Threshold)
     iv. How many projects were involved, their sizes
  j. The monetary benefit to ratepayers as a result of Upgrades that were more than 100% funded.
  k. The results of upgrade prioritization process for each Upgrade.

2. Utilities must file reports that include the preceding ~~following~~ information and data to the greatest extent practicable. Where a Utility is not able to provide the required information, the Company shall explain why it is unable to do so. Such reports must be filed annually on March 1st in the current docket, 24-288. Where applicable, Utilities must include data in spreadsheet (.xlsx) format as well as in tabulated form. If a Utility also files a PDF version of spreadsheet data, it must be filed as an attachment in a separate document instead of being merged with the main report.

4. After four years of DSRUP tariffed operation, each Utility shall file an evaluation of the Standards and any recommended changes with its annual report in Docket 24-288.

5. In addition to Utility evaluations, the DSRUP Standards are subject to refinement through Commission Order or through the Reactive Upgrade Workgroup with subsequent Commission approval. The Reactive Upgrade Workgroup shall be convened by Commission Staff and shall meet as necessary to refine and improve the Standards. Workgroup participants may reach out to Commission Staff to raise issues or concerns that may require the workgroup to reconvene.

6. The DSRUP shall be evaluated based on the proposed reporting requirements.

## O. Dispute Resolution

1. Dispute resolution shall be consistent with the highlighted portions of Attachment B.

## P. Tariff Implementation

1. These standards shall be implemented with each Utility through tariffs filed by each Utility.
2. The tariff filing shall include a Utility's DSRUP Agreement.

Attachment 2: Xcel Energy's Preferred Dispute Resolution Process for the DSRUP

**Dispute Resolution Process for the Distribution System Reactive Upgrade Process (DSRUP)[1]**

For Disputes Between Interconnection Customers (and Developers) and the Public Utility

Generally, follow the MN DIP process, except where shown in highlight below:

5.3 Disputes

5.3.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process (and the DSRUP) and associated study and Interconnection Agreements according to the provisions of this article and Minnesota Administrative Rules 7829.1500-7829.1900. More information on the Commission's Consumer Affairs Office dispute resolution services is available on the Commission's website: https://mn.gov/puc/consumers/help/complaint/

5.3.2 Prior to a written Notice of Dispute, the Party shall contact the other Party and raise the issue and the relief sought in an attempt to resolve the issue immediately.

5.3.3 In the event of a dispute, the disputing Party shall provide the other Party a written Notice of Dispute containing the relevant known facts pertaining to the dispute, the specific dispute and the relief sought, and express notice by the disputing Party that it is invoking the procedures under this article. The Interconnection Customer may utilize the Commission's Consumer Affairs Office's complaint/inquiry form and Informal Complaint dispute resolution process to assist with the written Notice of Dispute. The notice shall be sent to the non-disputing Party's email address and physical address set forth in the Interconnection Agreement or Interconnection Application, if there is no Interconnection Agreement. If the Interconnection Customer chooses not to utilize the Commission's Consumer Affair Office dispute resolution process, the Interconnection Customer shall provide an informational electronic copy of the Notice of Dispute to the Consumer Affairs Office at the Commission at consumer.puc@state.mn.us.

For Disputes relating to the DSRUP, it is mandatory to either complete the Commission's Consumer Affairs Office complaint/inquiry form or provide an informational copy to the CAO and this will provide notice to the Ombudsperson of the Dispute. ~~For the first three years of DSRUP implementation, a~~Any Dispute

[1] The process and standards approved by the Commission and outlined in Docket 24-288.

Xcel Energy modifications noted in red.

Attachment 2: Xcel Energy's Preferred Dispute Resolution Process for the DSRUP

regarding the DSRUP will not be logged as a complaint so that the Dispute will not count towards triggering service quality payments. Also, any Dispute relating to the DSRUP must be timely brought ("Timely Brought") in such a way so as to not further adversely impact other Interconnection Applications compared to if the Dispute had been brought in a timelier manner.

5.3.4 The non-disputing Party shall acknowledge the notice within three (3) Business Days of its receipt and identify a representative with the authority to make decisions for the non-disputing Party with respect to the dispute.

For Disputes relating to the DSRUP, if resolution of the Dispute might have a material impact on any other Interconnection Application, then that impacted Interconnection Application may be placed on hold until the Dispute is resolved.

5.3.5 The non-disputing Party shall provide the disputing Party with relevant regulatory and/or technical details and analysis regarding the Area EPS Operator interconnection requirements under dispute within ten (10) Business Days of the date of the Notice of Dispute.

If the Area EPS Operator believes that one or more other Interconnection Customers would be materially impacted by the resolution of a Dispute relating DSRUP, then the Area EPS Operator may as part of the 10 Business Day response above make any such Interconnection Customer a Party to the Dispute, and may provide pertinent details about the dispute to any Party to the Dispute including but not limited to as to any Party's position in the queue, name of any Party to the Dispute, and any such Party's assigned feeder and substation, date application was Deemed Complete, nameplate capacity of the Interconnection Application, etc. and an explanation of how each Party may be materially impacted by the resolution of the Dispute.

Within twenty (20) Business Days of the date of the Notice of Dispute, the Parties' authorized representatives will be required to meet and confer to try to resolve the dispute. Parties shall operate in good faith and use best efforts to resolve the dispute.

5.3.6 If a resolution is not reached in the thirty (30) Business Days from the date of the notice described in section 5.3.3, the Parties may 1) if mutually agreed, continue negotiations for up to an additional twenty (20) Business Days; or 2) either Party may request the Commission's Consumer Affairs Office provide mediation in an attempt to resolve the dispute within twenty (20) Business Days with the opportunity to extend this timeline upon mutual agreement. Alternatively, both Parties by mutual agreement may request mediation from an outside third-party mediator with costs to be shared equally between the Parties.

Xcel Energy modifications noted in red.

Attachment 2: Xcel Energy's Preferred Dispute Resolution Process for the DSRUP

In the case of a Dispute relating to the DSRUP, any Party may bring dispute relating to Reactive Cost Sharing to the Ombudsperson at the Commission's CAO office for mediation.

5.3.7 If the results of the mediation are not accepted by one or more Parties (or by any Party for a Dispute in the case of a and there is still disagreement, the dispute shall proceed to the Commission's Formal Complaint process as described in Minn. Rules 7829.1700-1900 unless mutually agreed to continue with informal dispute resolution.

5.3.8 At any time, either Party may file a complaint before the Commission pursuant to Minn. Stat. §216B.164, if applicable, and Commission rules outlined in Minn. Rules Ch. 7829.

Additional steps for Disputes relating to the DSRUP:

If the Dispute is not resolved following the above steps 5.3.1 to 5.3.6, then any Party may bring any Timely Brought Dispute relating to the DSRUP to the Commission for Expedited Dispute Resolution in the following way: File in a new Docket a Petition for Resolution of Dispute Relating to the DSRUP, include in that Petition all Parties to the Dispute as set forth above, and include in that Petition all pertinent facts. All Parties that are not Petitioners may be allowed 20 Business Days to submit their positions on the issue to the Commission, including where applicable a discussion on whether the Dispute has been Timely Brought. The Executive Secretary will determine if further rounds of comments are appropriate and will then set the matter for hearing. At hearing, the Commission may use its judgment on how the Dispute should be resolved, or whether further investigation is necessary. The Commission may determine whether the Dispute has not been Timely Brought and therefore is time barred.

Xcel Energy modifications noted in red.

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|

## B. Definitions

*Defined terms from the MN DIP have the same meanings here and are capitalized throughout the Standards below. Additionally, the Commission adopts the following definitions for the purposes of this proceeding:*

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| B.1 | Annual Ratepayer Cost Cap: The total rolling annual cost of Upgrades that are not paid for by Reactive Cost Share Participants and that may be recovered from ratepayers under Commission-approved cost recovery methods. | Support | |
| B.2 | Distributed Generation Project (Project): An energy generating system with a capacity no greater than ten megawatts. | Support | |
| B.3 | Distribution System Reactive Upgrade Process (DSRUP or Process): The process and operation of the “generic standards” envisioned by Section 53 of the 2024 Minnesota Session Laws, Regular Session, Chapter 126, Article 6 and approved by the Minnesota Public Utilities Commission. | Support | |
| B.4 | Distribution System Reactive Upgrade Process Cost Share Agreement (DSRUP Agreement): The agreement between an Interconnection Customer and the Utility providing the Interconnection Customer’s intention to participate in an Upgrade and to provide a Reactive Cost Share Contribution for an Upgrade with an open Mobilization Window. | Support | |
| B.5 | Hosting Capacity: The maximum capacity of a utility distribution system to transport electricity at a specific location without compromising the safety or reliability of the distribution system. | Support | |
| B.6 | Interconnection Application: An application that has been submitted to a utility for interconnection under MNDIP. | Support | |
| B.7 | Interconnection Customer: A Distributed Generation Project owner that has submitted an Interconnection Application. | Support | |
| B.8 | Minnesota Distributed Energy Resource Interconnection Agreement (MN DIA): The Agreement intended to provide for the Interconnection Customer to interconnect at the Point of Common Coupling and operate a Distributed Energy Resource with a Nameplate Rating of 10 Megawatts (MW) or less in parallel with the Area EPS at the location identified above and in the Interconnection Application. MN DIP Section 1.1.5 details when the Uniform Statewide Contract may replace the need for the MN DIA. | Support | |
| B.9 | Minnesota Distributed Energy Resource Interconnection Process (MN DIP): The generic, statewide standards for the interconnection and parallel operation of distributed energy resources of no more than 10 MW. All regulated Area Electrical Power System (EPS) Operators are subject to the MN DIP. | Support | |
| B.10 | Mobilization Threshold: The percentage of the estimated total Upgrade cost that must be committed in order for construction of the Upgrade to move forward. | Support | |
| B.11 | Mobilization Window: When the Trigger Project by itself does not meet the Mobilization Threshold, the time period during which additional projects can commit to pay for Upgrade costs and those commitments will count towards the Upgrade’s Mobilization Threshold. | Support | |
| B.12 | Outstanding Costs: Any Reactive Cost Share Distribution Upgrade costs that are unrecovered from Reactive Cost Share Participants at any given time, after a Mobilization Threshold has been met and before the Payback Period has been closed. | Support | |
| B.13 | Payback Period: The period of time, after the Mobilization Threshold has been met, allotted for the full value of the Upgrade to be paid for by Reactive Cost Share Participants. | Support | |
| B.14 | Pro Rata Cost: The $/kWac rate calculated by dividing the total costs of the eligible Upgrade by the total kilowatts of Hosting Capacity created by the Upgrade. | Support | |
| B.15 | Reactive Cost Share Contribution: The contribution made by an Interconnection Customer toward an Upgrade. The amount is determined by multiplying the Pro Rata Cost by the kWac capacity of the facility seeking interconnection. | Support | |
| B.16 | Reactive Cost Share Distribution Upgrade (Upgrade): A distribution Upgrade made under the DSRUP. This type of Upgrade must be a modification of a Utility’s distribution system at a specific location that is necessary to allow the interconnection of Distributed Generation Projects by increasing Hosting Capacity at the applicable location, including but not limited to installing or modifying equipment at a substation or along a distribution line. Upgrade does not mean an expansion of hosting capacity dedicated solely to the interconnection of a single Distributed Generation Project. | Do not oppose | |

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| Xcel B.16 | Reactive Cost Share Distribution Upgrade (Upgrade): A distribution Upgrade made under the DSRUP. This type of Upgrade must be a modification of a Utility's distribution system at a specific location that is necessary to allow the interconnection of Distributed Generation Projects by increasing Hosting Capacity at the applicable location, including but not limited to installing or modifying equipment at a substation or along a distribution line. Upgrade does not mean an expansion of hosting capacity dedicated solely to the interconnection of a single Distributed Generation Project. Upgrade does not mean construction of a new substation for the sole purpose of allowing the interconnection of Distributed Generation Projects. | Support as modified | New substations driven exclusively by new DG should be excluded from reactive cost-sharing because substation costs would have an outsize adverse impact on non-participating customers. Ratepayers should not pay for decades of O&M for a substation that exists solely to serve DG interconnections and from which they are not necessarily benefiting. A new substation would include transmission-related cost components that we believe would not qualify for cost-sharing under the DSRUP statute. A new substation likely would take several years to plan and build, and those behind in queue would likely need to be placed on hold during this time period. Construction of a new substation would take up a considerable amount of the Company's limited design and construction resources that would otherwise be used on projects and initiatives identified through the Company's robust planning process. We offer this modification to the definition of "Upgrade" to reflect this exclusion. |
| B.17 | Reactive Cost Share Participant: An Interconnection Customer who elects to participate in a Reactive Cost Share Distribution Upgrade with an open cost-share window and is responsible for paying a cost-share contribution. | Support | |
| B.18 | Reactive Upgrade Workgroup: The workgroup created in Docket 24-288 to create the draft standards of the DSRUP. | Support | |
| B.19 | Trigger Project: The initial Interconnection Application for interconnection for a Distributed Generation Project that alerted a Utility that an Upgrade is needed in order to accommodate the Trigger Project and any future interconnections at the applicable location. | Support | |
| B.20 | Utility: A public utility, as defined in Minnesota Statutes, section 216B.02, subdivision 4, that provides electric service. | Support | |

## C. Upgrade Cost Thresholds

*1 must be adopted, and the Commission must choose one subpart.*

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| C.1 | To qualify for the DSRUP, an Upgrade must have total project costs of: | | |
| | a. at least $250,000 | Oppose | Offering cost sharing for all Upgrades is not necessary; the market has shown its ability and willingness to cover upgrade costs, which is aligned with cost-causation principles. Small Upgrades generally do not create additional capacity that could benefit many different projects, limiting the benefits of cost-sharing. By making more Upgrades eligible for DSRUP, a lower Upgrade Cost Threshold would cause the Annual Ratepayer Cost Cap to be reached through a higher number of less impactful Upgrades that may not need cost sharing to move forward. |
| | **OR** | | |
| | b. at least $1 | Oppose | |
| | **OR** | | |
| | c. at least $2,500,000 | Support | The DSRUP should be used to clear the largest roadblocks to interconnection by enabling system upgrades that would generally not be feasible under the standard interconnection process due to high costs. A lower threshold would lead to more DSRUP-qualifying Upgrade projects, resulting in the Company reaching its Annual Ratepayer Cost Cap more quickly and thus precluding future, potentially more beneficial Upgrades from participating in DSRUP. A higher threshold of $2.5 million would serve as an important customer protection, ensuring that customers contribute only to larger upgrades that create additional capacity on the system for future projects (e.g., transformer upgrades, new feeders). |
| | **OR** | | |
| | d. $100,000 | Oppose | See above |

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| *2 may be adopted with one subpart. If the Commission does not wish to set a maximum limit, it may simply not adopt 2.* | | | |
| C.2 | To qualify as an eligible Reactive Cost Share Distribution Upgrade, an Upgrade must cost no more than: | | |
| | a. $300,000/MW$_{AC}$ | Do Not Oppose | |
| | **OR** | | |
| | b. $600,000/MW | Do Not Oppose | |
| | **OR** | | |
| | c. No maximum | Support | While the statute states that the tariff standards must establish a minimum level of upgrade costs, a maximum cost is not contemplated in the law and is not necessary. The prioritization process (section G) will serve to prevent the most costly, lower-benefit Upgrades from moving forward with ratepayer funds. The Commission need not adopt C.2. |

## D. Pro Rata Cost Calculation

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| D.1 | When a Trigger Project elects to initiate the DSRUP and become a Reactive Cost Share Participant, the Utility shall calculate the estimated Pro Rata Cost defined as the total estimated costs of the eligible Upgrade divided by the total kilowatts of Hosting Capacity created by the Upgrade. | Support | Provides important process clarity. |
| D.2 | The estimated Pro Rata Cost shall be considered an estimate in the calculation of a particular Reactive Cost Share Customer's Reactive Cost Share Contribution until a final Pro Rata Cost is determined after the final bill of actual costs for the Upgrade is issued consistent with MN DIP 5.6.4.1. The Utility shall either refund any excess fees paid or assess each Reactive Cost Share Participant the remaining amount, based on the final Pro Rata Cost of the Upgrade. Refunded amounts shall be issued by the Utility within 30 Business Days after the issuance of the final bill of actual costs. Additional assessments shall be paid by Reactive Cost Share Participants within 30 Business Days after the issuance of the final bill of actual costs. Interconnection Customers that elect to become a Reactive Cost Share Participant following construction of the Upgrade will be assessed a Reactive Cost Share Contribution based on the final Pro Rata Costs. | Support | Consistent with MN DIP. Provides important process clarity. |
| D.3 | Final Reactive Cost Share Contributions shall not exceed 125% of the estimated Reactive Cost Share Contribution assigned to a Reactive Cost Share Customer in an executed interconnection agreement | Oppose | The Company provides a good-faith, best estimate ("indicative estimate"). The indicative estimate is provided before the detailed design process, during which the Company talks to local Authorities Having Jurisdiction (AHJs) and completes other design details that affect cost. A variety of factors outside the Company's control can cause deviations from the indicative estimate (e.g., local mandates, supply chain constraints, etc.). If included, this requirement could require the Company to become more conservative in the indicative estimate stage. The Company must be able to plan and complete Upgrade projects to its safety, quality, and reliability standards. If the final cost contributions are capped, we would not be able to recover those costs from the cost share customer, causing the Company's overall cost of service to increase even if that extra cost could not be recovered directly from customers (as contemplated by Requirement D.4), violating cost-causation principles. |
| D.4 | Final total costs of an Upgrade in excess of 125% of the estimated total Upgrade cost shall be borne by Utility shareholders rather than recovered through rates. | Oppose | |

