BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger Nancy Lange Dan Lipschultz Matthew Schuerger John A. Tuma

Chair Commissioner Commissioner Commissioner

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 ISSUE DATE: February 16, 2016

DOCKET NO. IP-6943/GS-15-33

ORDER GRANTING SITE AND ROUTE PERMITS WITH CONDITIONS

PROCEDURAL HISTORY

On February 11, 2015, North Star Solar PV LLC (North Star) filed a joint application for a site and a route permit to construct a 100 megawatt photovoltaic (PV) solar energy generating facility, and a 115 kilovolt (kV) transmission line, in Chisago County (collectively, the North Star Project or Project).

On April 27, 2015, the Commission found the application complete.

On April 30, 2015, the Commission and the Department of Commerce Energy Environmental Review and Analysis staff (the Department) held a public information and environmental assessment scoping meeting at the Lent Town Hall in Stacy.

On June 29, 2015, the deputy commissioner of the Department issued the scoping decision for the environmental assessment.

On July 7, 2015, the Commission issued its Order Directing Use of Summary Proceedings under the alternative review permitting process (Minn. R. 7850.2800) to develop the record.

On September 24, 2015, the Department issued the environmental assessment for the Project.

On October 7, 2015, Administrative Law Judge (ALJ) Barbara J. Case conducted a public hearing at the Lakes Region EMS in North Branch. Following the public hearing, a comment period was open until October 21, 2015.

On December 16, 2015, the ALJ filed her Findings of Fact, Conclusions of Law, and Recommendation in this case (ALJ Report).

On December 24, 2015, the Department filed exceptions to the ALJ Report.

On January 20, 2016, the Commission met to consider the matter.

FINDINGS AND CONCLUSIONS

I. The Project

North Star requested a site permit to construct 100 megawatts (MW) of photovoltaic solar generation in Chisago County and a route permit to build a one-mile 115 kV transmission line to connect the station to the Chisago substation. North Star proposes to construct the Project at a single location in Chisago County, covering approximately 800 acres.

North Star stated that the proposed solar facility meets the definition of a large electric generating plant under Minn. Stat. § 216E.01, subd. 5, and that the proposed transmission line meets the definition of a high-voltage transmission line under Minn. Stat. § 216E.01, subd. 4.

North Star requested the permit application be considered under the alternative permitting process for eligible projects, which include large electric power generating plants powered by solar energy, as well as high-voltage transmission lines between 100 - 200 kV.¹ The Commission authorized use of the alternative permitting process for the Project in its April 27, 2015 order in this docket.²

II. The Legal Standard

A. Permits Required

Minn. Stat. § 216E.01, subd. 5 defines a large electric power generating plant as electric power generating equipment and associated facilities designed for or capable of operation at a capacity of 50 megawatts or more. As the proposed Project is a solar facility capable of generating 100 MW of electric energy, it requires a site permit before it can be constructed.

Minn. Stat. § 216E.03, subd. 1 provides that no person may construct a large electric generating plant without a site permit from the Commission and that a large electric generating plant may be constructed only on a site approved by the Commission.

Because the associated transmission line would exceed 100 kV and would be longer than 1,500 feet, a route permit for the transmission line aspect of the Project is also required.³ Minn. Stat. § 216E.03, subd. 2 provides that no person may construct a high-voltage transmission line without a route permit from the Commission and that a high-voltage transmission line may be constructed only along a route approved by the Commission.

The Commission has exempted the North Star Solar Project from the requirement to obtain a certificate of need under Minn. Stat. § 216B.243, as it is part of Xcel Energy's 2014 Solar Resource Solicitation.⁴ And no certificate of need is required for the transmission line associated

¹ Minn. Stat § 216E.04 and Minn. R. 7850.2800 to 7850.3900.

² This docket, Order Finding Application Substantially Complete, Directing Use of Alternative Permitting Process, and Granting Variance (April 27, 2015).

³ Minn. Stat. §§ 216E.01, subd. 4, and 216E.03, subd. 2.

⁴ In the Matter of Xcel Energy Petition for Approval of a Solar Portfolio to Meet Initial Solar Energy Standard, Docket No. E-002/M-14-162, Order Approving Solar Portfolio (March 24, 2015).

with the solar facility, because the transmission line has a capacity of less than 200 kV, is less than 10 miles in length, and does not cross a state border.

B. Criteria to be Considered

The proposed Project is subject to Minn. Stat. § 216E, which requires that large electric power generating plants and high-voltage transmission lines be located consistent with state policy and in a manner that minimizes adverse human and environmental impact while ensuring continuing electric power system reliability and integrity and ensuring that electric energy needs are met and fulfilled in an orderly and timely fashion.⁵

In deciding whether to issue a permit for a large electric power generating plant or a high-voltage transmission line, the Commission must consider the criteria set out in Minn. R. 7850.4100:

- A. effects on human settlement, including, but not limited to, displacement, noise, aesthetics, cultural values, recreation, and public services;
- B. effects on public health and safety;
- C. effects on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining;
- D. effects on archaeological and historic resources;
- E. effects on the natural environment, including effects on air and water quality resources and flora and fauna;
- F. effects on rare and unique natural resources;
- G. application of design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity;
- H. use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries;
- I. use of existing large electric power generating plant sites;
- J. use of existing transportation, pipeline, and electrical transmission systems or rights-of-way;
- K. electrical system reliability;
- L. costs of constructing, operating, and maintaining the facility which are dependent on design and route;
- M. adverse human and natural environmental effects which cannot be avoided; and
- N. irreversible and irretrievable commitments of resources.

The Commission may impose appropriate conditions on the grant of a site or route permit.⁶

⁵ Minn. Stat. § 216E.03, subd. 7(b).

⁶ Minn. Stat. § 216E.03, subd. 10 (a) and (b).

III. Environmental Assessment

Under the alternative permitting process, an applicant is not required to propose alternative routes, but projects are subject to an environmental assessment, the scope of which is determined by the Department.⁷

On June 29, 2015, the Department filed its Environmental Assessment scoping decision on the Project, which identified the following issues to be addressed in the Environmental Assessment: the general description of the Project; the regulatory framework; the Project's design, construction, and operation and maintenance; the potential impact of the Project as well as the potential to mitigate those impacts; and a list and description of permits required from other government agencies.

On September 24, 2015, the Department filed the Environmental Assessment. Sections 1 and 2 of the Environmental Assessment include a Project description addressing the Project's regulatory framework and construction. Section 3 describes the solar generation portion of the Project, the high-voltage transmission line, and the steps associated with their construction. Section 4 discusses North Star's decision to not consider any other transmission route alternatives. Section 5 addresses the potential impact of the proposed Project. Section 6 addresses the necessary siting and routing factors to consider in making a determination to issue a site and route permit.

The Commission has reviewed the Environmental Assessment and the record created at the public hearing under Minn. R. 7850.3900. Based on its review, the Commission finds that the Environmental Assessment and the record created at the public hearing adequately address the issues identified in the scoping decision.

IV. Public Comments

Approximately 100 members of the public attended the public hearing on October 7, 2015. Some 23 individuals spoke on the record at the hearing. Individuals who testified in support of the Project focused their comments on the benefits of solar energy, including its ability to offer more certainty in the cost of energy, its minimal environmental impacts, and the jobs and tax revenues created by the construction.

Comments by those opposed to the Project focused on the visual and aesthetic impact of the Project, the potential impact on nearby property values, and stray voltage or electro-magnetic field concerns.

Following the hearing, written comments were submitted by the Minnesota Department of Natural Resources, the Chisago County Board of Commissioners, landowners, and the Department.

V. ALJ Report

On December 16, 2015, the ALJ filed her Findings of Fact, Conclusions of Law, and Recommendation in this matter. The ALJ Report included 262 findings of fact, a summary of

⁷ Minn. § 216E.04, subd. 5; Minn. R. 7850.3700.

public comments, 17 conclusions of law, and a recommendation that the Commission issue a site permit for the proposed 100 MW solar generating plant in Chisago County and a route permit for the proposed 115 kV transmission line.

The ALJ reviewed the statutory and regulatory site-permit and route-permit criteria, applied the criteria to the proposed Project, and found, in light of planned mitigation measures, that the project would not have significant impacts in any of the relevant criteria. The ALJ found certain of North Star's proposed modifications to the site permit template (as further modified by the Department) to be reasonable.⁸ The ALJ concluded that the Project, with the modified site permit conditions, satisfies the criteria for issuing a site permit and a route permit.

