

October 21, 2025

VIA E-FILING

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

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

RE: 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

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

Dear Ms. Bergman and Judge Mortenson:

Enclosed for filing on behalf of North Star Energy Storage, LLC in the above-captioned matter, please find the following Documents:

- Direct Testimony of Joel Puritz, with Schedules A B and C; and
- Certificate of Service.

The documents referenced above have been electronically filed today through www.edockets.state.mn.us. A copy of this filing is also being served upon the persons on the Official Service List of record.

Sincerely,

FREDRIKSON & BYRON, P.A.

/s/ Jeremy P. Duehr

Jeremy P. Duehr
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JPD

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

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

MPUC Docket No. IP-7155/ESS-25-123

CAH Docket No. 5-2500-40938

**DIRECT TESTIMONY OF JOEL PURITZ
ON BEHALF OF NORTH STAR ENERGY STORAGE, LLC**

October 21, 2025

1 I. INTRODUCTION AND QUALIFICATIONS

2
3 Q. Please state your name, employer, and business address.

4 A. My name is Joel Puritz. I am Manager of Project Development at DESRI
5 Renewables, L.L.C. My business address is 575 Fifth Avenue, 24th Floor New
6 York, NY 10017.

7
8 Q. Please briefly describe your educational background and professional
9 experience.

10 A. I hold a Master of Business Administration from the Yale School of Management,
11 a Master of Science in Environmental Engineering from Missouri University of
12 Science and Technology, and a Bachelor of Science in Environmental Engineering
13 from the United States Military Academy at West Point. I have over eleven years
14 of combined experience in project management, leadership, engineering, and
15 renewable energy project development. I served for six years as an Engineer
16 Officer in the United States Army and was deployed as a construction platoon
17 leader to Mosul, Iraq in support of Operation Inherent Resolve (OIR). I joined
18 DESRI in 2022 and currently serve as a Manager on the Project Development
19 team. I assist across DESRI's portfolio, working with both internal resources and
20 external consultants to advance utility-scale battery energy storage system
21 (BESS) projects through siting, interconnection, permitting, and construction
22 readiness. I am directly responsible all aspects of the Development of the North
23 Star Battery Energy Storage Project.

24
25 Q. For whom are you testifying?

26 A. I am providing testimony on behalf of North Star Energy Storage, LLC (North Star
27 Storage or the Applicant), the Applicant in this proceeding.

28
29 Q. What is your role with respect to the Project?

30 A. My role is to lead project development and the Site Permit Application process –
31 working with the North Star Storage project team and external consultants to

1 ensure the Project design and the Application meets Minnesota rules and
2 regulations. This includes agency coordination, supporting studies, Project design,
3 and Application development.
4

5 II. PURPOSE OF TESTIMONY 6

7 Q. What is the purpose of your Direct Testimony?

8 A. On February 28, 2025, North Star Storage submitted a Site Permit Application for
9 the North Star Storage Project (the Application). The purpose of my testimony is
10 to: (1) provide an overview of the proposed up to 100 megawatt (MW)
11 400 megawatt-hour (MWh) battery energy storage system (BESS) (Project); (2)
12 provide updates on the Project; (3) discuss the local employment and economic
13 benefits of the Project; (4) discuss North Star Storage's coordination with the
14 Minnesota State Historic Preservation Office (SHPO); and (5) provide comments
15 on the Environmental Assessment (EA) and Draft Site Permit (DSP).
16

17 Q. What schedules are attached to your Direct Testimony?

18 A. The following schedules are attached to my Direct Testimony:

- 19 • **SCHEDULE A**: Statement of Qualifications
 - 20 • **SCHEDULE B**: Landscaping Plan
 - 21 • **SCHEDULE C**: Sound Analyses results
- 22

23 III. PROJECT OVERVIEW 24

25 Q. Please provide a summary of the Project, including the proposed location 26 and proposed site.

27 A. North Star Storage proposes to construct the Project in Township 35N, Range
28 21W, Section 36, Chisago County, Minnesota. The Project is located within the
29 municipal boundary of the City of North Branch, adjacent to the existing North Star
30 Solar Facility (Solar Facility), which is owned and operated by North Star Solar PV
31 LLC, a Delaware limited liability company (North Star PV), an affiliate of North Star

