Draft Proactive Distribution Upgrade Framework

A. Introduction

The Commission establishes the following framework for Proactive Distribution Upgrades for Xcel Energy in order to achieve the following goals:

Any combination of goals may be adopted with the following exceptions:
A.1 and A.2 are alternatives.
A.4 and A.5 are alternatives.
A.6 and A.7 are alternatives.
A.8 and A.9 are alternatives.

A.1 Proactively plan for the distribution system upgrades necessary to meet state energy policy requirements and goals.

OR

A.2 Proactively plan for the distribution system upgrades necessary to ~~meet state energy policy requirements and goals~~ enable customer DER and electrification adoption, considering state energy policy requirements and goals.

A.3 Meet customer expectations by reducing or eliminating the wait time to interconnect DERs and new load to the extent reasonably possible.

A.4 Protect ratepayers by establishing a rigorous review of proposed proactive investments to ensure they do not cause undue costs or result in inequitable distribution of costs or benefits.

OR

A.5 Protect ratepayers by establishing a ~~rigorous~~ review of proposed proactive investments to ~~ensure they do not cause undue risk costs or~~ minimize the risk of stranded assets or projects that result in inequitable distribution of costs or benefits.

A.6 Maximize the benefits to the distribution system while minimizing the costs.

OR

A.7 To the extent reasonably possible, maximize the benefits to the distribution system while minimizing the costs.

A.8 Limit cost impacts to ratepayers from forecast inaccuracies.

OR

A.9 Limit cost impacts from unreasonable forecast inaccuracies.

The Commission establishes the following principles to guide allocation of the costs of Proactive Distribution Upgrades:

Any combination of principles may be adopted with the following exceptions:
A.11 and A.12 are alternatives.
A.13, A.14, and A.15 are alternatives.

A.10 Limit deviations from traditional cost allocation and recovery processes to the extent possible.

A.11 Costs should be allocated to the customers or classes causing the costs, when appropriate.

OR

A.12 Costs should be allocated to the customers or classes causing the costs, ~~when appropriate~~ whenever possible.

A.13 If cost-causation cannot be determined, costs should be allocated according to the distribution of benefits.

OR

A.14 ~~If cost-causation cannot be determined, costs should be allocated according to~~ Cost allocation may take into account the distribution of benefits.

OR

A.15 Costs should be allocated according to the distribution of benefits.

B. Definitions

Any combination of definitions may be adopted with the following exceptions:
B.1, B.2, and Xcel.B.2 are alternatives.
B.7, B.8, and Staff.B.8 are alternatives.
B.14 and B.15 are alternatives
B.16, ATE.B.16, and Staff.B.16 are alternatives

The Commission adopts the following definitions for the purposes of this framework:

B.1 Proactive Cost-Share Customer: a customer who applies to interconnect either load or generation at a location served by a Proactive Distribution Upgrade with an open cost-share window.

OR

B.2 Proactive Cost-Share Customer: a customer who applies to interconnect either load or generation at a location served by a Proactive Distribution Upgrade with an open cost-share window and is responsible for paying a Proactive Cost-Share Fee.

OR

Xcel.B.2 Proactive Cost-Share Customer: a customer who applies to interconnect either load or generation at a location served by a Proactive Distribution Upgrade with an open cost-share window and is responsible for paying a Proactive Cost-Share Fee, unless otherwise specified in approved tariffs.

B.3 Proactive Cost-Share Fee: the amount a Proactive Cost-Share Customer pays to access a location served by a Proactive Distribution Upgrade.

B.4 Proactive Cost-Share Window: the period during which Proactive Cost-Share Fees are collected from Proactive Cost-Share Customers.

B.5 Distribution Capacity Upgrade: A distribution system upgrade at the substation or feeder level that increases hosting capacity for load and/or generation on the distribution system.

B.6 Distributed Energy Resource (DER)**:** Supply and demand side resources that can be used throughout an electric distribution system to meet energy and reliability needs of customers; can be installed on either the customer or utility side of the electric meter. This definition for this filing may include, but is not limited to: distributed generation, energy storage, electrified end uses that can be used as a resource, demand side management, and energy efficiency.

B.7 Distributed Generation (DG): a facility that has a capacity of 10 MW or less, is interconnected with a utility's distribution system, operates in parallel with the utility, and is eligible for interconnection under the Minnesota Distributed Energy Resource Interconnection Process (MN DIP).

OR

B.8 Distributed Generation (DG): a generation facility that ~~has a capacity of 10 MW or less,~~ is interconnected with a utility's distribution system~~,~~ and operates in parallel with the utility~~, and is eligible for interconnection under the Minnesota Distributed Energy Resource Interconnection Process (MN DIP)~~.

OR

Staff.B.8 Distributed Generation (DG): a generation facility that ~~has a capacity of 10 MW or less,~~ is interconnected with a utility's distribution system~~,~~ and operates in parallel with the utility, and is eligible for interconnection under the Minnesota Distributed Energy Resource Interconnection Process (MN DIP).

B.9 Electrification: the conversion of an energy-consuming device, system, or sector from non-electric sources of energy to electricity. This includes but is not limited to transportation electrification, cooking appliances, space heating and cooling, water heating, and industrial processes.

B.10 Forecasted/Proactive Hosting Capacity: The amount of DG or load that distribution equipment can host without exceeding thermal, voltage, protection, or other thresholds under forecasted system conditions.

B.11 Hosting Capacity: The amount of DG or load that distribution equipment can host without exceeding thermal, voltage, protection, or other thresholds under existing system conditions.

B.12 Integrated Distribution Plan: the biennial report established in Docket E002/CI-18-251 and as currently outlined in the most recent filing requirements from Xcel Energy's most recent IDP.

B.13 Priority Queue: The queue for "customer-sited" Interconnection Applications up to 40 kWac and applications that are a part of the Solar for Schools or Solar on Public Buildings legislative programs that comply with the 120% rule, as detailed on tariff sheet 10-81.5.