The ALJ recommended that the Commission issue the site permit incorporating the mitigation measures and conditions contained in the generic site permit template including the modifications recommended by North Star to Section 4.1 (notice of permit), and adding special conditions to Section 5 (Conclusion 10) addressing landscaping plan requirements, vegetation management plan requirements, security fence requirements, and tree removal timetables.

The ALJ also recommended that the Commission issue the route permit incorporating the mitigation measures and conditions contained in the generic route permit template.

VI. The Department's Exceptions

The Department concurred with the ALJ's recommendations to issue a site permit and route permit to North Star, and did not recommend any revisions to the ALJ's findings of fact. The Department did recommend modifying Special Condition 5.4 (in Conclusion 10) addressing tree clearing to protect threatened species to allow a less restrictive timetable. The Department recommended including the modified special condition in both the site permit and the route permit.

VII. Commission Action

Having reviewed the record, including North Star's application, the Department's environmental assessment, the parties' comments, and the ALJ's report, the Commission agrees with the parties and the ALJ that North Star has met the requirements for a solar energy site permit and a high-voltage transmission line route permit. The Commission concurs in the ALJ's analysis and finds the proposed Project is consistent with the factors contained in Minn. Stat.§ 216E.03, subd. 7(b) and Minn. R. 7850.4100.

North Star noted that there were seven landowners substantially surrounded by the solar panels. Although not required under Chapter 216E, North Star has negotiated with the landowners to buy their properties. Buyout negotiations, however, have not been concluded for all properties. The Commission will require North Star to notify the Commission of the resolution of those negotiations by providing a copy of any signed agreements or agreed-upon mitigation by March 15, 2016.

⁸ *See*, Site Permit Template Section 4.1, and Special Conditions 5 (site specific landscaping plan, security fence, and tree removal).

The Commission will therefore adopt the ALJ's Findings of Fact, Conclusion of Law, and Recommendation for the North Star solar electric power generating plant and associated 115 kV high-voltage transmission line in Chisago County with the modifications set forth below:

A. Modifications to the ALJ Report

The Commission will adopt the ALJ Report, with the following minor changes set forth below:

• Finding 169

The Commission will strike Finding 169, which recommended that the applicant file a storm water pollution protection plan for Commission approval to ensure proper mitigation measures are in place concerning erosion and sediment control best management practices. Such plans are regulated by the Minnesota Pollution Control Agency, and not the Commission.

• Conclusion 10

Conclusion 10 identified special condition language for the site permit addressing landscaping plan requirements (Section 5.1), vegetation management plan requirements (Section 5.2), security fence requirement (Section 5.3), and tree removal timetables (Section 5.4). The Commission will modify the special conditions in Sections 5.1 and 5.4 as set forth below to further clarify the compliance requirements:

Section 5.1

The Permittee shall develop a site specific Landscaping Plan in consultation with Chisago County, and considering local government ordinances and setbacks, that reasonably mitigates the visual impacts to all adjacent residences. The Landscaping Plan shall be filed in this docket <u>at least 14 days prior to the pre-construction</u> <u>meeting and approved by the PUC prior to construction beginning</u>.

Section 5.4

Tree removal required by the Project shall be done between October 1st and March 30th to mitigate negative impacts to the northern long-eared bat and to minimize potential impacts on migratory birds, <u>unless other appropriate time</u> limitations on tree clearing are determined in consultation with the United States Fish and Wildlife Service. The Permittee shall file an account of that consultation 14 days prior to the pre-construction meeting.

B. Modifications to the Site and Route Permits

The Commission agrees with the ALJ's Conclusion 9 to modify Section 4.1 of the Site Permit concerning notice of permit, as recommended by North Star, and adding special conditions to Section 5 (Conclusion 10) concerning landscaping plan requirements, vegetation management plan requirements, and security fence requirements. Accordingly, the Commission will issue a Site Permit for the 100 MW North Star solar energy generating facility reflecting the above modifications to the ALJ Report.

Finally, the Commission will issue the Route Permit for the 115 kV Transmission Line associated with the Project, with one minor modification:

The Commission agrees that the special permit condition regarding tree removal timetables to protect threatened species, as modified by the recommendation of the Department, should be included in the route permit for the high-voltage transmission line for the North Star Project. Because high-voltage route permits do not typically require a pre-construction meeting, however, the Commission will modify the Department's proposal for the route permit as follows:

• Tree Removal Timetables

Tree removal required by the Project shall be done between October 1st and March 30th to mitigate negative impacts to the northern long-eared bat and to minimize potential impacts on migratory birds, unless other appropriate time limitations on tree clearing are determined in consultation with the USFWS. <u>The Permittee shall file an account of that consultation as part of the plan and profile submission.</u> The Permittee shall file an account of that account of that consultation 14 days prior to the pre-construction meeting.

<u>ORDER</u>

- 1. The Commission adopts the ALJ's Findings of Fact, Conclusions of Law, and Recommendation for the North Star Solar Electric Generating Plant and associated 115 kV high-voltage transmission line in Chisago County, as modified below:
 - A. Strike Finding 169.
 - B. Modify Conclusion 10 to read:

§ 5.1

The Permittee shall develop a site specific Landscaping Plan in consultation with Chisago County, and considering local government ordinances and setbacks, that reasonably mitigates the visual impacts to all adjacent residences. The Landscaping Plan shall be filed in this docket at least 14 days prior to the pre-construction meeting.

C. Modify Conclusion 10 to read:

§ 5.4

Tree removal required by the Project shall be done between October 1st and March 30th to mitigate negative impacts to the northern long-eared bat and to minimize potential impacts on migratory birds, unless other appropriate time limitations on tree clearing are determined in consultation with the USFWS. The Permittee shall file an account of that consultation 14 days prior to the pre-construction meeting.

2. The Commission finds that the Environmental Assessment and the record created at the public hearing address the issues identified in the scoping decision.

- 3. The Commission hereby issues a site permit to North Star Solar PV LLC that includes the mitigation measures and conditions contained in the generic site permit template as modified herein, and as reflected below:
 - A. Modification to Section 4.1:

Within 14 days of issuance of this permit, the Permittee shall send a copy of the permit to any regional development commission, county, city, and township in which any part of the site is located.

The Permittee shall provide all affected landowners with a copy of this permit and, as a separate information piece, the complaint procedures after issuance of this permit. The Permittee shall contact participating landowners prior to entering their property or conducting maintenance within the site, unless otherwise negotiated with the affected landowner.

B. Modification of a special condition concerning landscaping plan requirement, as follows:

The Permittee shall develop a site specific Landscaping Plan in consultation with Chisago County, and considering local government ordinances and setbacks, that reasonably mitigates the visual impacts to all adjacent residences. The Landscaping Plan shall be filed at least 14 days prior to the pre-construction meeting.

C. Addition of a special condition concerning vegetation management plan requirements, as follows:

The Permittee shall develop a vegetation management plan in consultation with the DNR to the benefit of pollinators and other wildlife, and to enhance soil water retention and reduce storm water runoff and erosion. The vegetation management plan shall be filed at least 14 days prior to the pre-construction meeting.

D. Addition of a special condition concerning security fence requirements, as follows:

The security fence surrounding the Project shall be designed to minimize the visual impact of the Project. While maintaining compliance with the National Electrical Safety Code, the Permittee shall install an eight-foot wood pole and woven wire fence, or substantially similar, around the perimeter of the Project. This type of fence is commonly referred to as a "deer fence" or "agricultural fence." The permittee shall consult with DNR to insure the design of the facilities preserves or replaces identified natural wildlife, wetland, woodland or other corridors.

E. Modification of a special condition concerning tree removal timetables, as follows:

Tree removal required by the Project shall be done between October 1st and March 30th to mitigate negative impacts to the northern long-eared bat and to minimize potential impacts on migratory birds, unless other appropriate time limitations on tree clearing are determined in consultation with the USFWS. The Permittee shall file an account of that consultation 14 days prior to the pre-construction meeting.

4. The Commission hereby issues a route permit to North Star Solar PV LLC with the mitigation measures and conditions contained in the Generic Route Permit Template, including the special condition concerning tree removal timetables as follows:

Tree removal required by the Project shall be done between October 1st and March 30th to mitigate negative impacts to the northern long-eared bat and to minimize potential impacts on migratory birds, unless other appropriate time limitations on tree clearing are determined in consultation with the USFWS. The Permittee shall file an account of that consultation as part of the plan and profile submission.

