STATE OF MINNESOTA
BEFORE THE PUBLIC UTILITIES COMMISSION

Katie Sieben	Chair
Joseph K. Sullivan	Vice Chair
Hwikwon Ham	Commissioner
Audrey Partridge	Commissioner
John 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 OF THE OFFICE OF THE ATTORNEY GENERAL— RESIDENTIAL UTILITIES DIVISION

INTRODUCTION

The Office of the Attorney General—Residential Utilities Division (OAG) respectfully submits the following Comments in response to the Public Utilities Commission's Notice of Comment Period issued on September 26, 2025, which asked "what generic standards should the Commission adopt for the Distribution System Reactive Upgrades Process (DSRUP)?" The proposals in this docket were developed by organizations representing, broadly speaking, three distinct interest groups: ratepayers, utilities, and distributed generation developers. The standards will be most effective and enduring if the Commission ensures that costs and risks are equitably distributed among all three groups.

For Staff's convenience, Attachment 1 to these Comments provides a table listing the OAG's positions on each element of the full framework.

BACKGROUND

The legislature directed the Commission to initiate this proceeding "to establish by order generic standards for the sharing of utility costs necessary to upgrade a utility's distribution system

by increasing hosting capacity."[1] Minnesota has seen a vast expansion of Distributed Energy Resources (DER) in recent years, and this growth has led to certain areas of the distribution system becoming highly congested, or capacity-constrained.[2] Minnesota Session Laws – 2024, Regular Session, Chapter 126, Article 6, Section 53 is intended to make it easier for DER developers to share the costs of capacity upgrades and speed up the process of funding them while still protecting ratepayers from paying too much.

To understand what the legislation hopes to accomplish, it is worth discussing the current process for upgrading the distribution system to increase hosting capacity. When a DER developer wishes to interconnect to the grid, it applies to interconnect at a particular location. If the location is already highly congested, an upgrade needs to be built to increase grid capacity sufficiently to allow the new DER.

The utility requires the DER developer to pay for the entire cost of the upgrade. However, the utility will also choose an upgrade that is at least one size larger than the DER developer requires so that the grid does not again become congested immediately once the new developer interconnects. The DER developer thus must pay for more hosting capacity than it will use. The remaining capacity is eventually used by later load or generation resources for free – a free rider problem. DER developers sometimes attempt to band together to share the costs of an upgrade that they would all interconnect to, but they report that such coordination is extremely difficult.

The Distributed Generation Reactive Upgrade Process (DSRUP) will lower these barriers to DER interconnection. The basic goal is to allow DER developers to share the costs of upgrades that are required to increase hosting capacity. The DSRUP will also increase the speed at which

[1] Minn. Laws 2024, Regular Session, Ch. 126, Art. 6, Sec. 53.
[2] Docket No. E-002/CI-24-318, Staff Briefing Papers at 3-5 (Jul. 24, 2025).

grid upgrades are added by requiring construction to begin without developers paying for its full cost. It does this by defining how much of an upgrade's cost must be vouched for (subscribed) by developers before a utility is required to begin construction on the upgrade, how payments will be collected from developers, how the costs that developer payments do not cover will be recovered from ratepayers, and how ratepayers will be protected from over-subsidizing the program.

There are certain important concepts that must be understood to understand the OAG's recommended DSRUP program design.

Reactive Cost Share Contribution

The Cost Share Contribution is the total amount of money paid by a DER developer to interconnect to a DSRUP upgrade.[3] The authorizing legislation states that the dollar-per-kW of capacity rate that developers must pay must be calculated by dividing the total costs of the eligible upgrade by the total kilowatts of hosting capacity created by the upgrade. The Cost Share Contribution is determined by simply multiplying the dollar-per-kilowatt rate by the number of kilowatts of capacity the developer's project will use up.

Annual Ratepayer Cost Cap

The Annual Ratepayer Cost Cap represents the total amount of money that could be socialized to ratepayers each year as a result of the DSRUP.[4] It is an aggregate cost limit set by the Commission, and when total Outstanding Costs (discussed below) of all DSRUP upgrades reach this limit, new DSRUP upgrades cannot be pursued until existing upgrades have their Outstanding Costs paid down.

[3] Notice of Comment Period, Att. A at 3.
[4] *Id.* at 2.

Mobilization Threshold

The Mobilization Threshold is significant as both a ratepayer protection and for how it affects other aspects of the DSRUP standards. It is required by law[5] and defined as "the percentage of the estimated total Upgrade cost that must be committed in order for construction of the Upgrade to move forward."[6] In this case, "committed" means a commitment by DER developers to pay for it. Once the Mobilization Threshold for an upgrade is met, the utility collects payment from developers and begins the construction process.

The Commission's determination regarding the Mobilization Threshold will be one determination of the amount of protection ratepayers will receive. To understand, consider a 100 percent and 0 percent Mobilization Threshold. A 100 percent Mobilization Threshold is essentially the status quo where there is no risk to ratepayers because developers pay the entire upgrade cost, but the grid is congested. A 0 percent Mobilization Threshold would mean almost no ratepayer protection at all, as upgrades could simply be built on speculation if even a single developer demanded it. A Mobilization Threshold thus ensures that there is at least enough demand for the upgrade to pay for the percentage of the upgrade set by the Mobilization Threshold. It also ensures that ratepayers will only be exposed to a portion of the cost of each upgrade; the higher the Mobilization Threshold, the lower the Outstanding Costs (discussed next) of an upgrade. A higher Mobilization Threshold therefore means more protection, and a lower one means less protection.

The Mobilization Threshold is also significant for how it interacts with the Annual Ratepayer Cost Cap, as the two in combination determine how many upgrades can be pursued through the DSRUP at one time.

[5] Minn. Laws 2024, Regular Session, Ch. 126, Art. 6, Sec. 53, sub. (a), para. (5).
[6] Notice of Comment Period, Att. A at 3.

For the purposes of illustration, assume a set of 100 upgrades that cost $100 each all exactly reach their Mobilization Thresholds. If the Mobilization Threshold is 80 percent, the Outstanding Costs of each Upgrade will be $20, as the Outstanding Costs are the costs that have not been paid for by Cost Share Contributions. Now further assume an Annual Ratepayer Cost Cap of $1000. With Outstanding Costs of $20 per upgrade, 50 of those upgrades can be built before reaching the Annual Ratepayer Cost Cap.

