

## Staff Briefing Papers

**Meeting Date** August 3, 2023

**Agenda Item \*\*1**

**Company** Xcel Energy

**Docket No.** E-002/M-21-694

**In the Matter of** Xcel Energy's 2021 Integrated Distribution System Plan and Request for Certification of Distributed Intelligence and the Resilient Minneapolis Project

**Issues** Should the Commission approve the Company's withdrawal of its petition to increase the cost cap for the Resilient Minneapolis Project to \$17.6 million?

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### ✓ Relevant Documents

#### Date

Xcel Energy, 2021 IDP and RMP certification request	November 1, 2021
Order accepting 2021 Integrated Distribution System Plan and Certifying the Resilient Minneapolis Project	July 26, 2022
Xcel Energy, Resilient Minneapolis Project Annual Report Integrated Distribution Plan	December 1, 2022
Xcel Energy, Petition for Approval for Updated Costs	April 19, 2023
Xcel Energy, Resilience Minneapolis Project Letter of Withdrawal	June 9, 2023
Xcel Energy, Response to Commission Information Request	June 26, 2023
Xcel Energy, Comments	June 26, 2023

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The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

✓ **Relevant Documents**

	<b>Date</b>
<b>COMMENTS</b>	
Comments, Institute for Local Self-Reliance	June 22, 2023
Comments, Department of Commerce	June 26, 2023
Comments, Renewable Energy Partners, Inc.	June 26, 2023
Comments, Community Power	June 26, 2023
Comments, City of Minneapolis	June 26, 2023
Public Comments, P. Koelsch, D. Turner, B. Pence (Greater MN Director of Interfaith Power and Light), J. Intermill, and J. Foss	June 28, 2023
<i>Revised</i> Public Comments, P. Frank, R. Eldred, and M. Malecha	June 28, 2023

## **LIST OF ACRONYMS**

BESS	Battery Energy Storage Systems
CIP	Conservation Improvement Program
DER	Distributed Energy Resources
EPC	Engineering, Procurement, and Construction
IDP	Integrated Distribution Plan
IR	Information Request
IRA	Inflation Reduction Act
ITC	Investment Tax Credit
MAIC	Minneapolis American Indian Center
NWA	Non-Wires Alternative
O&M	Operations and Maintenance
REP	Renewable Energy Partners
RFI	Request for Information
RFP	Request for Proposals
RMP	Resilient Minneapolis Project
TCR	Transmission Cost Recovery

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## **I. Issue Before the Commission**

What action should the Commission take on Xcel Energy's proposed withdrawal of its Petition for a Cost Cap Increase for its Resilient Minneapolis Project?

## **II. Background**

On November 1, 2021, Xcel Energy (Xcel or the Company) filed its 2021 Integrated Distribution Plan (IDP). In its IDP filing Xcel also requested certification of the Resilient Minneapolis Project (RMP) under Minn. Stat. § 216B.2425, subd. 2(e), the Grid Modernization Statute. Certified projects under this statute are eligible for cost recovery in a future Transmission Cost Recovery (TCR) rider.<sup>1</sup>

In its initial filing, Xcel anticipated spending \$8.9 million in capital expenditures and \$62,000 in annual operations and maintenance costs over the life of the project.<sup>2</sup> The Company stated that they, "did not perform a rate analysis of this proposal because we expect the total dollars invested to be under \$10 million, and thus any rate impacts to be minimal. Additionally, until the specific projects are budgeted, we are unable to calculate a cost-of-service analysis." However, Xcel indicated willingness to perform such an analysis at the Commission's request.<sup>3</sup>

The Commission certified RMP in its July 26, 2022, Order. The Commission also required Xcel to file annual RMP reports<sup>4</sup> and in recognition of "the importance of scrutinizing the Project's investments and implementation" imposed a soft cap, limiting potential cost recovery to \$9 million, "unless Xcel can show by clear and convincing evidence that additional costs were reasonable, prudent, and beyond the Company's control." The July 26, 2022 Order also included Xcel's statement "that if the estimated costs of the Project increased due to inflationary pressures the Company would not discontinue Project implementation before seeking additional input on costs from the Commission."<sup>5</sup>

On April 19, 2023, Xcel filed a petition to increase the RMP budget "to \$17.7 million due to industry trends and economy-wide inflationary pressures."<sup>6</sup> To keep the RMP on track, including resumed implementation at the North Minneapolis Community Resilience Hub site, Xcel requested Commission action on its budget increase by July 13, 2023. On April 25, 2023, the Commission solicited comments as to whether the Commission should increase the RMP

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<sup>1</sup> Xcel Energy IDP Filing, November 1, 2021, Docket No. E002/M-21-694, Appendix H, p39.

<sup>2</sup> Xcel Energy, 2021 Integrated Distribution Plan (November 1, 2021), Docket No. E002/M-21-694, p. 37. Note, the rooftop solar arrays will be paid for and owned by RMP hosts. REP will operate its rooftop solar and will be net metered. Xcel will own and manage BESS, microgrid controls, and all electric gear.

<sup>3</sup> Xcel request for certification in IDP, Docket No. E002/M-21-694 2021 Appendix H – Page 40 of 40. The Company said it could provide this information after certification and once project components were finalized.

<sup>4</sup> Xcel Energy, Resilient Minneapolis Project Annual Report Integrated Distribution Plan, December 1, 2022, in docket no. E002/M-21-694

<sup>5</sup> Order accepting 2021 Integrated Distribution System Plan and Certifying the Resilient Minneapolis Project issued July 26, 2022, in docket no. E002/M-21-694, all quoted text in this paragraph at 10, see also ordering paragraph 7.