1 Storage. The Solar Facility received a Site Permit from the Commission in
2 February 2016 under MPUC Docket Number IP-6943/GS-15-33,¹ and has been in
3 operation since December 2016. The location of the proposed Project falls entirely
4 within the portion of Section 36 that was reviewed as part of the site permit
5 proceedings for the Solar Facility. As such, all land required for construction and
6 operation of the Project was previously reviewed for compliance with the
7 environmental information and siting factors in Minn. R. Chapter 7850.1900, Subd.
8 3 and Minn. R. Chapter 7850.4100, respectively.²

9
10 North Star Storage has sited the Project directly adjacent to the existing Solar
11 Facility's collector substation and the existing infrastructure that connects the Solar
12 Facility to the Chisago County Substation. The Chisago County Substation is the
13 Point of Interconnection (POI) for the Solar Facility and will be the POI for the
14 Project as well. North Star Storage will connect the Project to the Solar Facility's
15 collector substation via buried 34.5 kilovolt medium voltage collection lines and will
16 utilize the existing infrastructure between the Solar Facility substation and the
17 Chisago County substation. As a result, no new high voltage transmission line or
18 generation tie line (gen-tie line) are required.³

19
20 The Project will have a nameplate capacity of up to 100 MW and the capability to
21 store at least 400 MWh of energy at a given time.⁴ The Project is being developed
22 in response to the Northern States Power Company, a Minnesota Corporation,

¹ 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, Order Granting Site and Route Permits with Conditions (Feb. 16, 2026).

² North Star Storage Project Site Permit Application at 1, 10 (Feb. 28, 2025) (eDocket No. [20252-215915-02](#)) (Application).

³ Application at 1.

⁴ See *North Star Storage – Site Permit Application Amendment at 1* (Aug. 22, 2025) (eDocket No. [20258-222299-01](#)) (SPA Amendment).

1 doing business as Xcel Energy (Xcel Energy) Request for Proposals in MPUC
2 Docket Number E-002/CN-23-212. The Project will aid the region's ongoing
3 transition to renewables, ensure reliable electric service in the area, and provide
4 significant economic benefits to local residents.⁵

5
6 **Q. Why did North Star Storage choose the Project Area as presented in the**
7 **Application to build the Project?**

8 A. The Project Area was chosen based on proximity to the Solar Facility and its POI,
9 minimal environmental or civil constraints, supportive landowners, and limited
10 competition with other potential BESS projects.⁶

11 12 **IV. PROJECT UPDATES**

13
14 **Q. Have there been any updates to the potential offtake agreement for the**
15 **Project?**

16 A. Yes. North Star Storage and Xcel Energy have executed a Battery Storage Energy
17 Purchase Agreement (Offtake Agreement) for the Project. The Offtake Agreement
18 is a long-term contract for the Project to provide energy storage capacity to Xcel
19 Energy's service territory. North Star Storage is hopeful the Minnesota Public
20 Utilities Commission (Commission) will approve the contract in the first or second
21 quarter of 2026.

22
23 **Q. Have there been any updates in the design of the Project?**

24 A. Yes. As explained in the Site Permit Application Amendment filing on August 22,
25 2025, North Star Storage has increased the Project size from an 80 MW, 320 MWh
26 BESS to a 100 MW, 400 MWh BESS. This increase in nameplate capacity will not
27 pose a net increase in the acreage originally estimated to host the Project's
28 facilities. In fact, based on the current design, the Project is expected to occupy

⁵ Application at 1.

⁶ Application at 16.

1 less land than originally proposed.⁷ The overall reduction in the Project's acreage
2 footprint results primarily from continued design progress and advancement
3 toward final BESS vendor selection. As North Star Storage has refined the Project
4 design, it has prioritized BESS vendor candidates offering higher-density system
5 configurations, which enable more storage capacity to be installed within a smaller
6 footprint.

7
8 North Star Storage has also revised the site plan for the Project in direct response
9 to public comments received during the Project's environmental scoping comment
10 period as well as refinements to avoid potential aquatic resource impacts. North
11 Star Storage believes that these changes result in a decrease in the overall
12 anticipated impacts from the Project.

13
14 **Q. Please describe the revisions you've made to the site plan in response to**
15 **public comments.**

16 A. North Star Storage has made changes to the site plan to address potential impacts
17 to aesthetics, noise, access roads, and wetlands.

18
19 • *Aesthetics*

20 North Star Storage revised the site plan to reduce potential impacts to a neighbor
21 that lives north of the Project, Ms. Debra Hermel. Ms. Hermel provided comments
22 at the in-person public meeting questioning potential sound and aesthetic impacts
23 from the Project and asked for more information on North Star Storage's efforts to
24 address aesthetic impacts through a barrier or other aesthetic mitigation.⁸ As
25 stated in the Application, the Project is consistent with the aesthetics presented by
26 the existing Solar Facility, which is located directly adjacent to the Project and has

⁷ SPA Amendment at 1-2.