- 5. North Star shall notify the Commission of the resolution of the negotiations with the seven remaining landowners surrounded by the solar panels by providing a copy of any signed agreements or agreed-upon mitigation by March 15, 2016.
- 6. This order shall become effective immediately.

BY ORDER OF THE COMMISSION

Daniel P. Wolf Executive Secretary



This document can be made available in alternative formats (e.g., large print or audio) by calling 651.296.0406 (voice). Persons with hearing loss or speech disabilities may call us through their preferred Telecommunications Relay Service.

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

SITE PERMIT FOR A SOLAR ENERGY GENERATING SYSTEM

IN

CHISAGO COUNTY

ISSUED TO NORTH STAR SOLAR PV LLC

PUC DOCKET NO. IP-6943/GS-15-33

In accordance with the requirements of Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850 this site permit is hereby issued to:

North Star Solar PV LLC

The Permittee is authorized by this site permit to construct and operate a 100 megawatt solar energy generating system in Chisago County, Minnesota.

The solar energy generating system and associated facilities shall be built within the site identified in this permit and as portrayed in the official site map(s) and in compliance with the conditions specified in this permit.

This site permit shall expire 30 years from the date of this approval.

Approved and adopted this 16th day of February, 2016

BY ORDER OF THE COMMISSION

Daniel P. Wolf, Executive Secretary

This document can be made available in alternative formats (e.g., large print or audio) by calling 651-296-0406 (voice). Persons with hearing loss or speech disabilities may call us through their preferred Telecommunications Relay Service.

CONTENTS

1.0	SITE PER	MIT	1
1.1	Pre-emp	tion	1
2.0	PROJECT	DESCRIPTION	1
2.1	Project I	_ocation	1
3.0	DESIGNA	ATED SITE	2
4.0	GENERA	L CONDITIONS	2
4.1	Notificat	tion	2
4.2	Construc	ction and Operation Practices	2
	4.2.1	Field Representative	3
	4.2.2	Site Manager	3
	4.2.3	Employee Training and Education of Permit Terms and Conditions	3
	4.2.4	Temporary Work Space	4
	4.2.5	Noise	4
	4.2.6	Aesthetics	4
	4.2.7	Soil Erosion and Sediment Control	4
	4.2.8	Public Lands	5
	4.2.9	Wetlands and Shoreland	5
	4.2.10	Native Prairie	6
	4.2.11	Vegetation Management	6
	4.2.12	Application of Herbicides	6
	4.2.13	Invasive Species	7
	4.2.14	Noxious Weeds	7
	4.2.15	Roads	7
		Archaeological and Historic Resources	
		Interference with Communication Devices	
		Restoration	
		Cleanup	
		Pollution and Hazardous Wastes	
		Damages	
		Public Safety	
		Site Identification	
4.3	Feeder L	ines	9
4.4	Other Re	equirements 1	0
	4.4.1	Safety Codes and Design Requirements 1	0
	4.4.2	Other Permits and Regulations	0

5.0	SPECIAL CONDITIONS
5.1	Landscaping Plan
5.2	Vegetation Management Plan 10
5.3	Security Fence
5.4	Tree Removal Timetables11
6.0	DELAY IN CONSTRUCTION
7.0	COMPLAINT PROCEDURES
8.0	COMPLIANCE REQUIREMENTS
8.1	Pre-Construction Meeting
8.2	Pre-Operation Meeting
8.3	Site Plan
8.4	Status Reports
8.5	Notification to Commission
8.6	As-Builts
8.7	GPS Data
8.8	Project Energy Production
8.9	Emergency Response
8.10	Extraordinary Events
8.11	Wildlife Injuries and Fatalities
9.0	DECOMMISSIONING AND RESTORATION
9.1	Decommissioning Plan
9.2	Site Restoration
9.3	Abandoned Solar Installations
10.0	COMMISSION AUTHORITY AFTER PERMIT ISSUANCE
10.1	Final Boundaries
10.2	Expansion of Site Boundaries
10.3	-
10.4	
10.5	More Stringent Rules
11.0	PERMIT AMENDMENT
12.0	TRANSFER OF PERMIT
13.0	REVOCATION OR SUSPENSION OF THE PERMIT

FIGURES

Official Site Maps

ATTACHMENTS

Complaint Procedures for Permitted Energy Facilities Compliance Filing Procedures for Permitted Energy Facilities

1.0 SITE PERMIT

The Minnesota Public Utilities Commission (Commission) hereby issues this site permit to North Star Solar PV LLC (Permittee) pursuant to Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850. This permit authorizes the North Star Solar PV LLC to construct and operate a 100 megawatt (MW) alternating current (AC) solar energy generating system and associated facilities in Chisago County, Minnesota, and as identified in the attached site permit map(s), hereby incorporated into this document.

1.1 Pre-emption

Pursuant to Minn. Stat. § 216E.10, this site permit shall be the sole approval required for the construction of the solar energy generating system and this permit shall supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local and special purpose government.

2.0 PROJECT DESCRIPTION

The primary components of the 100 MW AC solar facility include photovoltaic modules mounted on a linear single-axis tracking system, centralized inverters, and a project substation. The photovoltaic modules will be grouped into approximately 50 arrays. An array is made up of 100 to 140 linear single-axis tracker rows that hold 36 to 72 photovoltaic modules each. The tracking system foundations or tracker rows will utilize driven piers or posts that are generally not anticipated to require concrete, although some concrete foundations may be necessary depending on location and specific soil conditions.

The balance of facility components include electrical cables, conduit, switchgear, step up transformers, supervisory control and data acquisition (SCADA) system, metering equipment, an operations and maintenance facility, temporary laydown yards/staging areas, and internal access roads. A perimeter fence with gated access points will enclose the facility. Energy generated by the facility will ultimately be delivered to the existing Xcel Energy Chisago Substation via a new 115 kV high-voltage transmission line permitted separately.

2.1 Project Location

The project is located in the following:

County	Political Boundary	Township	Range	Section(s)
Chisago	City of North Branch	35N	21W	25 and 36

Chisago	Sunrise Township	35N	20W	30 and 31
Chisago	Lent Township	34N	21W	2

3.0 DESIGNATED SITE

The site designated by the Commission in this permit is the site described below and shown on the site permit maps attached to this permit. The final solar facility design will occupy up to 800 acres of land.

The preliminary project layout is shown on the official site permit map(s). The preliminary layout represents the approximate location of photovoltaic tracker rows and associated facilities within the project boundary and identifies a layout that seeks to minimize the overall potential human and environmental impacts of the project, which were evaluated in the permitting process. The project boundary serves to provide the Permittee with the flexibility to make minor adjustments to the preliminary layout to accommodate requests by landowners, local government units, federal and state agency requirements, and unforeseen conditions encountered during the detailed engineering and design process. Any modification to the location of a photovoltaic tracker row or other associated facility depicted in the preliminary layout shall be done in such a manner to have comparable overall human and environmental impacts and shall be specifically identified in the site plan pursuant to Section 8.3.

4.0 GENERAL CONDITIONS

The Permittee shall comply with the following conditions during construction and operation of the solar energy generating system and associated facilities over the life of this permit.

4.1 Notification

Within 14 days of issuance of this permit, the Permittee shall send a copy of the permit to any regional development commission, county, city, and township in which any part of the site is located. The Permittee shall provide all affected landowners with a copy of this permit and, as a separate information piece, the complaint procedures after issuance of this permit. The Permittee shall contact participating landowners prior to entering their property or conducting maintenance within the site, unless otherwise negotiated with the affected landowner.

4.2 Construction and Operation Practices

The Permittee shall follow those specific construction practices, operation practices, and material specifications described in the *Joint Application to the Minnesota Public Utilities Commission*

for a Site Permit and Route Permit for the North Star Solar Electric Power Generating Plant and North Star 115 kV High-Voltage Transmission Line, dated February 11, 2015, the Addendum to the Joint Application, dated April 29, 2015, and the record of the proceedings unless this permit establishes a different requirement in which case this permit shall prevail.