<sup>6</sup> Xcel Energy, Petition filed April 19, 2023, in Docket no. E002/M-21-694

cost cap to \$17.6 million.<sup>7</sup>

On May 19, 2023, the City of Minneapolis (the City) requested an extension to the Commission's comment period, "to allow additional time to discuss the modification with the resilience hub hosts and Xcel Energy and to complete our analysis."<sup>8</sup>

On June 9, 2023, Xcel filed a letter notifying the Commission, pursuant to Minn. R. 7829.0430, that it was withdrawing its April 19, 2023 Petition to increase the cost cap for the RMP.

On June 13, 2023, the Commission suspended its comment period focused on increasing the project's cost cap and instead asked stakeholders to consider Xcel's withdrawal of its petition to increase its cost cap.

On June 16, 2023, Staff filed an Information Request (IR) to the Company requesting forward-looking information on its plans for RMP.

By June 28, 2023, Xcel had responded to Staff's IR and filed comments; 13 groups and members of the public also commented.<sup>9</sup> The matter comes before the Commission on August 3, 2023.

### **III. Briefing Paper Structure**

At the August 3, 2023 meeting, the Commission will need to determine whether to approve or deny Xcel's request to withdraw its petition for a cost cap increase for RMP. Though not the focus of Staff's Notice of Comment, Xcel also stated its intention to pause RMP. Therefore, the Commission may also give Xcel guidance on progression of the RMP. Staff lays out this briefing paper to first summarize the RMP, as explained in Xcel's request for certification. Staff includes the technical specification of RMP as Renewable Energy Partners (REP; one of the project sites) called into question the appropriateness of the RMP design. Second, Staff summarizes Xcel's first annual RMP report and request for a cost cap increase, to explore Xcel's response to increased RMP costs and timelines. Third, Staff discusses Xcel's withdrawal of its petition for a cost cap increase under [MN Rule 7829.0430](#). Staff then presents comments; commenters have contested the withdrawal and have encouraged continued discussions on the future of RMP. Most comments discussed how RMP is in the public interest, which may prompt the Commission to consider if it should put in place conditions on a withdrawal to mitigate harms from discontinuing RMP or withdrawing the petition for cost cap increase. Staff ends with analyses explaining the offered decision options, to provide pathways forward.

### **IV. Standard for Withdrawal**

Minn. R. 7829.0430 governs the withdrawal of filings. Subp. 1 delegates authority to the

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<sup>7</sup> Xcel Energy, Petition for Approval of Updated Costs, April 19, 2023. Three different values were cited throughout the petition: \$17.7 million at PDF p1; \$17.6 million at PDF p6; \$17,590,000 at PDF p11; \$17.6 million in Conclusion.

<sup>8</sup> City of Minneapolis, Request for Extension of Time to File Comments, May 19, 2023, Docket E002/M-21-694

<sup>9</sup> Institute for Local Self-Reliance (ILSR); Xcel Energy; City of Minneapolis; Community Power; Renewable Energy Partners (REP); the Department of Commerce (Department); eight public comments: P. Frank, R. Eldred, M. Malecha, P. Koelsch, D. Turner, B. Pence (Greater MN Director, Interfaith Power and Light), J. Intermill, J. Foss.

Executive Secretary to approve the withdrawal if within 14 days of service of the notice of withdrawal to the official service list no person, commissioner, or commission staff have expressed opposition to the withdrawal. Subp. 2 outlines the process if the withdrawal is contested:

Subp. 2. **Contested withdrawal.** If any person opposes a withdrawal request within 14 days of service of the notice, the commission will allow a filing to be withdrawn at the request of the filing party if the commission determines that the proposed withdrawal:

- A. does not contravene the public interest;
- B. does not prejudice any party; and
- C. does not concern a filing that raises issues requiring commission action.

If the commission determines that withdrawal would contravene the public interest or would prejudice a party, the commission may permit withdrawal only subject to conditions that mitigate the harm identified.

In the current proceeding, the Department supports the withdrawal of the petition to increase costs; however, other groups and members of the public contested the withdrawal because of the pause of the entire RMP project, signaled by Xcel in its withdrawal filing. Therefore, the Commission may evaluate Xcel's proposed withdrawal under Subp. 2 of Minn. R. 7829.0430 and may choose to place conditions on the withdrawal.

## **V. RMP Project Summary**

Xcel proposed RMP to offer routine grid services as well as provide power for critical services during a natural hazard event. RMP would accomplish this by installing and operating microgrids at three locations in Minneapolis: 1) the North Minneapolis Community Resiliency Hub comprised of the Minneapolis Public Schools Nutrition Center and Franklin Middle and Hall Elementary Schools (REP), 2) Sabathani Community Center (Sabathani), and 3) the Minneapolis American Indian Center (MAIC). At each site the Company and local partners would install rooftop solar, battery energy storage systems (BESS), microgrid controls, and necessary grid modifications to integrate these new technologies (Table 1). RMP was proposed to enhance community resilience, including communities' main objectives related to equity, energy affordability, energy justice, and energy careers.

**Table 1: Proposed Technology for RMP Sites**

Site	Rooftop Solar PV	BESS	Other
REP Sites 1 – 3	1.1 MW, spread across the three buildings	3 MWh (1.5 MW), at one building	Adaptive microgrid controller, designed to balance DER (Distributed Energy Resources) generation with load and provide multi-site balancing in emergencies. BESS site also has switchgear and main meter.
Sabathani Community Center	240 kW AC, sized based on a preliminary solar assessment from Elevate	1 MWh (500 kW, two hour)	
Mpls. American Indian Center (MAIC)	~200 kW, installed on the new addition, with the possibility of additional capacity	1 MWh (500 kW, two hour)	Back-up natural gas/diesel generator for emergency power.