On the other hand, if the Mobilization Threshold of the upgrades was set at only 20 percent, the Outstanding Costs of each upgrade would be $80 and only 12 upgrades would be built before hitting the Annual Ratepayer Cost Cap. The remaining 88 upgrades would have to wait until more developers interconnect to one of the only 12 existing upgrades, which may offer fewer options of suitable locations for all developers than the 50 upgrades in the prior example. Thus, a lower Mobilization Threshold can result in fewer upgrades overall being built.

Outstanding Costs

The draft framework defines Outstanding Costs as "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."[7] In other words, once the Mobilization Threshold has been met, Outstanding Costs are the costs of a mobilized upgrade that ratepayers will be required to pay if no new developers interconnect to that upgrade. If new developers do interconnect, they will pay for a percentage of the upgrade's cost equal to the percentage of the hosting capacity they use, reducing the Outstanding Costs. Because the utility selects the capacity of the upgrade by choosing a larger size upgrade than the anticipated

[7] Notice of Comment Period, Att. A at 3.

developer demand, every upgrade is likely to have some Outstanding Costs that are recovered in rates, meaning ratepayers will be paying for at least a portion of every DSRUP upgrade.

Payback Period

The Payback Period is defined as "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."[8] In other words, the Payback Period determines how long developers will need to pay their share of each DSRUP upgrade's cost. Once the Payback Period closes, ratepayers will definitively foot the bill for any remaining costs of an upgrade plus the utility's rate of return. Determining the length of the Payback Period requires consideration of both ratepayer protection and inter-developer equity.

For ratepayers, the length of the Payback Period strongly influences the risk that ratepayers will be forced to pay for the unused remaining capacity upgrade. The longer the Payback Period, the greater the chance that developers will (at least eventually) pay for an upgrade's Outstanding Costs. If the Payback Period is too short, ratepayers are at greater risk of paying for unused hosting capacity enabled by an upgrade.

A too-short Payback Period can also incentivize opportunism on the part of developers, to the detriment of both ratepayers and other developers. Once upgrades near the end of their Payback Periods, developers may choose to wait to initiate projects until after the Payback Period has lapsed in order to interconnect for free. This would result in ratepayers fully subsidizing those developers' interconnection, and therefore their net profits. It would also be inequitable between developers, as developers who interconnected during the Payback Period would have paid their fair share, whereas developers who waited for the Payback Period to close would be free riders.

[8] *Id.*

Consensus Item

The DSRUP framework was the result of a Commission-led workgroup process consisting of many meetings over many months. Through this rigorous process, workgroup participants were able to come to tentative consensus on wording of many elements of the framework. While a consensus arrived at during the workgroup is not binding on either workgroup participants or the Commission, the OAG's Comments do highlight some of these tentative agreements by referring to them as "consensus items" to emphasize their broad support among participants.

ANALYSIS

The Commission is tasked with deciding who will bear the costs of upgrading the distribution system to meet the present moment. Upgrading the distribution system to allow non-incumbent-utility distributed generation could result in a net benefit to each interest group: expanding the distribution system will increase rate base for the utility, lowering interconnection costs can make DER sufficiently profitable for developers, and growth in DER could ultimately reduce costs to ratepayers compared to traditional rate-based generation resources.

However, ratepayers have the least agency and the most to lose from an unbalanced outcome. Ratepayers are the one group that does not participate in distribution system upgrade transactions for DERs and does not profit from them, and yet are the group ultimately expected to be the backstop to pay for all prudently incurred Outstanding Costs. The Commission should therefore ensure that the DSRUP standards include sufficient ratepayer protections to ensure risks and costs are appropriately distributed between all three interest groups – developers, utility shareholders, and ratepayers. The OAG's recommendations aim to allow pent-up beneficial DER to interconnect to the distribution systems of Minnesota's regulated monopolies while ensuring that all stakeholders carry their weight towards the shared goal of an affordable, reliable, and clean electric grid.

During the workgroup process, members reached consensus on significant portions of the DSRUP framework, so these Comments focus substantive discussion on areas where the OAG believes differences of opinion remain or the Commission would benefit from further context. Importantly, there are some proposed standards that are not listed as alternatives, but that does not mean that those are consensus items – in fact, there are a number of proposed standards that one or more parties opposed outright, for which there are no alternatives. Therefore, the Commission must assess each item listed in the proposed standards and either adopt or reject that item.

A. Introduction

The OAG supports the introduction section as written.

B. Definitions

Precise definitions are extremely important in policy documents such as the DSRUP. They are the definite objects that are then plugged into the various policy proposals in the rest of the framework. The definitions in this section are consensus items that were the result of extensive negotiations during the workgroup process. Making changes to definitions could inadvertently make cascading changes to the way various policy proposals would function, and possibly in incoherent ways. As such, the OAG strongly cautions against changing any definitions, to the maximum extent possible, and instead advises changing the wording of the policy proposals that the definitions plug into.

C. Upgrade Cost Thresholds

Not all capacity upgrades will be eligible for inclusion in the DSRUP. The authorizing legislation requires that the Commission set at least a minimum cost threshold—upgrades cheaper than this threshold will not be eligible. Item C.1 and its subparts are proposals for setting this minimum threshold. Item C.2 and its subparts would set a maximum upgrade cost. The Commission must choose a minimum per Item C.1, but the law does not require it to choose a

maximum per Item C.2. However, the OAG supports choosing a maximum because doing so reduces the program's risks and has no significant downside.

1. Minimum Upgrade Cost Threshold

The OAG does not take an affirmative position on the amount of the minimum upgrade cost at this time but believes one is necessary. As such, the OAG opposes Item C.1.b and offers several considerations for the Commission to assess in determining which of the remaining options will set an appropriate minimum.

Item C.1.b would set the minimum upgrade cost at "at least $1 dollar," or effectively no minimum cost. A too-low minimum such as Item C.1.b would increase the number and type of upgrades that will be eligible for the DSRUP, but it also increases the risk that ratepayers will subsidize developers. If even the cheapest upgrades are eligible, a developer who would have simply paid for the upgrade themselves under the status quo could choose instead to reduce their costs by pursuing DSRUP. This is possible because if the upgrade cost is low enough, it is easier for a developer to simply meet the Mobilization Threshold by itself. The result would be a price discount equal to: (1 minus the Mobilization Threshold percentage). If that developer was the only one that could feasibly use the upgrade, ratepayers would be saddled with the remainder of the cost. The result is a direct subsidy from ratepayers to a single developer.