⁸ 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).

1 structures of similar height.⁹ Nonetheless in response to Ms. Hermel's concerns,
2 North Star Storage revised the site plan to reduce potential aesthetic and noise
3 impacts to Ms. Hermel's residence. Specifically, North Star Storage shifted the
4 Project layout south, approximately 180 feet, to create a larger distance between
5 the Project and Ms. Hermel's home. This will reduce visual impacts to her home.
6

7 In addition to revising the site location, North Star Storage also added an area
8 along the northern property boundary (Ms. Hermel's southern property boundary)
9 where vegetative screening can be planted by North Star Storage to mitigate
10 aesthetic impacts from the Project, further reducing any potential visual impacts to
11 her home. North Star Storage has developed a conceptual landscaping plan along
12 the property line to the north of the Project., which will be finalized along with other
13 final engineering plans. The landscaping plan is included in **Schedule B** to this
14 testimony.
15

- 16 • *Noise*

17 Ms. Hermel also raised questions and concerns in regards to noise impacts on her
18 residence. North Star Storage shifted the Project 180 feet south to help address
19 these concerns. North Star Storage has completed the process of updating its
20 noise study based on the revised Project layout. North Star Storage evaluated the
21 noise impacts from the Project using either a mechanical sound muffler on the
22 individual BESS units or a sound wall barrier on the north and west boundaries of
23 the BESS Project. The results of that noise study are attached as **Schedule C**.
24 The results for both scenarios are within the MPCA state noise standards at nearby
25 residences. As noted in the Application, the Project's final design noise impacts
26 will be re-evaluated, and sound mitigation measures will be implemented, if
27 necessary, to satisfy state requirements for sound.¹⁰

⁹ Application at 35.

¹⁰ Application at 43-44.

1
2 • *Access Road*

3 North Star Storage shifted the location of the western access road proposed in the
4 Application in response to comments from Mr. Steven Benson¹¹ and Mr. Dennis
5 Anderson during the EA scoping period. Specifically, Mr. Anderson submitted
6 written comments requesting North Star Storage have additional discussions with
7 highway maintenance officials to discuss the proposed access road to the Project
8 site.¹² Following conversations with Chisago County and Mr. Anderson regarding
9 the access road, North Star Storage shifted the western access road to the
10 southern portions of Mr. Anderson's property. The western access road is now
11 expected utilize an existing driveway from County Highway 14/Lincoln Trail and
12 will skirt the southern boundaries of the property to the extent practicable. The
13 revised alignment of the access road provides for a perpendicular crossing of the
14 existing pipeline corridor, which is often a requirement for pipeline crossings. Mr.
15 Anderson has further requested that North Star Storage construct the access road
16 as straight as possible to minimize impacts to agricultural operations on his land,
17 for which the Project has a lease option. Accordingly, North Star Storage is
18 coordinating with the owner of the pipeline to determine if it will allow the access
19 road to cross the pipeline at less than 90 degrees. North Star Storage will provide
20 updates on its coordination with the pipeline owner as it finalizes the design of the
21 Project. North Star will continue to coordinate with the landowner, pipeline
22 company, and County to ensure the development of a logical and well-design
23 access route.

24
25 Recently, North Star Storage has learned about potential additional delivery
26 requirements that may be necessary to accommodate delivery of BESS

¹¹ See Stacy 6:00 p.m. Tr. at 46-47.

¹² Comments Concerning DESRI North Star 80 MW 320 MWh BESS (March 20, 2025) (eDocket No. 20253- 216630-01); and Comments Access Road Concerns over DESRI North Star BESS Site (March 20, 2025) (eDocket No. 20253-216630-02).

1 enclosures from one of its vendors and is working with the equipment manufacturer
2 to determine what those equipment delivery requirements may entail. After an
3 initial review, North Star Storage believes that additional turning radii and/or areas
4 where equipment can be transferred from on-highway trucks to on-site trucks can
5 be accommodated within the area contemplated for the Project. North Star Storage
6 is working with the equipment vendor to determine the necessary measures for
7 equipment delivery to the site. North Star Storage anticipates that the additional
8 turning radii and equipment handling areas will fit mostly within the Preliminary
9 Development Area contemplated in the most recent design. At any rate North Star
10 Storage does not currently anticipate that the addition of these areas will exceed
11 the total acres of impact area included in the Preliminary Development Area
12 proposed in the original Site Permit Application. Refinements may be necessary
13 to accommodate the turning radii for the battery container delivery, and North Star
14 Storage will continue to coordinate once final technology is selected, and will refine
15 the proper turning radii required for equipment delivery in our final design plans.