B.14 Proactive Distribution Upgrade Proposal: one or more Proactive Distribution Upgrades submitted for Commission approval under the Proactive Distribution Upgrade Framework.

OR

B.15 Proactive Distribution Upgrade Proposal: one or more Proactive Distribution Upgrades submitted for Commission approval under the Proactive Distribution Upgrade Framework. In the context of this framework, the Proactive Distribution Upgrades submitted in the Proactive Distribution Upgrade Proposal would not be considered prudent under existing distribution planning practices due to the proactive nature of the projects.

B.16 Proactive Distribution Upgrade: a distribution upgrade made solely based on a forecasted need outside a utility's traditional planning cycle.

OR

Staff.B.16 Proactive Distribution Upgrade: a distribution upgrade made solely based on a forecasted need outside a utility's traditional planning cycle. In the context of this framework, a Proactive Distribution Upgrade would not be considered under existing distribution planning processes due to the proactive nature of the project.

OR

ATE.B.16 Proactive Distribution Upgrade: an upgrade deployed ahead of certain load growth. These may include investments to serve new loads ahead of the utility receiving a load letter, as well as investments deployed to serve expected load growth that do not target an existing system constraint.

B.17 Small DER Cost-Sharing Fund: Xcel Energy's cost sharing fund for MN DIP applications of 40kW$_{ac}$ or less as detailed on Tariff Sheet 10-81.4.

C. Process

C.1 through C.4, C.8, and C.9 may be adopted in any combination.
C.5 through C.7 are alternatives and one may be adopted with any other requirements.
C.10 and C.11 both pertain to stakeholder engagement and may be adopted individually, together, or not at all.

C.1 Xcel Energy may file a Proactive Distribution Upgrade Proposal in conjunction with its Integrated Distribution Plan (IDP) due on November 1 of odd numbered years. The Proactive Distribution Upgrade Proposal shall be evaluated through the same docket and process as the IDP but is not part of the IDP.

C.2 The Proactive Distribution Upgrade Proposal may include Proactive Distribution Upgrades that have not been initiated and shall begin construction within five years from the date of the filing. It may also contain Proactive Distribution Upgrades that are not specific to a single location but shall upgrade the same type of asset(s) across multiple locations.

C.3 The Proactive Distribution Upgrade Proposal must demonstrate alignment with the framework, and the Commission shall review and approve, deny, or modify the Proposal with a goal of completion within 12 months from the date of the initial filing.

C.4 Xcel Energy is not obligated to initiate a project if it is approved in the Proactive Distribution Upgrade Proposal. If Xcel Energy does not proceed with an approved project, it shall explain why and the impact on the overall program budget with its Annual Report, as described in L. Reporting - 9 below.

C.5 Previously approved projects do not require reapproval in subsequent Proactive Distribution Upgrade Proposal evaluations unless circumstances have changed significantly. Significant changes would be considered scope changes to the project that would impact overall project cost.

OR

C.6 Previously approved projects do not require reapproval in subsequent Proactive Distribution Upgrade Proposal evaluations unless circumstances have changed significantly. Significant changes include but are not limited to scope changes to the project that would impact overall project cost.

OR

Xcel.C.6 Previously approved projects do not require reapproval in subsequent Proactive Distribution Upgrade Proposal evaluations unless circumstances have changed significantly. Significant changes include scope changes to the project that would substantially impact overall project cost, and changes to the forecast that substantially impact the need for the project. Projects that have already been initiated are not subject to reapproval.

OR

C.7 Previously approved projects do not require reapproval in subsequent Proactive Distribution Upgrade Proposal evaluations unless circumstances have changed significantly. Significant changes would be considered scope changes to the project that would impact overall project cost. Projects that have already incurred charges would not need reapproval, however scope changes would require Commission approval.

C.8 As addressed further in Section J: Cost Recovery, Xcel Energy must pursue cost recovery through a separate proceeding for any incurred Proactive Distribution Upgrade Proposal expenditures.

C.9 The Proactive Distribution Upgrade Framework is subject to refinement through the Proactive Grid Upgrade Workgroup. The Proactive Grid Upgrade Workgroup shall be convened by Commission Staff and shall meet as necessary to refine and improve the Proactive Distribution Upgrade Framework. This shall include Phase 2 of the framework development, occurring in 2025 and 2026, to resolve issues left out of Phase 1.

C.10 Xcel Energy shall engage with interested stakeholders prior to the forecast being finalized and used to identify locations of proposed upgrades. This outreach shall be conducted during the first half of even-numbered years, starting in 2026.

C.10.a Xcel Energy shall share the initial results of its forecast and identify preliminary regions where upgrades may be needed.

C.10.b Xcel Energy shall give stakeholders the opportunity to send in written feedback on its initial forecast.

C.10.c Stakeholder feedback should focus on identifying geographic areas that have a higher likelihood to adopt DG and electrification that may not be represented in Xcel Energy's initial forecast.

C.10.d Utility shall provide a high-level summary of stakeholder engagement completed and feedback and where it was incorporated into the forecasting for the Proactive Distribution Upgrade Proposal, and if not, why not.

C.10.e Stakeholders with similar views are encouraged to file joint feedback with Xcel Energy.

C.11 Coordination with distributed generation developers:

C.11.a Xcel Energy shall establish a distributed generation stakeholder engagement group (DGEG) to coordinate stakeholder engagement with Xcel Energy on proactive long-term system planning. The DGEG shall be co-facilitated by Xcel Energy and a DG stakeholder representative and shall consist of one representative from the Department of Commerce, one representative from the Office of the Attorney General, and six DG stakeholder representatives (one of which must be a developer that conducts 60% or more of its business in residential DG, one of which must be a developer that conducts 60% or more of its business in C&I DG, one of which must be a developer that conducts 50% or more of its business in energy storage). DG industry trade associations shall work together to conduct industry elections for the six DG stakeholder representatives for each IDP iteration.

C.11.b Xcel Energy must engage with the DGEG to collect input for the forecast prior to it being finalized and used to identify locations of proposed upgrades. Forecast input should focus on identifying geographic areas that have a higher likelihood to adopt DG and electrification.

