Northern States Power Company-Minnesota & Northern States Power Company-Wisconsin 2023 Firm Dispatchable Proceeding

Applicant Guide

Section 1. Introduction

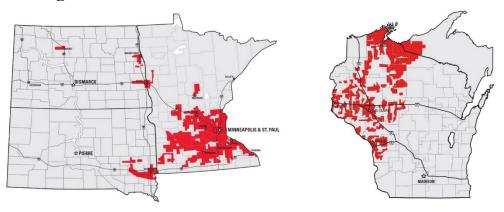
On May 24, 2023, Xcel Energy filed a Notice Petition to initiate a competitive resource acquisition process to acquire up to 800 megawatts of firm dispatchable resources. On November 3, 2023, the Minnesota Public Utilities Commission (Commission) issued an Order Approving Petition and Requiring Compliance Filing, and initiating the proceeding. As part of this proceeding, Xcel Energy plans to submit a proposal for our preferred resources to fulfill the identified firm dispatchable need. Other applicants are also encouraged to submit their own proposals. The Minnesota Public Utilities Commission will select the projects to serve Xcel Energy's customers from among those considered in this proceeding. The purpose of this Applicant Guide is to provide further information to potential applicants who may wish to submit a proposal to meet the identified firm dispatchable need.

Section 2. Company Information

Xcel Energy Inc., headquartered in Minneapolis, Minnesota, is a U.S. investor-owned holding company parent of four major electric and natural gas utilities. The four Xcel Energy operating companies have regulated utility operations in the eight western and midwestern states of: Minnesota, Wisconsin, North Dakota, South Dakota, Michigan, Colorado, Texas, and New Mexico. The operating companies of Xcel Energy provide energy-related products and services to approximately 3.7 million electricity customers and 2.1 million natural gas customers collectively. More information about Xcel Energy is available at www.xcelenergy.com.

Northern States Power Company (NSPM), a Minnesota corporation, is the Xcel Energy operating company in North Dakota, South Dakota and Minnesota, and Northern States Power Company (NSPW), a Wisconsin corporation, is the Xcel Energy operating Company in Wisconsin and Michigan. The retail electric service territories for NSPM and NSPW are shown below in Figure 1.

Figure 1. NSPM and NSPW Retail Electric Service Territory



The firm dispatchable resources subject to this proceeding will electrically serve NSPM and NSPW.

Section 3. Project Requirements

In this competitive acquisition process, a "project" will be interpreted as all assets that are part of a single proposal that together interconnect to the grid at a single point of interconnection.¹ An applicant may submit multiple proposals to fill the identified firm dispatchable resource need.

A summary of the eligible project types and parameters are included in Table 1 below:

Table 1. Summary of Firm Dispatchable Resource Project Types

Parameter	Project Types	
Category	Required For All Proposals	Optional Functionality
Resource Types	Firm Dispatchable,	Blackstart Service ²
	Commercially Operable	
Vintage	Newly Built or Existing	
MW Target	Up to 800 MW	
Minimum	> 5 MW Per Project	
Project Size		
Project Structure	Power Purchase Agreement	Power Purchase Agreement
	("PPA"), Build Transfer	("PPA"), Build Transfer
	("BT"), Company self-build	("BT"), Company self-
		build

¹ In other words, a project may contain more than a single generation asset.

² Projects containing one or more Blackstart Units (BSUs) with the capability of energizing the network from an on-site auxiliary supply.

Parameter	Project Types	
Timing for	Up to 800 MW by 12/31/2028	Operational by
Commercial		12/31/2028
In-servicing		
Geography &	MISO Zone 1; must have	Same as requirement for
Interconnection	uninterrupted interconnection	commercially operable
	path to MISO Load.3 All	load.
	interconnections must have	
	NRIS deliverability.4	
Bidder Financial	Financial viability &	Financial viability &
Strength	demonstrated experience on	demonstrated experience
& Experience	same type of project.	on same type of project.
Further Project	Meets required capacity	Meets blackstart and
Required	attributes.	system restoration
Attributes		attributes in addition to
		attributes already required
		for commercial operation.