On the other hand, a too-high minimum could reduce the usefulness of the DSRUP altogether by overly restricting upgrades that are eligible for participation. If the minimum cost is so high that, for example, only substation upgrades qualify, there is a risk that the DSRUP will fail to relieve the congestion that spurred the authorizing legislation in the first place.

Regardless of the Minimum Cost Threshold chosen by the Commission, the Commission should remain cognizant that, as with all elements of the DSRUP, it may need to revisit its decision

at some point in the future. Most obviously, the reasonableness of the chosen Minimum Cost Threshold could change due to inflation, as an upgrade that costs $250,000 15 years from now could be equivalent to a far cheaper upgrade in present dollars. It is also possible that natural changes to the distribution system, the pattern of congestion, or the economics of DER development could require the Commission to revisit its decision if the types of upgrades that are needed have different costs from the types of upgrades that the DSRUP supports.

The Commission must decide on a Minimum Cost Threshold, and the OAG currently only opposes Item C.1.b, as a $1 minimum is essentially no minimum at all. Otherwise, the OAG currently recommends that the Commission take the above discussion into account in determining the best choice. The OAG may make a recommendation regarding a preferred subpart in reply after reviewing the comments of other stakeholders.

2. Maximum Upgrade Cost Limit

A maximum upgrade cost would protect ratepayers. The Department and the OAG introduced the idea of a maximum upgrade cost limit during the workgroup process for two reasons. First, because the Mobilization Threshold is a percentage of the overall upgrade cost, more expensive upgrades expose ratepayers to greater costs, which present a greater risk that the remaining costs will not be covered by developers. Second, a cost maximum could help prevent the DSRUP from enabling upgrades that are not economically reasonable when considered in their totality, such as very expensive upgrades that are located in areas where only a few potential developers would ever seek to interconnect. Finally, if there is no maximum and extremely expensive upgrades are mobilized, even with a high Mobilization Threshold, these upgrades' Outstanding Costs could result in fewer upgrades being mobilized before the Cost Cap is reached. The OAG supports Item C.2.a, a maximum cost limit of $300,000 per MWac.

D. Pro Rata Cost Calculation

For each DSRUP upgrade, the utility will estimate the upgrade's cost before construction begins and collect Cost Share Contributions from developers based on that estimate. Once an upgrade has gone into service, the utility calculates the final actual cost and refunds or bills developers accordingly. This process is outlined in Items D.1 and D.2. However, because those items contemplate a change in costs once an upgrade has been built, the maximum extent of such a change needs to be determined, which is what Items D.3 and D.4 seek to do. The OAG recommends that the Commission adopt Items D.3 and D.4 in conjunction.

1. Cost Envelope

Items D.3 and D.4 would institute a "cost envelope." A cost envelope refers to the proposition that there should be a limit to how much both ratepayers and developers can be held liable for final upgrade costs. The OAG supports D.3 and D.4 together, but does not support D.3 if the Commission does not adopt D.4. Item D.3 limits developers' responsibility for the costs of an upgrade at 125 percent of a utility's initial cost estimate, while D.4 ensures that cost increases beyond 125 percent are not shunted onto ratepayers.

A cost envelope is an eminently reasonable allocation of risk for reactive, DER-driven upgrades. When a utility estimates its initial costs for any capital project, the budget usually includes a contingency – essentially, the utility inflates its estimated budget to ensure that it can cover unforeseen costs. Under the DSRUP, initial Cost Share Contributions will be determined based on this initial inflated budget. When the utility completes construction of an upgrade, the DSRUP allows the utility to assess further cost overruns to developers.[9] A 125 percent cost envelope amounts to yet another 25 percent cost contingency on top of the contingency the utility

[9] It would also require utilities to refund developers for coming in under budget, but this seems unlikely to occur.

already included in its initial estimate. If costs were to increase beyond this secondary contingency, doubts arise about the prudence and reasonableness of the utility's practices. Furthermore, a lack of a cost envelope presents a significant moral hazard to the utility that it simply does not need to contain its costs because developers or ratepayers will ultimately foot the bill.

Both Item D.3 and D.4 represent strong economic policies to reduce this moral hazard and protect ratepayers and developers. Without these items, a utility could allow the costs of an upgrade to grow uncontained, knowing it would simply charge developers or ratepayers down the line. This is not fair. Ratepayers are already being asked to finance most of the costs and insure most of the risks that arise out of the DSRUP, as the Outstanding Costs of any upgrade will be rate recovered once the Payment Period elapses.

Developers are also vulnerable without the cost envelope. Because developers are the utility's competitors to the extent that the utility would prefer to build and rate base its own energy resources, the lack of Item D.3 would make possible strategic cost overruns to harm developers, which is an abuse of monopoly power.

In addition to protecting ratepayers and developers, the cost envelope ensures that no individual upgrade takes up an unreasonable amount of the Annual Ratepayer Cost Cap. At any given percentage of subscribed capacity, the Outstanding Costs of an upgrade grow as the total cost of the upgrade grows. Thus if the final cost of an upgrade were 200 percent of the initial estimate, the Outstanding Costs would be 200 percent of what they were assumed to be when construction on the upgrade began, and the total cost of the DSRUP would be that much closer to the Cost Cap.

A cost envelope of 125 percent provides significant padding to the utility while still protecting developers and ratepayers. Items D.3 and D.4 should therefore be adopted.

E. Interconnection Process

Section E largely governs the process developers and utilities will follow when a developer seeks to interconnect to the distribution system. Because the OAG does not participate in this process, the OAG does not take a position on Item E.1 or Items E.3 through E.10 at this time. The OAG may take a position in reply upon reading the comments of other stakeholders.

Item E.2

The OAG supports Item E.2, which provides that a developer may choose to circumvent the DSRUP and simply pay the full cost of an upgrade itself. A developer that elects to do so would forfeit any Hosting Capacity enabled by the upgrade that it did not use. This is the status quo. Item E.2 therefore means that the DSRUP is optional for developers with sufficient margins to pay for an upgrade on their own. A developer utilizing Item E.2 would result in an upgrade being built without exposing ratepayers to any of the costs and provides options for DER developers, so the OAG supports this item.