4.2.1 Field Representative

The Permittee shall designate a field representative responsible for overseeing compliance with the conditions of this permit during construction of the project. This person shall be accessible by telephone or other means during normal business hours throughout site preparation, construction, cleanup, and restoration.

The Permittee shall file with the Commission the name, address, email, phone number, and emergency phone number of the field representative 14 days prior to commencing construction. The Permittee shall provide the field representative's contact information to affected landowners, residents, local government units and other interested persons. The Permittee may change the field representative at any time upon notice to the Commission, affected landowners, residents, local government units and other interested persons.

4.2.2 Site Manager

The Permittee shall designate a site manager responsible for overseeing compliance with the conditions of this permit during the commercial operation and decommissioning phases of the project. This person shall be accessible by telephone or other means during normal business hours for the life of this permit.

The Permittee shall file with the Commission the name, address, email, phone number, and emergency phone number of the site manager 14 days prior to placing the facility into commercial operation. The Permittee shall provide the field representative's contact information to affected landowners, residents, local government units and other interested persons. The Permittee may change the site manager at any time upon notice to the Commission, affected landowners, residents, local government units and other interested persons.

4.2.3 Employee Training and Education of Permit Terms and Conditions

The Permittee shall inform all employees, contractors, and other persons involved in the construction and ongoing operation of the solar facility of the terms and conditions of this permit.

4.2.4 Temporary Work Space

Temporary work space and equipment staging areas shall be selected to limit the removal and impacts to vegetation. Temporary work space shall not be sited in wetlands or native prairie as defined in sections 4.2.9 and 4.2.10. Temporary work space shall be sited to comply with standards for development of the shorelands of public waters as defined in Section 4.2.9. Temporary easements outside of the authorized site boundary will be obtained from affected landowners through rental agreements and are not provided for in this permit.

4.2.5 Noise

The Permittee shall comply with noise standards established under Minn. R. 7030.0100 to 7030.0080, at all times at all appropriate locations during operation of the facility. Construction and maintenance activities shall be limited to daytime working hours to ensure nighttime noise level standards will not be exceeded.

4.2.6 Aesthetics

The Permittee shall consider input pertaining to visual impacts from landowners or land management agencies prior to final location of structures with the potential for visual disturbance.

4.2.7 Soil Erosion and Sediment Control

The Permittee shall implement those erosion prevention and sediment control practices recommended by the Minnesota Pollution Control Agency (MPCA) Construction Stormwater Program.

The Permittee shall implement reasonable measures to minimize erosion and sedimentation during construction and shall employ perimeter sediment controls, protect exposed soil by promptly planting, seeding, using erosion control blankets and turf reinforcement mats, stabilizing slopes, protecting storm drain inlets, protecting soil stockpiles, and controlling vehicle tracking. Contours shall be graded as required so that all surfaces provide for proper drainage, blend with the natural terrain, and are left in a condition that will facilitate re-vegetation and prevent erosion. All areas disturbed during construction of the facilities shall be returned to preconstruction conditions.

Where larger areas of one acre or more are disturbed or other areas designated by the MPCA, the Permittee shall obtain a National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Construction Stormwater permit from the MPCA that provides for

development of a stormwater pollution prevention plan (SWPPP) that describes methods to control erosion and runoff.

4.2.8 Public Lands

In no case shall photovoltaic tracker rows and associated facilities including foundations, access roads, underground cable, and transformers, be located in the public lands identified in Minn. R. 7850.4400, subp. 1, or in federal waterfowl production areas. Photovoltaic tracker rows and associated facilities shall not be located in the public lands identified in Minn. R. 7850.4400, subp. 3, unless there is no feasible and prudent alternative.

4.2.9 Wetlands and Shoreland

Photovoltaic tracker rows and associated facilities, including access roads, underground cable and transformers shall not be placed in public waters and public waters wetlands, as shown on the public water inventory maps prescribed by Minnesota Statutes Chapter 103G, except that electric collector or feeder lines may cross or be placed in public waters or public waters wetlands subject to permits and approvals by the Minnesota Department of Natural Resources (DNR) and the United States Army Corps of Engineers (USACE), and local units of government as implementers of the Minnesota Wetlands Conservation Act. Photovoltaic tracker rows and associated facilities including foundations, access roads, underground cable and transformers, shall be located in compliance with the standards for development of the shorelands of public waters as identified in Minn. R. 6120.3300, and as adopted, Minn. R. 6120.2800, unless there is no feasible and prudent alternative.

Construction in wetland areas shall occur during frozen ground conditions to minimize impacts. When construction during winter is not possible, wooden or composite mats shall be used to protect wetland vegetation. Soil excavated from the wetlands and riparian areas shall be contained and not placed back into the wetland or riparian area. Wetlands and riparian areas shall be accessed using the shortest route possible in order to minimize travel through wetland areas and prevent unnecessary impacts.

Wetland and water resource areas disturbed by construction activities shall be restored to preconstruction conditions. Restoration of the wetlands will be performed by Permittee in accordance with the requirements of applicable state and federal permits or laws and landowner agreements.

4.2.10 Native Prairie

The Permittee shall prepare a prairie protection and management plan in consultation with the DNR if native prairie, as defined in Minn. Stat. § 84.02, subd. 5, is identified within the site boundaries. The Permittee shall file the plan 30 days prior to submitting the site plan required by Section 8.3 of this permit. The plan shall address steps that will be taken to avoid impacts to native prairie and mitigation to unavoidable impacts to native prairie by restoration or management of other native prairie areas that are in degraded condition, by conveyance of conservation easements, or by other means agreed to by the Permittee, DNR and the Commission.

Solar panels and associated facilities including foundations, access roads, collector and feeder lines, underground cable, and transformers shall not be placed in native prairie unless addressed in a prairie protection and management plan and shall not be located in areas enrolled in the Native Prairie Bank Program. Construction activities, as defined in Minn. Stat. § 216E.01, shall not impact native prairie unless addressed in a prairie protection and management plan.

4.2.11 Vegetation Management

The Permittee shall disturb or clear the site only to the extent necessary to assure suitable access for construction, safe operation and maintenance of the project.

The Permittee shall minimize the number of trees to be removed in selecting the site layout specifically preserving to the maximum extent practicable windbreaks, shelterbelts, living snow fences, and vegetation, to the extent that such actions do not violate sound engineering principles.

The Permittee shall work with the DNR to establish and manage vegetation that will benefit pollinators and other wildlife, to the extent that the vegetation will not interfere with the operation of the facility.

4.2.12 Application of Herbicides

The Permittee shall restrict herbicide use to those herbicides and methods of application approved by the Minnesota Department of Agriculture and the U.S. Environmental Protection Agency. Selective foliage or basal application shall be used when practicable. All herbicides shall be applied in a safe and cautious manner so as not to damage adjacent properties including crops, orchards, tree farms, apiaries, or gardens. The Permittee shall contact the landowner or designee to obtain approval for the use of herbicide at least 14 days prior to any application on their property. The landowner may request that there be no application of herbicides on any part of the site within the landowner's property. The Permittee shall provide notice of herbicide application to known beekeepers operating apiaries within one mile of the project site at least 14 days prior to such application.

4.2.13 Invasive Species

The Permittee shall employ best management practices to avoid the potential spread of invasive species on lands disturbed by project construction activities.

4.2.14 Noxious Weeds

The Permittee shall take all reasonable precautions against the spread of noxious weeds during all phases of construction. When utilizing seed to establish temporary and permanent vegetative cover on exposed soil the Permittee shall select site appropriate seed certified to be free of noxious weeds. To the extent possible, the Permittee shall use native seed mixes. The Permittee shall consult with landowners on the selection and use of seed for replanting.

4.2.15 Roads

The Permittee shall advise the appropriate governing bodies having jurisdiction over all state, county, city or township roads that will be used during the construction phase of the project. Where practical, existing roadways shall be used for all activities associated with construction of the solar facility. Oversize or overweight loads associated with the facility shall not be hauled across public roads without required permits and approvals.

The Permittee shall locate all perimeter fencing and vegetative screening in a manner that does not interfere with routine maintenance activities and allows for continued safe travel on public roads.

The Permittee shall construct the least number of site access roads it can. Access roads shall not be constructed across streams and drainage ways without the required permits and approvals. Access roads shall be constructed in accordance with all necessary township, county or state road requirements and permits.

The Permittee shall promptly repair private roads or lanes damaged when moving equipment or when obtaining access to the site, unless otherwise negotiated with the affected landowner.