## E. Interconnection Process

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| E.1 | The DSRUP can only be initiated when a Distributed Energy Project completes a Facilities Study, and the results of the study indicate an eligible Upgrade is required. The Interconnection Customer will be given 20 Business Days after a signature-ready MN DIA and signature-ready DSRUP Agreement are provided to the Interconnection Customer to choose one of the following options:<br>a. Participate in the DSRUP and act as a Trigger Project by signing and funding the DSRUP Agreement; or<br>b. Pay the full cost of the Upgrade as described in Section F2 by signing and funding the DSRUP Agreement; or<br>c. Withdraw its application | Support | Provides important process clarity. |
| E.2 | An Interconnection Application that triggers an Upgrade shall have the option to pay for the full Upgrade, foregoing the cost sharing process and thus paying in full for the additional capacity beyond their project's need. Should the Interconnection Customer choose to fund the full Upgrade cost and forgo the cost sharing process they shall not be entitled to use excess capacity created by the Upgrade or receive any compensation from future Interconnection Customers utilizing the capacity created by the Upgrade. | Support | Provides important process clarity. |

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| E.3 | Interconnection Applications with capacity no greater than 40 kWac and do not have available Hosting Capacity to interconnect shall be offered the opportunity to participate in the DSRUP prior to Initial Review. These projects are still subject to the MN DIP process for reviewing, studying, and processing their Interconnection Application. | Oppose | The Company's understanding is that the goal of this requirement is to ensure that Interconnection Applications for small DG projects are alerted early in the process if the project is seeking to interconnect at a location where the DSRUP has been initiated. The language "offered the opportunity" to participate lacks clarity and alignment with the other requirements - specifically Requirement E.8.a, under which the small DG project would be required to participate in DSRUP or withdraw their application. The wording in this requirement implies that the applicant can decline to participate in the DSRUP but still move their application forward. Xcel E.3 seeks to add clarity and alignment with other requirements. |
| Xcel E.3 | Interconnection Applications with capacity no greater than 40 kWac and do not have available Hosting Capacity to interconnect shall be informed prior to Initial Review of the likely need ~~offered the opportunity~~ to participate in the DSRUP ~~prior to Initial Review~~. These projects are still subject to the MN DIP process for reviewing, studying, and processing their Interconnection Application. | Support as modified | See above. This modification seeks to clarify - in alignment with Requirement E.8.a - that the Applicant would need to participate in DSRUP or withdraw their application if DSRUP had been initiated. This modification accomplishes the aim of alerting Applicants early in the process, while adding important clarity. We note that if a capacity reservation for small projects is adopted in the future, this scenario would be less likely. |
| *The Commission must choose either subpart 4a or 4b.* | | | |
| E.4 | An Interconnection Application with a nameplate rating more than 40 kWac is eligible to participate in an active Mobilization Window: | | |
| | a. Once its Interconnection Application has completed a System Impact Study and, if necessary, a Facilities Study as required by MN DIP. | Oppose | This requirement does not offer sufficient flexibility for the utility to complete all studies that could be necessary, such as an Internal Transmission Study or one required by the Midcontinent Independent System Operator (MISO). |
| | **OR** | | |
| | b. After all applicable MN DIP studies have been completed. | Support | This requirement provides flexibility to conduct necessary studies such as an Internal Transmission Study or MISO study. Consistency with MN DIP is an important way to "future-proof" the DSRUP - limiting the potential need for DSRUP updates if MN DIP evolves. |
| E.5 | Utilities shall streamline System Impact Studies for Interconnection Applications in queue behind a Trigger Project in Upgrades with an active Mobilization Window to the extent practicable. For Interconnection Applications starting a System Impact Study after a Mobilization Threshold has been met, the Utility shall utilize the Trigger Project's System Impact Study to the extent practicable. | Support | Provides important process clarity. |
| E.6 | Interconnection Agreements for Reactive Cost Share Participants shall not be tendered for signature until after the Mobilization Threshold has been met and any applicable cluster studies have been completed. | Support | Provides important process clarity. |
| E.7 | Utility shall countersign all Interconnection Agreements within 5 business days after receiving all signed Interconnection Agreements from all Reactive Cost Share Participants that are participating in the Upgrade. | Support | Provides important process clarity. |
| E.8 | Interconnection customers that elect to be a Reactive Cost Share Participant shall have their queue status updated to "Awaiting Cost Share Upgrade Selection" until the Interconnection Agreements for all Reactive Cost Share Participants that are participating in the Upgrade have been signed and countersigned by the Utility. | Support | Provides important process clarity. |
| | a. Interconnection Applications in the "Awaiting Cost Share Upgrade Selection" status will maintain their queue position, and the next-in-queue project will be processed and studied through MN DIP. After completion of the System Impact Study and, if necessary, Facilities Study, next-in-queue projects will be notified by the Utility with a signature-ready DSRUP agreement. Next-in-queue projects must sign the DSRUP Agreement and pay the administrative fee within 10 Business Days of receiving notification from the Utility, or withdraw | Support | Provides important process clarity. |
| | b. Next-in-queue projects will not be allowed to pay the entire cost of the upgrade under section E.2. | Support | Provides important process clarity. |
| | c. If the System Impact Study and Facilities Study for a next-in-queue project determines that a new eligible Upgrade is required that does not fit within the scope of the existing Upgrade, then that next-in-queue project may choose to become a Trigger Project for the new upgrade following E.1 of the Standards. | Support | Provides important process clarity. |
| | d. Interconnection Applications that are processed as a next-in-queue project and have a capacity no greater than 40 kWac may proceed with interconnection if no upgrades are required and Hosting Capacity is available for applications with a capacity no greater than 40 kWac through a capacity reservation. | Support | Provides important process clarity. |
| E.9 | After all Interconnection Agreements for all Reactive Cost Share Participants that are participating in an Upgrade are countersigned by the Utility, the Upgrade will proceed to detailed design and construction. Reactive Cost Share Participants will have their queue status updated to "Cost Share Upgrade In Progress." Until the Upgrade has been placed in-service. Interconnection Applications will have the estimated Reactive Cost Share Contribution included as an interconnection upgrade cost in the Interconnection Agreement. The Interconnection Agreement must be signed and timely paid consistent with MN DIP timelines. | Support | Provides important process clarity. |

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| E.10 | After an Upgrade has been placed in-service and before the Payback Period has closed, the queue will be processed following MN DIP. Interconnection Applications that are Deemed Complete during this time will have the estimated Reactive Cost Share Contribution, or the final Reactive Cost Share Contribution if available, included as an interconnection upgrade cost in the Interconnection Agreement. The Interconnection Agreement must be signed and timely paid consistent with MN DIP timelines. | Support | Provides important process clarity. |

## F. Mobilization Threshold and Window

*The Commission must choose one subpart of 1.*

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| F.1 | The Mobilization Threshold for an individual Upgrade is set at: | | |
| | a. 25 percent of total Upgrade costs. | Oppose | This lower Mobilization Threshold creates the risk of stranded or underutilized assets that increase costs for non-participating customers. With a 25% mobilization threshold, an Upgrade would be constructed with 75% of the costs remaining. If sufficient follow-on projects do not arise to use the additional capacity and cover the remaining costs, customers would be left bearing a larger burden, paying up to 75% of the costs of an underutilized Upgrade. In addition, under a 25% Mobilization Threshold, up to 75% of the cost of each Upgrade would contribute to the Annual Ratepayer Cost Cap, which would lead to the cap being reached more quickly, thus reducing the number of Upgrades that could be covered under DSRUP. |
| | **OR** | | |
| | b. 80 percent of total Upgrade costs. | Support | An 80% Mobilization Threshold ensures that most Upgrades are nearly fully utilized and funded through Reactive Cost Sharing Contributions, before ratepayer funds would be needed. Under an 80% threshold, more Upgrades could be funded under the same Annual Ratepayer Cost Cap, and the risk of stranded or underutilized assets would be reduced. |
| | **OR** | | |
| | c. The Mobilization Thresholds shall be tiered based on cost per MW of capacity added by the Upgrade as follows:<br>▪ $1/MW - $149,999/MW: 30%<br>▪ $150,000/MW - $249,999/MW: 45%<br>▪ $250,000/MW - $349,999/MW: 60%<br>▪ $350,000/MW - $449,999/MW: 75%<br>▪ $450,000/MW - $600,000/MW: 80% | Oppose | A tiered approach would be overly complex to administer and implement, particularly if and when cost estimates shift. As an example, if an Upgrade estimate is $325,000 and the Mobilization Threshold of 60% is reached, construction could begin. During construction, an unanticipated change could increase the cost estimate above $350,000, but the Upgrade has not reached the next-tier threshold of 75% of project costs committed; thus, the Upgrade would retroactively fall out of the Mobilization Threshold - yet in this example, construction has already begun. F.1.c is unnecessarily complex and would create complications, necessitating additional requirements and processes to clarify. In addition, as noted above, we have concerns about the risk to customers of underutilized assets at lower Mobilization Thresholds. |
| F.2 | The Mobilization Window for an Upgrade shall remain open until an alteration in the electric distribution system requires a new distribution System Impact Study to confirm the accuracy or necessity of the previously identified Upgrade. When the Mobilization Threshold is met the Utility may conduct a new mandatory cluster study with the costs assigned to the relevant Cost Share Participants consistent with a Utility's Cluster Study guidelines and timelines. Refusal by a Reactive Cost Share Participant to pay for its share of the study cost will constitute withdrawal. | Support | This requirement is an important acknowledgment of the dynamic nature of the distribution system. New studies may be necessary to ensure accuracy and necessity of the Upgrade and to provide Cost Share Participants with the most up-to-date information.<br>If the Commission chooses to allow the mobilization window to remain open indefinitely (i.e., if Requirement Xcel F.7 is not adopted), then this requirement becomes especially important. |
| F.3 | If either of the scenarios described in 3a or 3b occurs in the steps following an Upgrade being selected in the Upgrade prioritization process, the Utility will issue notice to the Reactive Cost Share Participants participating in the Upgrade that the Upgrade will be moved back to an open Mobilization Window. Within 20 Business days from the issuance of the notice by the Utility, the Reactive Cost Share Participants may elect to pay more than their project's Reactive Cost Share Contribution in order to reach the Mobilization Threshold, or the Upgrade will be moved back to an open Mobilization Window. After an Upgrade is moved back to an open Mobilization Window, when the Mobilization Threshold has been met again, the Upgrade will advance to the prioritization selection process.<br><br>a. A Reactive Cost Share Participant withdraws such that the mobilization threshold is no longer reached.<br>b. The final cluster study cost estimate varies from the previous estimate such that the mobilization threshold is no longer reached. | Support | Provides important process clarity. |

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| F.4 | If either of the scenarios described in 4a or 4b occurs in the steps following an Upgrade being selected in the Upgrade prioritization process, the Upgrade will be reprioritized against the criteria in G.1 of the Standards. If the reprioritization results in the Upgrade no longer maintaining its priority, it will be reconsidered in the next prioritization process as described in G.4 of the Standards before proceeding.<br>a. A Reactive Cost Share Participant withdraws.<br>b. The final cluster study cost estimate varies from the previous estimate by more than 20%. | Support | Provides important process clarity. |
| F.5 | If an Upgrade is moved back to an open Mobilization Window after estimated Reactive Cost Share Contributions have been paid by a Reactive Cost Share Participant, the Utility shall issue refunds of the estimated Reactive Cost Share Contributions within 30 Business Days from the date the Utility notifies the Reactive Cost Share Participants that the Mobilization Window is being reopened. | Support | Provides important process clarity. |
| F.6 | If a Mobilization Window remains open for more than two years, the Utility may consider Upgrade as a potential Proactive Upgrade in its next Proactive Upgrade Proposal under the framework established in Docket E002/CI-24-318. | Oppose | Any potential relationship or overlap between Proactive and Reactive Upgrades should be considered in the next phase of the Proactive Upgrades docket (Docket No. E002/CI-24-318). This requirement would functionally redefine "proactive" upgrade and thus needs to be considered in the Proactive Upgrades docket. |
| Xcel F.7 (New) | The Mobilization Window shall close if the Mobilization Threshold is not reached within two years. | Support | Under Requirement E.8.a, Interconnection Applications in queue after a Trigger Project would be required to participate in DSRUP or withdraw their application. If the Mobilization Window remains open indefinitely, an Upgrade could be "stuck" in an open Mobilization Window indefinitely due to a cost-prohibitive Upgrade not moving forward. |
| Xcel F.8 (New) | The Mobilization Window shall close if all Reactive Cost Share Participants withdraw. | Support | We believe this requirement should be explicit to help ensure consistency and clarity. |

## G. Upgrade Prioritization

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| | *Some areas of the distribution system have long queues of interconnection projects trying to interconnect into systems that are capacity constrained. Utilities have a finite number of resources that can be allocated towards Upgrade construction. Since there will likely be several areas of the distribution system that will meet the mobilization threshold around the same time and there are limited construction resources, prioritization can help parse which upgrades should be constructed first. In the future, when there are not more upgrades than available resources, this DSRUP will have upgrades completed in a market-driven way. In other words, chronologically as upgrades meet their mobilization thresholds. These prioritization criteria will only be in effect when there are multiple upgrades to choose from that can't all be started in the same period.* | | We believe it is imperative that all Upgrades go through the prioritization process outlined in G.1. |
| G.1 | When there are multiple eligible Upgrades that have reached the Mobilization Threshold, their construction shall be prioritized based on the below-listed criteria. In the case different upgrades are tied or equal in a given criterion, the upgrade will be prioritized by the next following criterion. The criteria used to evaluate the upgrades shall adhere to the following order:<br>a. The Upgrade with the highest percentage of developer-funded Upgrade cost<br>b. Lowest cost per megawatt of capacity added by the Upgrade<br>c. Most capacity constraints<br>d. Clear optimization benefits for the grid | Support | |
| G.2 | Notwithstanding the criteria listed in G1, where supply chain issues, permitting issues, or other issues that may delay an Upgrade by one year or longer are encountered, the Utility may remove the Upgrade from consideration until the next Upgrade prioritization review, and instead select the next highest priority Upgrade using the prioritization criteria. | Support | This requirement would limit delays for other Upgrades and projects; if one Upgrade is delayed for issues outside the Company's control, that delay would not need to cause delays for other Upgrades. |

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| G.3 | Following tariffed process initiation, every ____ the Utility shall review Upgrades that have met the Mobilization Threshold during the previous ____ months and prioritize them based on criteria in G1. | | |
| | a. Three months | Oppose | A longer interval is appropriate to enable necessary studies to be completed and for the prioritization process to be more meaningful. (See comments below.) |
| | **OR** | | |
| | b. Six Months | Support | Six months provides needed flexibility and ensures sufficient time to complete needed studies. At shorter intervals, studies may still be in progress. Conducting prioritization reviews every six months may also lead to more Upgrades being prioritized (versus a single Upgrade moving forward simply because no other Upgrades have reached this step), which would provide further assurance that the most beneficial and cost-effective Upgrades move forward first. |
| G.4 | An initial prioritization shall occur utilizing the criteria in G1 within six months of tariffed DSRUP approval. Following initial prioritization governed by G1, Upgrades shall move forward on a first come, first serve basis. Prioritization shall only be used when Upgrades meet the Mobilization Threshold during the same period as set in Section G3. | Oppose | The prioritization process outlined in G.1 should be used continuously; a solely first-come, first-serves approach to upgrades may lead to a higher number of less effective Upgrades being constructed and funded in part by customers. (We note that in a scenario where only one Upgrade meets the Mobilization Threshold in the time period under G.3, the prioritization process would be moot.) |
| G.5 | Approval through the prioritization process chosen in Section G shall create a rebuttable presumption of prudence in any cost recovery proceeding. | Support | DSRUP should use clearly established criteria -- as in G.1 -- for selecting Upgrades. Because the Company will have limited opportunity to control what Upgrades we build through the market-driven program, the Company needs to have a reasonable certainty for cost recovery. A rebuttable presumption of prudence is consistent with the Proactive Grid Upgrades framework approved by the Commission in Docket No. E002/CI-24-318 and is appropriate for DSRUP; we note a key difference between the Proactive framework and DSRUP is that the Commission will not approve these Upgrades before they move forward, because they are driven by the market. This further increases the importance of cost recovery certainty. |
| G.6 | Complaints regarding the prioritization results shall be addressed through the Formal Complaint process as subject to Minn. Rules 7829.1700-.1900 rather than the DSRUP dispute resolution process. | Oppose | If adopted, this requirement would function as a *prohibition* on any other avenue for resolving disputes regarding prioritization. Minn. Stat. 216B.172, subd. 2, states that "A complainant must first attempt to resolve a dispute with a public utility[.]" Under the MN DIP dispute resolution process - on which the DSRUP dispute resolution process is based - any party can file a formal complaint at any time during the process, so the Formal Complaint avenue would still be available to parties. The Commission should not preclude parties from being able to work through the dispute resolution process in the case of a complaint regarding the prioritization process. Many disputes can be resolved between parties and without the need for any party to file a formal complaint. |
| **H. Payment Details** | | | |
| H.1 | Interconnection Customers that have elected to participate in an Upgrade during an open Mobilization Window shall have an executed DSRUP Agreement to pay their Reactive Cost Share Contribution at the time the Interconnection Agreement is signed and paid consistent with MN DIP timelines. | Support | Consistent with MN DIP. Provides important process clarity. |
| H.2 | Interconnection Customers shall pay a non-refundable administrative fee with each executed DSRUP Agreement to participate in an Upgrade during an open Mobilization Window. The Interconnection Customer may exit the DSRUP Agreement at any time but will not be refunded the administrative fee. | Support | Provides important process clarity. The Administrative Fee is an important component of the process that enables the Company to cover its costs. The Administrative Fee will be set as part of a subsequent tariff filing. |
| H.3 | A DSRUP Agreement shall not be contingent upon any other DSRUP Agreement for another Upgrade. | Support | This requirement is relevant if a single project requires two Upgrades that are each subject to DSRUP. In that case, under this requirement the two DSRUP processes move independently. |