While Table 1 provides a high-level summary of project parameters, further detail on a number of the parameters is provided below.

Resource Types: Xcel Energy is seeking firm dispatchable generation projects that have an established development plan and that convey all energy, capacity, ancillary services including reactive supply and voltage control, full dispatch control,⁵ and any environmental benefits generated from the project. All projects are expected to be able to supply accredited capacity as a Planning Resource to meet our resource adequacy requirements within the MISO Resource Adequacy construct.

Projects that contain at least one Blackstart Unit (BSU) as defined in Appendix A to Xcel Energy's Notice Petition must also meet the blackstart and system restoration attributes in Appendix A to Attachment A.⁶

³ Due to overlap in the boundaries between MISO and SPP; projects cannot interconnect to infrastructure physically islanded by SPP.

⁴ Regardless of whether the project uses a new interconnection in the MISO queue or the replacement generation process.

⁵ For BESS components in Power Purchase Agreements.

⁶ Since Appendix A to Xcel Energy's Notice Petition is confidential, the definition of a BSU from that document is also provided here: A BSU has the capability of energizing the network from an on-site auxiliary supply.

Project Structure: Xcel Energy is seeking projects under either a BT, PPA, or Self Build (SB) arrangement. Under the BT model, Xcel Energy will assume 100 percent ownership of the project via a negotiated Purchase and Sale Agreement (PSA). Under the PPA model, the applicant will retain ownership of the project and Xcel Energy will negotiate an offtake contract for the unit's capacity, energy, and any environmental attributes. Model PPA and BT contract language will be published to Xcel Energy's website. If a project is proposed to be added at the site of an existing commercially operable generator, the applicant must own the existing commercially operable generator or provide proof of consent from generation owner. Under a SB structure, Xcel Energy will self-build the project.

Expected Online Date: Proposals must be for facilities that are complete and commercially operable, including all facilities necessary to generate and deliver energy at the point of interconnection by the commercial operation dates specified in the proposal.

Required Project Attributes & Verification: Projects must possess the following attributes as listed below. In order to ensure projects possess the required attributes, applicants are encouraged to provide demonstrated proof of each attribute in Appendix A to this Applicant Guide.⁷ Additional supporting documents are included on the Company's website at FD2023CN@xcelenergy.com.

1. Additional Capacity Requirements. Projects must be operable at regional extreme maximum temperatures.⁸ New projects must have a minimum design life or PPA contract term of at least 10 years after the COD of a contract selected through this competitive acquisition process. Projects already in operation (i.e., "existing projects") must have a minimum remaining operational life or propose a PPA contract term of at least 10 years after the COD of a contract selected through this competitive acquisition process. PPA projects must have an Operation and Maintenance (O&M) plan sufficient for a proposed contract term. Build-Transfer projects must comply with applicable company technical specifications.⁹

⁷ For example, in order to provide proof of capability to operate in hot and cold temperatures, provide warranty materials.

⁸ Must be able to operate commercially at the highest 0.2 percentile hourly temperature from January 1, 2000, until the date the temperature is calculated, using the NOAA NCEI station nearest to the generator, and for cold weather, the smallest of the 50 year regional extreme cold temperature as defined by the NOAA NCEI station nearest to the generator or the Extreme Cold Weather Temperature defined in NERC EOP-012, whichever is colder.

⁹ Xcel Energy will publish Tech Specs to the Company's website at <u>xcelenergy.com/FD2023CN</u> upon approval of the Notice Petition.