Xcel’s initial petition stated that RMP would utilize BESS systems with inverter-based technology with grid-forming capability to provide multi-hour backup power during an outage. With solar and /or generators, facilities could stay powered for a multi-day outage.<sup>10</sup> The primary benefit for the RMP site hosts would be enhancing resiliency during such outages, generally needed infrequently and for brief durations.<sup>11</sup> Xcel’s petition stated that systems would be managed to reserve BESS capacity for outages but also, provide daily grid benefits:<sup>12</sup>

- Dispatch BESS during peak system demand to support bulk system capacity and to reduce local feeder peak
- Making room for additional DER by engaging BESS to store excess generation
- Making room for load growth on feeders nearing capacity (preliminary non-wires alternative (NWA) step)
- Emissions avoidance
- Arbitrage: set system to automatically charge / discharge to take advantage of price variations (Staff note, if the site is on a Time of Use / Time of Day rate).

Beyond quantifiable grid services, the Company urged the Commission to consider RMP’s qualitative benefits. The Company emphasized that learning would come from opportunities to practice optimizing grid service deployment, as not all services could be provided simultaneously.<sup>13</sup> More, Xcel stated that RMP would provide benefits of training and job creation as well as energy equity, conceptualized as “equitable access to clean energy alternatives, using clean energy to build community wealth, energy sovereignty, improving

<sup>10</sup> Xcel Energy IDP Appendix H p32 (PDF p394) Docket No. E002/M-21-694 and information request No. 2002 from Fresh Energy in which Xcel explained BESS operation in the event of an outage.

<sup>11</sup> Xcel Energy IDP Appendix H p5 (PDF p367) Docket No. E002/M-21-694

<sup>12</sup> Xcel Energy IDP Appendix H p32-33 (PDF p394-5) Docket No. E002/M-21-694

<sup>13</sup> Xcel Energy IDP Appendix H p32 (PDF p394) Docket No. E002/M-21-694

energy affordability and reducing energy burden, and advancing environmental justice in communities historically disproportionately impacted by pollution and marginalized in energy decision-making.”<sup>14</sup>

#### A. RMP First Annual Status Report (December 2022)

The Company engaged in planning efforts with site hosts to collect load data, identify BESS location, and prioritize necessary curtailable services in an emergency. As such, Xcel developed plans as to how the BESS would operate and buildings would be “transformed” through actions like curtailing power from offices, using a gym as sleeping / gathering quarters, and repurposing offices for a Communications Center. For example,

The North Minneapolis Community Resiliency Hub – as conceived originally by a team that attended Rocky Mountain Institute’s eLab Accelerator in May 2018 – would prioritize the Nutrition Center as a means to provide food to the community, recharge medical devices, refrigerate medicines, and provide the City with a base of operations for emergency response. It could also function as a place to provide community members with important information and triage to other services available in the vicinity.<sup>15</sup>

In the future, once BESS capabilities are known, Xcel stated that it may work with the hosts to develop an emergency operation plan for microgrids at each site during short duration and in an outage lasting longer than the BESS could support the full building.<sup>16</sup> Xcel noted the National Renewable Energy Laboratory’s Cities Leading through Energy Analysis and Planning (NREL LEAP) grant could be helpful in such a planning endeavor and the Company would serve as a technical advisor.

### VI. Xcel Cost Cap Increase Request

In its first annual report the Company signaled expected cost overruns, though it was awaiting Requests for Proposals (RFP) responses with updated price data, and stated understanding that, “the Commission may wish to have the opportunity to revise its cost cap, rather than having the Company forego one of the project sites, while of course still expecting the Company to make prudent investments and proactively manage costs that are within our control.”<sup>17</sup>

As explained in its Petition, responses to Xcel’s RMP request for proposals showed cost increases at all three RMP sites, compared to 2020 NREL data used for Xcel’s estimates.<sup>18</sup> The

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<sup>14</sup> Xcel Energy IDP Appendix H p34 (PDF p396) Docket No. E002/M-21-694

<sup>15</sup> Xcel Energy, Resilient Minneapolis Project Annual Report Integrated Distribution Plan, December 1, 2022, in docket no. E002/M-21-694 at 10

<sup>16</sup> Xcel Energy, Resilient Minneapolis Project Annual Report Integrated Distribution Plan, December 1, 2022, in docket no. E002/M-21-694 at 11

<sup>17</sup> Xcel Energy, Resilient Minneapolis Project Annual Report Integrated Distribution Plan, December 1, 2022, in docket no. E002/M-21-694 at 5

<sup>18</sup> Xcel Energy, Petition filed April 19, 2023, in Docket no. E002/M-21-694



Company updated its total project cost to \$17.6 million, including O&M, with the potential decrease of an estimated \$1.5 million through federal investment tax credits (see Table 2).