C.11.c Xcel Energy must engage with the DGEG to collect input for prioritizing infrastructure upgrades at the planning stage of the analysis prior to Proactive Distribution Upgrade Proposal to the Commission.

C.11.d DGEG input must be collected in a manner that can be incorporated into Xcel Energy's forecasting tool and for use in prioritizing infrastructure upgrades in a Proactive Distribution Upgrade Proposal.

C.11.e Xcel Energy must include DGEG recommendations in its Proactive Distribution Upgrade Proposal filing with the Commission and explain how it did or did not incorporate recommendations.

C.11.f Xcel Energy must also collect DGEG input to inform prioritization of site proposals. This outreach shall be conducted during the first half of odd-numbered years, in the lead up to finalizing site proposals for the November 1 filing in odd-numbered years.

D. Baseline Information

Any requirements may be adopted in any combination.

The following information shall be provided with the IDP in which a Proactive Distribution Upgrade Proposal is submitted:

D.1 The types of upgrade projects and programs that fit within the framework and are currently considered when developing proposals. This may change over time based on utility capability.

D.2 Issues the potential project or program solves.

D.3 General range of cost for each type of upgrade.

D.4 An outline of future upgrade options, such as storage, and on what timeline they may be available.

D.5 A summary of upgrades that were previously approved but have since been accelerated, delayed, or abandoned due to a change in need since the last filing.

E. Forecast

Any requirements may be adopted in any combination, with the following exceptions:
E.1 and Xcel.E.1 are alternatives
E.4 and Xcel.E.4 are alternatives

E.1 Xcel Energy shall provide a base case forecast, as well as sensitivities that include higher and lower adoption of DERs and electrification than expected in the base case. Xcel Energy shall recommend which forecast should be adopted and explain why it thinks that forecast should be the case toward which to plan and why.

OR

Xcel.E.1 Xcel Energy shall provide a base case forecast, as well as sensitivities that include higher and lower adoption of DERs and ~~electrification~~ customer loads than expected in the base case. Xcel Energy shall recommend which forecast should be adopted and explain why it thinks that forecast should be the case toward which to plan and why.

E.2 Where possible, the following load and DER components shall be differentiated in the forecast data provided: distributed solar PV, CSGs, distributed energy storage, energy efficiency, demand response, electric vehicles, and electrification of space, water, and process heating.

E.3 For each of the DER components above, Xcel Energy shall provide a discussion of each essential assumption made in preparing the forecast, including assumptions regarding customer adoption rates, cost trends, and relevant policy drivers. Xcel Energy should include any sensitivity analyses used to test these assumptions.

E.4 In addition to the existing IDP load and DER forecast requirements, Xcel Energy shall submit its forecast results for generation and peak loads at the feeder/substation level for all locations associated with proposed Proactive Distribution Upgrades and locations that Xcel Energy analyzed but decided not to upgrade.

OR

Xcel.E.4 In addition to the existing IDP load and DER forecast requirements, Xcel Energy shall submit its forecast results for generation and peak loads at the feeder/substation level for all locations associated with proposed Proactive Distribution Upgrades ~~and locations that Xcel Energy analyzed but decided not to upgrade~~.

E.5 All proposed Proactive Distribution Upgrades shall be based on a forecasted need identified in the forecast between years five and ten, unless the anticipated lead time for an upgrade project exceeds ten years.

E.6 The forecast shall include an assessment of existing available hosting capacity for generation and load to the same extent as is shared in Xcel Energy's Hosting Capacity Analysis results.

F. Potential Sites for Proactive Distribution Upgrades

Any requirements may be adopted in any combination.

A utility must include in any Proactive Distribution Upgrade Proposal filing:

F.1 The criteria used to identify potential sites for Proactive Distribution Upgrades, including a discussion of feedback received from stakeholders under Section [XXX].

F.2 A list of sites that Xcel Energy may consider for future Proactive Distribution Upgrades.

F.3 A list of proposed Proactive Distribution Upgrades, including identifying any changes to upgrade locations since the last submission.

F.4 A narrative description or analysis of the impact of the proposed Proactive Distribution Upgrades on Environmental Justice Areas, as defined by Minn. Stat. §216B.1691, Subd. 1 (e).

F.5 The total capital cost of all proposed Proactive Distribution Upgrades and the projected total lifetime revenue requirements.

F.6 For each site where Xcel Energy is proposing a Proactive Distribution Upgrade project, Xcel Energy must provide:

F.6.a Expected type of upgrade.

F.6.b Narrative description for why the proposed upgrade or group of upgrades has been selected for the Proactive Distribution Upgrade process.

F.6.c Estimated upgrade cost and duration of construction.

F.6.d Increase in load and generation capacity expected to result from the proposed upgrade.

F.6.e Forecasted period before another upgrade is anticipated to be needed at the same site.

F.6.f Magnitude of forecasted growth (load or generation) and capacity gap driving the need for the proposed upgrade.

F.6.g Classes or characteristics of load or generation driving the need for the proposed upgrade.

F.6.h A quantitative or qualitative level of confidence of the forecasted need, and/or sensitivity of the forecasted need to deviations from the forecast, driving the need for the specific project. This may include any information

gathered from communities, developers, customers (for example if large fleet owners, or other industrial/commercial building customers) and others that informed selection of the site.

F.6.i Identification of any known additional benefits resulting from the upgrade.

F.6.j Identification of planned capital investment or maintenance work to be coordinated with the proposed Proactive Distribution Upgrade (where appropriate).

F.7 For sites that Xcel Energy analyzed but ultimately decided not to upgrade, the reasons Xcel Energy decided not to propose a Proactive Distribution Upgrade at that site.

F.8 For upgrades that are proposed as part of a longer-term plan, Xcel Energy shall provide an assessment of whether they are expandable and whether there would be any potential benefits or costs from doing repeated work in the same area.