16
17 • *Wetlands*

18 As part of its due diligence, North Star Storage updated the wetland delineation
19 that was originally completed in 2014 for the existing Solar Facility¹³. Wetland
20 boundaries often change over time, as seasonal fluctuations and changes in
21 hydrology and vegetation may alter their boundaries. Based on additional land
22 survey work and current conditions, North Star Storage delineated additional
23 incidental, likely non-jurisdictional wetlands in the Land Control Area¹⁴ of the
24 Project. The updated design avoids impacts to all delineated jurisdictional and non-

¹³ 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).

¹⁴ The Land Control Area is the 77.5-acre area where North Star Storage has site control. The Land Control Area is used to describe the existing environment. See Application at v.

1 jurisdictional wetlands. North Star Storage provided a figure depicting the non-
2 jurisdictional (and likely jurisdictional) wetlands it believes are present in the
3 Preliminary Development Area in its Site Permit Application Amendment filing.¹⁵
4

5 **Q. What is the status of executing a generator interconnection agreement (GIA)**
6 **for the Project?**

7 A. North Star Storage executed a Surplus Large Generator Interconnection
8 Agreement (LGIA) with Midcontinent Independent System Operator (MISO) for the
9 original 80 MW Project. The LGIA was submitted to the Federal Energy Regulatory
10 Commission (FERC) for approval, which is currently anticipated in the first quarter
11 of 2026. On August 22, 2025, North Star Storage submitted an updated
12 application to MISO for the 20 MW increase in Project capacity. MISO is currently
13 reviewing and studying the amendment request. North Star Storage currently
14 anticipates an amended LGIA, to allow the interconnection of the 100 MW Project,
15 to be executed in the first quarter of 2026.
16

17 **Q. Has the anticipated schedule for the construction and in-service of the**
18 **Project changed from what was contemplated in the Application?**

19 A. No. North Star Storage now anticipates the Project will begin construction in the
20 second or third quarter of 2026 with an anticipated commercial operation date of
21 second quarter of 2027.¹⁶ North Star Storage has started preparing the compliance
22 filings it anticipates will be required by the Site Permit. North Star Storage requests
23 Commission staff's cooperation in determining an appropriate process for its
24 review of pre-construction compliance filings in advance of Site Permit issuance
25 so that construction can begin as soon as possible after the Site Permit is issued
26 by the Commission.
27

¹⁵ SPA Amendment at 4.

¹⁶ See Application at 6.

1 **Q. Have there been any other updates related to the Project since North Star**
2 **Storage filed the Application?**

3 A. No.

4

5 **V. LOCAL EMPLOYMENT & ECONOMIC BENEFITS**

6

7 **Q. Will the Project result in local employment and economic benefits?**

8 A. Yes. North Star Storage will provide significant socioeconomic benefits to local,
9 union construction workers. North Star Storage anticipates supporting up to 60
10 temporary construction and installation jobs for the Project and following the
11 prevailing wage and apprenticeship rules in place under the United States Inflation
12 Reduction Act of 2022.¹⁷ While the Project will not generate tax revenue through
13 a production tax, the Project is estimated to provide additional property tax
14 payments to City of North Branch and Chisago County of approximately \$25,000
15 over the 30-year life of the Project.¹⁸ In addition, lease and easement payments
16 paid to the landowner of the western parcel will offset potential financial losses
17 associated with removing a portion of their land from agricultural production.¹⁹

18

19 **Q. What are North Star Storage’s commitments regarding the workforce that**
20 **will be needed for construction of the Project?**

21 A. North Star Storage anticipates the Project will require 30 to 60 laborers during the
22 construction and installation phases, and two long-term personnel during the
23 operations phase. North Star Storage will work with an EPC contractor to construct
24 the Project and will prioritize utilization of local, union construction personnel to the
25 greatest extent feasible. The EPC contractor will be required to work with local
26 labor unions, local subcontractors, and other vendors whenever possible to create
27 a construction staffing model that prioritizes local hiring and economic benefits,

¹⁷ EA at 19 (Oct. 13, 2025) (eDocket No. [202510-223823-01](#)) (EA).

¹⁸ Application at 54; EA at 50.

¹⁹ Application at 54.