F. Mobilization Threshold and Window

The OAG supports Item F.1.b, which sets a Mobilization Threshold of 80 percent. The OAG understands Items F.2 through F.5 to be consensus items and supports them, but may reply to other stakeholders regarding them. The OAG opposes Item F.6, which was not a consensus item and which provides that an upgrade that has failed to mobilize can be pursued through the proactive upgrade process.

The OAG supports a Mobilization Threshold of 80 percent because it provides greater ratepayer protection than the other options and allows the DSRUP to ultimately build more upgrades before hitting the Annual Ratepayer Cost Cap as explained in the Background section.

Developers may argue that an 80 percent Mobilization Threshold is too high and that it will slow the pace of upgrade construction. The OAG sees two issues with that argument. First, the

development of the DSRUP standards was spurred by the great deal of distribution system congestion in certain areas of Minnesota, and developers have indicated that a great deal of demand for interconnections has developed. If the demand for interconnection is indeed great, then there is less risk that an 80 percent Mobilization Threshold is too high.

Second, having a higher Mobilization Threshold can help more upgrades mobilize at the same time without hitting the Annual Ratepayer Cost Cap. Using the examples described in the Background section of these Comments, a Mobilization Threshold of 80 percent allowed 50 upgrades to be built, which means that there are fifty locations where later developers could interconnect, resulting in paying down Outstanding Costs, and opening up the Cost Cap. By contrast, a Mobilization Threshold of 20 percent only allowed 12 upgrades to be built. Fewer upgrades could limit the number of future developers who could entertain an interconnection there. This would mean it would take longer for that upgrade to be paid down and for the Cost Cap to be opened back up.

Furthermore, even a Mobilization Threshold of 80 percent confers a significant benefit on developers over the status quo. One major goal of the DSRUP is to address a status quo in which the first DER developer to request an interconnection that requires an upgrade must either pay the full cost of that upgrade, allowing follow-on developers to free ride, or it must find other developers who can split the full cost of the upgrade *and* can coordinate their projects sufficiently that they can all pay for the upgrade at the same time. The DSRUP addresses this by not only reducing the portion of the upgrade's cost that must be subscribed before the upgrade is built, but by reducing the need for coordination among competing developers.

The DSRUP at any Mobilization Threshold is therefore a boon to DER developers. First, it reduces each developer's costs to correspond directly to only the hosting capacity the developer

seeks to use. Second, any Mobilization Threshold lower than 100 percent speeds up construction of an upgrade compared to the status quo where the full cost of the upgrade needed to be paid for. Third, the DSRUP removes the synchronization challenges of collective action. Accordingly, the OAG recommends that the Commission adopt Item F.1.b.

Item F.6

The OAG opposes the adoption of Item F.6 because it could allow upgrades to be built for which demand is only speculative, with ratepayers ultimately footing the bill for unused rate base. This goes against the structure and purpose of the DSRUP. The DSRUP is a market-driven process by which new distribution system upgrades are built in reaction to market demand for them. If an upgrade languishes unable to reach the Mobilization Threshold for two years, that shows that there is not, in fact, sufficient demand to justify that particular upgrade.

G. Upgrade Prioritization

Section G governs the order in which upgrades will be built when more than one upgrade reaches the Mobilization Threshold. This was largely developed by consensus, so the OAG does not take a position on Items G.1 through G.4 or on Item G.6 at this time. However, the OAG strongly emphasizes that Item G.5 needs additional clarification to avoid confusion regarding the utility's obligation to show it prudently executed any DSRUP projects.

Item G.5

The OAG opposes Item G.5 as written because of the lack of clarity regarding the utility's statutory burden of proof[10] and ongoing duty of prudence. The OAG therefore strongly

[10] Minn. Stat. § 216B.16, subd. 4.

recommends amending Item G.5 to make clear that utilities have an ongoing burden to demonstrate prudence for the construction of approved upgrades. The OAG proposes the following redline:

> OAG G.5: ~~Approval~~ Selection through the prioritization process chosen in Section G shall create a rebuttable presumption ~~of prudence~~ that pursuing construction of an approved Upgrade was prudent in any cost recovery proceeding. The utility retains the burden of proof.

The original Item G.5 poses a risk of undermining the Commission's oversight authority and enabling imprudent actions after an upgrade has been mobilized, and risks obfuscating the utility's burden of proof. Simply stating there is a "rebuttable presumption of prudence in any cost recovery proceeding" is ambiguous, and a utility is likely to argue that the presumption applies to everything that occurs with the upgrade after it has gone through the prioritization process.[11] The OAG does not believe this was the intention of the draft language, and this would effectively remove the Commission's ability to ensure that upgrades remain prudent through the end of construction because of the asymmetry of information.

A "rebuttable presumption of prudence" means, essentially, that the utility would not be required to provide any information about upgrades when it seeks cost recovery for them. This could leave other stakeholders in the dark if the utility has not prudently executed construction of the upgrade, or has otherwise continued to pursue it in light of known issues that would cause a prudent utility to change plans.

While it may be reasonable to consider the *selection* of an upgrade prudent if selected through the prioritization process, the Commission should clarify that the utility is not alleviated

[11] To the extent the utilities might make oral promises at the hearing that this is not their interpretation, the OAG nevertheless recommends adoption of its more precise language because the Commission acts officially only through its written orders.

of its statutory burden of proof and that it has an ongoing duty to show that it actually carried out the upgrade in a prudent matter. The OAG's redline accomplishes this.

H. Payment Details

Section H largely describes the process for handling payments. The OAG does not handle payments and therefore does not take a position on Items H.1 through H.7 or Item H.9. The OAG also does not take a position on Item H.11 at this time. However, the OAG does recommend an alteration to Item H.8 for clarity. The OAG supports Item H.10, which addresses overcollection by the utility. The OAG supports Item H.12, which allows small DER owners to utilize other cost-share programs in conjunction with the DSRUP.

Item H.8

The last sentence of Item H.8 lacks clarity due to the definition of the term Payback Period. The final sentence should therefore be changed as follows:

> "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."