**Table 2: Preliminary Cost Estimates for RMP Hub Sites Compared to Updated Cost Estimates<sup>19</sup>**

Capital Costs					
Capital Costs	Updated Estimates				2021 Estimate
	North Minneapolis Resiliency Hub	Minneapolis American Indian Center	Sabathani Community Center	Updated Total Capital Budget	2021 Estimate - Total
Battery Energy Storage System	\$4,230,000	\$1,700,000	\$1,770,000	\$7,710,000	\$4,003,449
Islanding Switch	\$650,000	\$390,000	\$390,000	\$1,430,000	\$725,400
Medium Voltage Work	\$2,490,000	\$1,080,000	\$1,080,000	\$4,650,000	\$298,096
Site Evaluation/ Surveying/ Prep	\$160,000	\$160,000	\$160,000	\$490,000	\$634,260
Business Systems Integration	\$330,000	\$330,000	\$330,000	\$1,000,000	\$990,822
Project Management and Labor	\$230,000	\$240,000	\$240,000	\$710,000	\$739,040
Communications	\$120,000	\$130,000	\$130,000	\$370,000	\$1,547,810
Costs Due to Delaying One Site	\$500,000	\$0	\$0	\$500,000	\$0
Total Capital Costs	\$8,730,000	\$4,030,000	\$4,100,000	\$16,860,000	\$8,938,878
O&M Costs					
10 Yrs Maintenance Fees	\$390,000	\$170,000	\$170,000	\$730,000	\$624,030
Total Project Costs (Capital and O&M)					
Total Costs	\$9,120,000	\$4,200,000	\$4,270,000	\$17,590,000	\$9,562,908

*\*Costs to delay REP site would cause a second contractor mobilization for construction and thus the additional \$500,000 delay cost.*

#### A. Project Costs Have Increased: Multiple Sources of Evidence

A Request for Information (RFI) was sent to 21 contractors in October 2022; eight responses were received. Then, RFPs for contractors to engineer and construct BESS were issued; in January 2023 three bidders submitted proposals, all citing similar costs. This suggested to the Company that “cost increases are driven by industry-wide trends and are beyond the

<sup>19</sup> Xcel Energy, Petition filed April 19, 2023, in Docket no. E002/M-21-694, table p7 and quoted text p8. Xcel explained, “the line item labeled “Miscellaneous” in the 2021 filing [\$1,547,811] has been redistributed to reflect updates to costs as well as better granularity in the estimate. The “Miscellaneous” category was comprised of items related to Medium Voltage and Communications work; as a result, the old category was adjusted to reflect this better understanding. The increases in the Medium Voltage category reflect the increased costs of transformers, switch gear, and the related interconnection work.”

Company's control."<sup>20</sup> The Company concluded that cost increases were driven by supply chain challenges that increased costs of labor, transformers, batteries, and other electrical equipment. The Company further noted that not only were similar cost pressures reported across proposals, but that costs also increased across Xcel-run and third party-run projects.<sup>21</sup> Xcel selected the lowest-bidding contractor and expected to end negotiations in June 2023.

B. Xcel's response to cost increases: Additional funding opportunities

**Tax Credits.** The Company noted its RFP included preference for a portion of the work to be performed by women- and/or minority-owned suppliers or subcontractors and requirements to meet the 2022 Inflation Reduction Act (IRA) requirements for prevailing wage and qualified apprenticeship to ensure qualification for an Investment Tax Credit (ITC) of at least 30%. To further decrease RMP costs, Xcel's engineering, procurement, and construction (EPC) contractor would meet the IRA's domestic content requirements which is estimated to qualify the project for an additional 10 percent bonus ITC. Coupled with the prevailing wage and qualified apprenticeship commitments, the Company expected \$1.5 million to be returned through the ITC. The Company committed to returning the value of tax credits to customers.<sup>22</sup>

**Grants and Local Funding.** All three sites have been encouraged to take advantage of additional funding opportunities, e.g. through the Company and the City. Xcel also supported all three sites as they applied to, and were awarded, Community LEAP status to receive technical assistance on battery operation in coordination with Xcel and NREL support designing community outreach.<sup>23</sup> The Xcel Energy Foundation also provided \$30,000 to assist Sabathani with its community outreach efforts to better understand the community's needs during an emergency. Sabathani also worked with Xcel to access Conservation Improvement Program (CIP) funding.

C. Xcel's response to cost increases: Three options for the project sites

1. Cancel All Projects: Xcel concluded this approach would likely reduce costs but would run contrary to Xcel's belief in the value of the project to customers and communities.
2. Reduce Battery Size: planned battery size would support essential emergency operations, as determined by each site host. Decreasing battery size at either Sabathani or MAIC would inhibit that functionality so was not considered as an option. Decreasing size for the already-larger battery at the REP site would allow continued operation of

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<sup>20</sup> April 2023 petition at 4

<sup>21</sup> April 2023 petition at 5. For example, increased costs at the Company's Border Winds and Pleasant Valley wind repowering projects and at third-party projects, like solar PPAs for the Louise & Fillmore projects.

<sup>22</sup> Xcel Energy, Petition for Approval for Updated Costs filed April 19, 2023, in Docket No. E002/M-21-694, at 6.

<sup>23</sup> "Communities LEAP TA is supporting the three centers by providing information on solar-plus-storage configuration options and quantifying resilience and economic benefits for the grid and the community. Communities LEAP TA is supporting community engagement to account for varying perspectives about resilience hub design and operation. TA will also help the community coalition coordinate with Xcel about optimal battery operation to meet community needs and utility requirements that may result in a Community Benefits Agreement with Xcel." <https://www.energy.gov/communitiesLEAP/minneapolis-minnesota>

the Nutrition Center (primary focus of the Hub) but would eliminate Franklin and Hall Schools as community gathering sites. Xcel determined that the savings from reduced battery size, \$1.4million, would not outweigh drawbacks.