*The Commission must select 4 or 5.*

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| H.4 | Reactive Cost Share Participants may withdraw after all Interconnection Agreements for all Reactive Cost Share Participants that are participating in an Upgrade are countersigned by the Utility but shall not receive a refund of their Reactive Cost Share Contribution. | Support | H.4 aligns with MN DIP and the current cluster study guidelines. H.4 is also consistent with an amendment to the MN Distributed Energy Resources Interconnection Agreement (MN DIA) filed in Docket No. E002/M-18-714 on May 29, 2023 and which is authorized to be used as no participant filed an objection to this amendment within 30 days of its filing. This authorized amendment can also be used for the Reactive Cost Share program and its provisions do not need to be changed to do so. |
| **OR** | | | |
| H.5 | Reactive Cost Share Participants are not allowed to withdraw after all Interconnection Agreements for all Reactive Cost Share Participants that are participating in an Upgrade are countersigned by the Utility and shall be assessed a penalty by the Utility if they do. | Oppose | This requirement does not align with MN DIP. The Company believes that H.4 provides sufficient customer protection and disincentive for Reactive Cost Share Participants to withdraw; would be more administratively streamlined; and is - appropriately - consistent with MN DIP. |
| H.6 | Reactive Cost Share Participants may choose to use surety bonds and/or letters of credit to pay for their cost share contribution with cash payments becoming due in alignment with utilities' actual spending/costs incurred. | Oppose | At the time the Cost Share Contribution would be due, each Reactive Cost Share Participant would have a signed Interconnection Agreement; that is, the Cost Share Contribution is paid at a relatively late stage in the process: After the Mobilization Threshold has been met, the Upgrade has been prioritized, and the final cluster study is complete. Receiving payment before construction begins is a reasonable and standard practice. MN DIP Section 5.6.4 provides an option for the Area EPS Operator to use the "Traditional Security" or "Modified Security" methods to pay; similarly for DSRUP, such option should be at the Area EPS Operator's discretion. MN DIP has no provision for acceptance of a surety bond as a method of security for payment of any amount due; requiring the Company to accept surety bonds would increase risk to customers and is not reasonable, particularly for a market-driven program. |
| H.7 | The Utility shall track the funds via the initial invoice deposit and issue refunds to those that overpay. | Oppose | We support a requirement that ensures refunds are issued to those that overpay. This concept is well captured in H.8. The language in H.7 lacks clarity -- e.g., we are unsure what "initial invoice deposit" refers to -- and is unnecessary if H.8 is adopted. |
| H.8 | Any Reactive Cost Share Participant may pay more than their project's Reactive Cost Share Contribution in order to reach the Mobilization Threshold of an Upgrade. This payment beyond their project's calculated Reactive Cost Share Contribution shall be refunded if additional Reactive Cost Share Contributions are received prior to the Payback Period closing. A refund shall be issued to the overpaying Reactive Cost Share Participant within 30 business days from the date a new Reactive Cost Share Contribution is collected by the Utility. The amount refunded to overpaying Reactive Cost Share Participant is determined by the Reactive Cost Share Contribution collected from the new Reactive Cost Share Participant, not exceeding the amount of excess payment remaining to be refunded. Any remaining excess payment is not refundable once the Payback Period closes. Once the Payback Period closes or the over-payer has been fully refunded the excess payment, all funds from subsequent Reactive Cost Share Participants shall be credited to ratepayers. | Support | This requirement provides important process clarity, including specifying that refunds shall be issued to those that overpay. |
| H.9 | If two or more Reactive Cost Share Participants pay more than their projects' Reactive Cost Share Contribution obligations for a single Upgrade, the Utility shall refund such excess amounts in the order in which the excess payments were received. The reactive cost Share Participant whose excess payment was received first shall be refunded in full prior to the issuance of any refund to the Participant whose excess payment was received subsequently, and this sequence shall continue accordingly until all excess payments have been refunded. | Support | Provides important process clarity. |
| H.10 | There may be cases where a Utility collects greater than 100% of the final Upgrade costs and over-paying Reactive Cost Share Participants have already been refunded. If this occurs the excess will be returned to ratepayers by reducing the Utility's total recovery of distribution capital costs of the DSRUP the next time it seeks recovery for Process's costs. | Support | Provides important process clarity. |
| H.11 | Interconnection Applications under 40 kWac are exempt from paying a Reactive Cost Share Contribution if Hosting Capacity is available for Interconnection Applications under 40 kWac through a capacity reservation. | Support | "Capacity reservation" in this context refers to allowing small DER to exceed the Company's planning limit. The implementation of a system-wide capacity reservation is a topic that was deferred to Phase 2 of the proactive grid upgrade workgroup (Docket No. E002/CI-24-318).<br><br>The Commission can adopt this requirement now without prejudging the outcome of Phase 2 of the proactive grid upgrades workgroup; should a capacity reservation not become reality (or if it is not applicable to all utilities), Requirement H.11 would simply be moot. |
| H.12 | Reactive Cost Share Participants may use other, Utility-specific, cost sharing programs to fund their Reactive Cost Share Contribution where applicable and with subsequent approval in those relevant Utility-specific cost sharing program docket proceedings. | Support | While this requirement is not specific to small DER as written, this requirement is designed to account for programs like the small DER cost sharing program. A capacity reservation will help limit when small DG projects would need to bear a share of the Upgrade cost, but in cases where a small project would need to contribute to an Upgrade, this requirement leaves open options to ease the burden on small projects. |

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| **I. Payback Period** | | | |
| *The Commission must choose one of the subparts of 1 and of 2.* | | | |
| I.1 | The Payback Period shall remain open once the Mobilization Threshold is reached and remains open for: | | |
| | a. A minimum of five years from the Upgrade's in-service date.<br>i. If at least 75% of the costs of the Reactive Distribution Upgrade have not been recovered after five years, the Payback Period is automatically extended by an additional three years. | Oppose | Requiring a minimum Payback Period duration is unnecessary and counterproductive; there is no need to keep the Payback Period open if the Upgrade costs have been fully recovered from Reactive Cost Share Participants. In practice, a minimum Payback Period would create variable Payback periods, which would introduce unnecessary complexity and burden in administration, and is less consistent and clear for Reactive Cost Share Participants. |
| | **OR** | | |
| | b. A minimum of ten years from the Upgrade's in-service date. | Oppose | Requiring a minimum Payback Period duration is unnecessary and counterproductive; there is no need to keep the Payback Period open if the Upgrade costs have been fully recovered from Reactive Cost Share Participants. |
| | **OR** | | |
| | c. Until 100% of Upgrade costs are recovered from Interconnection Customers. | Oppose | 100% of upgrade costs may never be recovered from Interconnection Customers. Under this requirement, the Payback Period would effectively be open for the life of the Upgrade. There is a high likelihood that the distribution system will evolve and be reconfigured over that period. In that case, participants may be paying pro rata fees even when the Upgrade no longer provides the benefit as originally designed. due to ongoing changes in the system. |
| | **OR** | | |
| | d. No more than ten years from the Upgrade's in-service date | Support | The Payback Period should be long enough to give sufficient time for new projects to participate and contribute to the Upgrade costs, but not so long that the system has changed (e.g., new load, different load shapes, other projects, etc.) such that the Upgrade may no longer be benefiting future projects. This requirement is also consistent with the process for Proactive Upgrades (Docket No. E002/CI-24-318). |
| I.2 | The Payback Period shall end if: | | The Payback Period should end if *either* I.2.a *or* I.2.b is true. We provide a modification to I.2.a below to add one terminology clarification and clarify that either part should be true before the Payback Period ends. |
| | a. The Hosting created by the Upgrade is fully utilized by Reactive Cost Share Participants and all over-payers have been fully refunded the amounts above their Reactive Cost Share Contribution. | Do not oppose | |
| Xcel I.2.a | a. The Hosting Capacity created by the Upgrade is fully utilized by Reactive Cost Share Participants and all over-payers have been fully refunded the amounts above their Reactive Cost Share Contribution~~.~~, or | Support as modified | As noted above, Xcel I.2.a modification reflects a terminology clarification (Hosting Capacity), and clarifies that either I.2.a or I.2.b must be true for the Payback Period to end. |
| | b. The duration of the Payback Period defined in I.1 has elapsed. | Support | See above |
| I.3 | All Interconnection Applications that are in the Deemed Complete state within the Payback Period shall be subject to paying their Reactive Cost Share Contribution. | Support | Provides important process clarity and eliminates ambiguity surrounding when a project is subject to paying its Reactive Cost Share Contribution: If there is any Hosting Capacity sill available when the Payback Period closes, Interconnection Applications that in the Deemed Complete state will not be able to access that capacity at no cost. |
| **J. Annual Ratepayer Cost Cap** | | | |
| *The Annual Ratepayer Cost Cap is only referring to the total annual amount of potential Upgrade costs that may be allocated to ratepayers. It is not the "operational budget" of the DSRUP as a whole. The "Operational Budget" is theoretically how much money, on an annual rolling basis, is being spent on reactive distribution upgrades assuming the Annual Ratepayer Cost Cap is met.*<br>*The Commission must choose either 1 or 2. If it chooses 2, it must select either 2.a or 2.b.* | | | |
| J.1 | The Commission shall decide the Annual Ratepayer Cost Cap for Utility in a tariff filing upon approval of that Utility's DSRUP. | Support | Keeping the Annual Ratepayer Cost Cap in the utility's tariff filings provides important flexibility for all utilities. Procedurally, we also believe this approach better aligns with J.3 below. |
| **OR** | | | |
| J.2 | The Annual Ratepayer Cost Cap shall not exceed _____ % of the annual average of the Utility's forecasted 5-year distribution capital budget from its most recent Integrated Distribution Plan. | | Should the Commission choose to adopt J.2, we prefer J.2.a. |

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| | a. 2 percent<br>**OR** | Do not oppose | While we believe 2 percent is reasonable for Xcel Energy at this time, it may not be appropriate for all utilities or at all points in the future. As a point of reference, this amount would be approximately $17.9 million if DSRUP began today. The annual average of the Company's forecasted five-year distribution capital budget from our most recent Integrated Resource Plan, filed October 31, 2025 in Docket No. E002/M-25-142, is $896.7 million. |
| | b. 11 percent; or a percent that will equal $95 million for Xcel | Oppose | An Annual Ratepayer Cost Cap at $95 million presents a high ratepayer risk and is impracticable to implement. $95M is a significant amount of the Company's finite design and construction resources that would be dedicated to building these Upgrades. This would effectively pull resources away from other important investments we have budgeted, as shown in our 2025 IDP. |
| J.3 | The Commission intends that the Annual Ratepayer Cost Cap will remain in place for at least 24 months since the most recent change to the cost cap went into effect before the Commission considers modifications. A Utility, prospective Trigger Projects, and ratepayer advocates may request a modification to the Annual Ratepayer Cost Cap. In determining whether to change the Annual Ratepayer Cost Cap, the Commission shall consider, at a minimum, previous and future ratepayer costs and risks arising from the Utility's DSRUP, total pending cost share contributions, and the demand for new Upgrades. | Support | This requirement best aligns with J.1. An update to the Annual Ratepayer Cost Cap in the utility's DSRUP tariff would require a Petition to the Commission. Leaving the Cost Cap in place for at least 24 months is a reasonable approach to limit administrative burden while managing risk to the Company and customers. |
| J.4 | The Outstanding Costs of constructed Upgrades that have not been paid for by Reactive Cost Share Contributions shall count towards the Annual Ratepayer Cost Cap. | Support | Provides important clarification on how the Cost Cap functions. |
| | a. Costs of Upgrades that have not been paid for by Reactive Cost Share Participants upon the Payback Period closing shall be removed from the Annual Ratepayer Cost Cap. | Support | Provides important clarification on how the Cost Cap functions. |
| J.5 | Once the Annual Ratepayer Cost Cap is reached, the Mobilization Threshold for all pending Upgrades is set to 100 percent until the total amount recoverable from ratepayers drops below the cap. As available space opens up within the cost cap, projects transitioning back to the standard Mobilization Threshold shall follow existing prioritization processes. | Oppose | Under the Standards as outlined to this point, once an Upgrade reaches the Mobilization Threshold (regardless of what the Threshold is), it would go through the prioritization process in G.1. We support the Mobilization Threshold increasing to 100 percent once the Cost Cap is reached, but the second sentence is not necessary and lacks clarity. An Upgrade that reaches a 100 percent Mobilization Threshold should not need to transition back to the Standard Mobilization threshold in order to go through the prioritization process. Alternatively, J.5 as written could be read as implying that any Upgrade that reaches the 100 percent Mobilization Threshold would *not* go through the prioritization process, and would move straight to construction after completion of the cluster study. The Standards should require *all* Upgrades to go through the prioritization process once they reach the Mobilization Threshold - regardless of what the Mobilization Threshold is set at. This is an important Standard that serves to ensure the most beneficial Upgrades move to construction first. In practice, an Upgrade with a higher percentage (i.e., 100%) of committed developer funds would result in a higher priority based on the process outlined in G.1, but we think it is important to ensure that J.5 does not imply that any Upgrade would *not* go through the prioritization process. Striking the last sentence of this requirement would be clearer while maintaining the integrity of the Cost Cap. We offer a modification to this effect as Xcel J.5. |
| Xcel J.5 | Once the Annual Ratepayer Cost Cap is reached, the Mobilization Threshold for all pending Upgrades is set to 100 percent until the total amount recoverable from ratepayers drops below the cap. ~~As available space opens up within the cost cap, projects transitioning back to the standard Mobilization Threshold shall follow existing prioritization processes.~~ | Support as modified | |

## K. Cost Recovery

*If the Commission chooses 1, it must also choose 2 or 3. If the Commission chooses 3, it must choose 3a or 3b. 3c is optional.*

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| K.1 | Outstanding costs will not be eligible for rate recovery for the first five years of the Payback Period. After five years, the remainder of the outstanding costs shall be eligible for cost recovery. | Oppose | This requirement does not align with the statutory language, which "allows the utility to recover *on a timely basis* the costs of upgrades that are not allocated to participating distributed generation facilities under the commission order issued in docket No. E002, E015, or E017/CI-24-288" (emphasis added). (Minn. Stat. 216B.16, subd. 7b(b)(6).) Consistent with the law, the Company should be able to recover costs without delay or deferral. Deferred accounting should be applied in limited, extenuating circumstances, as the Commission has done in the past. Applying deferred accounting to individual Upgrades would not only be counter to Minnesota law, but it would be inconsistent with ratemaking principles and Commission precedent. |
| **AND** | | | |
| K.2 | The Utility will not accrue carrying costs during the first five years of the Payback Period. | Oppose | As noted above, this requirement is not aligned with Minnesota law. The Company should be able to recover on a timely basis all costs associated with implementing this market-driven program. |
| **OR** | | | |

