

December 3, 2025

VIA E-FILING

Ms. Sasha Bergman
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
Saint Paul, MN 55101-2147

The Honorable Jim Mortenson
Office of Administrative Hearings
600 North Robert Street
P.O. Box 64620
Saint Paul, MN 55164-0620

Re: *Response to Public Hearing Comments*

In the Matter of the Application of North Star Energy Storage, LLC for an up to 100-megawatt Battery Energy Storage System Site Permit for the North Star Storage Project in Chisago County, Minnesota

**CAH Docket No. 5-2500-40938
MPUC Docket No. IP-7155/ESS-25-123**

Dear Ms. Bergman and Judge Mortenson:

North Star Energy Storage, LLC (North Star Storage) respectfully submits these comments in response to the oral comments made at the public hearings held on October 28 and 29, 2025, and the written public comments submitted during the public comment period ending November 12, 2025 on North Star Storage's Application for a Site Permit (Application) for an up to 100-megawatt, 400 megawatt-hour battery energy storage system (BESS) and associated facilities adjacent to the existing North Star Solar Facility within the municipal boundary of North Branch in Township 35N, Range 21W, Section 36, Chisago County, Minnesota (the Project). With this filing, North Star Storage also provides comments on conditions proposed in the Draft Site Permit (DSP).

Written comments were submitted by the Minnesota Department of Natural Resources (DNR) and the Vegetation Management Plan Working Group (VMPWG).

North Star Storage appreciates the agency and public participation in this docket and the opportunity to offer this response. In the sections below, North Star Storage responds first to the agency comments and then to other comments submitted during the comment period.

As demonstrated in the record, the Project makes efficient use of available land while minimizing adverse human and environmental impacts, and the Project complies with the Minnesota Public Utilities Commission's (Commission) siting criteria. The Project enjoys broad public support and has thoughtfully addressed comments received during the site permit process.

I. Response to Verbal Comments at Public Hearings.

During the in-person public hearing on October 28, 2025, members of the public commented about visual, financial, and safety aspects of the proposed North Star Energy Storage Project. Steve Perrault, a nearby homeowner, requested the battery facility be relocated further south to reduce its visibility from his home.¹ Paul Dennison inquired about the Project's fiscal impact, and was assured it would generate additional tax revenue and support broader renewable energy efforts.² Aaron Nysse raised public safety concerns regarding battery discharge risks and emergency response capabilities, seeking clarity on who would bear the costs of necessary upgrades and decommissioning.³ DESRI Renewables, L.L.C. (DESRI) representatives, as developers of the Project for North Star Storage, responded to each of these individuals' comments at the public hearing and offered to meet with residents to discuss site-specific issues.⁴ Here, North Star Storage provides additional responses to questions from members of the public regarding visual impacts, location of the site, emergency response, and decommissioning and financial assurance.

A. Visual Impact and Screening.

The visible elements of the facility will consist of new infrastructure, including, but not limited to BESS enclosures, a project substation expansion and new stormwater ponds. For residents outside the Project vicinity and for others with low viewer sensitivity, such as travelers along CSAH 14, aesthetic impacts are anticipated to be minimal.⁵ However, residents to the north of the Project have expressed at the scoping meetings⁶ and at the public hearings for the Project that they will experience more aesthetic impacts. To address these concerns, North Star Storage has shifted the Project 180 feet south and committed to developing a landscaping plan along the property line to the north of the Project where visual impacts would be the greatest.⁷ The visual screening plan would screen the Project from all landowners located north of the Project, including Mr. Perrault, who does not live directly adjacent to the Project, but is located north of Project-adjacent properties. North Star Storage reiterates its willingness to meet with Mr. Perrault to discuss specific sightline mitigation.

B. Site Location and Wetland Constraints.

As mentioned in the Site Permit Application Amendment (SPAA), North Star Storage updated the wetland delineation that was originally completed in 2014 for the existing North Star

¹ See Stacy 6:00 p.m. Public Hearing Transcript (Stacy 6:00 p.m. Tr.) at 22-33 (Oct. 28, 2025).

² See Stacy 6:00 p.m. Tr. at 33-35 (Oct. 28, 2025).

³ See Stacy 6:00 p.m. Tr. at 35-41 (Oct. 28, 2025).

⁴ See Stacy 6:00 p.m. Tr. at 22-41 (Oct. 28, 2025).

⁵ See PUC-20 at 37 (Environmental Assessment (EA)).