3. Remove REP as a project site: due to larger size and cost removal would allow the Company to stay within the \$9 million cost cap. Alternatively, if the Company's request for a cost cap is approved, it negotiated with its contractor to proceed at the REP sites but with a delayed operation date and additional cost for a second mobilization (see Table 2 above).

#### D. Explaining Delayed Operation at North Minneapolis Site

In its request for certification, Xcel targeted projects coming online by Summer 2023.<sup>24</sup> In its request for additional funding, Xcel wrote that it, "intend[s] to proceed with the design and implementation for two of the sites, Sabathani and MAIC, to keep those projects on track to achieve commercial operation by the end of 2024 as planned. At the same time, we are pausing the implementation at the third site, the North Minneapolis Community Resiliency Hub, pending a Commission decision on the Company's request to increase the cost cap for these projects, as discussed in detail below. This pause would delay commercial operation of the North Minneapolis site by approximately one year, i.e., to the end of 2025."<sup>25</sup>

### VII. Previous Discussions About Moving Forward with RMP

At the Commission's June 1, 2022 agenda meeting a line of questioning occurred regarding cost caps and, specifically, if Xcel would come back to Commission if costs did increase. Xcel's representative was asked to confirm that even if the RMP budget increased, Xcel would come back before the Commission prior to terminating any of the projects. The Xcel representative confirmed the Company would return to the Commission prior to termination.<sup>26</sup>

More, the Commission's July 26, 2022, Order recorded Xcel's intention that even if inflationary pressures increased RMP cost, "the Company would not discontinue Project implementation before seeking additional input on costs from the Commission."<sup>27</sup> Finally, during agenda meeting discussions, the Department agreed with the Chair that inflationary costs would be evidence that costs were prudent, reasonable, and beyond control of the Company, and stated that, theoretically, inflation would be a reasonable concern regarding cost cap increases.<sup>28</sup>

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<sup>24</sup> Xcel Energy IDP Filing, November 1, 2021, Docket No. E002/M-21-694, Appendix H, p36.

<sup>25</sup> Xcel Energy, Petition filed April 19, 2023, in Docket no. E002/M-21-694 p3.

<sup>26</sup> Commission Agenda Meeting held June 1, 2022, discussion at 2:40:30. The Commission's calendar, on its website, has archived meeting video:  
[https://minnesotapuc.granicus.com/player/clip/1722?view\\_id=2&redirect=true&h=68ee748e5a84f81dd17b3ce265944cb8](https://minnesotapuc.granicus.com/player/clip/1722?view_id=2&redirect=true&h=68ee748e5a84f81dd17b3ce265944cb8)

<sup>27</sup> July 26, 2022, Order at 10

<sup>28</sup> The Commission's June 1, 2022, Agenda Meeting at 2:12:00.

## VIII. Xcel Petition to Withdraw Cost Cap Increase

In its letter notifying the Commission that it was withdrawing its April 19, 2023, petition to increase the cost cap for the RMP, the Company cited inflationary pressures, cost increases, supply chain constraints, and delays for stakeholders to engage in additional discussions and comment period extensions as reasons why executing an EPC contract for a project that appeared to contain much uncertainty, would not be prudent. Xcel concluded, “now is not the right time to proceed with the RMP.”<sup>29</sup>

Xcel stated that since certification, the Company met monthly with the City and host sites and that its decision to suspend RMP “was not made unilaterally but was made in consultation with the RMP host organizations and the City of Minneapolis.”<sup>30</sup> Xcel has committed to continued discussions with the City and host sites but does not support ILSR’s suggestion to submit a new RMP petition to the Commission.

## IX. Comments

### A. RMP as a Good Faith Effort

With respect to previous discussions with stakeholders, including consultations to decide on RMP’s suspension, Community Power interpreted events differently than Xcel and stated, “Xcel is acting unilaterally, without fully engaging its Clean Energy Partnership board & staff members in Minneapolis, a process which Xcel has committed to take part in.”<sup>31</sup>

Indeed, a good faith effort to work with the public is an element of RMP. As explained by a resident of Northeast Minneapolis, “[Xcel] now seeks to abandon those partners-- trusted members of our community who were selected as hosts precisely for their credibility in our community. The hosts put their credibility on the line for Xcel and those hosts have expressed their need for more time to make the microgrids that Xcel promised a reality.”

### B. Withdrawal of Petition- Department of Commerce

The Department’s comments were confined to responding to Staff’s Notice which only asked about withdrawal of the cost cap increase petition. To this extent, the Department concluded that all three conditions under Minn. R. 7829.0430, subpart 1 had been met. Thus, a withdrawal of a filing should be allowed by the Commission.

To the contestation of the withdrawal of the petition to increase the RMP cost cap, the Department also spoke to the three requirements that a withdrawal stating that, “withdrawing the request to increase the cost cap of the RMP does not, by itself, prejudice any party [and]the Department concludes that withdrawing the request to increase the cost of the RMP does not

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<sup>29</sup> Xcel June 9, 2023, Letter, Withdrawal of Petition, Docket E002/M-21-694

<sup>30</sup> Xcel comments, June 26, 2023, both quotations at 1

<sup>31</sup> Community Power Comments filed June 26, 2023, in Docket No. E-002/M-21-694

concern a filing that raises issues requiring Commission action.” However, the Department also stated that an *increase* to the cost cap would contravene the public interest.<sup>32</sup>