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| K.3 | The utility will accrue carrying costs during the first five years of the Payback Period. The percentage rate for calculating carrying costs shall be the ______. | | |
| | a. utility's authorized Weighted Average Cost of Capital from the most recently approved rate case | Do not oppose | While we strongly oppose K.1, should the Commission choose K.1, the Company should be able to recover carrying costs and we prefer K.3.a. |
| | **OR** | | |
| | b. utility's long-term cost of debt | Oppose | While we strongly oppose K.1, should the Commission choose K.1, the Company should be able to recover carrying costs, but using long-term cost of debt is not appropriate because it is not representative of the entire capital mix that the Company deploys to raise capital for its utility investments. |
| | c. Carrying costs shall not be capitalized. Carrying costs may be recovered through the Utility's Transmission Cost Recovery rider petition. | Do not oppose | While we strongly oppose K.1, should the Commission choose K.1, the Company should be able to recover carrying costs and we prefer K.3.a. K.3.c is not necessary because Minnesota law allows recovery through the Transmission Cost Recovery Rider and carrying costs are not capitalized. |
| K.4 | Projects enabled by Upgrades that interconnect after the initial five years of the Payback Period has closed shall still be required to pay a Reactive Cost Share Contribution until the close of the Payback Period. Reactive Cost Share Contributions paid after the initial five years of the Payback Period shall be returned to ratepayers by paying down the remaining rate base of the Upgrade. | Oppose | This requirement is duplicative and unnecessary. The first sentence is unclear and unnecessary because all Reactive Cost Share Participants would be required to pay their Reactive Cost Share Contribution under Section I; it is not clear what is meant by "...after the initial five years of the Payback Period has closed." Costs would be collected during the Payback Period regardless of the status of cost recovery from ratepayers. The second sentence is unnecessary because the method of returning costs to ratepayers is covered under K.6. |
| *The Commission must choose at least one of the options under 5.* | | | |
| K.5 | A Utility may petition to recover outstanding costs through any or all of the following (but without any double recovery): | | |
| | a. Through a general rate case. | Support | Remaining DSRUP costs after the Payback Period closes would be rolled into our rate base and included in a rate case, and no longer recovered through the Transmission Cost Recovery Rider. |
| | b. Through its Transmission Cost Recovery Rider pursuant to Minn. Stat. 216B.16, Subd. 7b, paragraph (b), clause 6. | Support | Necessary and allowed by Minnesota law. |
| | c. Through deferred accounting. | Oppose | Deferred accounting is unnecessary and would add complexity and cost. Minnesota law allows for timely recovery of DSRUP costs. As noted above, deferred accounting should be applied in limited, extenuating circumstances, as the Commission has done in the past. Applying deferred accounting to individual Upgrades would not only be counter to Minnesota law, but it would be inconsistent with ratemaking principles and Commission precedent. |
| | d. Through invoices for DER projects. | Oppose | This approach is unnecessary, unclear, and overly complex, and would undermine the spirit of the DSRUP itself. Reactive Cost Share Participants would cover their pro rata share of at least 80% of the upgrade costs (under the Company's preferred Mobilization Threshold in F.1.b); it is not clear if this requirement is suggesting that *non-participating* DER projects would cover the remaining costs (or how such requirement would function). Furthermore, a utility petitioning to recover outstanding costs through project invoices would be burdensome for the utility, parties, and the Commission, which would need to then conduct a procedural process and issue an Order on each invoice. |
| *The Commission must choose 6a or 6b* | | | |
| K.6 | 6. All Reactive Cost Share Contributions collected from Reactive Cost Share Participants shall be collected during the Payback Period and shall be: | | |
| | a. Returned to ratepayers as an offset to the revenue requirements of Reactive Cost Share Distribution Upgrade. | Support | This requirement is consistent with the Proactive Upgrades Framework (Docket No. E002/CI-24-318) and provides needed clarity on the mechanism under which costs would be returned to ratepayers. |
| | **OR** | | |
| | b. Used to offset the rate base amount of the Upgrade until the upgraded assets are fully paid down, or the Payback Window closes. | Oppose | The Company prefers K.6.a over this pathway, which would require the Company to establish new accounting procedures and add a level of complexity that would create administrative burden compared to K.6.a. |

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| **L. Cost Allocation** | | | |
| *1 and 2 are alternatives. 3 can be adopted with either combination* | | | |
| L.1 | Costs recovered from ratepayers shall be treated consistent with the most recently approved rate case allocators and established revenue requirement procedures. Parties to a Utility's rate case or other cost recovery proceeding may request that the Commission establish a different cost allocation and procedures for DSRUP Upgrades. | Support | This requirement is consistent with standard practice and procedures and thus would be straightforward to administer. While we do not believe a different cost allocation or procedure will be necessary for DSRUP, a rate case is the appropriate venue in which to review these issues. |
| **OR** | | | |
| L.2 | For Reactive Cost Share Distribution Upgrades primarily serving large commercial and/or industrial customers, Upgrades shall be tracked separately from other rate-base assets and costs not paid for by Cost Share Contributions shall be allocated to the large commercial and industrial classes contributing to the need for or benefiting from the Upgrade. For all Upgrades that do not primarily serve large commercial and/or industrial customers, costs will be allocated according to the most recently approved rate case allocators and revenue requirement procedures. Parties to a Utility's rate case may request that the Commission establish a different cost allocation and procedures for DSRUP Upgrades. | Oppose | We oppose this requirement for two reasons:<br>First, the requirement is unclear and would create policy uncertainty. Defining "primarily serving" would be difficult in because the Upgrade would include multiple projects likely serving multiple customers or purposes. This lack of definition could also add an unnecessary level of contentiousness and complexity to the process if there is a disagreement on whether a project "primarily serves" commercial and/or industrial customers. Allocators should be updated in a rate case.<br>Second, tracking these Upgrades separately on a project level raises several questions as to how a project-specific cost allocation procedure would be administered at the Commission and if each Upgrade project's cost allocation would require Commission approval. It is also unclear at what interval the Company would need to re-assess project-specific cost allocation. Approval of L.2 would add another layer of new process and administration that may further delay and complicate the DSRUP program administration process. |
| L.3 | To the extent that DSRUP Upgrade costs are allocated to ratepayers, the Utility shall identify and mitigate adverse bill impacts on under-resourced customers and/or small businesses. | Oppose | We support mitigating adverse bill impacts on under-resourced customers and small businesses; this requirement is unnecessary. The Mobilization Threshold and Annual Ratepayer Cost Cap are the appropriate instruments to consider and use to mitigate adverse bill impacts.<br><br>As a practical matter and as noted above, all costs allocated to ratepayers should only use existing cost allocators from an approved rate case. There is no practical way to change the allocation of costs in this docket, so in that context, it is not clear what "mitigating" would mean for or require of the Company. |
| **M. Publication of DSRUP Information and Data** | | | |
| M.1 | Utilities shall make all reasonable efforts to publish the feeders and/or substations that have an open Mobilization Window and the availability of potential Upgrades where there is an open Mobilization Window as well as where there is an Upgrade already constructed that still has available hosting capacity remaining. Utilities shall publish the following information on a monthly basis for each active Upgrade location:<br>a. The $/kW Pro Rata Cost to participate in the Upgrade<br>b. Start and end dates of the Mobilization Window<br>c. Start and end dates of the Payback Period<br>d. The feeders and/or substations that have an open Mobilization Window<br>e. The maximum amount of distribution capacity that could be created by the Upgrade<br>f. Status of the Mobilization Threshold<br>i. How many projects have opted in<br>ii. The capacity they have taken up<br>iii. The progress, in percentage, towards the Mobilization Threshold | Support | We support publishing this information, and the Requirement language provides sufficient flexibility. |

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| M.2 | The information in M1 shall be included in Hosting Capacity maps. | Oppose | The Company's hosting capacity map includes a significant amount of data that can be difficult to navigate and locate the most relevant data (We plan to host additional training sessions in the future to help users navigate the map most effectively.) Putting this data into the hosting capacity map would require investment of time and money that we believe is unnecessary because the information can be provided in a spreadsheet, consistent with the presentation of the monthly MN DIP queue report. Not including this requirement in the Standards would not preclude the Company from including this information in Hosting Capacity maps in the future if appropriate, but it should not be a requirement. |
| M.3 | The information in M1 shall be listed on a spreadsheet. | Support | Listing this information in a publicly available spreadsheet is straightforward and consistent with the presentation of the monthly MN DIP queue report. |

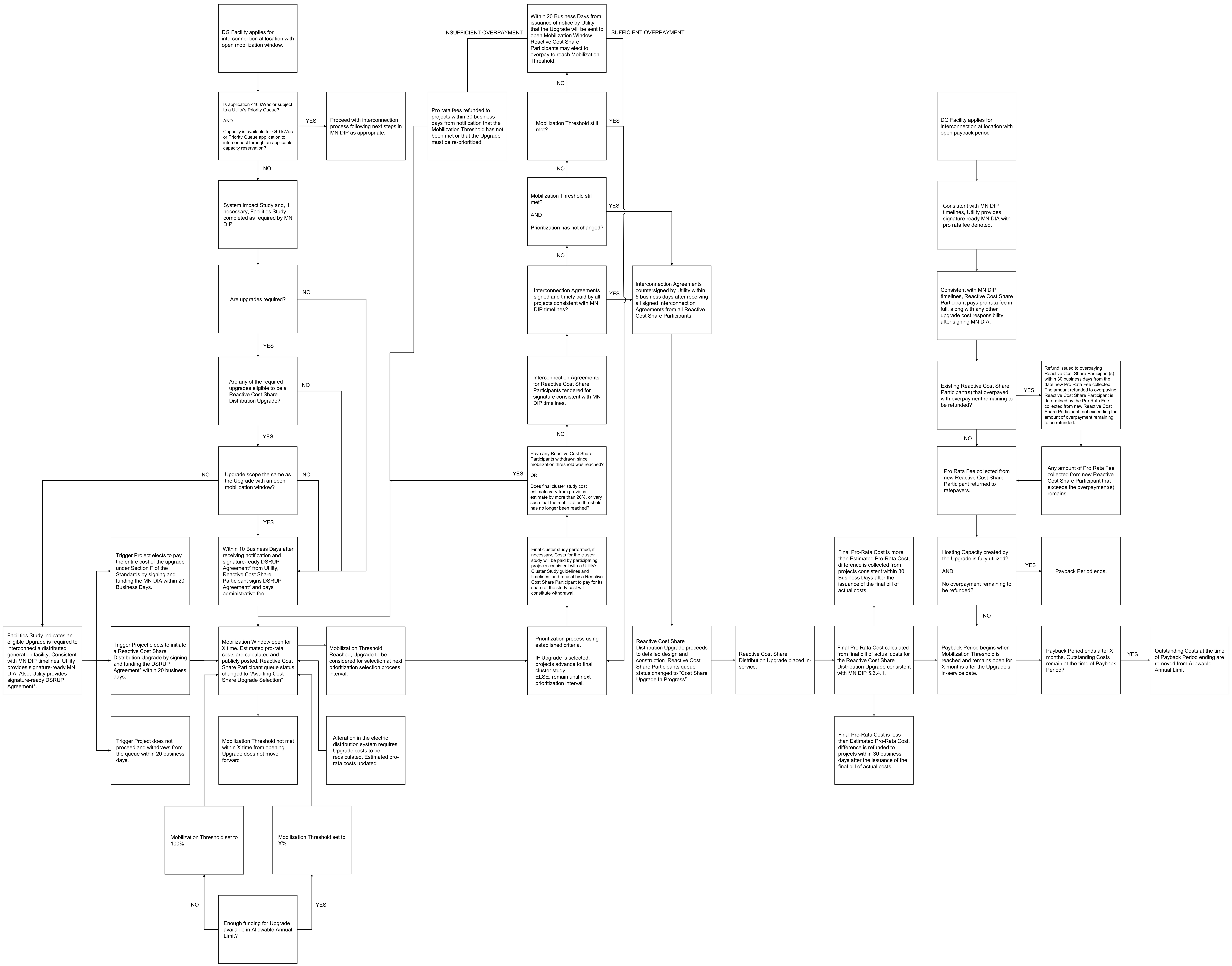
## N. Reporting and Process Evaluation

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| N.1 | Utilities shall file an annual compliance filing in Docket 24-288 the following reporting requirements: | Support | These reporting requirements are reasonable; we note that much of this information will be reported in the Company's annual Transmission Cost Recovery (TCR) Rider filing. We note below which items we anticipate would be reported in the TCR filing for any Upgrades whose costs are included in the TCR. |
| | a. List of ongoing projects by feeder and status (waiting for Mobilization Threshold to be reached, Upgrades in progress, post-construction Mobilization Window) | Support | |
| | b. Status of the Annual Ratepayer Cost Cap (how much $ space is available) | Support | Included in TCR filing |
| | c. Revenue requirements | Support | Included in TCR filing |
| | d. Impact to the Annual Ratepayer Cost Cap from each project including a forecast of cap space (assuming no new cost share customers interconnect) | Support | |
| | e. Total costs allocated to ratepayers by the DSRUP | Support | Included in TCR filing |
| | f. Total capacity (kWac) added by the DSRUP | Support | |
| | g. Total cumulative capacity (kWac) added by DSRUP | Support | |
| | h. Total amount funded by Reactive Cost Share Contributions | Support | Included in TCR filing |
| | i. Details about each individual Upgrade made, including | Support | |
| | i. Capacity added | Support | |
| | ii. Total Cost (estimated, final), Pro Rata Cost (estimated, final) | Support | |
| | iii. Trigger date, construction date, etc. (length to Mobilization Threshold) | Support | |
| | iv. How many projects were involved, their sizes | Support | |
| | j. The monetary benefit to ratepayers as a result of Upgrades that were more than 100% funded. | Support | |
| | k. The results of upgrade prioritization process for each Upgrade. | Support | |
| N.2 | Utilities must file reports that include the preceding ~~following~~ information and data to the greatest extent practicable. Where a Utility is not able to provide the required information, the Company shall explain why it is unable to do so. Such reports must be filed annually on March 1st in the current docket, 24-288. Where applicable, Utilities must include data in spreadsheet (.xlsx) format as well as in tabulated form. If a Utility also files a PDF version of spreadsheet data, it must be filed as an attachment in a separate document instead of being merged with the main report. | Support as modified | We support this requirement and offer a minor correction to reflect the latest requirement numbering. |
| N.3 | The Utility shall also include a summary of the DSRUP information in its Integrated Distribution Plan, including total projects triggered, total projects constructed, what portion of the Annual Ratepayer Cost Cap has been used, and other key metrics. | Oppose | This reporting would be duplicative of the report that will be filed annually on March 1 under Requirements N.1 and N.2. As noted above, some of the same information would also be included in the Company's annual Transmission Cost Recovery Rider filing. |
| N.4 | After four years of DSRUP tariffed operation, each Utility shall file an evaluation of the Standards and any recommended changes with its annual report in Docket 24-288. | Support | Evaluating the Standards is important. Four years is an appropriate length of time to allow the process to ramp up and achieve consistent operation. |
| N.5 | In addition to Utility evaluations, the DSRUP Standards are subject to refinement through Commission Order or through the Reactive Upgrade Workgroup with subsequent Commission approval. The Reactive Upgrade Workgroup shall be convened by Commission Staff and shall meet as necessary to refine and improve the Standards. Workgroup participants may reach out to Commission Staff to raise issues or concerns that may require the workgroup to reconvene. | Support | We support ongoing convening of the Workgroup. |
| N.6 | The DSRUP shall be evaluated based on the proposed reporting requirements. | Support | Explicit evaluation factors provide important clarity. |

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| **O. Dispute Resolution** | | | |
| O.1 | Dispute resolution shall be consistent with the highlighted portions of Attachment B. | Support | See "Att. B - Xcel Energy Position" |
| **P. Tariff Implementation** | | | |
| P.1 | These standards shall be implemented with each Utility through tariffs filed by each Utility. | Support | Important clarification |
| P.2 | The tariff filing shall include a Utility's DSRUP Agreement. | Support | Important clarification |

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| | Dispute Resolution Process for the Distribution System Reactive Upgrade Process (DSRUP)<br>For Disputes Between Interconnection Customers (and Developers) and the Public Utility<br>Generally, follow the MN DIP process, except where shown in yellow highlight *italics* below: | | |
| 5.3 | Disputes | *n/a - MN DIP* | |
| 5.3.1 | The Parties agree to attempt to resolve all disputes arising out of the interconnection process | *n/a - MN DIP* | |
| | *(and the DSRUP)* | Support | |
| | and associated study and Interconnection Agreements according to the provisions of this article and Minnesota Administrative Rules 7829.1500-7829.1900. More information on the Commission's Consumer Affairs Office dispute resolution services is available on the Commission's website: https://mn.gov/puc/consumers/help/complaint/ | *n/a - MN DIP* | |
| 5.3.2 | Prior to a written Notice of Dispute, the Party shall contact the other Party and raise the issue and the relief sought in an attempt to resolve the issue immediately. | *n/a - MN DIP* | |
| 5.3.3 | In the event of a dispute, the disputing Party shall provide the other Party a written Notice of Dispute containing the relevant known facts pertaining to the dispute, the specific dispute and the relief sought, and express notice by the disputing Party that it is invoking the procedures under this article. The Interconnection Customer may utilize the Commission's Consumer Affairs Office's complaint/inquiry form and Informal Complaint dispute resolution process to assist with the written Notice of Dispute. The notice shall be sent to the non-disputing Party's email address and physical address set forth in the Interconnection Agreement or Interconnection Application, if there is no Interconnection Agreement. If the Interconnection Customer chooses not to utilize the Commission's Consumer Affair Office dispute resolution process, the Interconnection Customer shall provide an informational electronic copy of the Notice of Dispute to the Consumer Affairs Office at the Commission at consumer.puc@state.mn.us. | *n/a - MN DIP* | |
| | *For Disputes relating to the DSRUP, it is mandatory to either complete the Commission's Consumer Affairs Office complaint/inquiry form or provide an informational copy to the CAO and this will provide notice to the Ombudsperson of the Dispute. For the first three years of DSRUP implementation, any Dispute regarding the DSRUP will not be logged as a complaint so that the Dispute will not count towards triggering service quality payments. Also, any Dispute relating to the DSRUP must be timely brought ("Timely Brought") in such a way so as to not further adversely impact other Interconnection Applications compared to if the Dispute had been brought in a timelier manner.* | Oppose | |
| Xcel 5.3.3 part 2 | *For Disputes relating to the DSRUP, it is mandatory to either complete the Commission's Consumer Affairs Office complaint/inquiry form or provide an informational copy to the CAO and this will provide notice to the Ombudsperson of the Dispute. ~~For the first three years of DSRUP implementation,~~ Any Dispute regarding the DSRUP will not be logged as a complaint so that the Dispute will not count towards triggering service quality payments. Also, any Dispute relating to the DSRUP must be timely brought ("Timely Brought") in such a way so as to not further adversely impact other Interconnection Applications compared to if the Dispute had been brought in a timelier manner.* | Support as modified | Any complaints should not count toward the Company's complaint threshold because DSRUP is a new process, required by law. DSRUP was not considered when the Company's complaint threshold or penalties were set, based on record development in a dedicated proceeding. Any changes to the Company's Quality of Service Plan tariff should be reviewed holistically in that docket. |
| 5.3.4 | The non-disputing Party shall acknowledge the notice within three (3) Business Days of its receipt and identify a representative with the authority to make decisions for the non-disputing Party with respect to the dispute. | *n/a - MN DIP* | |
| | *For Disputes relating to the DSRUP, if resolution of the Dispute might have a material impact on any other Interconnection Application, then that impacted Interconnection Application may be placed on hold until the Dispute is resolved.* | Support | |
| 5.3.5 | The non-disputing Party shall provide the disputing Party with relevant regulatory and/or technical details and analysis regarding the Area EPS Operator interconnection requirements under dispute within ten (10) Business Days of the date of the Notice of Dispute. | *n/a - MN DIP* | |
| | *If the Area EPS Operator believes that one or more other Interconnection Customers would be materially impacted by the resolution of a Dispute relating DSRUP, then the Area EPS Operator may as part of the 10 Business Day response above make any such Interconnection Customer a Party to the Dispute, and may provide pertinent details about the dispute to any Party to the Dispute including but not limited to as to any Party's position in the queue, name of any Party to the Dispute, and any such Party's assigned feeder and substation, date application was Deemed Complete, nameplate capacity of the Interconnection Application, etc. and an explanation of how each Party may be materially impacted by the resolution of the Dispute.* | Support | |
| | Within twenty (20) Business Days of the date of the Notice of Dispute, the Parties' authorized representatives will be required to meet and confer to try to resolve the dispute. Parties shall operate in good faith and use best efforts to resolve the dispute. | *n/a - MN DIP* | |