4.2.16 Archaeological and Historic Resources

The Permittee shall make every effort to avoid impacts to identified archaeological and historic resources when constructing the solar facility. The Permittee shall consult the State Historic Preservation Office (SHPO) on the need to conduct a survey of the project site. If a survey is required, the results shall be submitted to the Commission with the site plan pursuant to Section 8.3.

In the event that a resource is encountered, the Permittee shall contact and consult with SHPO and the State Archaeologist. Where feasible, avoidance of the resource is required. Where not feasible, mitigation must include an effort to minimize project impacts on the resource consistent with SHPO and State Archaeologist requirements.

Prior to construction, workers shall be trained about the need to avoid cultural properties, how to identify cultural properties, and procedures to follow if undocumented cultural properties, including gravesites, are found during construction. If human remains are encountered during construction, the Permittee shall immediately halt construction and promptly notify local law enforcement and the State Archaeologist. Construction at such location shall not proceed until authorized by local law enforcement or the State Archaeologist.

4.2.17 Interference with Communication Devices

If interference with radio or television, satellite, wireless internet, GPS-based agriculture navigation systems or other communication devices is caused by the presence or operation of the project, the Permittee shall take whatever action is feasible to restore or provide reception equivalent to reception levels in the immediate area just prior to the construction of the project.

4.2.18 Restoration

The Permittee shall restore the areas affected by construction of the solar facility to the condition that existed immediately before construction began to the extent possible. The time period to complete restoration may be no longer than 12 months after completion of the construction, unless otherwise negotiated with the affected landowner. Restoration shall be compatible with the safe operation, maintenance and inspection of the project. Within 60 days after completion of all restoration activities the Permittee shall advise the Commission in writing of the completion of such activities.

4.2.19 Cleanup

All waste and scrap that is the product of construction shall be removed from the site and all premises on which construction activities were conducted and properly disposed of upon completion of each task. Personal litter, including bottles, cans, and paper from construction activities shall be removed on a daily basis.

4.2.20 Pollution and Hazardous Wastes

All appropriate precautions to protect against pollution of the environment shall be taken by the Permittee. The Permittee shall be responsible for compliance with all laws applicable to the generation, storage, transportation, clean up and disposal of all wastes generated during construction and restoration of the site.

4.2.21 Damages

The Permittee shall promptly repair or fairly compensate landowners for damage to crops, fences, private roads and lanes, landscaping, drain tile, or other damages sustained during construction and operation unless otherwise negotiated with the affected landowner.

4.2.22 Public Safety

The Permittee shall provide educational materials to landowners adjacent to the site and, upon request, to interested persons about the project and any restrictions or dangers associated with the project. The Permittee shall also provide any necessary safety measures such as warning signs and gates for traffic control or to restrict public access. The Permittee shall submit the location of all underground facilities, as defined in Minn. Stat. § 216D.01, subd. 11, to Gopher State One Call following the completion of construction at the site.

4.2.23 Site Identification

The solar site shall be marked with a visible identification number and or street address.

4.3 Feeder Lines

Feeder lines that carry power from an internal project interconnection point to the project substation or interconnection point on the electrical grid may be overhead or underground. Overhead and underground feeder lines that parallel public roads shall be placed within the public right-of-way or on private land immediately adjacent to the road. The Permittee shall obtain approval from the private landowner or government unit responsible for the affected right-of-way.

Feeder line locations shall be located in such a manner as to minimize interference with agricultural operations including, but not limited, to existing drainage patterns, drain tile, future tiling plans, and ditches. Safety shields shall be placed on all guy wires associated with overhead feeder lines. The Permittee shall submit the engineering drawings of all collector and feeder lines with the site plan pursuant to Section 8.3.

4.4 Other Requirements

4.4.1 Safety Codes and Design Requirements

The solar energy generating system and associated facilities shall be designed to meet or exceed all relevant local and state codes, Institute of Electrical and Electronics Engineers, Inc. (IEEE) standards, the National Electric Safety Code (NESC), and North American Electric Reliability Corporation (NERC) requirements.

4.4.2 Other Permits and Regulations

The Permittee shall comply with all applicable state rules and statutes. The Permittee shall obtain all required permits for the project and comply with the conditions of these permits. The Permittee shall submit a copy of such permits to the Commission upon request.

5.0 SPECIAL CONDITIONS

The Permittee shall provide a report to the Commission as part of the site plan submission required under Section 8.3 that describes the actions taken and mitigative measures developed regarding the project and the following special conditions. Special conditions shall take precedence over other conditions of this permit should there be a conflict.

5.1 Landscaping Plan

The Permittee shall develop a site specific landscaping plan in consultation with Chisago County, and considering local government ordinances and setbacks, that reasonably mitigates the visual impacts to all adjacent residences. The landscaping plan shall be filed at least 14 days prior to the pre-construction meeting.

5.2 Vegetation Management Plan

The Permittee shall develop a vegetation management plan in consultation with the DNR to the benefit of pollinators and other wildlife, and to enhance soil water retention and reduce storm

water runoff and erosion. The vegetation management plan shall be filed at least 14 days prior to the pre-construction meeting.

5.3 Security Fence

The security fence surrounding the facility shall be designed to minimize the visual impact of the project. While maintaining compliance with the NESC, the Permittee shall install an eight-foot wood pole and woven wire fence, or substantially similar, around the perimeter of the facility. This type of fence is commonly referred to as a "deer fence" or "agricultural fence." The permittee shall consult with the DNR to insure the design of the facilities preserves or replaces identified natural wildlife, wetland, woodland or other corridors.

5.4 Tree Removal Timetables

Tree removal required by the project shall be done between October 1st and March 30th to mitigate negative impacts to the northern long-eared bat and to minimize potential impacts on migratory birds, unless other appropriate time limitations on tree clearing are determined in consultation with the U.S. Fish and Wildlife Service (USFWS). The Permittee shall file an account of that consultation 14 days prior to the pre-construction meeting.

6.0 DELAY IN CONSTRUCTION

If the Permittee has not commenced construction or improvement of the site within four years after the date of issuance of this permit the Permittee shall file a report on the failure to construct and the Commission shall consider suspension of the permit in accordance with Minn. R. 7850.4700.

7.0 COMPLAINT PROCEDURES

Prior to the start of construction, the Permittee shall submit to the Commission the procedures that will be used to receive and respond to complaints. The procedures shall be in accordance with the requirements of Minn. R. 7829.1500 or Minn. R. 7829.1700, and as set forth in the complaint procedures attached to this permit.

Upon request, the Permittee shall assist the Commission with the disposition of unresolved or longstanding complaints. This assistance shall include, but is not limited to, the submittal of complaint correspondence and complaint resolution efforts.

8.0 COMPLIANCE REQUIREMENTS

Failure to timely and properly make compliance filings required by this permit is a failure to comply with the conditions of this permit. Compliance filings must be electronically filed with the Commission.

8.1 **Pre-Construction Meeting**

Prior to the start of any construction, the Permittee shall participate in a pre-construction meeting with the Department of Commerce and Commission staff to review pre-construction filing requirements, scheduling, and to coordinate monitoring of construction and site restoration activities. Within 14 days following the pre-construction meeting the Permittee shall file with the Commission, a summary of the topics reviewed and discussed and a list of attendees. The Permittee shall indicate in the filing the construction start date.

8.2 **Pre-Operation Meeting**

At least 14 days prior to commercial operation of the facility, the Permittee shall participate in a pre-operation meeting with the Department of Commerce and Commission staff to coordinate field monitoring of operation activities for the project. Within 14 days following the pre-operation meeting the Permittee shall file with the Commission, a summary of the topics reviewed and discussed and a list of attendees.

8.3 Site Plan

At least 14 days prior to the pre-construction meeting, the Permittee shall provide the Commission with a site plan that includes specifications and drawings for site preparation and grading; specifications and locations of photovoltaic panels and other structures to be constructed including all electrical equipment, pollution control equipment, fencing, roads, and other associated facilities; and procedures for cleanup and restoration. The documentation shall include maps depicting the site boundary and layout in relation to that approved by this permit.

The Permittee may not commence construction until the 30 days has expired or until the Commission has advised the Permittee in writing that it has completed its review of the documents and determined that the planned construction is consistent with this permit. If the Permittee intends to make any significant changes to its site plan or the specifications and drawings after submission to the Commission, the Permittee shall notify the Commission at least five days before implementing the changes. No changes shall be made that would be in violation of any of the terms of this permit.