### C. RMP is in the Public Interest

While the Department did not deviate from the questions posed in Staff’s Notice, all other commenters<sup>33</sup> linked withdrawing the petition to canceling RMP, and commenters and members of the public believed that discontinuing RMP would contravene the public interest. Members of the public underscored the benefits of RMP and advocated for RMP’s continuation, “for the sake of humanity that is less fortunate” and said that continuation could serve, “particularly to rectify past neglect of, and wrongs inflicted upon, the low-income and BIPOC communities.” REP also explained how RMP is in the public interest,

Minnesota must develop resiliency hub models that can respond to extended grid outages, whether triggered by weather conditions, mechanical failures, or cyber terrorism. These resiliency hubs will be particularly critical for Environmental Justice communities such as the ones included in the Resilient Minneapolis Project as resiliency hubs are increasingly included in emergency preparedness planning. The learning from these solar microgrid models in the RMP will be valuable to many communities throughout the state.<sup>34</sup>

### D. RMP Site Host: REP’s Experience

REP forged partnerships<sup>35</sup> prior to working with Xcel and more recently secured funding for solar panels for all three buildings at the site. Some of this support was lost when REP was selected for RMP, though NREL continues to give support as a technical consultant.

REP’s partnerships produced additional insights into RMP’s design. These insights, coupled with “limited transparency into Xcel’s design process or costs for the BESS portion of the project,”<sup>36</sup> led REP to conclude that RMP, in its current iteration, may be inappropriately designed for community needs and may rely on inaccurate cost forecasts, specifically:

- System of 1.5 MW BESS with 3 MWhs of storage would have a 44% probability of surviving a 48-hour outage<sup>37</sup>
- Solar panels are too small to produce excess energy that would be sent to batteries- a

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<sup>32</sup> Dept comments at 5

<sup>33</sup> City of Minneapolis comments filed June 26, 2023, in docket no. E002/M-21-694; Institute for Local Self-Reliance, Comments, filed June 22, 2023 in Docket no. E002/M- 21-694, at 1; Community Power Comments filed June 26, 2023 in Docket No. E-002/M-21-694; REP; and all members of the public

<sup>34</sup> Renewable Energy Partners, Comments, filed June 26, 2023, in docket no. E002/M-21-694 at 4

<sup>35</sup> REP had been planning the North Minneapolis sites since 2018 with various partners including Siemens, University of Minnesota’s Energy Transition Lab, and Minneapolis Public Schools. When REP was selected as an RMP site, Siemens withdrew as a co-developer of the project.

<sup>36</sup> Renewable Energy Partners, Comments, filed June 26, 2023, in docket no. E002/M-21-694 at 2

<sup>37</sup> REP comments filed in E002/M-21-694 on June 26, 2023, at 3. Findings based on REopt analysis of the North Minneapolis microgrid.



sizing decision made (errantly) by Xcel. Batteries would instead pull from grid and deployed during the day to shave peak demand.<sup>38</sup>

- Cost-effectiveness and reliability if using solar only in an emergency.
- Missing the lateral line design component which, is critical for resilience.
- Considering only batteries 1 MW (Sabathani and MAIC) and 3MW (North Minneapolis)
- Xcel's plans do not mention long-term ownership for site hosts
- NREL 2021 Study expects price stabilization in 2024-2025 which would return prices closer to \$9 million original estimate.
- RMP is highly fundable as agencies like FEMA reached out to REP to support the project.

To move forward with the project in its current form, REP stated it is requesting 180 days to revisit its original plans and assemble a team of qualified partners to develop the North Minneapolis site on its own, **without Xcel development and ownership** of the BESS and switchgear" [emphasis added]. Also, REP also stated it "may still ask that Xcel be required to invest the original \$9 million in exchange for the right to dispatch energy from the batteries to shave peak periods of use."<sup>39</sup>

#### E. Potential Conditions Surrounding Petition Withdrawal

**Continued Discussions.** Considering Xcel's statement that "now is not the right time to proceed with the RMP,"<sup>40</sup> the City, ILSR, Community Power, Interfaith Power and Light, and REP, requested additional time to engage with project sites, community stakeholders, and perhaps Xcel, to facilitate RMP's continuation. As mentioned above, REP believed the project design could be improved or that funding could still be contributed from Xcel, for example in exchange for dispatch during peak periods. Xcel agreed to continue discussions, ILSR advocated for filing a joint petition, and REP supported filing a new petition without Xcel. Xcel disagreed and said that a new filing was unnecessary.

**Funding.** Commenters also seemed interested in additional funding to allow RMP to continue. The City mentioned a desire to continue stakeholder discussions on additional funding options, including federal funds and "working productively with a grantor where the RMP project was one of the components for securing a resiliency staffing grant."<sup>41</sup> REP would like to secure the original \$9 million described in the Commission's Order Certifying RMP but would want to operate the project without Xcel.

A member of the public asked to increase the cost cap as a way to continue project

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<sup>38</sup> REP comments filed in E002/M-21-694 on June 26, 2023, at 2, "Xcel does not plan to recharge the batteries from the on-site solar and Xcel's BESS sizing appears to be based primarily on arbitrage of energy pulled from the utility grid at night and deployed during daytime hours to shave peak demand. While solar energy could theoretically flow through the batteries if there was excess production, the sizing of the on-site solar arrays is such that it is unlikely that any of the solar generation would exceed on-site demand and be exported to the batteries for deployment into the grid;"

<sup>39</sup> Renewable Energy Partners, Comments, filed June 26, 2023, in docket no. E002/M-21-694 at 4.