G. Proactive Distribution Upgrade Proposal Evaluation Criteria

Any requirements may be adopted in any combination, with the following exceptions:
G.3 and MNSEIA.G.3 are alternatives
G.6 and Staff.G.6 are alternatives
G.14 and G.15 are alternatives

Each proposed Proactive Distribution Upgrade shall be evaluated using the following criteria, with Xcel Energy providing such information and evaluation as part of its filing:

G.1 The total capital cost of the proposed upgrade and its projected total lifetime revenue requirement.

G.2 The overall capacity gained for both load and generation.

G.3 The cost per unit of capacity gained.

OR

MNSEIA.G.3 The cost per unit of capacity gained, and a discussion informed by historical data and developer input on the maximum cost per unit of capacity gained, at or below which Interconnecting customers are likely to agree to pay to interconnect, and above which interconnection would become unviable.

G.4 The lead time for the upgrade.

G.5 The risk of deferring the upgrade, or using the existing distribution planning process, including quantifying the potential energization delays (in years) and number of customers impacted by delays

G.6 Discussion of whether Xcel Energy performed a non-wires alternative (NWA) for the project, and if so, the results of the analysis. If Xcel Energy did not perform an NWA, provide a discussion of alternative measures, if any, that could be taken to mitigate the risk(s) the upgrade is intended to address, including energy-conservation, load-management measures and/or flexible interconnection.

OR

Staff.G.6: ~~Discussion of w~~ Whether Xcel Energy performed a non-wires alternative (NWA) for the project, and if so, a citation to the results of the analysis in its IDP. If Xcel Energy did not perform an NWA, provide a discussion of alternative measures, if any, that could be taken to mitigate the risk(s) the upgrade is intended to address, including energy-conservation, load-management measures and/or flexible interconnection.

G.7 The degree of certainty, qualitative or quantitative, of the forecast components driving the forecasted need at that location, and any additional certainty in the magnitude/scale of investment provided by direct customer engagement.

G.8 The remaining estimated useful life of the assets proposed to be replaced.

G.9 The estimated number of years beyond the timing of the upgrade that the project would meet the forecasted capacity needs at that location.

G.10 Narrative description or analysis of the impact of the proposed Proactive Distribution Upgrade projects, including impacts on Environmental Justice Areas, as defined by Minn. Stat. §216B.1691, Subd. 1 (e).

G.11 The benefits additional to increased hosting capacity realized from the upgrade, if any, to reliability, resilience, safety, and asset health, and the value of those benefits, where known.

G.12 How any additional planned work would be coordinated with the proposed Proactive Distribution Upgrade (where appropriate).

G.13 The extent to which the upgrade would facilitate progress toward greenhouse gas emission reduction targets.

G.14 Which of the following desired outcomes of the proactive planning process would be facilitated by the proposed upgrade?

G.14.a Anticipate Adoption Speed: Increased adoption speed of DERs and electrification by removing grid barriers.

G.14.b Coordinate Impacts: Avoided risk of construction/procurement bottlenecks.

G.14.c Efficiency: Degree of lifecycle cost reduction or overall spending efficiency achieved.

OR

G.15 Which desired outcomes of the proactive planning process would be facilitated by the proposed upgrade.

G.16 Feasibility of the projected Proactive Distribution Upgrade project timeline including any foreseeable risks to the timeline.

H. Proposal for non-location specific proactive measures

H.1 and H.2 may be adopted.
H.1 may be adopted without H.2.
Staff.H.3 is a combination of H.1 and H.2

H.1 Xcel Energy may propose programmatic investment proposals which are Proactive Distribution Upgrade initiatives that affect a variety of locations, but the specific locations may shift over time in alignment with established site selection criteria.

H.2 In proposing such measures or initiatives, Xcel Energy shall consider whether there are basic, low-cost upgrades that can be done as a part of standard maintenance.

Staff.H.3 Xcel Energy may propose programmatic investment proposals which are Proactive Distribution Upgrade initiatives that affect a variety of locations, but the specific locations may shift over time in alignment with established site selection criteria. In proposing such measures or initiatives, Xcel Energy shall provide a high-level discussion of any ~~consider whether there are~~ basic, low-cost upgrades that would increase hosting capacity that are already ~~can be done as a~~ part of standard maintenance.

J. Cost Recovery

As indicated in Section C.8 regarding Process, Xcel Energy must pursue cost recovery through a separate proceeding for any incurred Proactive Distribution Upgrade Proposal expenditures.

Cost Recovery Mechanism

J.0 may be adopted with J.2
J.1 and J.2 may be adopted together or individually.
J.3 is an alternative to J.1 and J.2
J.4 and Xcel.J.4 are alternatives and may be selected with either of the above requirements or not at all

OAG.J.0 The primary mode of cost recovery for Proactive Distribution Upgrades is through a utility's base rates.

J.1 Xcel Energy may place Proactive Distribution Upgrade investments, or portions of upgrade investments in service as regulatory assets.

J.2 Xcel Energy may request deferred-accounting treatment for approved Proactive Distribution Upgrade investments. The Commission shall grant, deny, or modify the request with the Proactive Distribution Upgrade Proposal decision.

J.3 Expenditures for approved Proactive Distribution Upgrades shall be tracked as regulatory assets and/or receive deferred accounting treatment to ensure that the costs of the upgrades are transparently accounted for and can be recovered.

OR

Xcel.J.3 Expenditures for approved Proactive Distribution Upgrades shall be tracked as regulatory assets and~~/or~~ receive deferred accounting treatment to ensure that the costs of the upgrades are transparently accounted for, and ~~can~~ are eligible to be recovered.

J.4 All Proactive Cost-Share Fees collected from Proactive Cost-Share Customers shall be returned to ratepayers as an offset to Proactive Distribution Upgrade capital investments.

OR

Xcel.J.4 All Proactive Cost-Share fees collected from Proactive Cost-Share Customers shall be returned to ratepayers as an offset to the revenue requirements of Proactive Distribution Upgrade capital investments.

Proactive Cost-Share Window

The Commission may select from the following combinations to establish a Proactive Cost-Share Window:
J.5 and J.6
OAG/Dept.J.6

J.7 and J.8 or Xcel.J.8
J.9 may be adopted with any of the above options.