| Requirement No. | Requirement | Position | Justification |
|---|---|---|---|
| 5.3.6 | If a resolution is not reached in the thirty (30) Business Days from the date of the notice described in section 5.3.3, the Parties may 1) if mutually agreed, continue negotiations for up to an additional twenty (20) Business Days; or 2) either Party may request the Commission's Consumer Affairs Office provide mediation in an attempt to resolve the dispute within twenty (20) Business Days with the opportunity to extend this timeline upon mutual agreement. Alternatively, both Parties by mutual agreement may request mediation from an outside third-party mediator with costs to be shared equally between the Parties. | *n/a - MN DIP* | |
| | *In the case of a Dispute relating to the DSRUP, any Party may bring dispute relating to Reactive Cost Sharing to the Ombudsperson at the Commission's CAO office for mediation.* | Support | |
| 5.3.7 | If the results of the mediation are not accepted by one or more Parties (or by any Party for a Dispute in the case of a and there is still disagreement, the dispute shall proceed to the Commission's Formal Complaint process as described in Minn. Rules 7829.1700-1900 unless mutually agreed to continue with informal dispute resolution. | *n/a - MN DIP* | |
| 5.3.8 | At any time, either Party may file a complaint before the Commission pursuant to Minn. Stat. §216B.164, if applicable, and Commission rules outlined in Minn. Rules Ch. 7829. | *n/a - MN DIP* | |
| | Additional steps for Disputes relating to the DSRUP: | | |
| | *If the Dispute is not resolved following the above steps 5.3.1 to 5.3.6, then any Party may bring any Timely Brought Dispute relating to the DSRUP to the Commission for Expedited Dispute Resolution in the following way: File in a new Docket a Petition for Resolution of Dispute Relating to the DSRUP, include in that Petition all Parties to the Dispute as set forth above, and include in that Petition all pertinent facts. All Parties that are not Petitioners may be allowed 20 Business Days to submit their positions on the issue to the Commission, including where applicable a discussion on whether the Dispute has been Timely Brought. The Executive Secretary will determine if further rounds of comments are appropriate and will then set the matter for hearing. At hearing, the Commission may use its judgment on how the Dispute should be resolved, or whether further investigation is necessary. The Commission may determine whether the Dispute has not been Timely Brought and therefore is time barred.* | *Support* | |


DG Facility applies for interconnection at location with open mobilization window.
Is application <40 kWac or subject to a Utility's Priority Queue?
AND
Capacity is available for <40 kWac or Priority Queue application to interconnect through an applicable capacity reservation?
YES
Proceed with interconnection process following next steps in MN DIP as appropriate.
NO
System Impact Study and, if necessary, Facilities Study completed as required by MN DIP.
Are upgrades required?
NO
YES
Are any of the required upgrades eligible to be a Reactive Cost Share Distribution Upgrade?
NO
YES
Upgrade scope the same as the Upgrade with an open mobilization window?
NO
NO
YES
Within 10 Business Days after receiving notification and signature-ready DSRUP Agreement* from Utility, Reactive Cost Share Participant signs DSRUP Agreement* and pays administrative fee.
Facilities Study indicates an eligible Upgrade is required to interconnect a distributed generation facility. Consistent with MN DIP timelines, Utility provides signature-ready MN DIA. Also, Utility provides signature-ready DSRUP Agreement*.
Trigger Project elects to pay the entire cost of the upgrade under Section F of the Standards by signing and funding the MN DIA within 20 Business Days.
Trigger Project elects to initiate a Reactive Cost Share Distribution Upgrade by signing and funding the DSRUP Agreement* within 20 business days.
Trigger Project does not proceed and withdraws from the queue within 20 business days.
Mobilization Window open for X time. Estimated pro-rata costs are calculated and publicly posted. Reactive Cost Share Participant queue status changed to "Awaiting Cost Share Upgrade Selection"
Mobilization Threshold Reached, Upgrade to be considered for selection at next prioritization selection process interval.
Mobilization Threshold not met within X time from opening. Upgrade does not move forward
Alteration in the electric distribution system requires Upgrade costs to be recalculated, Estimated pro-rata costs updated
Mobilization Threshold set to 100%
Mobilization Threshold set to X%
NO
YES
Enough funding for Upgrade available in Allowable Annual Limit?
INSUFFICIENT OVERPAYMENT
SUFFICIENT OVERPAYMENT
Within 20 Business Days from issuance of notice by Utility that the Upgrade will be sent to open Mobilization Window, Reactive Cost Share Participants may elect to overpay to reach Mobilization Threshold.
Pro rata fees refunded to projects within 30 business days from notification that the Mobilization Threshold has not been met or that the Upgrade must be re-prioritized.
NO
Mobilization Threshold still met?
YES
NO
Mobilization Threshold still met?
AND
Prioritization has not changed?
YES
NO
Interconnection Agreements signed and timely paid by all projects consistent with MN DIP timelines?
YES
Interconnection Agreements countersigned by Utility within 5 business days after receiving all signed Interconnection Agreements from all Reactive Cost Share Participants.
Interconnection Agreements for Reactive Cost Share Participants tendered for signature consistent with MN DIP timelines.
NO
Have any Reactive Cost Share Participants withdrawn since mobilization threshold was reached?
OR
Does final cluster study cost estimate vary from previous estimate by more than 20%, or vary such that the mobilization threshold has no longer been reached?
YES
Final cluster study performed, if necessary. Costs for the cluster study will be paid by participating projects consistent with a Utility's Cluster Study guidelines and timelines, and refusal by a Reactive Cost Share Participant to pay for its share of the study cost will constitute withdrawal.
Prioritization process using established criteria.
IF Upgrade is selected, projects advance to final cluster study.
ELSE, remain until next prioritization interval.
Reactive Cost Share Distribution Upgrade proceeds to detailed design and construction. Reactive Cost Share Participants queue status changed to "Cost Share Upgrade In Progress"
Reactive Cost Share Distribution Upgrade placed in-service.
Final Pro Rata Cost calculated from final bill of actual costs for the Reactive Cost Share Distribution Upgrade consistent with MN DIP 5.6.4.1.
Final Pro-Rata Cost is more than Estimated Pro-Rata Cost, difference is collected from projects consistent within 30 Business Days after the issuance of the final bill of actual costs.
Final Pro-Rata Cost is less than Estimated Pro-Rata Cost, difference is refunded to projects within 30 business days after the issuance of the final bill of actual costs.
DG Facility applies for interconnection at location with open payback period
Consistent with MN DIP timelines, Utility provides signature-ready MN DIA with pro rata fee denoted.
Consistent with MN DIP timelines, Reactive Cost Share Participant pays pro rata fee in full, along with any other upgrade cost responsibility, after signing MN DIA.
Existing Reactive Cost Share Participant(s) that overpaid with overpayment remaining to be refunded?
YES
Refund issued to overpaying Reactive Cost Share Participant(s) within 30 business days from the date new Pro Rata Fee collected. The amount refunded to overpaying Reactive Cost Share Participant is determined by the Pro Rata Fee collected from new Reactive Cost Share Participant, not exceeding the amount of overpayment remaining to be refunded.
NO
Pro Rata Fee collected from new Reactive Cost Share Participant returned to ratepayers.
Any amount of Pro Rata Fee collected from new Reactive Cost Share Participant that exceeds the overpayment(s) remains.
Hosting Capacity created by the Upgrade is fully utilized?
AND
No overpayment remaining to be refunded?
YES
Payback Period ends.
NO
Payback Period begins when Mobilization Threshold is reached and remains open for X months after the Upgrade's in-service date.
Payback Period ends after X months. Outstanding Costs remain at the time of Payback Period?
YES
Outstanding Costs at the time of Payback Period ending are removed from Allowable Annual Limit

## CERTIFICATE OF SERVICE

I, Christine Marquis, hereby certify that I have this day served copies of the foregoing document on the attached list of persons.

xx by depositing a true and correct copy thereof, properly enveloped with postage paid in the United States mail at Minneapolis, Minnesota