The Payback Period is defined in Section B as "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." By definition, once the Payback Period has closed, funds will not be collected from developers. Thus it does not make sense to refer to funds collected after the Payback Period has closed.

Item H.10

Item H.10 is a consensus item that is intended to ensure that ratepayers do not overpay for upgrades in certain unlikely scenarios.

To understand how Item H.10 would apply, consider the following situation. The DSRUP process is triggered for a particular upgrade, the mobilization threshold is met, and the utility builds

the upgrade. Shortly after the upgrade has been completed, one of the developers goes out of business and is unable to interconnect to the upgrade. At this point, the utility has already obtained the Cost Share Contribution from the developer, but the developer will no longer use that hosting capacity. If sufficient other developers then interconnect to the upgrade to use the upgrade's entire hosting capacity while the Payback Period is open, the total Cost Share Contributions collected by the utility will exceed 100 percent of the upgrade's cost.

In the same situation, if the Payback Period were to simply close when 100 percent of the Upgrade's cost was collected, developers who then used the remaining hosting capacity that the out-of-business developer forfeited would get a free ride.

Without Item H.10, in the former situation, the utility would simply capture the excess payments as economic rent.[12] Both rent extraction and, in the latter situation, free riding from the failure of a developer, are against the public interest. Furthermore, ratepayers are shouldering the majority of the risk that the DSRUP results in overbuilding the distribution system. The OAG therefore proposed Item H.10 to prevent ill-gotten gains accruing to either the utility or later developers while also potentially providing a small counterbalance to the risks ratepayers are taking on to enable the DSRUP.

Item H.12

The OAG supports Item H.12 because small DER should be able to make use of utility-specific cost share programs regardless of whether they are interconnecting to a DSRUP Upgrade or any other upgrade on a utility's distribution system. However, depending on how many small DER owners choose to take advantage of this option, there may be some risk that the existing

[12] "Economic rent" here refers to unearned surplus value.

utility-specific cost share programs become insolvent. The OAG therefore recommends that the Commission adopt Item H.12, but cautions that this decision may need to be revisited in the future.

I. Payback Period

The OAG supports a Payback Period of 10 years, corresponding to Item I.1.b. The OAG opposes the shorter Payback Periods proposed by Items I.1.a, I.1.c and I.1.d. The Payback Period should only end once its duration has elapsed, and the OAG therefore supports Item I.2.b and opposes Item I.2.a. The OAG is unable to take a position on Item I.3 due to a lack of information and discusses the information necessary to take a position.

1. Payback Period Length

Items I.1.a through I.1.d provide various Payback Period lengths. The OAG supports Item I.1.b: "The Payback Period shall remain open once the Mobilization Threshold is reached and remains open for a minimum of ten years from the Upgrade's in-service date." A 10-year Payback Period offers the greatest likelihood among the options that upgrade costs will be paid by the developers who spur the need for the upgrade, while remaining feasible according to the utilities' workgroup descriptions of the nature of the distribution grid. A 10-year Payback Period both protects ratepayers from bearing the costs of the DSRUP program and prevents later developers from free riding off of ratepayers and earlier developers. In addition, the Commission approved a 10-year cost-share window in the Proactive Upgrade Framework in Docket No. 24-318.

The OAG opposes Item I.1.a because five years is too short of a Payback Period. Five years would be too short a timeframe to reasonably hope that ratepayers could be made whole for a DSRUP upgrade. Furthermore, a short five-year Payback Period would create too great a temptation for developers to prowl the list of upgrades nearing the end of their Payback Period in order to free ride. This concern with a too-short Payback Period becomes all the more important if the Commission approves a lower mobilization threshold (thereby increasing the Outstanding

Costs of each upgrade), as a lower mobilization threshold and shorter Payback Period would mean less time to recover more money, which only increases the risk that ratepayers are saddled with greater Outstanding Costs.

The OAG does not support Item I.1.c because keeping the Payback Period open until an upgrade is fully depreciated may not be feasible. The OAG originally proposed Item I.1.c because it would provide maximum ratepayer protection by allowing the greatest opportunity for a utility to recover the cost of an upgrade from developers. It would also be in line with cost-causation principles: because DSRUP upgrades would not necessarily be built absent developer interest, it is reasonable to design a program that maximizes the likelihood that developers pay for the upgrade.

However, there are two issues with Item I.1.c. First, it is incompatible with Item H.10, because Item I.1.c would close the Payback Period as soon as the full cost of the upgrade was recovered, even if there was further hosting capacity that could have been paid for by future developers. Second, utilities expressed concerns that, because the distribution system is not static, requiring Cost Share Contributions until an upgrade is fully paid-for could result in a mismatch between customers who benefit from a given upgrade and customers who pay for it. It is the OAG's understanding, however, that this is unlikely to be a significant concern for at least 10 years, making Item I.1.b reasonable.

The OAG opposes Item I.1.d because it sets only a maximum Payback Period length. It therefore leaves open the possibility of an even shorter Payback Period than contemplated by Item I.1.a., which the OAG already believes to be too short.

2. Payback Period Closure

The OAG supports Item I.2.b, which states that the Payback Period for an upgrade will *only* close once its duration has lapsed. This simpler language protects ratepayers and developers, and accomplishes everything that I.2.a would accomplish without complicating things or introducing unintended consequences.

Item I.2.b ensures that developers pay their fair share of an upgrade's cost so long as the Payback Period's duration has not lapsed. This approach is equitable, simple, and works regardless of cost recovery mechanism, developer demand, and contingencies such as that contemplated in the discussion of Item H.10, above.

To illustrate, if a utility pursues immediate cost recovery once an upgrade is built,[13] there could be situations in which developer demand for a particular upgrade dries up, ratepayers pay down significant portions of an upgrade's cost, and then new developers appear who use up the remaining hosting capacity. In this situation, it would be important to ensure that the utility did not double-recover the portion of the upgrade's cost that had been extracted from ratepayers while developer demand for the upgrade dropped. Item I.2.b and Item H.10 work together to ensure that does not happen, while also ensuring later developers do not free ride off of earlier developers (so long as the Payback Period remains open).