J.5 Each approved Proactive Distribution Upgrade shall have a Proactive Cost-Share Window of at least 15 years that starts upon the upgrade being placed in service. During the Proactive Cost-Share Window, Proactive Cost-Share Fees from Proactive Cost-Share Customers act as an offset to Xcel Energy's capital investment in the Proactive Distribution Upgrade. No costs are socialized to ratepayers during this time.

J.6 Where socialization of an upgrade's cost (i.e., rate-base treatment) begins with Xcel Energy's next rate case following the upgrade's in-service date, the Proactive Cost-Share Window for that upgrade shall remain open until the upgrade is fully depreciated to help mitigate risks to ratepayers.

OAG/Dept.J.6 The Proactive Cost-Share Window for an upgrade shall remain open until the upgrade is fully depreciated to help mitigate risks to ratepayers.

J.7 Each approved Proactive Distribution Upgrade shall have a Proactive Cost-Share Window that starts the year that the Proactive Distribution Upgrade project is placed in-service. The duration of the Proactive Cost-Share Window shall be until 5 years after the anticipated need date for the Proactive Distribution Upgrade at the time of approval. During the Proactive Cost-Share Window, Proactive Cost-Share Fees from Proactive Cost-Share Customers act as an offset to the revenue requirements of all Proactive Distribution Upgrades.

J.8 At the end of the Proactive Cost-Share Window, any remaining costs that have not been offset by Proactive Cost-Share Fees are placed into rate base and no longer subject to this cost sharing program.

OR

Xcel.J.8 Upon completion of the Proactive Distribution Upgrade project, the total costs of the upgrade are placed into rate base.

J.9 Interconnecting customers that apply to interconnect on or before the Proactive Cost-Share Window end date are Proactive Cost-Share Customers. For generation interconnections, the date of applying to interconnect shall be the Deemed Complete date under the Minnesota Distributed Energy Resource Interconnection Process (MN DIP).

Staff Reorganized Decision Options

All decision options below are replications of J.5 through J.9, but subdivided into smaller sections so the Commission may make decisions on the length of the Proactive Cost-Share Window and the treatment of costs separately and without needing to write new language. The selected provisions will be renumbered in the final framework version.

Length of Proactive Cost-Share Window:

The Commission may choose J.A, J.B., or J.C. If desired, the Commission may change the length of time in J.A or J.B.

J.A Each approved Proactive Distribution Upgrade shall have a Proactive Cost-share window of at least 15 years that starts upon the upgrade being placed in service.

OR

J.B Each approved Proactive Distribution Upgrade shall have a Proactive Cost-Share Window that starts the year that the Proactive Distribution Upgrade project is placed in-service. The duration of the Proactive Cost-Share Window shall be until 5 years after the anticipated need date for the Proactive Distribution Upgrade at the time of approval.

OR

J.C The Proactive Cost-Share Window for an upgrade shall remain open until the upgrade is fully depreciated to help mitigate risks to ratepayers.

Treatment of Costs during the Proactive Cost-Share Window:

The Commission may choose J.D or J.E.
The Commission may select J.F AND J.G; or J.H, or neither.
It may select J.I with any options

J.D During the cost-share window, Proactive Cost-Share Fees from Proactive Cost-Share Customers act as an offset to Xcel Energy's capital investment in the Proactive Distribution Upgrade.

OR

J.E During the Proactive Cost-Share Window, Proactive Cost-Share Fees from Proactive Cost-Share Customers act as an offset to the revenue requirements of all Proactive Distribution Upgrades.

J.F No costs are socialized to ratepayers during the Cost-Share window

J.G At the end of the Cost-Share Window, any remaining costs that have not been offset by Proactive Cost-Share Fees are placed into rate base and no longer subject to this cost sharing program.

J.H Upon completion of a Proactive Distribution Upgrade Project, the total costs of the upgrade are placed into rate base.

J.I Interconnecting customers that apply to interconnect on or before the Proactive Cost-Share Window end date are Proactive Cost-Share Customers. For generation interconnections, the date of applying to interconnect shall be the Deemed Complete date under the Minnesota Distributed Energy Resource Interconnection Process (MN DIP).

Cost Cap

J.10 establishes a cost cap. J.11 and J.12 may be adopted with J.10

J.10 Total Proactive Distribution Upgrade costs recoverable from ratepayers shall be capped in some manner, such as a percentage of the total capacity-related five-year budget in the IDP, or a specified dollar cap on Proactive Distribution Upgrades. The cost cap shall be determined as part of the Commission's first Proactive Distribution Upgrade Proposal decision.

J.11 Capital expenditures that have been offset by Proactive Cost-Share Fees do not count against the cap.

J.12 After a project's cost-share window has closed, the project shall be considered system assets and associated costs shall no longer count against the cap.

Prudency Review

J.13 is an alternative to J.14 through J.16
J.17 may be adopted with J.13 or J.14-16
J.18 and J.19 are alternatives and either may be adopted with J.13 or J.14-16

J.13 The Commission's Proactive Distribution Upgrade Proposal decision creates a rebuttable presumption, in a cost-recovery proceeding, that upgrades completed consistent with the decision are prudent.

OR

J.14 The Commission's Proactive Distribution Upgrade Proposal decision constitutes an advance determination of prudence for the projects approved in the Proactive Distribution Upgrade Proposal.

AND

J.15 If a Proactive Distribution Upgrade project receives advanced determination of prudence, this means that at the time cost recovery is being considered, costs that align with the original Proactive Distribution Upgrade Proposal cannot be deemed imprudent.

AND

J.16 If the Commission does not provide an advanced determination of prudence for a Proactive Distribution Upgrade project, then for that reason alone, Xcel Energy may choose not to proceed with the project.

J.17 Up until the point that a previously approved Proactive Distribution Upgrade project is canceled or rescinded by Commission Order, Xcel Energy is entitled to recover all costs that have been prudently incurred, not exceeding the previously approved amount.