1 while ensuring the Project is safely built on time and on budget. North Star Storage
2 notes that it may be necessary to import specialized labor from non-local areas in
3 Minnesota or other states, as the short duration of the construction phase
4 precludes special training of local or regional labor.²⁰
5

6 VI. COORDINATION WITH SHPO 7

8 **Q. Do you have any updates regarding SHPO coordination since the**
9 **Application was filed?**

10 A. Yes. On December 4, 2024, the SHPO agreed that the 2014 survey of the Project
11 area was adequate for the Land Control Area and site layout at that time; additional
12 survey is not required for the site layout at that time; no significant archaeological
13 sites will be affected by this Project; and there are no properties listed in the
14 National or State Registers of Historic Places, or within the Historic Sites Network,
15 that will be affected by this Project.²¹ When the Project was reviewed in 2024 by
16 Merjent Inc. (Merjent), a potentially historically significant farmstead located to the
17 southwest of the Project Area adjacent to Highway 14 (as per Westwood's 2014
18 report) was outside of the Project's boundaries, and no direct effects were
19 anticipated.
20

21 However, North Star Storage has since moved the access road for the Project to
22 a location that would intersect a portion of the farmstead. Accordingly, Merjent
23 conducted a field survey to assess whether any of the character defining features
24 of the potentially eligible farmstead would be impacted by the access road.
25 Merjent's report concluded that the area to be impacted by the Project driveway
26 will not impact the character defining features of the potentially eligible farmstead.

²⁰ Application at 53.

²¹ Application at Appendix B.

1 Merjent submitted a Cultural Resources Phase I Survey report on the potentially
2 eligible farmstead to SHPO on October 16, 2025.

3
4 **Q. Has North Star Storage received additional correspondence from SHPO?**

5 A. No. Merjent is awaiting a response. North Star Storage will provide a copy of the
6 SHPO concurrence letter pertaining to the revised access road upon receipt.

7
8 **VII. COMMENTS ON THE EA AND DSP**

9
10 **Q. Have you reviewed the EA prepared by the Commission Energy
11 Infrastructure Permitting (EIP) unit for the Project?**

12 A. Yes, EIP filed the EA on October 13, 2025. Included with the EA was a DSP
13 prepared by EIP. I have reviewed both the EA and the DSP and offer the following
14 comments.

15
16 **Q. Do you have any comments on the DSP?**

17 A. In the EA, EIP Staff recommended the addition of special condition 5.12 (Offtake
18 Agreement) to the DSP. North Star Storage generally does not object to a special
19 condition requiring an offtake agreement or some other enforceable mechanism
20 for the sale of energy capacity. North Star Solar has entered into the Offtake
21 Agreement for the Project. However, due to the non-generative, and dispatchable
22 nature of energy storage projects they are better suited for the merchant market or
23 other contracting services such as the Offtake Agreement, rather than a long-term
24 power purchase agreement that is typically used for wind and solar generation
25 resources. Unlike a generation facility, North Star Storage could enter into a tolling
26 agreement with an affiliated merchant energy business or third-party market
27 participant if the Offtake Agreement is not approved by the MPUC. Another
28 potential enforceable mechanism for the Project, if the MPUC does not approve
29 the Offtake Agreement, is to register as a market participant with MISO or other
30 Regional Transmission Organization or Independent System Operator. North Star
31 Storage respectfully requests that special condition 5.12 be revised to contemplate

1 a variety of offtake agreements that better fit the nature of an energy storage
2 project and to align the permit condition with a site permit recently issued for
3 another standalone battery energy storage project to reflect the aforementioned
4 variety of offtake agreements.²²

5
6 North Star Storage also requests that special condition 5.12 be revised to align the
7 time period provided for it to obtain an offtake agreement or other enforceable
8 mechanism, with the time period provided in of the DSP for commencing
9 construction. Specifically, North Star Storage proposes that special condition 5.12
10 be revised to align with general permit condition 6 such that the permittee has four
11 years to obtain an offtake agreement or some other enforceable mechanism and
12 to begin construction of the Project. The Commission has recently granted site
13 permits that align these two permit conditions at four years.