The OAG opposes Item I.2.a because it is more complicated and could create a conflict with Item H.10. For the DSRUP to be successful, which includes being acceptable to the ratepaying public, it must be equitable. This means ensuring that developers pay their fair share and utilities do not double-recover the cost of upgrades from developers and ratepayers. Item I.2.a allows for

[13] Whether immediate cost recovery is available under the DSRUP must be determined by the Commission as well, but the broader point is that Item I.2.b works regardless of that decision.

the Payback Period to be cut short and only ensures that overpaying DER developers have been refunded. By contrast, Item I.2.b ensures that *both* overpaying DER developers *and* overpaying ratepayers are made whole.

3. When Must a Developer Pay

Item I.3 provides: "all Interconnection Applications that are in the Deemed Complete state within the Payback Period shall be subject to paying their Reactive Cost Share Contribution." The OAG is not able to take a position on Item I.3 due to lack of necessary information.

A provision like Item I.3 is necessary to provide clarity as to which developers must pay a Cost Share Contribution when the Payback Period nears its close. However, Item I.3 may not provide the necessary clarity because it turns on the phrase "Deemed Complete," but there is no definition of "Deemed Complete" in the DSRUP. If this phrase is defined in some other policy that governs interconnections, Item I.3 should reference that definition. If this phrase is not defined anywhere else, the DSRUP should define it. In any case, the OAG cautions the Commission against adopting Item I.3 without stakeholders being able to assess the appropriateness of the definition of "Deemed Complete."

J. Annual Ratepayer Cost Cap

The Annual Ratepayer Cost Cap represents the total amount of money that could be socialized to ratepayers each year as a result of the DSRUP. Items J.1 and J.2 are alternatives, of which the OAG supports Item J.1. The OAG also supports Items J.3, J.4, and J.5. Because these were consensus items, the OAG will not discuss them unless it becomes necessary to do so in reply. Finally, the OAG takes no position on Item J.4.a at this time.

1. Utility-specific Cost Caps versus a universal Cost Cap

The OAG supports Item J.1 over J.2 because determining an appropriate budget for each utility's DSRUP should be done by examining each utility's particular circumstances. First of all,

although Item J.2 seems proportional because it uses percentages, these percentages would result in vastly different amounts depending on the utility: 2 percent of the Dakota Electric Association,[14] Otter Tail Power,[15] Minnesota Power,[16] and Xcel Energy[17] distribution budgets would yield an Annual Ratepayer Cost Cap of $347,520, $467,726, $1,578,400, and $15,600,000, respectively. Moreover, the Commission may wish to consider more factors in setting the Annual Ratepayer Cost Cap than simply the size of the utility's distribution system capital budget, such as the severity of distribution system congestion, developer demand, and the types and costs of system upgrades that are likely to be pursued on a given utility's system.

If the Commission adopts Item J.1 as recommended by the OAG, this need not necessarily result in delays to a utility implementing its DSRUP. Each utility's initial Annual Ratepayer Cost Cap could be set following an expedited comment period initiated upon each utility's filing of its DSRUP tariff. In order to properly scope the size of each utility's DSRUP to the needs of its system, the Commission should adopt Item J.1.

K. Cost Recovery

The Cost Recovery proposals of the framework address both the ratemaking treatment of Cost Share Contributions and of Outstanding Costs. The proposals address three major questions:

1. Whether Cost Share Contributions should pay down the rate base of the upgrades for which they were paid or should be applied to the utility's revenue requirement;

[14] Docket No. E-111/CI-23-420, Dakota Electric Association 2023 IDP Report at 127 (Nov. 1, 2023).
[15] *See* Docket No. E017/M-23-380, Otter Tail Power Integrated Distribution Plan at 38 (Nov. 1, 2023).
[16] Docket No. E015/M-23-258, MP Integrated Distribution Plan at 37 (Nov. 1, 2023).
[17] Docket No. E-002/M-25-142, Xcel Energy IDP Preview at 32 (Sep. 19, 2025).

2. Whether utilities should be allowed to pursue rate recovery of upgrade costs immediately, and if not whether utilities should be allowed to charge carrying costs; and

3. Which rate recovery mechanisms should Outstanding Costs be recovered through.

The OAG's recommendations regarding the first two questions are highly dependent on one another, so the OAG presents its recommendations as packages ranked in order of preference. The following chart demonstrates the order of the OAG's preference:

OAG Recommendation on Items in Part K

Rank	Items to Adopt	Items to Reject
First Choice	Adopt K.6.b	Reject K.6.a, K.1 through K.4
Second Choice	Adopt K.1, K.2, K.4	Reject K.6.a, K.3.a, K.3.b
Third Choice	Adopt K.1, K.3.b, K.3.c, K.4	Reject K.6.a, K.2, K.3.a

For the third question, the rate recovery mechanism, the OAG supports Items K.5.a and K.5.b, which would allow rate recovery only through a general rate case or through the TCR rider. The OAG opposes Items K.5.c and strongly opposes Items K.6.a and K.3.a. The OAG currently takes no position on K.5.d and requests the initial proposer to explain its intention.

1. Application of Cost Share Contributions to Rate Base or Revenue Requirement

The Commission should order that payments from developers be applied to rate base rather than revenue requirement:

> K.6.b: All Reactive Cost Share Contributions collected from Reactive Cost Share Participants shall be collected during the Payback Period and shall be used to offset the rate base amount of the Upgrade until the upgraded assets are fully paid down, or the Payback Window closes.

This is the only way to ensure that utilities recover only the cost of service, and aligns with longstanding principles regarding the use of Contributions in Aid of Construction (CIAC). If the Commission instead selects Item K.6.a, it would be allowing utilities to extract from ratepayers a return on asset costs that have already been paid down by Cost Share Contributions, resulting in double recovery. For an analogy, applying Cost Share Contributions to the revenue requirement per Item K.6.a is like allowing a bank to continue charging interest on a loan that was already paid off.

In addition to ensuring that utilities do not charge ratepayers and reap extra profit from upgrades already paid for by developers, paying down the rate base results in fewer costs of the DSRUP program being borne by ratepayers over the life of the asset by reducing rate base, return on rate base, and long-run depreciation costs. This is analogous to how CIAC fees work. Utilities reduce asset rate base when they collect CIAC fees, and the OAG understands from workgroup discussions that this should be feasible with DSRUP upgrades as well. The DSRUP is predicated on utilities tracking the costs of each DSRUP Upgrade to ensure that Participant Cost Share Contributions are applied to the appropriate upgrade. Thus applying the Cost Share Contributions paid for an upgrade to offset that upgrade's rate base amount should require little additional effort.