J.18 An interested person may submit substantial evidence to rebut the Proactive Distribution Upgrade Proposal findings and conclusions in a cost recovery proceeding.

OR

J.19 An interested person may submit substantial evidence to rebut the Proactive Distribution Upgrade Proposal findings and conclusions in a cost recovery proceeding, to the extent that actual or updated projected costs exceed the prior estimate previously approved by the Commission.

K. Cost Allocation

K.1 is a standalone option and may be adopted with any of the following requirements.

K.1 If a change is made to distribution planning or other utility standards that impacts the amount of available hosting capacity after a Proactive Distribution Upgrade project has been completed, there shall be no resulting change in cost-sharing responsibility.

OR

Dep.K.1 If a change is made to distribution planning or other utility standards that impacts the amount of available hosting capacity after a Proactive Distribution Upgrade project has been completed, there shall be no resulting retroactive change in cost-sharing responsibility.

K.2 – K.6 is a package.
The Commission may adopt K.2 or Xcel.K.2 or Staff.K2 in combination with K.3 through K.6

K.2 A $\$/kW_{ac}$ fee shall be charged to any Proactive Cost-Share Customers and the dollars returned to ratepayers. The fee shall be calculated at an aggregated, programmatic level for all approved Proactive Distribution Upgrade investments. The fee calculation shall be the total cost of all approved Proactive Distribution Upgrades divided by the total kWac of capacity added by all approved Proactive Distribution Upgrades. This fee shall determine the pro rata cost for any Proactive Cost-Share

Customer, load or generation, and pay down the assets until the total revenue requirements of all Proactive Distribution Upgrade projects has been paid off.

OR

Xcel.K.2 A $\$/kW_{ac}$ fee shall be charged to any Proactive Cost-Share Customers and the dollars returned to ratepayers. The fee shall be calculated at an aggregated, programmatic level for all approved Proactive Distribution Upgrade investments. The fee calculation shall be the total cost of all approved Proactive Distribution Upgrades divided by the total kWac of capacity added by all approved Proactive Distribution Upgrades. This fee shall determine the pro rata cost for any Proactive Cost-Share Customer, load or generation, which will be applied as an offset to ~~and pay down the assets until~~ the total revenue requirements of all Proactive Distribution Upgrade projects ~~has been paid off~~ with an open Cost-Share window.

OR

Staff.K.2 A $\$/kW_{ac}$ fee shall be charged to any Proactive Cost-Share Customers and the dollars returned to ratepayers. The fee shall be calculated at an aggregated, programmatic level for all approved Proactive Distribution Upgrade investments. The fee calculation shall be the total cost of all approved Proactive Distribution Upgrades divided by the total kWac of capacity added by all approved Proactive Distribution Upgrades. This fee shall determine the pro rata cost for any Proactive Cost-Share Customer, load or generation~~, and pay down the assets until the total revenue requirements of all Proactive Distribution Upgrade projects has been paid off~~.

AND

K.3. When new Proactive Distribution Upgrade Proposals are approved, the total kWac of capacity added and total cost of the newly approved Proactive Distribution Upgrades shall be added respectively to the totals of the previously approved Proactive Distribution Upgrades. The resulting new total kWac of capacity added and total cost of all Proactive Distribution Upgrades shall be used to calculate the new $/kWac fee that shall be charged to any Proactive Cost-Share Customers beginning after the date the new Proactive Distribution Upgrade Proposal is approved.

AND

K.4 Any generation interconnections that are subject to the Priority Queue shall not be Proactive Cost-Share Customers.

AND

K.5 Load interconnections that are demand metered shall be Proactive Cost-Share Customers. Load interconnections that are not demand metered shall not be Proactive Cost-Share Customers.

AND

K.6 Any Proactive Distribution Upgrade costs recovered from ratepayers shall be treated consistent with approved rate case allocators and established revenue requirement procedures.

K.7 – K.12 is a package

Cost Allocation between Customers Adding New Load and Rate Payers

K.7 Insofar as Proactive Distribution Upgrades are associated with forecasted needs associated with identifiable customers, those customers shall be considered Proactive Cost-Share Customers and shall be allocated costs via a Proactive Cost-Share Fee.

K.7.a Proactive Cost-Share Fees for small load additions from the residential class should be structured similarly to the Small DER Cost-Sharing Fund.

AND

K.8 For Proactive Distribution Upgrade projects primarily serving large commercial and industrial customers, Proactive Distribution Upgrade costs shall be tracked separately from other rate-base assets and cost allocated to the large commercial and industrial classes contributing to the need for the upgrade.

AND

K.9 For Proactive Distribution Upgrade projects primarily intended to enable load growth by residential and small commercial customers, traditional cost allocation methods in a rate case shall apply. Specifically, Xcel Energy shall record costs from the upgrades in their respective FERC accounts and allocate costs with cost allocators from Xcel Energy's most recent rate case.

AND

K.10 Insofar as Proactive Distribution Upgrade costs are recovered from customers through cost share fees, those revenues shall be returned to ratepayers. Costs recovered through these tools should "pay down" the remaining unattributable Proactive Distribution Upgrade costs that are socialized to ratepayers.

AND

Cost Allocation between Customers Interconnecting Generation and Rate Payers

K.11 Proactive Distribution Upgrade projects, or portions of upgrade projects, that enable DG interconnection, shall assess an upfront $/kW$_{ac}$ fee to Interconnection Proactive Cost-Share Customers seeking to interconnect generation.

K.11.a Proactive Cost Share Fees shall continue to be collected beyond the original date of the forecasted need if capacity remains

K.11.b Initial Proactive Cost Share Fees could be set to target recovering a certain threshold of the Proactive Distribution Upgrade costs from interconnections,

such as the $/kW$_{ac}$ fee set higher than the forecasted amount, which could be applied for the first X% of capacity.

K.11.c The existing Small DER Cost Sharing-Fund may be used to fund the Proactive Cost-Share Fee.