2. Additional Requirements for BSU Project. Projects are not required to be BSU to apply, and this procurement is not required to result in a blackstart resource acquisition. For those that wish to be considered as a BSU, the following requirements apply:

Any project wishing to be considered as a BSU must register with MISO as a Blackstart Resource. Projects must possess the capability to operate in isochronous mode. Projects must possess the capability to operate in islanded operation. Projects must possess the capability to accept instantaneous loading of demand blocks, % of rated output but not less than 1 MW, while controlling frequency and voltage levels within acceptable limits during block loading process. Projects must possess the capability to control voltage level within acceptable limits during energization/block loading (-10%/+5%). Projects must possess the capability to control frequency within 58.7 Hz to 61.8 Hz during energization/block loading. Projects must possess the capability to dispatch at any time if needed and run in a continuous stable and controllable mode for at least 48 hours without violating any environmental or other restrictions. Projects must possess the capability to 1) run in a continuous stable and controllable mode over their entire design operating range to zero load; 2) operate in remote load control service up and down. Projects must possess sufficient reactive reserve capability to allow energization of the transmission system within the station to supply the facility with restoration power. Projects must possess the ability to close to a dead bus.

<u>Preferred Project Attributes & Portfolio Evaluation</u>: In addition to the listed required project attributes above, projects are preferred based on additional defined attributes. For a complete list of preferred attributes, please see Appendix A to Attachment A, of the Proposed Evaluation Process.

As seen in Attachment A, proposals will be modeled from several perspectives throughout the evaluation process, including individually from spreadsheet-based levelized cost of capacity perspectives and as part of candidate portfolios in software model(s) of the larger NSP system.

Section 4. Company Information Policy

Xcel Energy created a website to share relevant information related to this proceeding with potential applicants once materials are approved by the Commission.

xcelenergy.com/FD2023CN

This website includes the Notice Petition Order, any Commission approved documents relating to this proceeding, model agreements, responses to applicant questions, and a

link to the Commission's Docket. Our hope is that the provided information may be assistive in preparing proposals for potential applicants.

To obtain any additional information that may be needed to prepare a proposal, applicants may submit inquires via email at:

FD2023CN@xcelenergy.com

We will maintain a log of all inquiries and coordinate the preparation of written responses. Responses to questions will periodically be posted to the website. Applicants are responsible for monitoring the website and eDockets for updated information. Questions may be submitted up until three days prior to the deadline for submitting proposals with the Commission.

Section 5. Schedule

In its Notice Petition Order, the Commission set a procedural schedule for the proceeding. The procedural schedule for this proceeding is listed in Table 2:

Date Action November 22, Notice published 2023 Proposals to Meet the Need January 22, 2024 filed in Docket March 28, 2024 Commission Determination of Completeness, referral to the Office of Administrative Hearings, if warranted October 25, Administrative Law Judge Report, if referred 2024 December 19, Commission decision on competitive process 2024

Table 2: Procedural Schedule

Proposals will be accepted until 4:30 P.M. Central Daylight Time on January 22, 2024. Proposals received later than the due date and time indicated will be rejected. All proposals must be filed electronically in accordance with Commission rules, in the Commission's eDocket system. The Docket for this proceeding can be found at:

Docket No. E002/CN-23-212

To receive notification of filings in the Docket, you can subscribe via the Commission's eSubscription service available at <u>eDockets/Public Utilities (mn.gov)</u> (click on "Subscribe").

Section 6. Filing Requirements

The filing requirements for this proceeding are outlined in the Xcel-Bid Contested Case/Track 2 Process and Commission rules. The Xcel-Bid Contested Case/Track 2 Process provides that Xcel Energy and interested competitors (or alternative projects) must provide their proposals with Certificate of Need-like detail.

The Commission's Certificate of Need rules are laid out at Minn. Chapter 7849. Alternative proposals are granted the following exemptions to the Minn. Chapter 7849 filing requirements:

- 7849.0240 subpart 2, part A (socially beneficial uses)
- 7849.0250 subpart B (alternatives to the facility)
- 7849.0250 subpart C (the portion pertaining to alternatives)
- 7849.0270 (peak demand and annual consumption forecasts)
- 7849.0280 (system capacity)
- 7849.0290 (conservation programs)
- 7849.0300 (consequences of delay)
- 7849.0340 (required within 7849.0310, information regarding the alternative of no facility)

However, alternative proposals are required to submit a list of supplementary data that includes the following information.