14
15 **Q. What modification is North Star Storage requesting to Section 5.12 of the**
16 **DSP?**

17 A. North Star Storage proposes the following revised Section 5.12 of the DSP:

18 **5.12 Offtake Agreement**

19 In the event the Permittee does not have an offtake
20 agreement, or some other enforceable mechanism for the
21 sale of energy capacity, or ancillary services, and/or other
22 products provided by the Project at the time this site permit is
23 issued, the Permittee shall provide notice to the Commission
24 when it obtains an offtake agreement, or some other
25 enforceable mechanism for the sale of energy, capacity, or
26 ancillary services, and/or other products. This site permit does

²² See In the Matter of the Application of Snowshoe BESS, LLC for a Site Permit for the up to 150 MW Snowshoe Energy Storage Project in Olmsted County, MPUC Docket No. IP-7138/ESS-24-279, Order Adopting Administrative Law Judge Report, Determining Environmental Assessment Adequate, and Issuing Site Permit at Permit Condition 5.11 (Sept. 22, 2025).

1 not authorize construction of the Project until the Permittee
2 has obtained an offtake agreement, or some other
3 enforceable mechanism for energy capacity, or ancillary
4 services, and/or other products provided by the Project,
5 including as example, registration as a market participant with
6 MISO or other Regional Transmission Organization or
7 Independent System Operator. In the event the Permittee
8 does not obtain an offtake agreement or some other
9 enforceable mechanism for the sale of energy, capacity, or
10 ancillary services, and/or other products provided by the
11 Project within four years of the issuance of this site permit, the
12 Permittee must advise the Commission of the reason for not
13 having an offtake agreement, or some other enforceable
14 mechanism. In such event, the Commission may determine
15 whether this site permit should be amended or revoked. No
16 amendment or revocation of this site permit may be
17 undertaken except in accordance with Minn. Stat. § 216I.09
18 or Minn. Stat. § 216I.14.

19
20 **VIII. CONCLUSION**

21
22 **Q. Does this conclude your Direct Testimony?**

23 **A. Yes.**

JOEL PURITZ

MANAGER, PROJECT DEVELOPMENT

EDUCATION

Master of Business

Administration, Yale School of Management
2022

Master of Science, Environmental Engineering, Missouri University of Science and Technology
2019

Bachelor of Science, Environmental Engineering, United States Military Academy at West Point
2014

CURRENT ROLE

DESRI

Manager, Project Development — December 2025 – Present
Associate, Project Development — August 2022 – December 2025

Mr. Puritz manages the development and execution of utility-scale battery energy storage system (BESS) projects across multiple U.S. markets. In this role, he advances projects from early-stage siting through construction readiness, coordinating among engineering, legal, environmental, finance and construction teams to ensure timely and compliant delivery. His responsibilities include:

- Overseeing interconnection applications and technical studies.
- Engaging with landowners, community stakeholders, and permitting authorities.
- Leading local, state, and federal permitting processes.
- Managing due-diligence reviews, budgets, and project schedules.
- Supporting project execution from inception through Financial Notice to Proceed (FNTP).
- Driving internal process development to scale DESRI's BESS platform, including the creation of standardized templates, approval workflows, and governance procedures.