8.4 Status Reports

The Permittee shall report to the Commission on progress regarding site construction. The Permittee need not report more frequently than monthly.

8.5 Notification to Commission

At least three days before the solar facility is to be placed into service, the Permittee shall notify the Commission of the date on which the facility will be placed into service and the date on which construction was complete.

8.6 As-Builts

Within 60 days after completion of construction, the Permittee shall submit copies of all final asbuilt plans and specifications developed during the project.

8.7 GPS Data

Within 60 days after completion of construction, the Permittee shall submit to the Commission, in the format requested by the Commission, geo-spatial information (e.g., ArcGIS compatible map files, GPS coordinates, associated database of characteristics) for all structures associated with the solar energy generating system.

8.8 **Project Energy Production**

The Permittee shall, by February 1st following each complete or partial year of project operation, file a report with the Commission on the monthly energy production of the facility including:

- (a) the installed nameplate capacity of the permitted facility;
- (b) the total daily energy generated by the facility in MW hours;
- (c) the total monthly energy generated by the facility in MW hours;
- (d) the monthly capacity factor of the facility;
- (e) yearly energy production and capacity factor for the facility;
- (f) the average monthly and average annual solar strength gradient measured in kWh/m²/Day observed at the facility;

- (g) the operational status of the facility and any major outages, major repairs, or performance improvements occurring in the previous year; and
- (h) any other information reasonably requested by the Commission.

This information shall be considered public and must be filed electronically.

8.9 Emergency Response

The Permittee shall prepare an emergency response plan in consultation with the emergency responders having jurisdiction over the facility prior to project construction. The Permittee shall submit a copy of the plan, along with any comments from emergency responders, to the Commission at least 14 days prior to the pre-construction meeting and a revised plan, if any, at least 14 days prior to the pre-operation meeting. The Permittee shall provide as a compliance filing, confirmation that the emergency response plan was provided to the emergency responders and Public Safety Answering Points (PSAP) with jurisdiction over the facility, prior to commencement of construction. The Permittee shall obtain and register the facility address or other location indicators acceptable to the emergency responders and PSAP having jurisdiction over the facility.

8.10 Extraordinary Events

Within 24 hours of discovery of an occurrence, the Permittee shall notify the Commission of any extraordinary event. Extraordinary events include but shall not be limited to: fires, solar panel collapse, acts of sabotage, collector or feeder line failure, and injured worker or private person. The Permittee shall, within 30 days of the occurrence, file a report with the Commission describing the cause of the occurrence and the steps taken to avoid future occurrences.

8.11 Wildlife Injuries and Fatalities

The Permittee shall report any wildlife injuries and fatalities to the Commission quarterly.

9.0 DECOMMISSIONING AND RESTORATION

9.1 Decommissioning Plan

The Permittee shall submit a decommissioning plan to the Commission at least fourteen 14 days prior to the pre-operation meeting documenting the manner in which the Permittee anticipates decommissioning the project. The Permittee shall also submit the decommissioning plan to the local unit of government having direct zoning authority over the project. The Permittee shall

ensure that it carries out its obligations to provide for the resources necessary to fulfill its requirements to properly decommission the project at the appropriate time. The Commission may at any time request the Permittee to file a status report with the Commission describing how the Permittee is fulfilling this obligation.

9.2 Site Restoration

Upon expiration of this permit or upon termination of operation of the project, the Permittee shall have the obligation to dismantle and remove from the site all solar panels, mounting steel posts and beams, inverters, transformers, overhead and underground cables and lines, foundations, buildings, and ancillary equipment. To the extent feasible, the Permittee shall restore and reclaim the site to pre-project topography and topsoil quality. All access roads shall be removed unless written approval is given by the affected landowner requesting that one or more roads, or portions thereof, be retained. All such agreements between the Permittee and the affected landowner shall be submitted to the Commission prior to completion of restoration activities. The site shall be restored in accordance with the requirements of this condition within 18 months of termination.

9.3 Abandoned Solar Installations

The Permittee shall advise the Commission of any solar facilities that are abandoned prior to termination of operation of the project. The project, or any equipment within the project, shall be considered abandoned after one year without energy production and the land restored pursuant to Section 9.2 unless a plan is developed and submitted to the Commission outlining the steps and schedule for returning the project, or any equipment within the project, to service.

10.0 COMMISSION AUTHORITY AFTER PERMIT ISSUANCE

10.1 Final Boundaries

After completion of construction the Commission shall determine the need to adjust the final site boundaries required for the project. This permit may be modified, after notice and opportunity for public hearing, to represent the actual site boundary required by the Permittee to operate the project authorized by this permit.

10.2 Expansion of Site Boundaries

No expansion of the site boundary described in this permit shall be authorized without the approval of the Commission. The Permittee may submit to the Commission a request for a

change in the boundary of the site for the project. The Commission will respond to the requested change in accordance with applicable statutes and rules.

10.3 Periodic Review

The Commission shall initiate a review of this permit and the applicable conditions at least once every five years. The purpose of the periodic review is to allow the Commission, the Permittee, and other interested persons an opportunity to consider modifications in the conditions of this permit. No modification may be made except in accordance with applicable statutes and rules.

10.4 Modification of Conditions

After notice and opportunity for hearing this permit may be modified or amended for cause, including but not limited to the following:

- (a) violation of any condition in this permit;
- (b) endangerment of human health or the environment by operation of the Project; or
- (c) existence of other grounds established by rule.

10.5 More Stringent Rules

The issuance of this permit does not prevent the future adoption by the Commission of rules or orders more stringent than those now in existence and does not prevent the enforcement of these more stringent rules and orders against the Permittee.

11.0 PERMIT AMENDMENT

This permit may be amended at any time by the Commission. Any person may request an amendment of the conditions of this permit by submitting a request to the Commission in writing describing the amendment sought and the reasons for the amendment. The Commission will mail notice of receipt of the request to the Permittee. The Commission may amend the conditions after affording the Permittee and interested persons such process as is required.

12.0 TRANSFER OF PERMIT

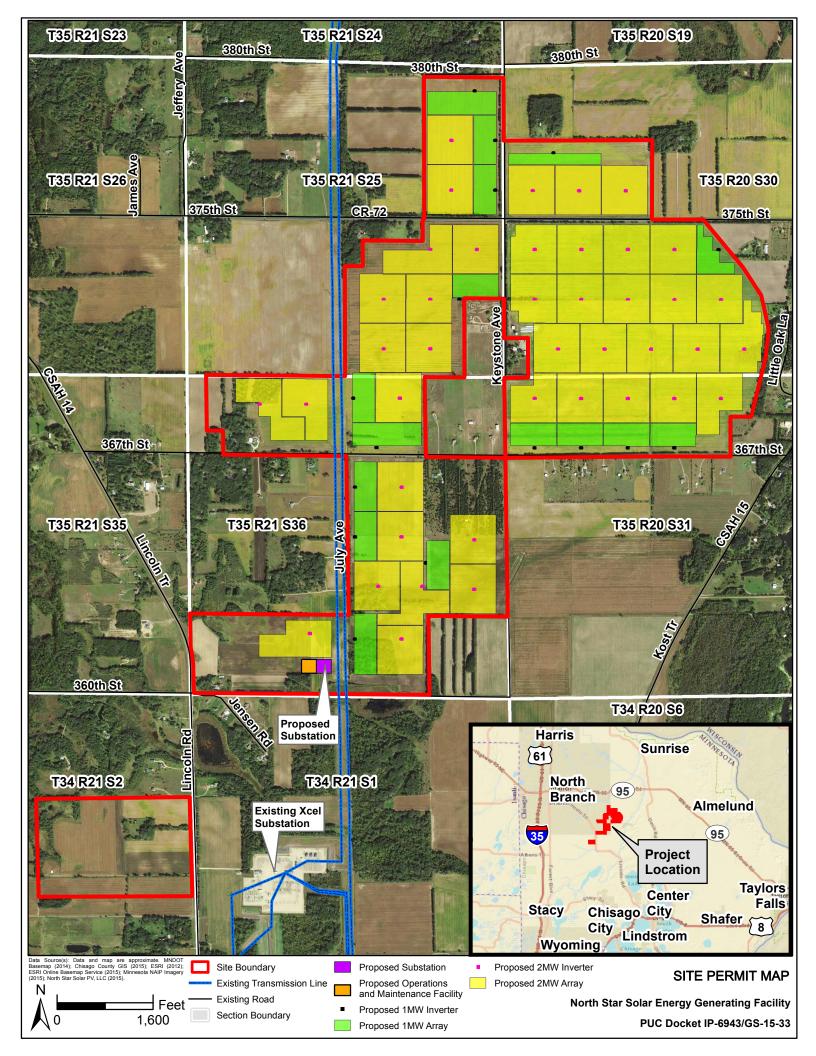
The Permittee may request at any time that the Commission transfer this permit to another person or entity. The Permittee shall provide the name and description of the person or entity to

whom the permit is requested to be transferred, the reasons for the transfer, a description of the facilities affected, and the proposed effective date of the transfer.