To protect ratepayers and developers and to ensure that utilities only recover just and reasonable profits, the Commission should select Item K.6.b.

2. Deferred Recovery Window and Carrying Costs

Items K.1 through K.4 pertain to the parameters of a 5-year period of delayed rate recovery on DSRUP upgrades that was originally proposed by the OAG. The OAG supports the period of delay before recovery if there are no carrying costs or if the carrying costs are low and are not capitalized. However, the OAG also believes that programs should be designed simply, and any

level of carrying costs could undermine the purpose of delaying recovery. For that reason, the OAG's top recommendation is for Cost Share Contributions to be applied to rate base, in which case the OAG would not oppose rejecting the delayed rate recovery window Items K.1 through K.4.

The original impetus for delayed rate recovery was ratepayer protection. A 5-year period before rate recovery enables the possibility that the cost of a DSRUP upgrade never goes into rates at all. This is because developers would continue to interconnect to the upgrade and pay Cost Share Contributions during this 5-year period. If demand for an upgrade is high enough that developers use up all of its hosting capacity, the upgrade will be paid off by developers before it will ever be felt by ratepayers.

Delaying recovery is also better for ratepayers from a cash flow perspective. If DSRUP costs are immediately recovered by utilities, ratepayers bear the full Outstanding Costs up front. While Cost Share Contributions from later developers would be credited back to ratepayers, relying on refunds ignores that ratepayers, particularly low-income ratepayers, are less able to adjust their budgets to absorb a charge even if they ultimately receive a refund. Without a delayed recovery period, ratepayers (who have the least capital among the three interest groups) would essentially be providing an interest-free loan to the DSRUP program.

The amount of ratepayer protection provided by a period of delay before rate recovery is attenuated if utilities are allowed to recover carrying costs during the period. Carrying costs are essentially fees the utility charges to ratepayers in exchange for waiting to begin rate recovery. If an upgrade is built, there is a 5-year delay with carrying costs, but no new developers interconnect to the upgrade, it is not clear whether the utility would end up recovering more from ratepayers for the upgrade than if it had simply begun recovery immediately. Potentially, if the utility has not

begun depreciating the project, the utility's carrying costs on the full asset balance could exceed the weighted average cost of capital.[18]

The OAG supports Item K.2, which provides that the utility would not accrue carrying costs during the period of delayed recovery for a few reasons. First, this would ensure that there was no risk that the costs ultimately borne by ratepayers may be greater than they would have been without the delayed recovery. Second, the net transfer of resources under the DSRUP is from ratepayers to both developers and the utility, while the net transfer of risk is from developers and the utility and developers to ratepayers. Denying carrying costs would be a reasonable reallocation of a small portion of costs and risks to utility shareholders, who otherwise are the only stakeholders made completely whole by this process.

If the Commission does not adopt Item K.2, it should at least limit carrying costs to the level of the utility's long-term cost of debt per Item K.3.b. This represents a middle ground between ratepayer and utility interests, with the ratepayer interest being no carrying costs and the utility's interest being carrying costs equivalent to making a full return.

If carrying costs are allowed under either Item K.3.a or K.3.b, the Commission should certainly adopt Item K.3.c, which would prevent carrying costs from being capitalized. Capitalization of carrying costs would be manifestly unjust, as capitalization would mean that carrying costs would become part of rate base and the utility would earn a return on them; utilities would earn a return on their return. In other words, they would get to charge ratepayers a second time for nothing.

[18] The utilities' plan for when and how they will depreciate the assets subject to a carrying charge is not clear. The utilities should explain their plan in reply.

Item K.4 is necessary if the Commission approves *both* a Payback Period longer than 5 years in Section I *and* the 5-year delay per Item K.1, whether with or without carrying costs. In such a circumstance, Item K.4 makes clear that, after the 5-year delay, the utility may begin rate recovery of the upgrade, but that it must still collect Cost Share Contributions through the remainder of the Payback Period. In other words, Item K.4 clarifies that there is a difference between the Payback Period (during which a utility must collect costs from developers) and the 5-year delay in rate recovery per Item K.1 (during which a utility cannot recover the costs of an upgrade from ratepayers).

To reiterate, the OAG's recommendations for Section K are packaged deals. The OAG's first choice of package is that the Commission selects Item K.6.b and rejects the deferred recovery period Items K.1 through K.4. The OAG's second choice would be a 5-year deferred recovery period with no carrying costs, meaning Items K.1, K.2, and K.4. The OAG's last choice would be a 5-year deferred recovery period with carrying costs set at the cost of debt and no capitalization of carrying costs, meaning Items K.1, K.3.b, K.3.c, and K.4. The OAG opposes applying Cost Share Contributions to the revenue requirement and opposes carrying costs.

3. Rate Recovery Mechanism

Item K.5 and its subparts determine the mechanism through which utilities can recover the costs of upgrades that aren't covered by Cost Share Contributions. The OAG supports recovery of costs through a general rate case or through the TCR rider per Items K.5.a and K.5.b, respectively. A general rate case is the standard way to recover costs and allows the Commission to determine rates are just and reasonable. This should be the first choice for recovering costs unless it proves entirely unfeasible. The OAG also supports use of the TCR rider for recovery of DSRUP costs, but only because the authorizing legislation specifically authorizes utilities to use that method.

The OAG opposes Item K.5.c, which would allow recovery through deferred accounting. Deferred accounting is only used when there are not more appropriate recovery mechanisms, and even then only in limited circumstances where it would be unfair to the utility to apply standard ratemaking principles. In this case, either a general rate case or the TCR would be more appropriate.

The OAG is unclear on the meaning of Item K.5.d. If another stakeholder provides an explanation in comments, the OAG may respond in reply.

L. Cost Allocation

Items L.1 and L.2 are alternative ways of addressing cost allocation. The OAG supports Item L.2, which is intended to reduce the extent to which residential ratepayers are inadvertently and inequitably required to subsidize the for-profit activities of commercial and industrial ratepayers.

The OAG also supports Item L.3, which provides guidance to utilities in implementing the DSRUP that the DSRUP should, to the extent practicable, promote energy justice and equity rather than result in further cost burdens.