xx electronic filing

**DOCKET NO. E002,E015,E017/CI-24-288**

Dated this 7th day of November 2025

/s/
______________________________
Christine Marquis
Regulatory Administrator

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Daniel | Abelson | daniel.abelson@metc.state.mn.us | Metropolitan Council | | 390 Robert Street N. St. Paul MN, 55101 United States | Electronic Service | | No | 24-288Official 24-288 |
| 2 | Brian | Allen | brian.allen@allenergysolar.com | All Energy Solar, Inc | | 1642 Carroll Ave Saint Paul MN, 55104 United States | Electronic Service | | No | 24-288Official 24-288 |
| 3 | Michael | Allen | michael.allen@allenergysolar.com | All Energy Solar | | 721 W 26th st Suite 211 Minneapolis MN, 55405 United States | Electronic Service | | No | 24-288Official 24-288 |
| 4 | Ellen | Anderson | ellena@umn.edu | 325 Learning and Environmental Sciences | | 1954 Buford Ave Saint Paul MN, 55108 United States | Electronic Service | | No | 24-288Official 24-288 |
| 5 | Janet | Anderson | jcainstp@icloud.com | - | | 1799 Sargent St. Paul MN, 55105 United States | Electronic Service | | No | 24-288Official 24-288 |
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| 7 | MK | Anderson | anderson@fresh-energy.org | Fresh Energy | | 408 St Peter Street Saint Paul MN, 55102 United States | Electronic Service | | No | 24-288Official 24-288 |
| 8 | David | Assaf | daassaf@flaherty-hood.com | Flaherty & Hood, P.A. | | 525 Park Street Suite 470 St. Paul MN, 55102 United States | Electronic Service | | No | 24-288Official 24-288 |
| 9 | Donna | Attanasio | dattanasio@gwu.edu | George Washington University | | 2000 H Street NW Washington DC, 20052 United States | Electronic Service | | No | 24-288Official 24-288 |
| 10 | John | Bailey | bailey@ilsr.org | Institute For Local Self-Reliance | | 1313 5th St SE Ste 303 Minneapolis MN, 55414 United States | Electronic Service | | No | 24-288Official 24-288 |
| 11 | Anjali | Bains | bains@fresh-energy.org | Fresh Energy | | 408 Saint Peter Ste 220 Saint Paul MN, 55102 United States | Electronic Service | | No | 24-288Official 24-288 |
| 12 | Mark | Bakk | mbakk@lcp.coop | Lake Country Power | | 26039 Bear Ridge Drive Cohasset MN, 55721 United States | Electronic Service | | No | 24-288Official 24-288 |
| 13 | Jared | Ballew | jared.ballew@ev.energy | EV.ENERGY CORP | | 726 18th St. Des Moines IA, 50314 United States | Electronic Service | | No | 24-288Official 24-288 |
| 14 | Laura | Beaton | beaton@smwlaw.com | Shute, Mihaly & Weinberger LLP | | 396 Hayes Street San Francisco CA, 94102 United States | Electronic Service | | No | 24-288Official 24-288 |
| 15 | Mathias | Bell | mathias@weavegrid.com | WeaveGrid | | 375 Alabama Street, Suite 325 San Francisco CA, 94110 United States | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| 16 | Jeff | Benson | jbenson@southcentralelectric.com | South Central Electric Association | | PO Box 150<br>71176 Tiell Drive<br>St. James MN, 56081<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 17 | Sasha | Bergman | sasha.bergman@state.mn.us | | Public Utilities Commission | | Electronic Service | | No | 24-288Official 24-288 |
| 18 | Derek | Bertsch | derek.bertsch@mrenergy.com | Missouri River Energy Services | | 3724 West Avera Drive<br>PO Box 88920<br>Sioux Falls SD, 57109-8920<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 19 | Barb | Bischoff | barb.bischoff@nngco.com | Northern Natural Gas Co. | | CORP HQ, 714<br>1111 So. 103rd Street<br>Omaha NE, 68124-1000<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 20 | Ingrid | Bjorklund | ibjorklund@avisenlegal.com | Avisen Legal | | 901 S. Marquette Ave. #1675<br>Minneapolis MN, 55402<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 21 | Ingrid | Bjorklund | ingrid@bjorklundlaw.com | Bjorklund Law, PLLC | | 855 Village Center Drive #256<br>North Oaks MN, 55127<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 22 | William | Black | bblack@mmua.org | MMUA | | Suite 200<br>3131 Fernbrook Lane North<br>Plymouth MN, 55447<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 23 | Kenneth | Bradley | kbradley@environmentminnesota.org | | | 2837 Emerson Ave S Apt CW112<br>Minneapolis MN, 55408<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 24 | Jon | Brekke | jbrekke@grenergy.com | Great River Energy | | 12300 Elm Creek Boulevard<br>Maple Grove MN, 55369-4718<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 25 | Kathleen | Brennan | kbrennan@spencerfane.com | Spencer Fane LLP | | 100 South Fifth Street, Suite 2500<br>Minneapolis MN, 55402<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 26 | Sydney R. | Briggs | sbriggs@swce.coop | Steele-Waseca Cooperative Electric | | 2411 W. Bridge St<br>PO Box 485<br>Owatonna MN, 55060-0485<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 27 | Mark B. | Bring | mbring@otpco.com | Otter Tail Power Company | | 215 South Cascade Street<br>PO Box 496<br>Fergus Falls MN, 56538-0496<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 28 | Matthew | Brodin | mbrodin@allete.com | Minnesota Power | | 30 West Superior Street<br>Duluth MN, | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
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| **29** | Christopher | Browning | christopher.browning@nexteraenergy.com | | | null null, null<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **30** | Christina | Brusven | cbrusven@fredlaw.com | Fredrikson Byron | | 60 S 6th St Ste 1500<br>Minneapolis MN, 55402-4400<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **31** | Mike | Bull | mike.bull@state.mn.us | | Public Utilities Commission | 121 7th Place East, Suite 350<br>St. Paul MN, 55101<br>United States | Electronic Service | | Yes | 24-288Official 24-288 |
| **32** | Jessica | Burdette | jessica.burdette@state.mn.us | | Department of Commerce | 85 7th Place East<br>Suite 500<br>St. Paul MN, 55101<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **33** | Jerry | Byer | jbyer@itasca-mantrap.com | Itasca-Mantrap Coop. Electrical Ass'n | | PO Box 192<br>Park Rapids MN, 56470<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **34** | Jennifer | Cady | jjcady@mnpower.com | Minnesota Power | | 30 W Superior St<br>Duluth MN, 55802<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **35** | Daniel T | Carlisle | todd-wad@toddwadena.coop | Todd-Wadena Electric Cooperative | | 550 Ash Ave NE<br>PO Box 431<br>Wadena MN, 56482<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **36** | Douglas M. | Carnival | dcarnival@carnivalberns.com | McGrann Shea Carnival Straughn & Lamb | | 800 Nicollet Mall Ste 2600<br>Minneapolis MN, 55402-7035<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **37** | Pat | Carruth | pat@mnvalleyrec.com | Minnesota Valley Coop. Light & Power Assn. | | 501 S 1st St.<br>PO Box 248<br>Montevideo MN, 56265<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **38** | Gabriel | Chan | gabechan@umn.edu | | | 130 Hubert H. Humphrey Center<br>301 19th Ave S<br>Minneapolis MN, 55455<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **39** | Ray | Choquette | rchoquette@agp.com | Ag Processing Inc. | | 12700 West Dodge Road<br>PO Box 2047<br>Omaha NE, 68103-2047<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **40** | City | Clerk | gregg.engdahl@ci.stcloud.mn.us | City of St. Cloud | | 400 Second St. S<br>St. Cloud MN, 56301<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **41** | Joshua | Cohen | josh.cohen@swtchenergy.com | SWTCH Energy, Inc. | | Greentown Labs<br>444 Somerville Avenue<br>Somerville MA, 02143<br>United States | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| 42 | Kenneth A. | Colburn | kcolburn@symbioticstrategies.com | Symbiotic Strategies, LLC | | 26 Winton Road Meredith NH, 32535413 United States | Electronic Service | | No | 24-288Official 24-288 |
| 43 | 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 | 24-288Official 24-288 |
| 44 | Kevin | Cray | kevin@communitysolaraccess.org | CCSA | | 1644 Platte St Denver CO, 80202 United States | Electronic Service | | No | 24-288Official 24-288 |
| 45 | George | Crocker | gwillc@nawo.org | North American Water Office | | 5093 Keats Avenue Lake Elmo MN, 55042 United States | Electronic Service | | No | 24-288Official 24-288 |
| 46 | Stacy | Dahl | sdahl@minnkota.com | Minnkota Power Cooperative, Inc. | | 5301 32nd Ave S Grand Forks ND, 58201 United States | Electronic Service | | No | 24-288Official 24-288 |
| 47 | George | Damian | gdamian@cleanenergyeconomymn.org | Clean Energy Economy MN | | 13713 Washburn Ave S Burnsville MN, 55337 United States | Electronic Service | | No | 24-288Official 24-288 |
| 48 | Lisa | Daniels | lisadaniels@windustry.org | Windustry | | 201 Ridgewood Ave Minneapolis MN, 55403 United States | Electronic Service | | No | 24-288Official 24-288 |
| 49 | James | Darabi | james.darabi@solarfarm.com | | | 2355 Fairview Ave #101 St. Paul MN, 55113 United States | Electronic Service | | No | 24-288Official 24-288 |
| 50 | Danielle | DeMarre | danielle.demarre@allenergysolar.com | All Energy Solar | | 1264 Energy Lane St Paul MN, 55108 United States | Electronic Service | | No | 24-288Official 24-288 |
| 51 | Timothy | DenHerder Thomas | timothy@cooperativeenergyfutures.com | Cooperative Energy Futures | | 3500 Bloomington Ave. S Minneapolis MN, 55407 United States | Electronic Service | | No | 24-288Official 24-288 |
| 52 | James | Denniston | james.r.denniston@xcelenergy.com | Xcel Energy Services, Inc. | | 414 Nicollet Mall, 401-8 Minneapolis MN, 55401 United States | Electronic Service | | No | 24-288Official 24-288 |
| 53 | Curt | Dieren | curt.dieren@dgr.com | L&O Power Cooperative | | 1302 S Union St Rock Rapids IA, 51246 United States | Electronic Service | | No | 24-288Official 24-288 |
| 54 | Cheryl | Dietrich | cheryl.dietrich@nexteraenergy.com | NextEra Energy Resources, LLC | | 700 Universe Blvd E1W/JB Juno Beach FL, 33408 United States | Electronic Service | | No | 24-288Official 24-288 |
| 55 | Ian M. | Dobson | ian.m.dobson@xcelenergy.com | Xcel Energy | | 414 Nicollet Mall, 401-8 Minneapolis MN, 55401 United States | Electronic Service | | No | 24-288Official 24-288 |
| 56 | Kristin | Dolan | kdolan@meeker.coop | Meeker Cooperative Light & Power Assn | | 1725 US Hwy 12 E. Ste 100 Litchfield MN, 55355 United States | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| **57** | Renee | Doyle | guydoyleelectric@gmail.com | Doyle Electric Inc. | | PO Box 295<br>Amboy MN, 56010<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **58** | Carlon | Doyle Fontaine | carlon.doyle.fontaine@senate.mn | MN Senate | | 75 Rev Dr Martin Luther King Jr Blvd Room G-17<br>St Paul MN, 55155<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **59** | Adam | Duininck | aduininck@ncsrcc.org | North Central States Regional Council of Carpenters | | 700 Olive Street<br>St. Paul MN, 55130<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **60** | Scott | Dunbar | sdunbar@kfwlaw.com | Keyes & Fox LLP | | 1580 Lincoln St Ste 880<br>Denver CO, 80203<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **61** | John R. | Dunlop, P.E. | jdunlop@resminn.com | Renewable Energy Services | | Suite 300<br>448 Morgan Ave. S.<br>Minneapolis MN, 55405-2030<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **62** | Hannah | Dunn | hannah.dunn@oakdalemn.gov | City of Oakdale | | 1584 Hadley Ave N<br>Oakdale MN, 55104<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **63** | Kelly | Dybdahl | kdybdahl@llec.coop | Lyon-Lincoln Electric Cooperative, Inc. | | 205 W. Hwy. 14<br>Tyler MN, 56178<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **64** | Brian | Edstrom | briane@cubminnesota.org | Citizens Utility Board of Minnesota | | 332 Minnesota St Ste W1360<br>Saint Paul MN, 55101<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **65** | Dick | Edwards | dedwards@ci.maple-grove.mn.us | City of Maple Grove | | 12800 Arbor Lakes Parkway<br>P O Box 1180<br>Maple Grove MN, 55311-6180<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **66** | William | Ehrlich | wehrlich@tesla.com | Tesla, Inc. | | 3500 Deer Creek Rd<br>Palo Alto CA, 94304<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **67** | Kristen | Eide Tollefson | healingsystems69@gmail.com | R-CURE | | 28477 N Lake Ave<br>Frontenac MN, 55026-1044<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **68** | Bob | Eleff | bob.eleff@house.mn | Regulated Industries Cmte | | 100 Rev Dr Martin Luther King Jr Blvd Room 600<br>St. Paul MN, 55155<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **69** | R. Neal | Elliot | rnelliott@aceee.org | American Council for an Energy-Efficient Economy | | ACEEE<br>529 14th St NW Ste 600<br>Washington DC, 20045<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **70** | Nadav | Enbar | nenbar@epri.com | EPRI | | 1117 Quince Ave<br>Boulder CO, | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 80304<br>United States | | | | |
| **71** | John | Farrell | jfarrell@ilsr.org | Institute for Local Self-Reliance | | 2720 E. 22nd St<br>Institute for Local Self-Reliance<br>Minneapolis MN, 55406<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **72** | Christian | Fenstermacher | christian.fenstermacher@owatonnautilities.com | Owatonna Municipal Public Utilities | | PO Box 800<br>208 S Walnut Ave<br>Owatonna MN, 55060<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **73** | Sharon | Ferguson | sharon.ferguson@state.mn.us | | Department of Commerce | 85 7th Place E Ste 280<br>Saint Paul MN, 55101-2198<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **74** | Christine | Fox | cfox@itasca-mantrap.com | Itasca-Mantrap Coop. Electric Assn. | | PO Box 192<br>Park Rapids MN, 56470<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **75** | Kornbaum | Frank | fkornbaum@mnpower.com | | | null null, null<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **76** | Nathan | Franzen | nathan@nationalgridrenewables.com | Geronimo Energy, LLC | | 8400 Normandale Lake Blvd<br>Ste 1200<br>Bloomington MN, 55437<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **77** | David | Freestate | dfreestate@epri.com | EPRI | | 942 Corridor Park Blvd<br>Knoxville TN, 37932<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **78** | Katelyn | Frye | kfrye@mnpower.com | Minnesota Power | | 30 W Superiot St<br>Duluth MN, 55802-2093<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **79** | Jessica | Fyhrie | jfyhrie@otpco.com | Otter Tail Power Company | | PO Box 496<br>Fergus Falls MN, 56538-0496<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **80** | Edward | Garvey | garveyed@aol.com | Residence | | 32 Lawton St<br>Saint Paul MN, 55102<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **81** | Allen | Gleckner | gleckner@fresh-energy.org | Fresh Energy | | 408 St. Peter Street<br>Ste 350<br>Saint Paul MN, 55102<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **82** | Allen | Gleckner | agleckner@elpc.org | Environmental Law & Policy Center | | 35 E. Wacker Drive, Suite 1600<br>Suite 1600<br>Chicago IL, 60601<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **83** | Jenny | Glumack | jenny@mrea.org | Minnesota Rural Electric Association | | 11640 73rd Ave N<br>Maple Grove MN, 55369<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **84** | Sean | Gosiewski | sean@afors.org | Alliance for Sustainability | | 2801 21st Ave S Ste 100<br>Minneapolis MN, 55407<br>United States | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| **85** | Scott | Greenbert | scott@nautilussolar.com | Nautilus Solar Energy, LLC | | 396 Springfield Aver, Ste 2 Summit NJ, 07901 United States | Electronic Service | | No | 24-288Official 24-288 |
| **86** | Sarah | Groebner | sgroebner@redwoodelectric.com | Redwood Electric Cooperative | | 60 Pine St Clements MN, 56224 United States | Electronic Service | | No | 24-288Official 24-288 |
| **87** | Tim | Gross | tgross@fuelingmn.com | Fueling Minnesota | | 3244 Rice Street St. Paul MN, 55126 United States | Electronic Service | | No | 24-288Official 24-288 |
| **88** | Cody | Gustafson | cgustafson@mnpower.com | | | null null, null United States | Electronic Service | | No | 24-288Official 24-288 |
| **89** | Tom | Guttormson | tom.guttormson@connexusenergy.com | Connexus Energy | | 14601 Ramsey Blvd Ramsey MN, 55303 United States | Electronic Service | | No | 24-288Official 24-288 |
| **90** | Natalie | Haberman | townsend@fresh-energy.org | Fresh Energy | | 408 St Peter St # 350 St. Paul MN, 55102 United States | Electronic Service | | No | 24-288Official 24-288 |
| **91** | James | Haler | jhaler@southcentralelectric.com | South Central Electric Association | | 71176 Tiell Dr P. O. Box 150 St. James MN, 56081 United States | Electronic Service | | No | 24-288Official 24-288 |
| **92** | Joe | Halso | joe.halso@sierraclub.org | Sierra Club | | 1536 Wynkoop St Ste 200 Denver CO, 80202 United States | Electronic Service | | No | 24-288Official 24-288 |
| **93** | Donald | Hanson | dfhanson@ieee.org | | | P. O. Box 44579 Eden Prairie MN, 55344 United States | Electronic Service | | No | 24-288Official 24-288 |
| **94** | John | Harlander | john.c.harlander@xcelenergy.com | Xcel Energy | | null null, null United States | Electronic Service | | No | 24-288Official 24-288 |
| **95** | Kim | Havey | kim.havey@minneapolismn.gov | City of Minneapolis | | 350 South 5th Street, Suite 315M Minneapolis MN, 55415 United States | Electronic Service | | No | 24-288Official 24-288 |
| **96** | Todd | Headlee | theadlee@dvigridsolutions.com | Dominion Voltage, Inc. | | 701 E. Cary Street Richmond VA, 23219 United States | Electronic Service | | No | 24-288Official 24-288 |
| **97** | Amber | Hedlund | amber.r.hedlund@xcelenergy.com | Northern States Power Company dba Xcel Energy-Elec | | 414 Nicollet Mall, 401-7 Minneapolis MN, 55401 United States | Electronic Service | | No | 24-288Official 24-288 |
| **98** | Tiana | Heger | theger@mnpower.com | Minnesota Power | | 30 W. Superior Street Duluth MN, 55802 United States | Electronic Service | | No | 24-288Official 24-288 |
| **99** | Adam | Heinen | aheinen@dakotaelectric.com | Dakota Electric Association | | 4300 220th St W Farmington MN, 55024 United States | Electronic Service | | No | 24-288Official 24-288 |
| **100** | Annete | Henkel | mui@mnutilityinvestors.org | Minnesota Utility Investors | | 413 Wacouta Street #230 St.Paul MN, | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 55101 United States | | | | |
| 101 | Jessy | Hennesy | jessy.hennesy@avantenergy.com | Avant Energy | | 220 S. Sixth St. Ste 1300 Minneapolis MN, 55402 United States | Electronic Service | | No | 24-288Official 24-288 |
| 102 | Joe | Hoffman | ja.hoffman@smmpa.org | SMMPA | | 500 First Ave SW Rochester MN, 55902-3303 United States | Electronic Service | | No | 24-288Official 24-288 |
| 103 | Michael | Hoppe | lu23@ibew23.org | Local Union 23, I.B.E.W. | | 445 Etna Street Ste. 61 St. Paul MN, 55106 United States | Electronic Service | | No | 24-288Official 24-288 |
| 104 | Ronald | Horman | rhorman@redwoodelectric.com | Redwood Electric Cooperative | | 60 Pine Street Clements MN, 56224 United States | Electronic Service | | No | 24-288Official 24-288 |