The person to whom the permit is to be transferred shall provide the Commission with such information as the Commission shall require to determine whether the new Permittee can comply with the conditions of the permit. The Commission may authorize transfer of the permit after affording the Permittee, the new Permittee, and interested persons such process as is required.

13.0 REVOCATION OR SUSPENSION OF THE PERMIT

The Commission may initiate action to revoke or suspend this permit at any time. The Commission shall act in accordance with the requirements of Minn. R. 7850.5100, to revoke or suspend the permit.



MINNESOTA PUBLIC UTILITIES COMMISSION COMPLAINT HANDLING PROCEDURES FOR PERMITTED ENERGY FACILITIES

A. Purpose

To establish a uniform and timely method of reporting complaints received by the permittee concerning permit conditions for site preparation, construction, cleanup and restoration, operation, and resolution of such complaints.

B. Scope

This document describes complaint reporting procedures and frequency.

C. Applicability

The procedures shall be used for all complaints received by the permittee and all complaints received by the Minnesota Public Utilities Commission (Commission) under Minn. R. 7829.1500 or Minn. R. 7829.1700 relevant to this permit.

D. Definitions

Complaint: A verbal or written statement presented to the permittees by a person expressing dissatisfaction or concern regarding site preparation, cleanup or restoration or other route and associated facilities permit conditions. Complaints do not include requests, inquiries, questions or general comments.

Substantial Complaint: A written complaint alleging a violation of a specific permit condition that, if substantiated, could result in permit modification or suspension pursuant to the applicable regulations.

Unresolved Complaint: A complaint which, despite the good faith efforts of the permittee and a person, remains to both or one of the parties unresolved or unsatisfactorily resolved.

Person: An individual, partnership, joint venture, private or public corporation, association, firm, public service company, cooperative, political subdivision, municipal corporation, government agency, public utility district, or any other entity, public or private, however organized.

E. Complaint Documentation and Processing

- 1. The permittee shall designate an individual to summarize complaints for the Commission. This person's name, phone number and email address shall accompany all complaint submittals.
- 2. A person presenting the complaint should to the extent possible, include the following information in their communications:
 - a. name, address, phone number, and email address;
 - b. date of complaint;
 - c. tract or parcel number; and
 - d. whether the complaint relates to a permit matter or a compliance issue.
- 3. The permittee shall document all complaints by maintaining a record of all applicable information concerning the complaint, including the following:
 - a. docket number and project name;
 - b. name of complainant, address, phone number and email address;
 - c. precise description of property or parcel number;
 - d. name of permittee representative receiving complaint and date of receipt;
 - e. nature of complaint and the applicable permit condition(s);
 - f. activities undertaken to resolve the complaint; and
 - g. final disposition of the complaint.

F. Reporting Requirements

The permittee shall commence complaint reporting at the beginning of project construction and continue through the term of the permit. The permittee shall report all complaints to the Commission according to the following schedule:

Immediate Reports: All substantial complaints through the term of the permit shall be reported to the Commission the same day received, or on the following working day for complaints received after working hours. Such reports are to be directed to the Commission's Consumer Affairs Office at 1-800-657-3782 (voice messages are acceptable) or consumer.puc@state.mn.us. For e-mail reporting, the email subject line should read "PUC EFP Complaint" and include the appropriate project docket number.

Monthly Reports: During project construction and restoration a summary of all complaints, including substantial complaints received or resolved during the preceding month, shall be filed by the 15th of each month to Daniel P. Wolf, Executive Secretary, Public Utilities Commission, using the eDockets system. The eDockets system is located at: https://www.edockets.state.mn.us/EFiling/home.jsp

If no complaints were received during the preceding month, the permittee shall file a summary indicating that no complaints were received.

G. Complaints Received by the Commission

Complaints received directly by the Commission from aggrieved persons regarding site preparation, construction, cleanup, restoration, operation and maintenance shall be promptly sent to the permittee.

H. Commission Process for Unresolved Complaints

Commission staff shall perform an initial evaluation of unresolved complaints submitted to the Commission. Complaints raising substantial permit issues shall be processed and resolved by the Commission. Staff shall notify the permittee and appropriate persons if it determines that the complaint is a substantial complaint. With respect to such complaints, each party shall submit a written summary of its position to the Commission no later than ten days after receipt of the staff notification. The complaint will be presented to the Commission for a decision as soon as practicable.

I. Permittee Contacts for Complaints and Complaint Reporting

Complaints may filed by mail or email to:

Billy Scarborough Swinerton Renewable Energy 16798 West Bernardo Drive Sand Diego, CA 92127 760-317-8803 sre_north_star@swinerton.com

This information shall be maintained current by informing the Commission of any changes as they become effective.

MINNESOTA PUBLIC UTILITIES COMMISSION COMPLIANCE FILING PROCEDURE FOR PERMITTED ENERGY FACILITIES

A. Purpose

To establish a uniform and timely method of submitting information required by the Commission energy facility permits.

B. Scope and Applicability

This procedure encompasses all compliance filings required by permit.

C. Definitions

Compliance Filing: A filing of information to the Commission, where the information is required by a Commission site or route permit.

D. Responsibilities

1. The permittee shall file all compliance filings with Daniel P. Wolf, Executive Secretary, Public Utilities Commission, through the eDockets system. The eDockets system is located at: https://www.edockets.state.mn.us/EFiling/home.jsp

General instructions are provided on the eDockets website. Permittees must register on the website to file documents.

- 2. All filings must have a cover sheet that includes:
 - a. Date
 - b. Name of submitter/permittee
 - c. Type of permit (site or route)
 - d. Project location
 - e. Project docket number
 - f. Permit section under which the filing is made
 - g. Short description of the filing

3. Filings that are graphic intensive (e.g., maps, engineered drawings) must, in addition to being electronically filed, be submitted as paper copies and on CD. Paper copies and CDs should be sent to: 1) Daniel P. Wolf, Executive Secretary, Minnesota Public Utilities Commission, 121 7th Place East, Suite 350, St. Paul, MN 55101-2147, and 2) Department of Commerce, Energy Environmental Review and Analysis, 85 7th Place East, Suite 500, St. Paul, MN 55101-2198.

The Commission may request a paper copy of any electronically filed document.

PERMIT COMPLIANCE FILINGS¹

PERMITTEE: North Star Solar PERMIT TYPE: Solar Energy Generating System Site Permit PROJECT LOCATION: Chisago County PUC DOCKET NUMBER: IP-6943/GS-15-33

Filing Number	Permit Section	Description of Compliance Filing	Due Date
	4.2.1	Field Representative	14 days prior to commencing construction
	4.2.2	Site Manager	14 days prior to commercial operation
	4.2.10	Prairie Protection and Management Plan	30 days prior to submitting site plan, if required
	4.2.16	Historic and Cultural Resource Survey	14 days prior to pre- construction meeting
	4.2.18	Site Restoration Report	60 days after completion of all restoration activities
	4.3	Feeder and Collector Line Engineered Drawings	14 days prior to pre- construction meeting
	5.0	Special Conditions Report	14 days prior to pre- construction meeting
	5.1	Landscaping Plan	14 days prior to pre- construction meeting
	5.2	Vegetation Management Plan	14 days prior to pre- construction meeting

¹ This compilation of permit compliance filings is provided for the convenience of the permittee and the Commission. It is not a substitute for the permit; the language of the permit controls.