⁶ See Stacy 6:00 p.m. Public Information and EA Scoping Meeting Transcript (Stacy 6:00 p.m. Tr.) at 42-43 (May 28, 2025).

⁷ See NSS-14 (Site Permit Application Amendment (SPAA)).

Solar facility.⁸ In its review of the original wetland report and from additional land survey work, North Star Storage discovered additional incidental, likely non-jurisdictional wetlands in the Land Control Area⁹ of the Project. North Star Storage indicated it was committed to avoiding all delineated wetlands and provided a figure depicting the non-jurisdictional (and likely jurisdictional) wetlands it believes are present in the Preliminary Development Area in **Attachment 1 of the SPAA**. North Star Storage's updated design avoids impacts to all delineated jurisdictional and non-jurisdictional wetlands.¹⁰ North Star Storage is unable to significantly shift its Project further south, beyond the 180 foot southerly shift already undertaken, away from landowners to the north, without impacting delineated wetlands.

C. Emergency Response and Safety.

As stated in the Environmental Assessment (EA) for the Project, there are two major types of lithium-ion battery technology used in BESS facilities—Nickel Manganese Cobalt (NMC) and Lithium Iron Phosphate (LFP).¹¹ The chemistry of NMC batteries allows them to charge and discharge at higher rates (referred to as “energy density”) than LFP batteries. The ability to charge and discharge at high rates made them a popular choice in early BESS projects. However, compared to LFP batteries, the NMC batteries have a lower thermal runaway temperature, creating increased risks and requiring enhanced monitoring. In comparison, LFP batteries have a higher thermal runaway temperature, making them more stable and less prone to fire. As a result of the relative thermal stability compared to NMC technology as well as decreased costs as the LFP technology matured, the energy storage industry has recently pivoted to LFP technology.¹² North Star Storage anticipates using LFP battery technology for this Project.¹³

North Star Storage is aware that emergency response to fires or thermal runaway events at BESS facilities require specialized response and may present unique challenges to firefighters. To date, North Star Storage has held an initial training session with local first responders to introduce the Project and cover emergency response basics for BESS facilities. North Star Storage has indicated it is willing to train local responders and ensure the local responders have the appropriate equipment to respond to emergencies at the site. As such, North Star Storage proposes that Section 8.11 of the Draft Site Permit be amended as follows:

⁸ See *In the Matter of the Combined Application of North Star Solar PV LLC for a Site Permit and Route Permit for the North Star Solar Electric Power Generating Plant and Associated 115 kV High-Voltage Transmission Line in Chisago County*, MPUC Docket No. IP-6943/GS-15-33 at Joint Site and Route Permit Application Appendix A-9 (Feb. 11, 2015).

⁹ The Land Control Area is the 77.5-acre area where North Star Energy Storage, LLC has site control. The Land Control Area is used to describe the existing environment. See *NSS-3 at v* (Site Permit Application (Application)).

¹⁰ SPAA at 4.

¹¹ EA at 15.

¹² EA at 56.

¹³ See Stacy 6:00 p.m. Tr. at 17:5-18 (Oct. 28, 2025).

8.11 Emergency Response

The Permittee shall prepare an Emergency Response Plan (ERP) in consultation with the emergency responders having jurisdiction over the Project prior to construction. The plan developed shall have a process for (1) identifying any specialized equipment gaps for responding to emergencies at the BESS; (2) acquiring the equipment; and (3) providing any training for the specialized equipment at the Permittee's expense. The plan shall also indicate that the annual training of emergency service personnel with site operators must be done at the Permittee's expense. The Permittee shall file the ERP, along with any comments from emergency responders to the Commission at least 14 days prior to the pre-construction meeting and a revised ERP, if any, at least 14 days prior to the pre-operation meeting. At least 14 days prior to the pre-operation meeting, the Permittee shall file with the Commission an affidavit of the distribution of the ERP to emergency responders and Public Safety Answering Points (PSAP) with jurisdiction over the Project. The Permittee shall obtain and register the Project address or other location indicators acceptable to the emergency responders and PSAP having jurisdiction over the Project.

D. Decommissioning and Financial Assurance.

North Star Storage will take the necessary measures to prevent the community from bearing decommissioning costs if North Star Storage ceases to exist.