Item L.1 versus Item L.2

The OAG supports Item L.2, which would allocate the costs of Upgrades that primarily serve large commercial and industrial customers specifically to those customers, rather than allocating costs using general rate case allocators, which is less precise. Item L.2's approach to cost allocation would improve alignment with cost causation principles. Upgrades that primarily serve large commercial and industrial customers are more likely to be costly and are less likely to have wide-ranging system benefits that would make broader allocation of their costs fair. In addition, there may be situations in which large commercial or industrial customers are themselves the DER owners who spur the need for a DSRUP upgrade. If the primary beneficiaries of an

upgrade other than DER developers are large commercial and industrial customers, or if large commercial and industrial customers are themselves the DER owners who spur a DSRUP upgrade, those are the customers who should pay for the remainder of the upgrade cost.

Item L.3

Item L.3 confers on utilities an affirmative obligation to mitigate the impacts of this new program on the most vulnerable ratepayers. At the end of the day, the DSRUP program will allow developers to create profitable projects and allow utilities to profit as well, but it is ratepayers who underwrite everything. The Commission should adopt Item L.3 to further protect ratepayers in this time of ever-increasing costs.

M. Publication of DSRUP Information and Data

The OAG does not take a position on the items in Section M at this time. The OAG may take a position in reply upon reading the comments of other stakeholders.

N. Reporting and Process Evaluation

The OAG does not take a position on the items in Section N at this time. The OAG may take a position in reply upon reading the comments of other stakeholders.

O. Dispute Resolution

The OAG does not take a position on the items in Section O at this time. The OAG may take a position in reply upon reading the comments of other stakeholders.

P. Tariff Implementation

The OAG does not take a position on the items in Section P at this time. The OAG may take a position in reply upon reading the comments of other stakeholders.

CONCLUSION

The OAG appreciates the input and work of all stakeholders participating in the workgroup process. Through this intensive and collaborative process, the issues have been significantly

narrowed for the Commission's consideration. And the OAG, like many other stakeholders, has modified its initial inclinations and ideas to come up with a framework that balances interests of various stakeholders.

DER stand to become a crucial part of the clean grid of the future, but that clean grid will only be affordable and equitable if ratepayer interests are put front and center as the transition proceeds. The OAG's recommendations strongly protect ratepayer interests while considering the interests of other stakeholders developed through the months' long workgroup process. For a well-balanced decision on the DSRUP, the Commission should adopt the OAG's recommendations.

Dated: November 7, 2025

Respectfully submitted,

KEITH ELLISON
Attorney General
State of Minnesota

/s/ Joey Cherney
JOEY CHERNEY
Assistant Attorney General
Atty. Reg. No. 0403219

445 Minnesota Street, Suite 600
St. Paul, Minnesota 55101-2125
(651) 300-7569 (Voice)
(651) 296-9663 (Fax)
Joey.Cherney@ag.state.mn.us

ATTORNEY FOR MINNESOTA
OFFICE OF THE ATTORNEY GENERAL—
RESIDENTIAL UTILITIES DIVISION

Attachment 1: OAG Positions on DSRUP Elements

Item Number	Support/Alternative/Oppose	Note
B.1	Support	
B.2	Support	
B.3	Support	
B.4	Support	
B.5	Support	
B.6	Support	
B.7	Support	
B.8	Support	
B.9	Support	
B.10	Support	
B.11	Support	
B.12	Support	
B.13	Support	
B.14	Support	
B.15	Support	
B.16	Support	
B.17	Support	
B.18	Support	
B.19	Support	
B.20	Support	
C.1.a	No Position	

C.1.b	Oppose	
C.1.c	No Position	
C.1.d	No Position	
C.2.a	Support	C.2 First Choice
C.2.b	Alternative	C.2 Second Choice
C.2.c	Oppose	
D.1	Support	
D.2	Support	
D.3	Support	
D.4	Support	
E.1.a	No Position	
E.1.b	No Position	
E.1.c	No Position	
E.2	Support	
E.3	No Position	
E.4.a	No Position	
E.4.b	No Position	
E.5	No Position	
E.6	No Position	
E.7	No Position	
E.8.a	No Position	
E.8.b	No Position	
E.8.c	No Position	

E.8.d	No Position	
E.9	No Position	
E.10	No Position	
F.1.a	Oppose	
F.1.b	Support	
F.1.c	Oppose	
F.2	Support	
F.3	Support	
F.3.a	Support	
F.3.b	Support	
F.4	Support	
F.4.a	Support	
F.4.b	Support	
F.5	Support	
F.6	Oppose	
G.1	No Position	
G.2	No Position	
G.3.a	No Position	
G.3.b	No Position	
G.4	No Position	
G.5	Oppose	First choice is to oppose entirely; as a second choice OAG offers an alternative
G.6	No Position	

H.1	No Position	
H.2	No Position	
H.3	No Position	
H.4	No Position	
H.5	No Position	
H.6	No Position	
H.7	No Position	
H.8	No Position	Redline recommended
H.9	No Position	
H.10	Support	
H.11	No Position	See discussion
H.12	Support	
I.1.a	Oppose	
I.1.a.i	Support	If I.1.a is selected, support adding I.1.a.i
I.1.b	Support	
I.1.c	Oppose	
I.1.d	Oppose	
I.2.a	Oppose	
I.2.b	Support	
I.3	No Position	Insufficient information
J.1	Support	
J.2.a	Oppose	
J.2.b	Oppose	

J.3	Support	
J.4	Support	
J.4.a	No Position	
J.5	Support	
K.1	Support	Less preferred than K.6.b
K.2	Support	First Choice if K.1 selected
K.3.a	Oppose	
K.3.b	Support	Second Choice if K.1 selected
K.3.c	Support	Required if either K.3.a or K.3.b is selected
K.4	Support	Required if K.1 selected
K.5.a	Support	
K.5.b	Support	
K.5.c	Oppose	
K.5.d	No Position	
K.6.a	Oppose	
K.6.b	Support	
L.1	Alternative	Less preferred than L.2
L.2	Support	Preferred over L.1
L.3	Support	
M.1	No Position	
M.2	No Position	
M.3	No Position	

N.1	No Position
N.2	No Position
N.3	No Position
N.4	No Position
N.5	No Position
N.6	No Position
O.1	No Position
P.1	No Position
P.2	No Position