ADDITIONAL WORK EXPERIENCE

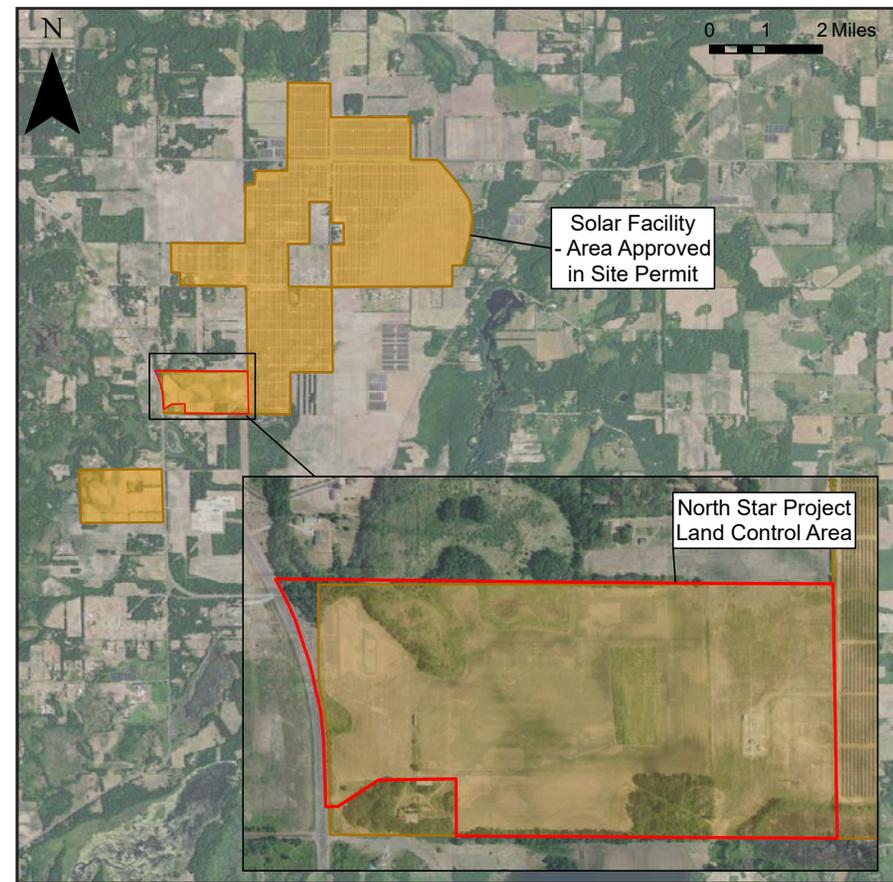
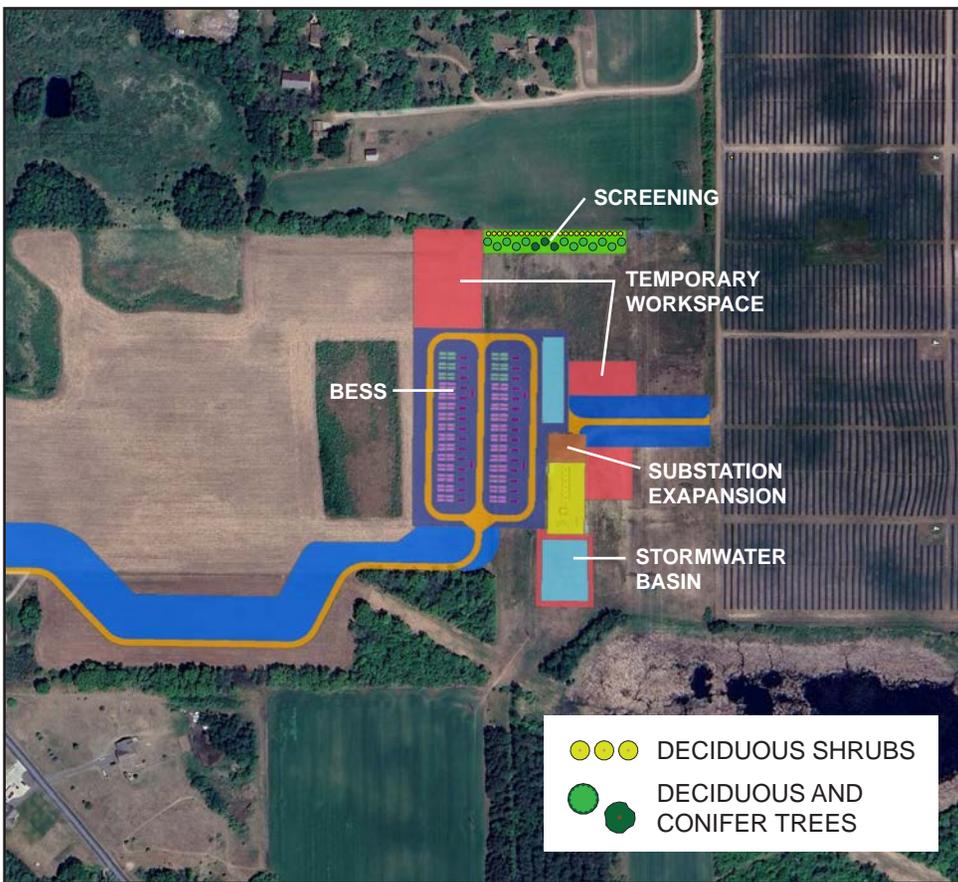
Engineer Officer, United States Army

Captain – May 2018 – May 2020

First Lieutenant – January 2016 – May 2018

Second Lieutenant – May 2014 – January 2016

Mr. Puritz served for six years as an Engineer Officer in the United States Army, where his experience ranged from leading construction and infrastructure projects in combat zones to overseeing day-to-day operations and personnel management in both stateside and deployed environments.