Commission issued site permits require that the permittee be responsible for removing all project components and restore the site to pre-construction conditions at the end of a project's useful life and that the permittee is responsible for all costs associated with decommissioning the project.¹⁴ Specifically, Section 9.1 of the DSP requires the permittee to provide a decommissioning plan with an itemized breakdown of costs of decommissioning all Project components prior to construction and update it every five years. Periodic updates of the plan will address the developing information on end-of-life issues related to batteries.¹⁵ North Star Storage provided a draft decommissioning plan as Appendix D of its SPA.¹⁶

As stated in North Star Storage's draft decommissioning plan, if the Project is not repowered at the end of its anticipated 30-year life-span, then North Star Storage will decommission the Project and remove the Project facilities. Decommissioning would include

¹⁴ EA at 22.

¹⁵ EA at 58.

¹⁶ EA at 22.

removal of the BESS enclosures (cabinets, batteries, racking, and other auxiliary equipment), foundations, transformers and pad-mounted inverters, fencing, underground cables and lines, gravel and crushed rock, and the access road should the landowner wish it removed.¹⁷ North Star Storage anticipates the decommissioning of the facility will take approximately 9 to 12 months to complete.¹⁸

North Star Storage currently anticipates the total estimated cost to decommission the Project is approximately \$5.6 million and estimated salvage/scrap value is approximately \$16.3 million, for a net decommissioning revenue of approximately \$10.7 million. North Star Storage will establish a financial surety equal to the net decommissioning costs with North Branch as a beneficiary of the financial assurance in the tenth year after the Project achieves commercial operation consistent with Commission standards and practices.¹⁹ The financial surety will ensure that the Project will be decommissioned at the end of its useful life and local governments or residents will not be burdened with the financial responsibilities of decommissioning the Project.

E. Economic Benefits.

According to the EA, the Project has the potential to support the shift of energy production in Minnesota and the upper Midwest toward carbon-free sources.²⁰ The socioeconomic impacts from the Project are anticipated to be positive in the short term and insignificant over the long-term operation of the Project.²¹

North Star Storage anticipates that the Project will have property tax payments which, summed over the life of the Project, will amount to \$25,000 to North Branch over the 30 year life of the project.²² Unlike solar and wind facilities that pay a production tax based on energy generated, North Star Storage will not pay a production tax because the facility does not generate power, it stores power.²³

North Star Storage anticipates that the Project will employ between 30 and 60 construction workers during construction and will add two full-time employees to manage and maintain the site during operation.²⁴

II. Response to DNR Comments.

¹⁷ See Application – Appendix D at 3.

¹⁸ EA at 22.

¹⁹ EA at 22.

²⁰ EA at 79.

²¹ EA at 50.

²² Application at 54.

²³ See EA at 50; *see also* Stacy 6:00 p.m. Tr. at 34:19-25 (Oct. 28, 2025).

²⁴ See Stacy 6:00 p.m. Tr. at 25:11-14 (Oct. 28, 2025).

The DNR submitted comments on November 12, 2025, regarding state-listed threatened species, fencing, lighting, wildlife friendly erosion control, dust control, and the Vegetation Management Plan (VMP).²⁵

A. State-Listed Threatened Species.

The DNR noted that Blanding's turtles, a state-listed threatened species, had been documented near the Project site and that suitable habitat existed in the area. The DNR expressed its support of DSP special condition 5.10 to mitigate potential impacts on this species. North Star Storage does not oppose Special Condition Section 5.10 of the DSP.

5.10 Blanding's Turtle

The Permittee shall implement the following avoidance measures described in the DNR's Natural Heritage Review letter to mitigate impacts to Blanding's turtles;

- (a) Avoid wetland and aquatic impacts during hibernation season, between September 15 and April 15, if the area is suitable for hibernation.
- (c) Install and maintain a temporary turtle proof barrier, such as a silt fence, to keep turtles out of soil stockpiles, gravel pads, and other areas of exposed soil/sand/sediment during nesting season, May 15 to July 15. The turtle proof barrier must be buried a minimum of 10 inches and removed once project is complete.
- (d) Limit erosion and sediment control to wildlife friendly erosion control (see section 5.8).
- (e) Avoid hydro-mulch products that contain any materials with synthetic (plastic) fiber additives, as the fibers can re-suspend and flow into waterbodies.
- (f) Check bare ground within construction areas for turtles before the use of heavy equipment or any ground disturbance.
- (g) The Blanding's turtle flyer must be given to all contractors working in the area.

Report any sightings using the Quick Species Observation Form.