| 105 | Samantha | Houston | shouston@ucsusa.org | Union of Concerned Scientists | | 1825 K St. NW Ste 800 Washington DC, 20006 United States | Electronic Service | | No | 24-288Official 24-288 |
| 106 | Lori | Hoyum | lhoyum@mnpower.com | Minnesota Power | | 30 West Superior Street Duluth MN, 55802 United States | Electronic Service | | No | 24-288Official 24-288 |
| 107 | Jan | Hubbard | jan.hubbard@comcast.net | | | 7730 Mississippi Lane Brooklyn Park MN, 55444 United States | Electronic Service | | No | 24-288Official 24-288 |
| 108 | Dean | Hunter | dean.hunter@state.mn.us | | Minnesota Department of Labor & Industry | 443 Lafayette Rd N St. Paul MN, 55155-4341 United States | Electronic Service | | No | 24-288Official 24-288 |
| 109 | Reuben | Hunter | bhunter@madisonei.com | Madison Energy Investments | | 8100 Boone Blvd Suite 430 Vienna VA, 22182 United States | Electronic Service | | No | 24-288Official 24-288 |
| 110 | Casey | Jacobson | cjacobson@bepc.com | Basin Electric Power Cooperative | | 1717 East Interstate Avenue Bismarck ND, 58501 United States | Electronic Service | | No | 24-288Official 24-288 |
| 111 | John S. | Jaffray | jjaffray@jjrpower.com | JJR Power | | 350 Highway 7 Suite 236 Excelsior MN, 55331 United States | Electronic Service | | No | 24-288Official 24-288 |
| 112 | Robert | Jagusch | rjagusch@mmua.org | MMUA | | 3025 Harbor Lane N Minneapolis MN, 55447 United States | Electronic Service | | No | 24-288Official 24-288 |
| 113 | Chris | Jarosch | chris@carrcreekelectricservice.com | Carr Creek Electric Service, LLC | | 209 Sommers Street North Hudson WI, 54016 United States | Electronic Service | | No | 24-288Official 24-288 |
| 114 | Alan | Jenkins | aj@jenkinsatlaw.com | Jenkins at Law | | 2950 Yellowtail Ave. Marathon FL, 33050 United States | Electronic Service | | No | 24-288Official 24-288 |
| 115 | Richard | Johnson | rick.johnson@lawmoss.com | Moss & Barnett | | 150 S. 5th Street | Electronic Service | | No | 24-288Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Suite 1200 Minneapolis MN, 55402 United States | | | | 24-288 |
| **116** | Sarah | Johnson Phillips | sjphillips@stoel.com | Stoel Rives LLP | | 33 South Sixth Street Suite 4200 Minneapolis MN, 55402 United States | Electronic Service | | No | 24-288Official 24-288 |
| **117** | Nate | Jones | njones@hcpd.com | Heartland Consumers Power | | PO Box 248 Madison SD, 57042 United States | Electronic Service | | No | 24-288Official 24-288 |
| **118** | Philip | Jones | phil@evtransportationalliance.org | | | 1402 Third Ave Ste 1315 Seattle WA, 98101 United States | Electronic Service | | No | 24-288Official 24-288 |
| **119** | Julie | Jorgensen | julie@greenmark.us.com | Greenmark Solar | | 4630 Quebec Ave N New Hope MN, 55428-4973 United States | Electronic Service | | No | 24-288Official 24-288 |
| **120** | Kevin | Joyce | kjoyce@tesla.com | | | null null, null United States | Electronic Service | | No | 24-288Official 24-288 |
| **121** | Mahmoud | Kabalan | mahmoud.kabalan@stthomas.edu | University of St Thomas | | 2115 Summit Ave. Mail OSS100 School of Engineering Saint Paul MN, 55105 United States | Electronic Service | | No | 24-288Official 24-288 |
| **122** | Camille | Kadoch | ckadoch@raponline.org | Regulatory Assistance Project | | 50 State Street Suite 3 Montpelier VT, 05602 United States | Electronic Service | | No | 24-288Official 24-288 |
| **123** | Cliff | Kaehler | cliff.kaehler@novelenergy.biz | Novel Energy Solutions LLC | | 4710 Blaylock Way Inver Grove Heights MN, 55076 United States | Electronic Service | | No | 24-288Official 24-288 |
| **124** | Ralph | Kaehler | ralph.kaehler@gmail.com | | | 13700 Co. Rd. 9 Eyota MN, 55934 United States | Electronic Service | | No | 24-288Official 24-288 |
| **125** | Michael | Kampmeyer | mkampmeyer@a-e-group.com | AEG Group, LLC | | 260 Salem Church Road Sunfish Lake MN, 55118 United States | Electronic Service | | No | 24-288Official 24-288 |
| **126** | Nick | Kaneski | nick.kaneski@enbridge.com | Enbridge Energy Company, Inc. | | 11 East Superior St Ste 125 Duluth MN, 55802 United States | Electronic Service | | No | 24-288Official 24-288 |
| **127** | Jack | Kegel | jkegel@mmua.org | MMUA | | 3025 Harbor Lane N Suite 400 Plymouth MN, 55447-5142 United States | Electronic Service | | No | 24-288Official 24-288 |
| **128** | William | Kenworthy | will@votesolar.org | | | 1 South Dearborn St Ste 2000 Chicago IL, 60603 United States | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| **129** | Samuel B. | Ketchum | sketchum@kennedy-graven.com | Kennedy & Graven, Chartered | | 150 S 5th St Ste 700 Minneapolis MN, 55402 United States | Electronic Service | | No | 24-288Official 24-288 |
| **130** | Tom | Key | tkey@epri.com | EPRI | | 942 Corridor Park Blvd Knoxville TN, 37932 United States | Electronic Service | | No | 24-288Official 24-288 |
| **131** | Bobby | King | bking@solarunitedneighbors.org | Solar United Neighbors | | 3140 43rd Ave S Minneapolis MN, 55406 United States | Electronic Service | | No | 24-288Official 24-288 |
| **132** | Jack | Kluempke | jack.kluempke@state.mn.us | | Department of Commerce | 85 7th Place East Suite 600 St. Paul MN, 55101 United States | Electronic Service | | No | 24-288Official 24-288 |
| **133** | Aaron | Knoll | aknoll@greeneespel.com | Greene Espel PLLP | | 222 South Ninth Street Suite 2200 Minneapolis MN, 55402 United States | Electronic Service | | No | 24-288Official 24-288 |
| **134** | Steve | Kosbab | skosbab@meeker.coop | Meeker Cooperative Light and Power | | 1725 US Hwy 12 E Litchfield MN, 55355 United States | Electronic Service | | No | 24-288Official 24-288 |
| **135** | Brian | Krambeer | bkrambeer@mienergy.coop | MiEnergy Cooperative | | PO Box 626 31110 Cooperative Way Rushford MN, 55971 United States | Electronic Service | | No | 24-288Official 24-288 |
| **136** | Michael | Krause | michaelkrause61@yahoo.com | | | 1200 Plymouth Avenue Minneapolis MN, 55411 United States | Electronic Service | | No | 24-288Official 24-288 |
| **137** | Michael | Krikava | mkrikava@taftlaw.com | Taft Stettinius & Hollister LLP | | 2200 IDS Center 80 S 8th St Minneapolis MN, 55402 United States | Electronic Service | | No | 24-288Official 24-288 |
| **138** | Corrina | Kumpe | ckumpe@mysunshare.com | | | null null, null United States | Electronic Service | | No | 24-288Official 24-288 |
| **139** | Matthew | Lacey | mlacey@grenergy.com | Great River Energy | | 12300 Elm Creek Boulevard Maple Grove MN, 55369-4718 United States | Electronic Service | | No | 24-288Official 24-288 |
| **140** | James D. | Larson | james.larson@avantenergy.com | Avant Energy Services | | 220 S 6th St Ste 1300 Minneapolis MN, 55402 United States | Electronic Service | | No | 24-288Official 24-288 |
| **141** | Mark | Larson | mlarson@meeker.coop | Meeker Coop Light & Power Assn | | 1725 Highway 12 E Ste 100 Litchfield MN, 55355 United States | Electronic Service | | No | 24-288Official 24-288 |
| **142** | Burnell | Lauer | blauer.sundial@gmail.com | Sundial Solar | | 3209 W. 76th St #305 Edina MN, 55435 United States | Electronic Service | | No | 24-288Official 24-288 |
| **143** | Dean | Leischow | dean@sunrisenrg.com | Sunrise Energy Ventures | | 315 Manitoba Ave Ste 200 Wayzata MN, | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 55391<br>United States | | | | |
| **144** | Annie | Levenson Falk | annielf@cubminnesota.org | Citizens Utility Board of Minnesota | | 332 Minnesota Street, Suite W1360<br>St. Paul MN, 55101<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **145** | Benjamin | Levine | blevine@mnpower.com | Minnesota Power | | 30 West Superior Street<br>Duluth MN, 55802<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **146** | Amy | Liberkowski | amy.a.liberkowski@xcelenergy.com | Xcel Energy | | 414 Nicollet Mall<br>7th Floor<br>Minneapolis MN, 55401-1993<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **147** | Carl | Linvill | clinvill@raponline.org | | | 50 State Street Suite #3<br>Montpelier VT, 05602<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **148** | Phillip | Lipetsky | greenenergyproductsllc@gmail.com | Green Energy Products | | PO Box 108<br>Springfield MN, 56087<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **149** | Jody | Londo | jody.l.londo@xcelenergy.com | Xcel Energy | | 414 Nicillet Mall<br>7th Floor<br>Minneapolis MN, 55401-1993<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **150** | Susan | Ludwig | sludwig@mnpower.com | Minnesota Power | | 30 West Superior Street<br>Duluth MN, 55802<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **151** | Brian | Lydic | brian@irecusa.org | Interstate Renewable Energy Council, Inc. | | PO Box 1156<br>Latham NY, 12110-1156<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **152** | Richard | Macke | macker@powersystem.org | Power System Engineering, Inc. | | 10710 Town Square Dr NE Ste 201<br>Minneapolis MN, 55449<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **153** | Alice | Madden | alice@communitypowermn.org | Community Power | | 2720 E 22nd St<br>Minneapolis MN, 55406<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **154** | Alex | Magerko | amagerko@epri.com | EPRI | | 942 Corridor Park Blvd<br>Knoxville TN, 37932<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **155** | Kavita | Maini | kmaini@wi.rr.com | KM Energy Consulting, LLC | | 961 N Lost Woods Rd<br>Oconomowoc WI, 53066<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **156** | Discovery | Manager | discoverymanager@mnpower.com | Minnesota Power | | 30 W Superior St<br>Duluth MN, 55802<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **157** | Christine | Marquis | regulatory.records@xcelenergy.com | Xcel Energy | | 414 Nicollet Mall<br>MN1180-07-MCA<br>Minneapolis | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MN, 55401<br>United States | | | | |
| **158** | Gregg | Mast | gmast@cleanenergyeconomymn.org | Clean Energy Economy Minnesota | | 4808 10th Avenue S<br>Minneapolis MN, 55417<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **159** | Jason | Maur | jason.maur@renesolapower.com | Renesola Power Holdings, LLC | | 850 Canal Street<br>3rd Floor<br>Stamford CT, 06902<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **160** | Erica | McConnell | emcconnell@elpc.org | Environmental Law & Policy Center | | 35 E. Wacker Drive, Suite 1600<br>Chicago IL, 60601<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **161** | Jess | McCullough | jmccullough@mnpower.com | Minnesota Power | | 30 W Superior St<br>Duluth MN, 55802<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **162** | Sara G | McGrane | smcgrane@felhaber.com | Felhaber Larson | | 220 S 6th St Ste 2200<br>Minneapolis MN, 55420<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **163** | Natalie | McIntire | natalie.mcintire@gmail.com | Wind on the Wires | | 570 Asbury St Ste 201<br>Saint Paul MN, 55104-1850<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **164** | Matthew | Melewski | matthew@theboutiquefirm.com | Nokomis Energy LLC & Ole Solar LLC | | 2639 Nicollet Ave Ste 200<br>Minneapolis MN, 55408<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **165** | Thomas | Melone | thomas.melone@allcous.com | Minnesota Go Solar LLC | | 222 South 9th Street<br>Suite 1600<br>Minneapolis MN, 55120<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **166** | Michael | Menzel | mike.m@sagiliti.com | Sagiliti | | 23505 Smithtown Rd.<br>Suite 280<br>Excelsior MN, 55331<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **167** | Tim | Mergen | tmergen@meeker.coop | Meeker Cooperative Light And Power | | 1725 US Hwy 12 E. Suite 100<br>PO Box 68<br>Litchfield MN, 55355<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **168** | Pontius | Mike | mpontius@mnpower.com | | | null null, null<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **169** | Brian | Millberg | fwengineering@comcast.net | | | 695 Grand AVe<br>#222<br>Saint Paul MN, 55105<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **170** | Luther | Miller | luther.c.miller@xcelenergy.com | Xcel Energy | | null null, null<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **171** | Marc | Miller | mmiller@soltage.com | Soltage, LLC | | 66 York Street, 5th Floor<br>Jersey City NJ, 07302<br>United States | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| **172** | Stacy | Miller | stacy.miller@minneapolismn.gov | City of Minneapolis | | 350 S. 5th Street Room M 301 Minneapolis MN, 55415 United States | Electronic Service | | No | 24-288Official 24-288 |
| **173** | Marcus | Mills | marcus@communitypowermn.org | Community Power | | 2720 E 22nd St Minneapolis MN, 55406 United States | Electronic Service | | No | 24-288Official 24-288 |
| **174** | Darrick | Moe | darrick@mrea.org | Minnesota Rural Electric Association | | 11640 73rd Ave N Maple Grove MN, 55369 United States | Electronic Service | | No | 24-288Official 24-288 |
| **175** | David | Moeller | dmoeller@allete.com | Minnesota Power | | | Electronic Service | | No | 24-288Official 24-288 |
| **176** | Dalene | Monsebroten | dalene.monsebroten@nmpagency.com | Northern Municipal Power Agency | | 123 2nd St W Thief River Falls MN, 56701 United States | Electronic Service | | No | 24-288Official 24-288 |
| **177** | Andrew | Moratzka | andrew.moratzka@stoel.com | Stoel Rives LLP | | 33 South Sixth St Ste 4200 Minneapolis MN, 55402 United States | Electronic Service | | No | 24-288Official 24-288 |
| **178** | Susan | Mudd | smudd@elpc.org | Environmental Law and Policy Center | | 35 E. Wacker Drive, Suite 1600 Chicago IL, 60601 United States | Electronic Service | | No | 24-288Official 24-288 |
| **179** | Pouya | Najmaie | najm0001@gmail.com | Cooperative Energy Futures | | 3416 16th Ave S Minneapolis MN, 55407 United States | Electronic Service | | No | 24-288Official 24-288 |
| **180** | Alex | Nelson | anelson@dakotaelectric.com | Dakota Electric Association | | 4300 220nd St Farmington MN, 55024 United States | Electronic Service | | No | 24-288Official 24-288 |
| **181** | Anthony | Nelson | amnelson@otpco.com | Ottertail Power | | 53233 Sunrise Ln Park Rapids MN, 56470 United States | Electronic Service | | No | 24-288Official 24-288 |
| **182** | Ben | Nelson | benn@cmpasgroup.org | CMMPA | | 459 South Grove Street Blue Earth MN, 56013 United States | Electronic Service | | No | 24-288Official 24-288 |
| **183** | Carl | Nelson | cnelson@mncee.org | Center for Energy and Environment | | 212 3rd Ave N Ste 560 Minneapolis MN, 55401 United States | Electronic Service | | No | 24-288Official 24-288 |
| **184** | Darin | Nelson | dnelson@minnetonkamn.gov | City of Minnetonka | | 14600 Minnetonka Blvd Minnetonka MN, 55345 United States | Electronic Service | | No | 24-288Official 24-288 |
| **185** | David | Niles | david.niles@avantenergy.com | Minnesota Municipal Power Agency | | 220 South Sixth Street Suite 1300 Minneapolis MN, 55402 United States | Electronic Service | | No | 24-288Official 24-288 |
| **186** | Sephra | Ninow | sephra.ninow@energycenter.org | Center for Sustainable Energy | | 426 17th Street, Suite 700 Oakland CA, 94612 United States | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| **187** | Michael | Noble | noble@fresh-energy.org | Fresh Energy | | 408 Saint Peter St Ste 350<br>Saint Paul MN, 55102<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **188** | Rolf | Nordstrom | rnordstrom@gpisd.net | Great Plains Institute | | 2801 21ST AVE S STE 220<br>Minneapolis MN, 55407-1229<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **189** | Samantha | Norris | samanthanorris@alliantenergy.com | Interstate Power and Light Company | | 200 1st Street SE PO Box 351<br>Cedar Rapids IA, 52406-0351<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **190** | David | O'Brien | david.obrien@navigant.com | Navigant Consulting | | 77 South Bedford St Ste 400<br>Burlington MA, 01803<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **191** | Logan | O'Grady | logrady@mnseia.org | Minnesota Solar Energy Industries Association | | 2288 University Ave W<br>St. Paul MN, 55114<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **192** | Patty | O'Keefe | patty.okeefe@sierraclub.org | | | 2525 Emerson Ave S Apt 2<br>Minneapolis MN, 55405<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **193** | Timothy | O'Leary | toleary@llec.coop | Lyon-Lincoln Electric Cooperative, Inc | | P.O. Box 639<br>Tyler MN, 56178-0639<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **194** | Jeff | O'Neill | jeff.oneill@ci.monticello.mn.us | City of Monticello | | 505 Walnut Street<br>Suite 1<br>Monticelllo MN, 55362<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **195** | Matthew | Olsen | molsen@otpco.com | Otter Tail Power Company | | 215 South Cascade Street<br>Fergus Falls MN, 56537<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **196** | Russell | Olson | rolson@hcpd.com | Heartland Consumers Power District | | PO Box 248<br>Madison SD, 57042-0248<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **197** | Wendi | Olson | wolson@otpco.com | Otter Tail Power Company | | 215 South Cascade<br>Fergus Falls MN, 56537<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **198** | Carol A. | Overland | overland@legalectric.org | Legalectric - Overland Law Office | | 1110 West Avenue<br>Red Wing MN, 55066<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **199** | Bethany | Owen | bowen@mnpower.com | Minnesota Power | | 30 West Superior Street<br>Duluth MN, 55802<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **200** | Cezar | Panait | cezar.panait@state.mn.us | | Public Utilities Commission | 121 7th Place East<br>Suite 350<br>St. Paul MN, 55101<br>United States | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| 201 | Dan | Patry | dpatry@sunedison.com | SunEdison | | 600 Clipper Drive Belmont CA, 94002 United States | Electronic Service | | No | 24-288Official 24-288 |
| 202 | Jeffrey C | Paulson | jeff.jcplaw@comcast.net | Paulson Law Office, Ltd. | | 4445 W 77th Street Suite 224 Edina MN, 55435 United States | Electronic Service | | No | 24-288Official 24-288 |
| 203 | Dean | Pawlowski | dpawlowski@otpco.com | Otter Tail Power Company | | PO Box 496 215 S. Cascade St. Fergus Falls MN, 56537-0496 United States | Electronic Service | | No | 24-288Official 24-288 |
| 204 | Susan | Peirce | susan.peirce@state.mn.us | | Department of Commerce | 85 Seventh Place East St. Paul MN, 55101 United States | Electronic Service | | No | 24-288Official 24-288 |
| 205 | Mary Beth | Peranteau | mperanteau@fredlaw.com | Fredrikson & Byron, P.A. | | 44 East Mifflin Street Suite 1000 Madison WI, 53703 United States | Electronic Service | | No | 24-288Official 24-288 |
| 206 | Jennifer | Peterson | jjpeterson@mnpower.com | Minnesota Power | | 30 West Superior Street Duluth MN, 55802 United States | Electronic Service | | No | 24-288Official 24-288 |
| 207 | Wess | Pfaff | wes.pfaff@mrenergy.com | | | null null, null United States | Electronic Service | | No | 24-288Official 24-288 |