Scientific Name	Common Name	Mature Height (ft)	Spacing (ft)
<i>Amelanchier laevis</i>	Serviceberry	15-25	10-15
<i>Quercus macrocarpa</i>	Bur oak	50-70	25-30
<i>Quercus macrocarpa</i>	Bur oak	50-70	25-30
<i>Picea glauca</i>	White spruce	30-60	12-16
<i>Pinus resinosa</i>	Red pine	50-80	16-20
<i>Celtis occidentalis</i>	Hackberry	40-60	20-25
<i>Prunus virginiana</i>	Chokecherry	10-20	10-15

Scientific Name	Common Name	Mature Height	Spacing (ft)
<i>Juniperus virginiana</i>	Eastern redcedar	20-50	8-12
<i>Ceanothus americanus</i>	New Jersey tea	3-5	4-6
<i>Rosa spp.</i>	Wild rose	3-6	3-5



WHITE SPRUCE



SERVICEBERRY



BUR OAK



RED PINE



HACKBERRY



CHOCKECHERRY



EASTERN RED CEDAR



NEW JERSEY TEA



WILD ROSE

10/09/2025



DRAFT

FIGURE X VEGETATION SCREENING PLAN
NORTH STAR BESS

VEGETATION SCREENING PLAN FOR LAYOUT REVIEW
NOT TO SCALE
NOT FOR CONSTRUCTION USE

NORTH STAR BESS



Sound Analyses results

		100 MW with barrier (without Muffler)	100 MW with Muffler (without barrier)
Receptor ²³	Distance to BESS (ft)	Noise Attributable to the Project (Barrier)	Noise Attributable to the Project (Muffler)
1	731.7	44.4	48.2
2	855.3	43.0	46.8
3	983.6	41.1	44.0
4	1157.6	39.6	42.2
5	1164.1	39.1	40.7
6	1360.7	45.3	41.2
7	1456.9	37.2	39.1
8	1547.3	43.6	38.2
9	1606.1	43.6	38.9
10	1648.7	43.4	38.7
11	1652.9	36.1	37.8
12	1744.1	42.8	38.1
13	1802.4	42.6	38.0
14	1922.1	34.7	36.3
15	1965.2	41.6	36.4
16	2197.7	33.5	35.1

²³ Receptors are numbered in accordance with receptor identification numbers shown on Map 7 of the Site Permit Application.

		100 MW with barrier (without Muffler)	100 MW with Muffler (without barrier)
Receptor ²³	Distance to BESS (ft)	Noise Attributable to the Project (Barrier)	Noise Attributable to the Project (Muffler)
17	2213.8	33.6	35.6
18	2298.2	33.8	36.8
19	2433.4	33.3	36.3
20	2490.2	39.7	35.0
21	2541.0	33.2	36.5
22	2557.7	32.7	35.3
23	2842.9	32.1	35.3
24	2848.8	32.1	35.3
25	2899.0	38.9	35.1
26	2931.6	31.3	33.7
27	2948.0	31.8	35.0
28	2948.6	31.6	34.4
29	2950.4	31.4	34.1
30	3053.7	37.9	33.1

**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**

CERTIFICATE OF SERVICE

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

Breann L. Jurek certifies that on the 21st day of October, 2025, she e-filed on behalf of North Star Energy Storage, LLC, a true and correct copy of the Direct Testimony of Joel Puritz, with Schedules A, B and C, with the Minnesota Public Utilities Commission via eDockets (www.edockets.state.mn.us). Said documents were also served as designated on the Official Service List on file with the Minnesota Public Utilities Commission and as attached hereto.

Executed on: October 21, 2025

Signed: /s/ Breann L. Jurek

Fredrikson & Byron, P.A.
60 South Sixth Street
Suite 1500
Minneapolis, MN 55402

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	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		Yes	ESS-25-123
2	Ryan	Cox	rcox@fredlaw.com	Fredrikson & Byron, P.A.		60 S Sixth St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	ESS-25-123
3	Monika	Davis	monika.davis@merjent.com			1 Main Street Suite 300 Minneapolis MN, 55414 United States	Electronic Service		No	ESS-25-123
4	Jeremy	Duehr	jduehr@fredlaw.com	Fredrikson & Byron, P.A.		60 S Sixth St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	ESS-25-123
5	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	ESS-25-123
6	Breann	Jurek	bjurek@fredlaw.com	Fredrikson & Byron PA		60 S Sixth St Ste 1500 Minneapolis MN, 55402 United States	Electronic Service		No	ESS-25-123
7	Joel	Puritz	joel.puritz@deshaw.com	D. E. Shaw Renewable Investments		4949 Syracuse Street Suite 570 Denver CO, 80237 United States	Electronic Service		No	ESS-25-123
8	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		Yes	ESS-25-123
9	Will	Seuffert	will.seuffert@state.mn.us		Public Utilities Commission	121 7th Pl E Ste 350 Saint Paul MN, 55101 United States	Electronic Service		Yes	ESS-25-123