<sup>40</sup> Xcel June 9, 2023, Letter, Withdrawal of Petition, Docket E002/M-21-694

<sup>41</sup> City of Minneapolis comments filed June 26, 2023, in docket no. E002/M-21-694

momentum. However, the Department argued “that Xcel’s original request to increase the cost cap of the RMP is not in the public interest...[and that] increasing the cost cap would contravene the intent of the original cost cap of \$9 million set by the Commission.”<sup>42</sup>

## **X. Staff Analysis**

As summarized above, most parties do not oppose the withdrawal of the cost cap petition if there is clarity on the future of the RMP overall. Staff analysis in this first section uses Minn. R. 7829.0430, subp. 2 for contested withdrawals, to evaluate potential harms to the public interest or any party and potential mitigations to harms identified.

In its initial request for certification in its 2021 IDP, Xcel stated that RMP would provide support in the event of multi-hour and multi-day outages and that BESS resources would be dispatched daily during system peaks. As conceptualized, RMP would provide benefits to the system and site as well as the more-difficult-to-quantify benefit of building Community Energy Wealth.<sup>43</sup> The Commission certified RMP under Minn. Stat. 216B. 2425 subd. 2(e).<sup>44</sup> However, as stated in comments and described in detail by REP, the current design for RMP does not appear to align with some initial understandings of the project.

Commenters believe that harm to site hosts and all Xcel customers will result from operating RMP in its current form. According to REP, operating RMP in its current form offers only a 44% probability to sustain a multi-day outage, is missing components needed for resilience, and has a solar array of a size unlikely to exceed the needs of the sites, and thus is unlikely to be available to send energy back to the grid or recharge batteries. Staff understands that while use of solar panels to generate on-site power would contribute to emissions avoidance, without the concerted working of solar panels and battery dispatch, the project may not contribute to certain learning and system-wide emissions goals.

Commenters also believe that harm to site hosts and all Xcel customers will result from the total cancellation of RMP indicated in Xcel’s June 9, 2023 Letter of Withdrawal. Commenters stated that a total cancellation of RMP would damage relationships with stakeholders and miss microgrid learning opportunities during outages which could theoretically to be applied across Minnesota. Cancellation of RMP would also reduce site hosts’ Community Energy Wealth. Further, Xcel positioned RMP as a way to store DER-generated power and to enable more DERs on the system, but in RMPs current form this is unclear. Staff notes that greater availability of DERs for underserved communities is a goal of Xcel’s Equity Stakeholder Advocacy Group (ESAG) (see Docket No. E002/M-22-266).

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<sup>42</sup> Department of Commerce, Comments, filed June 26, 2023, in docket no. E002/M-21-694, at 5.

<sup>43</sup> Building Community Energy Wealth in terms of jobs and careers, clean energy, affordability, ownership and increase of DERs and storage of DER-generated energy.

<sup>44</sup> Certification included understanding of the learning opportunities that would come from modernizing the distribution system by, “improving security against cyber and physical threats, and by increasing energy conservation opportunities by facilitating communication between the utility and its customers through the use of two-way meters, control technologies, energy storage and microgrids,”





Finally, risks to affordability would constitute a harm if RMP proceeded as planned, was cancelled, or if the withdrawal of the petition to increase cost caps was denied. The Department explained that denying the withdrawal and effectively *increasing* the RMP cost cap would double the cost of the project for ratepayers. If the RMP were to operate in its current form, Staff understands that ratepayers could be harmed by paying for a project that did not offer the microgrid learning opportunities they had been promised, if instead RMP charged batteries with off-site generation and used batteries just for peak shaving. Finally, Staff understands that cancellation of RMP has implications for energy affordability at the RMP sites that counted on cost-sharing with Xcel to generate their own clean energy, self-sustain during outages with decreased reliance on generators, and offer a training and job space for community members.

#### A. Need to Clarify the Alignment of the Certified RMP with the Current RMP

Stakeholders would like to see RMP continue and are comfortable with a delay in RMP to allow time for additional discussions on RMP's future. REP specifically would like RMP to continue without Xcel except as a source of funding. As the record shows clear disagreement around the details of RMP, Staff supports continued discussions with a filed update from Xcel.

Comments were brief as to what might happen in these discussions. To this extent, many of the parties' decision options lack specificity. Therefore, if the Commission would like Xcel to be held to stringent outcomes or parameters for additional discussions, it would need to collaboratively work with groups to add detail to decision options and/or further develop the record. The following items would be useful to focus on:

**Terminology.** Commenters often used similar but not identical terms to describe who would be present in these discussions. ILSR recommended the Commission require Xcel to meet with "project stakeholders," the City recommended "the hosts, Xcel, and community stakeholders," Community Power recommended discussions with Xcel's "formal community partners and the communities impacted." REP envisions discussions without Xcel and only "community stakeholders" and "parties interested in working on an alternative approach."<sup>45</sup> Parties may wish to work with the Commission to determine who would participate in discussions.

**Funding.** The Department does not support increasing cost caps, stating that doing so would contravene the public interest. However, a member of the public did imply that increasing the cost cap may be necessary to move RMP forward. The Commission could approve the withdrawal of the cost cap increase and allow the \$9 million budget and cost cap to remain in place. If the Commission chooses to move forward with RMP by requiring additional discussions, the Company would still bear the burden of proving prudent investments when it sought cost recovery.

As REP's decision option specifically contemplates a \$9 million contribution from Xcel, without

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<sup>45</sup> Comments filed in docket no. E002/M-21-694. ILSR on June 22, 2023, at 1. The City at 1; Community Power at 1; REP at 4 all filed June 26, 2023.





any additional Company input, a different model of project has emerged. The original certification was given for Xcel to run a pilot, not a third party. The Commission may wish to be clear that any re-envisioned RMP project under the original certification would still be Xcel's project where they work with site hosts in the community, not as a grantor.