- A. Developer experience and qualifications.
- B. Pricing of the proposal, including but not limited to the following:
- 1. The term,
- 2. In-service date,
- 3. Contract capacity,
- 4. Capacity payment,
- 5. Fixed operations and maintenance payment,
- 6. Variable operations and maintenance payment,
- 7. Fuel payment, and
- 8. Tax-related payments and other costs.
- C. Scheduling provisions, including but not limited to –
- 1. Planned maintenance,
- 2. Expected minimum load,
- 3. Ramp rates, and
- 4. Limitations on operations.
- D. Discussion of the guaranteed performance factors, such as construction costs, unit completion, availability, and efficiency.
- E. Any other key contract terms the provider requires.

A list of the applicable rules and filing requirement are included in Appendix A to this Applicant Guide. Proposals must include all applicable content requirements described in Appendix A, and the modeling data intake,¹⁰ including clear and complete written descriptions of all information required. Proposals must be sufficiently detailed so that the Commission can effectively initiate the contested case proceeding and so that no proposal is advantaged or disadvantaged by the level of information provided.

Regardless of whether the proposal is a PPA, self-build, or BT, pricing must be for a complete project, including but not limited to balance of plant equipment, operations and maintenance, required transmission or interconnection costs. If the proposal includes a BESS, the proposal price must also include all equipment associated with the energy storage system.

We note that these requirements may have to be expanded should Xcel Energy and the Commission need additional information to support the evaluation of the attributes in Appendix A to this Applicant Guide. Proposals that do not include the information required in this section will be deemed incomplete and ineligible for further consideration, unless the Commission finds that the requested information is not applicable or relevant to a given proposal. Further, in conducting our own evaluations of each proposal, Xcel Energy may ask additional due diligence questions in order to verify that the attributes claimed in proposals are indeed possessed by each project.

Section 7. Completeness Review

The completeness review ensures compliance with the Commission's filing requirements. The Commission may reject any, all, or portions of any proposal received for failure to meet the criteria set forth in Section 6, Filing Requirements, Appendix A to this Applicant Guide, and the Threshold Requirements Per Project listed in Appendix A of Attachment A.

Section 8. Evaluation Process

The Commission defined and provided characteristics of firm dispatchable resources as resources that are able to provide capacity and energy. However, the Commission may also consider the firm dispatchable resources':

- 1. Energy availability to meet load for extended durations of energy in the context of the system as a whole,
- 2. The value from production capabilities during potential system restoration events of unknown duration,
- 3. Environmental impacts,

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¹⁰ The data intake form is structured to collect proposed contract payments that do not result in finance leases. Please see the data intake Form for additional detail.

- 4. Costs, and
- 5. Ability to foster integration of renewable resources.

To further assist in this proceeding, Xcel Energy has proposed a 5 Phase Evaluation Process to assist in identifying proposals that meet the resource objectives in a reliable and cost-effective manner. These five phases include:

- 1. Threshold Requirement Per Project (to occur as part of the completeness review)
- 2. Individual Scoring Per Project
- 3. Portfolio Optimization in EnCompass
- 4. Portfolio Viability Assessment & Scoring
- 5. Cost to Value Modeling and Portfolio Selection

While the Commission is not bound to the proposed evaluation process, the process provides a framework for evaluating proposals against each other, that Xcel Energy will use to establish how well proposals would satisfy the identified firm dispatchable resource need. Further information on the Evaluation Process is outlined in Attachment A to our Notice Petition.

Section 9. Commission Determination

Based upon the results of the complete evaluation, the Commission will determine which proposals will be selected.

Section 10. Negotiations

If the Commission selects an option that is not Xcel Energy's proposal, Xcel Energy will negotiate a PPA or PSA based on our model agreements. Applicants must comply with all material terms of our model agreements. Following the negotiation, Xcel Energy will then petition the Commission for approval of the contract(s). If the parties are unable to reach agreement, Xcel Energy will file an explanation with the Commission and requested instruction (such as switching to an alternative proposal or to our original proposal).

Section 11. Regulatory Approvals

At the completion of the contract negotiation process, Xcel Energy will file the signed transactional agreements with the applicable regulatory commissions in the states in which we operate for all necessary review and approvals.

Appendix A Filing Requirements