AND

K.12 Insofar as Proactive Distribution Upgrade costs are recovered from customers through Interconnection Proactive Cost-Share Fees those revenues shall be returned to ratepayers. Costs recovered through this tool should “pay down” the remaining unattributable Proactive Distribution Upgrade costs that are socialized to ratepayers.

K.13 – K.19 is a package

K.13 When both load and DG are forecasted to benefit from a Proactive Distribution Upgrade, costs shall be categorized and allocated based on the type of benefit the upgrade provides, which may be either 'DG-Enabling' (to DG customers), or 'Reliability-Enhancing' (to load customers).

AND

K.14 Utilities shall collect pro rata cost per kW$_{ac}$ fees from all interconnecting load or DG facilities over 40kWac that utilize capacity associated with an upgrade for a period of *[XXX years]* from project approval, or until all additional capacity is subscribed.

AND

K.15 A per $/kWac fee shall apply to all DG interconnections over 40kWac using capacity from a Proactive Distribution Upgrade.

K.15.a DG interconnections under 40kWac and subject to the Priority Queue are exempt from per $/kWac fees.

K.15.b DG Interconnections under 40kWac that are not subject to the Priority Queue (under 40kWac systems projected to generation more than 120% of onsite load) shall be subject to per $/kWac fees, and shall pay the per $/kWac fees for upgrade costs directly.

AND

K.16 Project "payback" tracking shall:
a. Monitor both financial recovery and capacity utilization percentages separately
b. Record CIAC payments as direct offsets to project costs
c. Consider a project "paid off" when either 100% of costs are recovered or [XXX] years have elapsed.

K.16.a Capacity utilized by Priority Queue customers under 40kW DG shall not count towards 'DG-Enabling' capacity utilization metrics if Xcel Energy has a planning limit in place at the location of the upgrade.

AND

K.17 All collected Proactive Cost-Share Fees offset ratepayer costs for the Proactive Distribution Upgrade investments. All Proactive Cost-Share Fee revenue shall be returned directly to ratepayers as offsets to the specific Proactive Distribution Upgrade project costs and allocated in proportion to how the initial costs were assigned to ratepayer classes

AND

K.18 Initial costs prior to Proactive Cost-Share Fee collection shall be temporarily allocated to ratepayer classes based on forecasted benefit distribution.

K.18.a For DG-enabling portions, recorded as regulatory assets with carrying costs.

K.18.b For load-enabling portions, included in standard distribution rates.

AND

K.19 After the Proactive Cost-Share Window closes, any unrecovered costs shall become permanent rate-based system assets and be allocated to customer classes according to standard cost allocation procedures.

K.20 is a standalone option

K.20 When both load and DG are each forecasted to grow and thus both benefit from a given selection of Proactive Distribution Upgrades, costs shall be allocated between ratepayers and DG customers to the extent at which each relies on such upgrades. Allocation, therefore, requires categorizing the benefits provided by a given upgrade. These can range between strictly 'DG-Enabling' allocated to interconnecting DG customers, strictly 'Reliability-Enhancing' allocated to load customers, and 'Capacity-Expansion' co-benefits split between DG and load customers. The split of cost for 'Capacity-Expansion' upgrades is to be determined by the ratio of either enabled forecasted load or DG to total enabled forecasted load and DG.

K.21 – K.26 are standalone options but would need to be adopted in conjunction with one of the package proposals listed above. The Commission may select any combination with the following exceptions:
K.25 and OAG.K.25 are alternatives
K.26 and OAG/Dept.K.26 are alternatives

K.21 For Proactive Distribution Upgrades primarily intended to enable DG adoption for residential and small commercial customers, Xcel Energy shall socialize the upgrade

costs through the Small DER Cost Sharing Fund. If a customer that does not qualify for the Small DER Cost Sharing Fund interconnects to a location served by this upgrade within the Proactive Cost-Share Window under Section J.[XXX], this non-qualifying customer would pay to the Small DER Cost Sharing Fund a Proactive Cost-Share Fee pursuant to Section K.[XXX].

K.22 Insofar as Proactive Distribution Upgrades are associated with forecasted needs associated with identifiable customers, those customers shall be allocated costs consistent with existing CIAC policies, and an upgrade shall not be eligible for the proactive process.

K.23 Xcel Energy's existing CIAC policies include waiving service-transformer-related CIAC for customers with an EV who opt to participate in a managed charging program.

K.24 For upgrades primarily intended to enable load growth by residential and small commercial customers, traditional cost allocation methods in a rate case shall apply. Specifically, Xcel Energy shall record costs from the upgrades in their respective FERC accounts and allocate costs with cost allocators from Xcel Energy's most recent rate case.

K.25 For upgrades serving large commercial and industrial customers, Proactive Distribution Upgrades shall be tracked separately from other rate-base assets and their total cost allocated based on customer classes' aggregate contribution to the need for Proactive Distribution Upgrades.

OR

OAG/Dept.K.25 For upgrades primarily serving large commercial and industrial customers, Proactive Distribution Upgrades shall be tracked separately from other rate-base assets ~~and their total cost~~ allocated to the large commercial and industrial classes contributing to the need for or benefiting from the upgrades. ~~based on customer classes' aggregate contribution to the need for Proactive Distribution Upgrade~~s.

K.26 If Proactive Distribution Upgrade costs are socialized to ratepayers, Xcel Energy shall identify and mitigate adverse bill impacts on under-resourced customers and/or small business by adjusting cost allocation within or among classes.

OR

OAG/Dept.K.26 To the extent that Proactive Distribution Upgrade costs are socialized to ratepayers, Xcel Energy shall identify and mitigate adverse bill impacts on under-resourced customers and/or small businesses. ~~by adjusting cost allocation within or among classes.~~

L. Capacity Reservation

L.1 – L.6 are alternatives to one another. The Commission may select one or none of these options.

L.1 Capacity does not need to be reserved for a specific customer class.

OR

L.2 Residential customers shall have priority for accessing proactive distribution capacity upgrades based on the percentage of upgrade costs allocated to residential rates.