**Scope.** Stakeholders believe harm will come from operation of RMP in its current form and from project cancellation. If RMP in its current form is no longer a resilience hub and microgrid but instead a model for on-site battery storage that could be dispatched for peak shaving, the scope of the project certified by the Commission has changed. If the Commission is interested in ordering Xcel to proceed with RMP and perhaps reimagine the form the project will take, Staff believe further record development is needed. Due to the brevity of comments, the record is not clear, for example, as to what outcomes and actions would be prioritized if the Commission were to simply require Xcel to proceed with the RMP project. Further, if a reimagined RMP is changed significantly, the Commission may also need to determine if the original certification still applies.

REP's proposal envisions a future project that is not administered by Xcel (included as Decision Option 5). As mentioned above, Xcel functioning as a grantor would not align with previous utility practice. Staff modified REP's language to provide an actionable path forward that would allow any interested party, including REP, to propose an alternative RMP. If the Commission is interested in pursuing this option, further revisions of decision option five are necessary to clarify the role of Xcel. Additionally, REP's decision option 5a(ii) states that RMP could, "Engineer the recharging of the BESS to come from both the on-site solar and the grid during normal operations;" however, Staff notes this would not be allowed by Xcel when a DER is on net metering.

## B. Conditions to Mitigate Harms Identified

Per MN Rule 7829.0430, the Commission may place conditions around a withdrawal to mitigate the harm that would occur from the withdrawal. In this matter, conditions could include a requirement that Xcel engage in continued meetings about the future of RMP. Continued discussions may be in service of mitigating any harm that could come from a cancellation of the project and concurrent lack of resilience for some of the most under-served communities in Minneapolis. More, including all stakeholders in discussions about RMP's future would align with commenters' desire to be included in project decisions.

Requiring Xcel to file an update, after 180 days of work, would offer the Commission insight to RMP progress and/or status. If RMP proceeds, Staff finds it important to reexamine the technical specifications and dispatch planning of panels and BESS to ensure they meet the needs of communities and the grid. More, Staff finds it important that a revised proposal include how resources will be allocated to RMP. Balancing resources, including funding, technical support, and personnel, to allow RMP to serve some of the most historically underfunded areas of Minneapolis while not burdening ratepayers is a key consideration.

Moving forward, the Commission must decide on whether to allow Xcel to withdraw the RMP

cost cap and may consider giving Xcel direction on the future of RMP:

- **Cost Caps**

- Reject withdrawal of petition to increase cost cap.  
*Outcome: Consideration of increasing cost cap to \$17.6 million.*

OR

- Approve withdrawal of petition to increase cost cap to \$17.6 million.  
*Outcome: RMP cost cap stays at \$9 million.*

- **Future of RMP**

- Take no action on Xcel's suspension of RMP.  
*Outcome: Xcel determines when and if to move forward with RMP. Without additional action, there may or may not be project oversight from the Commission on this decision.*

OR

- Require Xcel to work with stakeholders and submit an update on the status of the RMP after 180 days.  
*Outcome: The Commission could reconsider RMP status after review of filing.*

## **XI. Decision Options**

1. Approve Xcel Energy's June 9, 2023, withdrawal of its April 19, 2023, Petition to increase the cost cap for the Resilient Minneapolis Project from Commission consideration pursuant to Minn. R. 7829.0430. (Department; Xcel; Renewable Energy Partners (REP) if decision option 5 is adopted)

**OR**

2. Deny Xcel Energy's withdrawal of its request to increase the cost cap for the Resilient Minneapolis Project from Commission consideration pursuant to Minn. R. 7829.0430. (Institute for Local Self-Reliance (ILSR); Community Power, preferred; City of Minneapolis)

*Staff note: the Commission may choose DO 3, 4, or 5 in addition to either DO 1 or 2*

3. Require Xcel to file a revised RMP within 180 days of the issuance of the Order in the instant docket, created in collaboration with its formal community partners and the communities impacted. (Community Power; ILSR)



4. Require Xcel to continue discussions with site hosts and stakeholders about the future operation of RMP and file an update with the Commission 180 days from the issuance of the order. (Staff interpretation of Minneapolis)
5. Direct the Executive Secretary to issue a notice requesting an alternative RMP proposal be filed within 180 days, and request that REP and interested parties provide recommendations for how the project could be designed, implemented, and paid for, with no more than the original \$9 million contribution from Xcel. (Staff modification of REP)
  - a. A revised RMP proposal may include the following (REP):
    - i. Size battery capacity to better match the estimated on-site solar capacity at the sites, plus “future proofing” of battery capacity for any additional on-site generation capacity that could be added at the sites over the next 3-5 years;
    - ii. Engineer the recharge of the BESS to come from both the on-site solar and the grid during normal operations;
    - iii. Construct the new lateral distribution line connecting the three school buildings at the North Minneapolis site and integrate all of the solar with the BESS to enhance the islanding capacity at the Nutrition Center;
    - iv. Leverage development of the resiliency hubs to establish skills training in solar microgrid systems and BESS technologies at REP’s training center and the other sites;
    - v. Identify federal and state grant funds and partnerships to implement the RMP resiliency hubs as models for other communities in Minnesota and across the country;
    - vi. Identify the necessary resources for scenario exercises and more thorough community-based planning for use of the resiliency hubs in an emergency;
    - vii. Work with primarily Minnesota organizations and vendors to develop, construct and operate the resiliency hubs.