| 208 | Morgan | Pitz | morgan.pitz@us-solar.com | US Solar | | 100 N 6th St #410B Minneapolis MN, 55403 United States | Electronic Service | | No | 24-288Official 24-288 |
| 209 | Hannah | Polikov | hpolikov@aee.net | Advanced Energy Economy Institute | | 1000 Vermont Ave, Third Floor Washington DC, 20005 United States | Electronic Service | | No | 24-288Official 24-288 |
| 210 | Crystal | Pomerleau | crystal.r.pomerleau@xcelenergy.com | Xcel | | null null, null United States | Electronic Service | | No | 24-288Official 24-288 |
| 211 | Kristel | Porter | kristel@mnrenewablenow.org | MN Renewable Now | | null null, null United States | Electronic Service | | No | 24-288Official 24-288 |
| 212 | Paula | Prahl | paula.prahl@dominiuminc.com | Dominium | | 2905 Northwest Blvd Ste 150 Plymouth MN, 55441 United States | Electronic Service | | No | 24-288Official 24-288 |
| 213 | Kevin | Pranis | kpranis@liunagroc.com | Laborers' District Council of MN and ND | | 81 E Little Canada Road St. Paul MN, 55117 United States | Electronic Service | | No | 24-288Official 24-288 |
| 214 | David G. | Prazak | dprazak@otpco.com | Otter Tail Power Company | | P.O. Box 496 215 South Cascade Street Fergus Falls MN, 56538-0496 United States | Electronic Service | | No | 24-288Official 24-288 |
| 215 | Elizabeth | Psihos | elizabeth.psihos@idealenergies.com | | | null null, null United States | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| **216** | Bridget | Rathsack | bridget.rathsack@burnsvillemn.gov | City of Burnsville, MN | | 100 Civic Center Parkway<br>Burnsville MN, 55337<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **217** | Peter | Reese | preese@sundialsolarenergy.com | Sundial Energy, LLC | | 3363 Republic Ave<br>Saint Louis Park MN, 55426<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **218** | Generic Notice | Regulatory | regulatory_filing_coordinators@otpco.com | Otter Tail Power Company | | 215 S. Cascade Street<br>Fergus Falls MN, 56537<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **219** | John C. | Reinhardt | | Laura A. Reinhardt | | 3552 26th Ave S<br>Minneapolis MN, 55406<br>United States | Paper Service | | No | 24-288Official 24-288 |
| **220** | Generic Notice | Residential Utilities Division | residential.utilities@ag.state.mn.us | | Office of the Attorney General - Residential Utilities Division | 1400 BRM Tower<br>445 Minnesota St<br>St. Paul MN, 55101-2131<br>United States | Electronic Service | | Yes | 24-288Official 24-288 |
| **221** | Kevin | Reuther | kreuther@mncenter.org | MN Center for Environmental Advocacy | | 26 E Exchange St, Ste 206<br>St. Paul MN, 55101-1667<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **222** | Micah | Revell | micah.revell@stinson.com | Stinson LLP | | 50 South Sixth St Ste 2600<br>Minneapolis MN, 55402<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **223** | Michael | Riewer | mriewer@otpco.com | Otter Tail Power Company | | PO Box 4496<br>Fergus Falls MN, 56538-0496<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **224** | Jonathan | Roberts | jroberts@soltage.com | Soltage | | 66 York St<br>5th Floor<br>Jersey City NJ, 07302<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **225** | Noah | Roberts | nroberts@cleanpower.org | Energy Storage Association | | 1155 15th St NW, Ste 500<br>Washington DC, 20005<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **226** | Kristi | Robinson | krobinson@star-energy.com | STAR Energy Services, LLC | | 1401 South Broadway<br>Pelican Rapids MN, 56572<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **227** | Daniel | Rogers | dan@nokomispartners.com | | | 2639 Nicollet Ave Ste 200<br>Minneapolis MN, 55408<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **228** | Michael | Ruiz | michael.ruiz@xcelenergy.com | Xcel Energy | | null null, null<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **229** | Nathaniel | Runke | nrunke@local49.org | | | 611 28th St. NW<br>Rochester MN, 55901<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **230** | Darla | Ruschen | d.ruschen@bcrea.coop | Brown County Rural Electrical Association | | PO Box 529<br>24386 State Highway 4 | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Sleepy Eye MN, 56085 United States | | | | |
| **231** | Delaney | Russell | delaney@mnipl.org | Just Solar Coalition | | 4407 E Lake Street Minneapolis MN, 55407 United States | Electronic Service | | No | 24-288Official 24-288 |
| **232** | Robert K. | Sahr | bsahr@eastriver.coop | East River Electric Power Cooperative | | P.O. Box 227 Madison SD, 57042 United States | Electronic Service | | No | 24-288Official 24-288 |
| **233** | Ian | SantosMeeker | ians@ips-solar.com | IPS Solar | | null null, null United States | Electronic Service | | No | 24-288Official 24-288 |
| **234** | Joseph L | Sathe | jsathe@kennedy-graven.com | Kennedy & Graven, Chartered | | 150 S 5th St Ste 700 Minneapolis MN, 55402 United States | Electronic Service | | No | 24-288Official 24-288 |
| **235** | Kenric | Scheevel | kjs@dairynet.com | Dairyland Power Cooperative | | 3200 East Ave S PO Box 817 La Crosse WI, 54602 United States | Electronic Service | | No | 24-288Official 24-288 |
| **236** | Dean | Schiro | dean.e.schiro@xcelenergy.com | Xcel Energy | | null null, null United States | Electronic Service | | No | 24-288Official 24-288 |
| **237** | Jacob J. | Schlesinger | jschlesinger@keyesfox.com | Keyes & Fox LLP | | 1580 Lincoln St Ste 880 Denver CO, 80203 United States | Electronic Service | | No | 24-288Official 24-288 |
| **238** | Jeff | Schoenecker | jschoenecker@dakotaelectric.com | Dakota Electric Association | | 4300 220th Street W Farmington MN, 55024 United States | Electronic Service | | No | 24-288Official 24-288 |
| **239** | Kay | Schraeder | kschraeder@minnkota.com | Minnkota Power | | 5301 32nd Ave S Grand Forks ND, 58201 United States | Electronic Service | | No | 24-288Official 24-288 |
| **240** | Matthew | Schuerger | matthew.schuerger@state.mn.us | | Public Utilities Commission | 121 7th Place East Suite 350 St. Paul MN, 55101 United States | Electronic Service | | No | 24-288Official 24-288 |
| **241** | Ronald J. | Schwartau | rschwartau@noblesce.com | Nobles Electric Cooperative | | 22636 U.S. Hwy. 59 Worthington MN, 56187 United States | Electronic Service | | No | 24-288Official 24-288 |
| **242** | Rob | Scott Hovland | rob.scott-hovland@mrenergy.com | Missouri River Energy Services | | 3724 W Avera Dr PO Box 88920 Sioux Falls SD, 57109-8920 United States | Electronic Service | | No | 24-288Official 24-288 |
| **243** | Dean | Sedgwick | sedgwick@itascapower.com | Itasca Power Company | | PO Box 455 Spring Lake MN, 56680 United States | Electronic Service | | No | 24-288Official 24-288 |
| **244** | Maria | Seidler | maria.seidler@dom.com | Dominion Energy Technology | | 120 Tredegar Street Richmond VA, 23219 United States | Electronic Service | | No | 24-288Official 24-288 |
| **245** | David | Shaffer | david.shaffer@novelenergy.biz | Novel Energy Solutions | | 2303 Wycliff St Ste 300 St. Paul MN, 55114 United States | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| 246 | Patricia | Sharkey | psharkey@environmentallawcounsel.com | Midwest Cogeneration Association. | | 180 N LaSalle St<br>Ste 3700<br>Chicago IL, 60601<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 247 | Christopher L. | Sherman | csherman@sherman-associates.com | Solar Holdings LLC | | 233 Park Ave S Ste 201<br>Minneapolis MN, 55415<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 248 | Doug | Shoemaker | dougs@charter.net | Minnesota Renewable Energy | | 2928 5th Ave S<br>Minneapolis MN, 55408<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 249 | Felicia | Skaggs | fskaggs@meeker.coop | Meeker Cooperative Light & Power | | 1725 US Highway 12 E Suite 100<br>Litchfield MN, 55355<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 250 | Glen | Skarbakka | glen@s-pllc.com | Skarbakka PLLC | | 5411 Bartlett Blvd<br>Mound MN, 55364<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 251 | Anne | Smart | anne.smart@chargepoint.com | ChargePoint, Inc. | | 254 E Hacienda Ave<br>Campbell CA, 95008<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 252 | Joshua | Smith | joshua.smith@sierraclub.org | | | 85 Second St FL 2<br>San Francisco CA, 94105<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 253 | Ken | Smith | ken.smith@ever-greenenergy.com | Ever Green Energy | | 305 Saint Peter St<br>Saint Paul MN, 55102<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 254 | Ken | Smith | ken.smith@districtenergy.com | District Energy St. Paul Inc. | | 76 W Kellogg Blvd<br>St. Paul MN, 55102<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 255 | Trevor | Smith | trevor.smith@avantenergy.com | Avant Energy, Inc. | | 220 South Sixth Street Suite 1300<br>Minneapolis MN, 55402<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 256 | Rafi | Sohail | rafi.sohail@centerpointenergy.com | CenterPoint Energy | | 800 LaSalle Avenue<br>P.O. Box 59038<br>Minneapolis MN, 55459-0038<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 257 | Beth | Soholt | bsoholt@cleangridalliance.org | Clean Grid Alliance | | 570 Asbury Street Suite 201<br>St. Paul MN, 55104<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 258 | Marcia | Solie | m.solie@bcrea.coop | Brown County Rural Electrical Association | | 24386 State Hwy. 4, PO Box 529<br>Sleepy Eye MN, 56085<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| 259 | Braden | Solum | braden.solum@idealenergies.com | iDEAL Energies | | 5810 Nicollet Ave<br>Minneapolis MN, 55419<br>United States | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| 260 | Karl | Sonneman | karl17@hbci.com | Law Office of Karl W. Sonneman | | 111 Riverfront Suite 202 Winona MN, 55987 United States | Electronic Service | | No | 24-288Official 24-288 |
| 261 | Brandon | Stamp | brandon.j.stamp@xcelenergy.com | Xcel Energy | | 401 Nicollet Mall Minneapolis MN, 55401 United States | Electronic Service | | No | 24-288Official 24-288 |
| 262 | Sky | Stanfield | stanfield@smwlaw.com | Shute, Mihaly & Weinberger | | 396 Hayes Street San Francisco CA, 94102 United States | Electronic Service | | No | 24-288Official 24-288 |
| 263 | Russ | Stark | russ.stark@ci.stpaul.mn.us | City of St. Paul | | Mayor's Office 15 W. Kellogg Blvd., Suite 390 Saint Paul MN, 55102 United States | Electronic Service | | No | 24-288Official 24-288 |
| 264 | Byron E. | Starns | byron.starns@stinson.com | STINSON LLP | | 50 S 6th St Ste 2600 Minneapolis MN, 55402 United States | Electronic Service | | No | 24-288Official 24-288 |
| 265 | Kristin | Stastny | kstastny@taftlaw.com | Taft Stettinius & Hollister LLP | | 2200 IDS Center 80 South 8th Street Minneapolis MN, 55402 United States | Electronic Service | | No | 24-288Official 24-288 |
| 266 | Lindsey | Stegall | lindsey.stegall@evgo.com | EVgo Services, LLC | | 11835 W Olympic Blvd Ste 900E Los Angeles CA, 90064 United States | Electronic Service | | No | 24-288Official 24-288 |
| 267 | Cary | Stephenson | cstephenson@otpco.com | Otter Tail Power Company | | 215 South Cascade Street Fergus Falls MN, 56537 United States | Electronic Service | | No | 24-288Official 24-288 |
| 268 | Sherry | Swanson | sswanson@noblesce.com | Nobles Cooperative Electric | | 22636 US Highway 59 PO Box 788 Worthington MN, 56187 United States | Electronic Service | | No | 24-288Official 24-288 |
| 269 | Bryant | Tauer | btauer@whe.org | Wright-Hennepin | | 6800 Electric Dr Rockford MN, 55373 United States | Electronic Service | | No | 24-288Official 24-288 |
| 270 | Dean | Taylor | dtaylor@pluginamerica.org | Plug In America | | 6380 Wilshire Blvd, Suite 1000 Los Angeles CA, 90048 United States | Electronic Service | | No | 24-288Official 24-288 |
| 271 | Whitney | Terrill | whitney@mnipl.org | Minnesota Interfaith Power & Light | | null null, null United States | Electronic Service | | No | 24-288Official 24-288 |
| 272 | Stuart | Tommerdahl | stommerdahl@otpco.com | Otter Tail Power Company | | 215 S Cascade St PO Box 496 Fergus Falls MN, 56537 United States | Electronic Service | | No | 24-288Official 24-288 |
| 273 | Taige | Tople | taige.d.tople@xcelenergy.com | Northern States Power Company dba Xcel Energy-Elec | | 414 Nicollet Mall 401 7th Floor Minneapolis MN, 55401 United States | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| 274 | Jason | Topp | jason.topp@lumen.com | Qwest Communications Company, LLC. | | 200 S 5th St Ste 2200 Minneapolis MN, 55402 United States | Electronic Service | | No | 24-288Official 24-288 |
| 275 | Emma Marshall | Torres | emarshall-torres@convergentep.com | | | null null, null United States | Electronic Service | | No | 24-288Official 24-288 |
| 276 | Zack | Townsend | zachary.townsend@brookfieldrenewable.com | Brookfield Renewable | | 200 Liberty St FL 14 New York NY, 10281 United States | Electronic Service | | No | 24-288Official 24-288 |
| 277 | Pat | Treseler | pat.jcplaw@comcast.net | Paulson Law Office LTD | | 4445 W 77th Street Suite 224 Edina MN, 55435 United States | Electronic Service | | No | 24-288Official 24-288 |
| 278 | Jeff | Triplett | triplettj@powersystem.org | MREA | | 10710 Town Square Dr NW St 201 Minneapolis MN, 55449 United States | Electronic Service | | No | 24-288Official 24-288 |
| 279 | Adam | Tromblay | atromblay@noblesce.com | Nobles Cooperative Electric | | 22636 US Hwy. 59 P.O. Box 788 Worthington MN, 56187-0788 United States | Electronic Service | | No | 24-288Official 24-288 |
| 280 | Lise | Trudeau | lise.trudeau@state.mn.us | | Department of Commerce | 85 7th Place East Suite 500 Saint Paul MN, 55101 United States | Electronic Service | | No | 24-288Official 24-288 |
| 281 | Alan | Urban | alan.m.urban@xcelenergy.com | Xcel Energy | | null null, null United States | Electronic Service | | No | 24-288Official 24-288 |
| 282 | Gary | Van Winkle | gvanwinkle@mylegalaid.org | Mid-Minnesota Legal Aid | | 111 N Fifth St Ste 100 Minneapolis MN, 55403 United States | Electronic Service | | No | 24-288Official 24-288 |
| 283 | John | Vaughn | nik@rreal.org | Rural Renewable Energy Alliance | | 3963 8th Street SW Backus MN, 55435 United States | Electronic Service | | No | 24-288Official 24-288 |
| 284 | Ellen | Veazey | lveazey@solarunitedneighbors.org | Solar United Neighbors | | 1350 Connecticut Ave NW Ste 412 Washington DC, 20036 United States | Electronic Service | | No | 24-288Official 24-288 |
| 285 | Sam | Villella | sdvillella@gmail.com | | | 10534 Alamo Street NE Blaine MN, 55449 United States | Electronic Service | | No | 24-288Official 24-288 |
| 286 | Curt | Volkmann | curt@newenergy-advisors.com | Fresh Energy | | 408 St Peter St Saint Paul MN, 55102 United States | Electronic Service | | No | 24-288Official 24-288 |
| 287 | Wendy | Vorasane | wendy.vorasane@idealenergies.com | | | null null, null United States | Electronic Service | | No | 24-288Official 24-288 |
| 288 | Robert J.V. | Vose | rvose@kennedy-graven.com | Kennedy & Graven, Chartered | | 150 S 5th St Ste 700 Minneapolis MN, 55402 United States | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| **289** | Stacy | Wahlund | swahlund@otpco.com | Otter Tail Power Company | | 215 S. Cascade St Fergus Falls MN, 56537 United States | Electronic Service | | No | 24-288Official 24-288 |
| **290** | Sarah | Walinga | swalinga@solarcity.com | Energy Freedom Coalition | | 3055 Clearview Way San Mateo MN, 94402 United States | Electronic Service | | No | 24-288Official 24-288 |
| **291** | Kevin | Walker | kwalker@beaconinterfaith.org | Beacon Interfaith Housing Collaborative | | null null, null United States | Electronic Service | | No | 24-288Official 24-288 |
| **292** | Roger | Warehime | roger.warehime@owatonnautilities.com | Owatonna Municipal Public Utilities - Gas | | 208 S Walnut Ave PO BOX 800 Owatonna MN, 55060 United States | Electronic Service | | No | 24-288Official 24-288 |
| **293** | Jenna | Warmuth | jwarmuth@mnpower.com | Minnesota Power | | 30 W Superior St Duluth MN, 55802-2093 United States | Electronic Service | | No | 24-288Official 24-288 |
| **294** | Samantha | Weaver | samantha@communitysolaraccess.org | Coalition for Community Solar Access | | 1380 Monroe St. Washington DC DC, 20010 United States | Electronic Service | | No | 24-288Official 24-288 |
| **295** | Elizabeth | Wefel | eawefel@flaherty-hood.com | Missouri River Energy Services | | 525 Park St Ste 470 Saint Paul MN, 55103 United States | Electronic Service | | No | 24-288Official 24-288 |
| **296** | Joshua | Williams | joshua@highlandfleets.com | Highland Electric Fleets | | 200 Cummings Center Suite 273-D Beverly MA, 01915 United States | Electronic Service | | No | 24-288Official 24-288 |
| **297** | Laurie | Williams | laurie.williams@sierraclub.org | Sierra Club | | Environmental Law Program 1536 Wynkoop St Ste 200 Denver CO, 80202 United States | Electronic Service | | No | 24-288Official 24-288 |
| **298** | John | Williamson | john.williamson@state.mn.us | Minnesota Department of Labor and Industry | | 443 Lafayette Rd N St. Paul MN, 55155-4341 United States | Electronic Service | | No | 24-288Official 24-288 |
| **299** | Anthony | Willingham | anthony.willingham@electrifyamerica.com | Electrify America | | 1950 Opportunity Way Suite 1500 Reston VA, 20190 United States | Electronic Service | | No | 24-288Official 24-288 |
| **300** | Danielle | Winner | danielle.winner@state.mn.us | | Department of Commerce | 85 7th Place East Suite 500 Saint Paul MN, 55101 United States | Electronic Service | | No | 24-288Official 24-288 |
| **301** | Heidi | Winter | hwinter@co.murray.mn.us | Murray County | | 2500 28th Street PO Box 57 Slayton MN, 56172 United States | Electronic Service | | No | 24-288Official 24-288 |
| **302** | Robyn | Woeste | robynwoeste@alliantenergy.com | Interstate Power and Light Company | | 200 First St SE Cedar Rapids | Electronic Service | | No | 24-288Official 24-288 |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | IA, 52401<br>United States | | | | |
| **303** | Terry | Wolf | terry.wolf@mrenergy.com | Missouri River Energy Services | | 3724 W Avera Dr<br>PO Box<br>Sioux Falls SD, 57109-8920<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **304** | Curtis | Zaun | curtis@cpzlaw.com | | | 3254 Rice Street<br>Little Canada MN, 55126<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **305** | Brian | Zavesky | brianz@mrenergy.com | Missouri River Energy Services | | 3724 West Avera Drive<br>P.O. Box 88920<br>Sioux Falls SD, 57108-8920<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **306** | Christopher | Zibart | czibart@atcllc.com | American Transmission Company LLC | | W234 N2000 Ridgeview Pkwy Court<br>Waukesha WI, 53188-1022<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **307** | Kurt | Zimmerman | kwz@ibew160.org | Local Union #160, IBEW | | 2909 Anthony Ln<br>St Anthony Village MN, 55418-3238<br>United States | Electronic Service | | No | 24-288Official 24-288 |
| **308** | Emily | Ziring | eziring@stlouispark.org | City of St. Louis Park | | 5005 Minnetonka Blvd<br>St. Louis Park MN, 55416<br>United States | Electronic Service | | No | 24-288Official 24-288 |