If turtles are in imminent danger, move them by hand out of harm's way; otherwise, they are to be left undisturbed. Directions on how to move turtles safely can be found at Helping Turtles Across the Road.

²⁵ See DNR Public Hearing Comments (Nov. 12, 2025) (eDocket No. 202511-224882-01).

B. Security Fencing.

Regarding security fencing, DNR commented that although North Star Storage proposed a six-foot chain-link fence topped with two feet of barbed wire, the DNR recommends a minimum height of ten feet and advises against barbed wire to reduce wildlife injury risks, citing the adjacent North Star Solar facility and local deer presence as a concern. The DNR expressed its support for special condition 5.7 requiring coordination with DNR on the final fence design. North Star Storage will coordinate with the DNR on final fence design and does not believe any revisions to Section 5.7 are necessary.

5.7 Security Fencing

The Permittee shall design the security fence surrounding the energy storage system to minimize the visual impact of the Project while maintaining compliance with the National Electric Safety Code. The Permittee shall develop a final fence plan for the specific site in coordination with the DNR. The final fence plan shall be submitted to the Commission as part of the Site Plan pursuant to Section 8.3.

C. Lighting.

Regarding lighting, the DNR agreed with the EA's recommendation to use shielded, downward-facing fixtures and lights that minimize blue hue. Accordingly, the DNR expressed its support for special condition 5.1. North Star Storage does not oppose Special Condition Section 5.1 of the DSP.

5.1 Lighting

Permittees must use shielded and downward facing lighting and LED lighting that minimizes blue hue at the gate locations, BESS Enclosures, and along fence lines. Downward facing lighting must be clearly visible on the plan and profile submitted for the Project.

D. Wildlife Friendly Erosion Control.

The DNR supports special condition 5.8, which requires the Permittee to use wildlife-friendly erosion control materials that do not contain plastic components. North Star Storage does not oppose Special Condition Section 5.8 of the DSP.

5.8 Wildlife -Friendly Erosion Control

The Permittee shall use only "bio-netting" or "natural netting" types of erosion control materials and mulch products without synthetic (plastic) fiber additives.

E. Dust Control.

The DNR supports special condition 5.9, prohibiting the use of dust suppression agents that contain chloride. North Star Storage does not oppose Special Condition Section 5.9 of the DSP.

5.9 Dust Control

The Permittee shall minimize and avoid, if possible, the use of chloride-based dust control chemicals (i.e., calcium chloride, magnesium chloride).

F. VMP.

The DNR supports Section 5.5 of the DSP, directing the Permittee to coordinate with the VMPWG. Additionally, the DNR emphasized the need to update the VMP in coordination with the VMPWG, recommending the use of diverse native grasses and forbs to enhance habitat, soil health, and erosion prevention. The DNR noted that North Star Storage reused a VMP from the North Star Solar project, but criteria has since changed, requiring revisions consistent with the DNR's Prairie Establishment & Maintenance Technical Guidance and VMPWG standards. North Star Storage does not oppose Section 5.5 of the DSP and will work with the VMPWG to update the VMP for the Project.

5.5 Vegetation Management Plan

The Permittee shall amend its existing vegetation management plan (VMP) for the North Star Solar Facility, as presented in the North Star Solar Docket 15-33 (eDockets no. 20164-120014-03). This amended VMP will be developed in coordination with Commission staff and the Vegetation Management Working Group, using best management practices established by the DNR and BWSR. The Permittee shall file the amended VMP to the dockets for both North Star Solar and North Star Storage, and documentation of the coordination efforts between the Permittee and the coordinating agencies with the Commission at least 14 days prior to the preconstruction meeting. Landowner-specific vegetation requests resulting from individual consultation between the Company and a landowner need not be included in the VMP. The Permittee shall provide all landowners within the Designated Site copies of the VMP. The Permittee shall file, with the Commission, an affidavit of its distribution of the VMP to landowners at least 14 days prior to the pre-construction meeting.

The amended VMP must include the following:

- (a) management objectives addressing short term (year 0-5, seeding and establishment) and long term (year 5 through the life of the Project) goals;
- (b) a description of planned restoration and vegetation management activities, including how the site will be prepared, timing of activities, how seeding will occur (e.g., broadcast, drilling, etc.), and the types of seed mixes to be used;
- (c) a description of how the site will be monitored and evaluated to meet management goals;
- (d) a description of the management tools used to maintain vegetation (e.g., mowing, spot spraying, hand removal, fire, grazing, etc.), including the timing and frequency of maintenance activities;
- (e) identification of the third-party (e.g., consultant, contractor, site manager, etc.) contracted for restoration, monitoring, and long-term vegetation management of the site;
- (f) identification of on-site noxious weeds and invasive species (native and non-native) and the monitoring and management practices to be utilized; and
- (g) a marked-up copy of the Site Plan showing how the site will be revegetated and that identifies the corresponding seed mixes. Best management practices should be followed concerning seed mixes, seeding rates, and cover crops.