OR

L.3 A percentage of the capacity of a Proactive Distribution Upgrade may be reserved for under 40kW$_{ac}$ DG to facilitate more efficient queue processing through the Priority Queue, if the proposal demonstrates that based on the customer make-up of the feeder, existing customers will benefit from a capacity reservation.

L.3.a Xcel Energy shall propose a capacity reservation for under 40kW$_{ac}$ DG for each upgrade in a Proactive Distribution Upgrade Proposal with its filing.

L.3.b. Small DG (less than 40kW$_{ac}$) shall continue to be able to use the Small DER Cost Sharing Fund for service transformer and secondary upgrades at the existing funding levels and fees consistent with Cost Sharing Program.

L.3.c. Xcel Energy must seek PUC approval to implement this capacity reservation system and any specific Proactive Distribution Upgrade capacity reservation Proposal. If Xcel Energy's planning limit is invalidated, this agreement must be renegotiated.

OR

L.4 Xcel Energy shall implement a system-wide capacity reservation for small DG to facilitate more efficient queue processing through the Priority Queue.

L.4.a Small DG (less than 40kW$_{ac}$) shall continue to be able to use the Small DER Cost Sharing Fund for service transformer and secondary upgrades at the existing funding levels and fees consistent with the Cost Sharing Program.

OR

L.5 Xcel Energy shall implement a system-wide capacity reservation for small DG in the Priority Queue to facilitate more efficient queue processing through the Priority Queue.

L.5.a Small DG would be allowed to use the Small DER Cost Sharing Fund to help cover their pro-rata costs.

L.5.b Once the mobilization threshold has been reached for a capacity upgrade, that triggers all subsequent DG projects to pay their pro-rata share, even if there is available capacity for Priority Queue applications within the capacity reservation.

OR

L.6 Xcel Energy shall implement a capacity reservation system as follows:

L.6.a **Generation:** Following a proactive DG hosting capacity upgrade, a minimum of 1 MW shall be reserved for the interconnection of systems below 40kW$_{ac}$. Where the installation of new DER systems larger than 40kW$_{ac}$ does not impose new constraints on the interconnection of 1 MW of new DG smaller than 40kW$_{ac}$, such systems can be allowed to proceed with interconnection.

L.6.b **Load**: 25% [or another percentage to be discussed] of the capacity from Proactive Distribution Upgrades shall be reserved for residential and small C&I customers and shall not be made available to new load additions of total size in excess of 250kW$_{ac}$ [or another threshold to be discussed].

L.6.c **Reservation Waiver**: For locations where new adoption from residential and small C&I customers is not reasonably anticipated (e.g., on feeders serving exclusively industrial loads), load and generation capacity reservations for residential and small C&I customers such areas may be waived or reduced.

M. Reporting

Any combination of definitions may be adopted with the following exceptions:
M.2 and M.3 are alternatives
M.12 and Xcel.M.12 are alternatives

M.1 Xcel Energy must file reports that include the following information and data to the greatest extent practicable. Where Xcel Energy 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 November 1 as part of Xcel Energy's Integrated Distribution Plan or Annual Update. Where applicable, Xcel Energy must include data in spreadsheet (.xlsx) format. If Xcel Energy 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.

M.2 For projects where the Cost-Share window has closed Xcel Energy shall no longer include them in the "all Proactive Distribution Upgrades" summary and may discontinue updates in the project-by-project reporting points.

OR

M.3 For projects where the cost-share window has closed, Xcel Energy may discontinue updates in the project-by-project reporting points under M.4 and M.5.

M.4 For all Proactive Distribution Upgrades –

	Approved	Development	Construction	Completed	Total
Number of projects					
Upgrades in Environmental Justice Communities					
Total $ approved					
Total $ spent					
Total $ and percent of project costs recovered from interconnection customers					
Total incremental generation hosting capacity gained					
Total incremental load hosting capacity gained					

M.5 By Proactive Distribution Upgrade project –

	[Project Name]	[Project Name]	[Project Name]
Year Proposed			
Located in EJ Community (y/n)			
Anticipated completion year at time of proposal			
Date Cost-Share window closed (actual or predicted)			
Project status (approved, development, construction, completed, terminated)			
Year completed or current anticipated year of completion			
Total incremental generation hosting capacity gained			
Utilization of capacity post upgrade (generation)			
Total incremental load hosting capacity gained			
Utilization of capacity post upgrade (load)			
Total $ approved			
Total $ spent			
Total $ and percent of project costs recovered from interconnecting customers (load or generation)			

M.6 DER additions (Fill out table for each completed project)

[Project Name]

	40kW and under (BTM)	Over 40kW (BTM)	Front of the Meter	Total
Number of DERs added since project completion				
Solar				
Battery				
Other (Specify)				
Capacity of DERs added since project completion				
Solar				
Battery				
Other (Specify)				

M.7 For each completed project, the current peak load, forecasted peak load, and any known load additions by load type (Fleet EV charging, DCFC fast charging, etc.) and customer class

M.8 A comparison of Load and DG added since project completion with the forecast from the Proactive Distribution Upgrade Proposal.

M.9 Any additional narrative information, by project or portfolio, on the status of the project, cost deviations from the approved amount, and any delays in implementation and the cause for the delays.

M.10 For any approved projects that did not proceed, an explanation of why and what the impact is on the overall program budget.

M.11 If the costs of previously approved Proactive Distribution Upgrades were not recovered within the cost-share window, Xcel Energy shall provide a narrative explanation of why it was not able to recover the costs within the window. Xcel Energy shall also explain how it will improve its forecast or other procedures to avoid unnecessarily socializing costs.

M.12 For projects that were accelerated, delayed, or abandoned following Commission approval, Xcel Energy shall discuss the impact of that change on total proactive grid upgrade costs, cost allocation, and benefit allocation.

Xcel.M.12 For projects that were accelerated, delayed, or abandoned following Commission approval, Xcel Energy shall discuss the impact of that change ~~on total proactive grid upgrade costs, cost allocation, and benefit allocation~~.