G. Response to VMPWG Comments.

The VMPWG submitted comments on November 12, 2025, stating that it found North Star Storage's VMP generally achievable but in need of some refinements. The group recommended that North Star Storage define clear short-term and long-term vegetation management objectives and provide detailed plans for each management unit, including areas to be seeded and impervious surfaces. The VMPWG advised specifying site preparation methods, verifying chemical application history, and clarifying the use of cover crops. The VMPWG emphasized the need for diverse, native perennial seed mixes, preferably BWSR's Low-Growing Solar Mixes, and requested species substitution lists to maintain ecological integrity. Additional recommendations included addressing visual screening with native species, detailing concrete and gravel use and its impact on runoff, and providing comprehensive herbicide and weed control strategies. The group stressed the importance of independent third-party monitoring with annual reporting to the Commission and urged the applicant to finalize the VMP through continued coordination with state agencies. Overall, the VMPWG highlighted that successful site restoration depends on

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refining objectives, seed mix selection, installation methods, and monitoring protocols before construction begins.²⁶

North Star Storage thanks the VMPWG for their comments. North Star Storage remains committed to working with the VMPWG to further develop and revise the VMP prior to construction.

III. Conclusion.

North Star Storage appreciates this opportunity to provide this response to the public comments. Because the record supports doing so, North Star Storage respectfully requests that the Administrative Law Judge recommend that the Commission issue a site permit for the Project.

These comments have been e-filed through www.edocket.state.mn.us. A copy of this filing is also being served upon the persons on the Official Service List of record.

Please let me know if you have any questions regarding this filing.

Sincerely,

FREDRIKSON & BYRON, P.A.

/s/ Jeremy P. Duehr

Jeremy P. Duehr

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JPD

²⁶ See VMPWG Public Hearing Comments (Nov. 12, 2025) (eDocket No. 202511-224874-01).

**In the Matter of the Application of North
Star Energy Storage, LLC for an up to
100-megawatt Battery Energy Storage
System Site Permit for the North Star
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Minnesota**

CERTIFICATE OF SERVICE

**CAH Docket No. 5-2500-40938
MPUC Docket No. IP-7155/ESS-25-123**

Breann L. Jurek certifies that on the 3rd day of December, 2025, she e-filed on behalf of North Star Energy Storage, LLC, a true and correct copy of its Response to Public Hearing Comments with the Minnesota Public Utilities Commission via eDockets (www.edockets.state.mn.us).

Said document was also served as designated on the Official Service List on file with the Minnesota Public Utilities Commission and as attached hereto.

Executed on: December 3, 2025

Signed: /s/ Breann L. Jurek

Fredrikson & Byron, P.A.

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3	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		No	25-123 Official CC Service List
4	Ryan	Cox	rcox@fredlaw.com	Fredrikson & Byron, P.A.		60 S Sixth St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	25-123 Official CC Service List
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8	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101-2198 United States	Electronic Service		No	25-123 Official CC Service List
9	Breann	Jurek	bjurek@fredlaw.com	Fredrikson & Byron PA		60 S Sixth St Ste 1500 Minneapolis MN, 55402 United States	Electronic Service		No	25-123 Official CC Service List
10	James	Mortenson	james.mortenson@state.mn.us		Office of Administrative Hearings	PO BOX 64620 St. Paul MN, 55164-0620 United States	Electronic Service		Yes	25-123 Official CC Service List
11	Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	1400 BRM Tower 445 Minnesota St St. Paul MN, 55101-2131 United States	Electronic Service		No	25-123 Official CC Service List
12	William	Risse	wrisse@nationalgridrenewables.com	National Grid Renewables Development, LLC		8400 Normandale Blvd Ste 1200 Bloomington MN, 55437 United States	Electronic Service		No	25-123 Official CC Service List
13	Nathaniel	Runke	nrunke@local49.org			611 28th St. NW Rochester MN, 55901 United States	Electronic Service		No	25-123 Official CC Service List
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