Filing Number	Permit Section	Description of Compliance Filing	Due Date
	5.4	Tree Removal Consultation	14 days prior to pre- construction meeting
	6.0	Failure to Construct	Four years after permit issuance, as necessary
	8.1	Pre-Construction Meeting Summary and Construction Star Date	14 days after pre- construction meeting
	8.2	Pre-Operation Meeting Summary	14 days after pre-operation meeting
	8.3	Site Plan	14 days prior to pre- construction meeting
	8.3	Changes to Site Plan after Authorization	Five days prior to implementing changes
	8.4	Status Reports	Monthly
	8.5	Notice of Operation and Completion of Construction	Three days prior to commercial operation
	8.6	As-Builts	60 days after construction is complete
	8.7	GPS Data	60 days after construction is complete
	8.8	Energy Production	Yearly on February 1st
	8.9	Emergency Response Plan	14 days prior to pre- construction meeting

Filing Number	Permit Section	Description of Compliance Filing	Due Date
	8.10	Extraordinary Events	Notification within 24 hours of discovery and report 30 days after occurrence
	8.11	Wildlife Injuries and Fatalities	Quarterly
	9.1	Decommissioning Plan	14 days prior to pre- operation meeting
	Complaint Reporting	Monthly Complaint Reports	Monthly during project construction and restoration
	Complaint Reporting	Immediate Complaint Reports	By the following day throughout the life of the permit

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

ROUTE PERMIT A HIGH-VOLTAGE TRANSMISSION LINE AND ASSOCIATED FACILITIES

IN

CHISAGO COUNTY

ISSUED TO NORTH STAR SOLAR PV LLC

PUC DOCKET NO. IP-6943/GS-15-33

In accordance with the requirements of Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850, this route permit is hereby issued to:

North Star Solar PV LLC

The Permittee is authorized by this route permit to construct and operate an approximately onemile long 115 kilovolt transmission line in Chisago County, Minnesota.

The high-voltage transmission line and associated facilities shall be built within the route identified in this permit and as portrayed in the official route map(s), and in compliance with the conditions specified in this permit.

Approved and adopted this 16th day of February, 2016

BY ORDER OF THE COMMISSION

Daniel P. Wolf, Executive Secretary

This document can be made available in alternative formats (e.g., large print or audio) by calling 651-296-0406 (voice). Persons with hearing loss or speech disabilities may call us through their preferred Telecommunications Relay Service.

CONTENTS

1.0	ROUTE P	ERMIT	1
1.1	Pre-emp	tion	1
2.0	PROJECT	DESCRIPTION	1
2.1	Substatio	ons and Associated Facilities	1
2.2	Project I	Location	2
2.3	Structure	es	2
2.4	Conduct	ors	2
3.0	DESIGNA	ATED ROUTE	2
4.0	RIGHT-O	F-WAY	2
5.0	GENERA	L CONDITIONS	3
5.1	Notificat	tion	3
5.2	Construc	ction and Operation Practices	3
	5.2.1	Field Representative	4
	5.2.2	Employee Training and Education of Permit Terms and Conditions	4
	5.2.3	Public Services, Public Utilities, and Existing Easements	4
	5.2.4	Temporary Work Space	5
	5.2.5	Noise	5
	5.2.6	Aesthetics	5
	5.2.7	Soil Erosion and Sediment Control	5
	5.2.8	Wetlands and Water Resources	6
	5.2.9	Vegetation Removal and Protection	6
	5.2.10	Application of Herbicides	7
	5.2.11	Invasive Species	7
	5.2.12	Noxious Weeds	7
	5.2.13	Roads	7
	5.2.14	Archaeological and Historic Resources	8
	5.2.15	Avian Mitigation	8
	5.2.16	Restoration	9
	5.2.17	Cleanup	9
	5.2.18	Pollution and Hazardous Wastes	9
	5.2.19	Damages	9
5.3	Electrica	al Performance Standards	9
	5.3.1	Grounding	9
	5.3.2	Electric Field 1	0
	5.3.3	Interference with Communication Devices 1	0

5.4	Other Requirements
	5.4.1 Safety Codes and Design Requirements 10
	5.4.2 Other Permits and Regulations
6.0	SPECIAL CONDITIONS
6.1	Tree Removal Timetables 11
7.0	DELAY IN CONSTRUCTION
8.0	COMPLAINT PROCEDURES 11
9.0	COMPLIANCE REQUIREMENTS 11
9.1	Plan and Profile11
9.2	Status Reports
9.3	Notification to Commission 12
9.4	As-Builts 12
9.5	GPS Data12
10.0	PERMIT AMENDMENT
11.0	TRANSFER OF PERMIT
12.0	REVOCATION OR SUSPENSION OF THE PERMIT

FIGURES

Official Route Maps

ATTACHMENTS

Complaint Procedures for a Permitted Energy Facilities Compliance Filing Procedures for Permitted Energy Facilities

1.0 ROUTE PERMIT

The Minnesota Public Utilities Commission (Commission) hereby issues this route permit to North Star Solar PV LLC (Permittee) pursuant to Minnesota Statutes Chapter 216E and Minnesota Rules Chapter 7850. This permit authorizes the North Star Solar PV LLC to construct and operate an approximately one-mile long 115 kilovolt (kV) transmission line in Chisago County, Minnesota, and as identified in the attached route permit maps, hereby incorporated into this document.

1.1 Pre-emption

Pursuant to Minn. Stat. § 216E.10, this route permit shall be the sole approval required to be obtained by the Permittee for construction of the transmission facilities and this permit shall supersede and preempt all zoning, building, or land use rules, regulations, or ordinances promulgated by regional, county, local and special purpose government.

2.0 PROJECT DESCRIPTION

The project includes the construction and operation of approximately one-mile of new 115 kV single-circuit transmission line in Chisago County, Minnesota. The 115 kV transmission will connect a new proposed substation to be constructed on the site of the North Star Solar Energy Generating Facility with the existing Xcel Energy Chisago substation. The new 115 kV transmission will parallel existing 500 kV and 230 kV. The northern portion of the transmission line route is located on private land under agreements with North Star and the southern portion of the route is located on land owned by Xcel Energy.

2.1 Substations and Associated Facilities

The new substation for the facility will be located in North Branch Township in the southeast 1/4 of the southwest 1/4 of Section 36. The substation is estimated to occupy approximately two acres of land and will consist of supporting structures for high-voltage electrical structures, breakers, transformers, lightning protection, secondary containment areas for the transformer, and necessary control equipment. The substation area will be graded and finished with crush rock and will include a parking area. The substation will be enclosed by a 125 foot by 225 foot fence surrounded by a minimum 20-foot buffer. Underground 34.5 kV collector lines from the North Star Solar Facility will deliver energy to the substation.

2.2 Project Location

County	Political Boundary	Township	Range	Section(s)
Chisago	City of North Branch	35N	21W	36
Chisago	Lent Township	34N	21W	1

2.3 Structures

The primary tangent structures authorized for the project are single pole wood or galvanized/selfweathering steel braced-post structures that will be direct-embedded. The structures will be approximately 70 feet in height with a span of 300 to 340 feet between structures.

2.4 Conductors

The phase wires will be 795-kcmil 26/7 aluminum conductor composite reinforced (ACCR) conductor or a conductor of similar capacity. A shield wire will be installed above the conductors for lightning protection.

3.0 DESIGNATED ROUTE

The route width approved by the Commission in this permit is a variable route width of between 0.25 and 0.50 miles within which the right-of-way will be located and as shown in the route maps attached to this permit.

The identified route widths will provide the Permittee with flexibility for minor adjustments of the alignment or right-of-way to accommodate landowner requests and unforeseen conditions. The final alignment (i.e., permanent and maintained rights-of-way) will be located within this designated route unless otherwise authorized by the Commission.

4.0 RIGHT-OF-WAY

The approved right-of-way width for the project is up to 75 feet. This permit anticipates that the right-of-way will generally conform to the alignment identified on the attached route permit maps unless changes are requested by individual landowners or unforeseen conditions are encountered or are otherwise provided for by this permit.

The anticipated right-of-way for the 115 kV transmission line exists the proposed North Star Solar Energy Generating Facility substation and extends approximately 3,000 feet south. The

right-of-way then turns west and proceeds approximately 1,790 feet along the northern boundary of the existing Xcel Chisago substation before turning south for approximately 1,040 feet and entering the Xcel Chisago substation at its southwest corner.

Any modifications within the designated route shall be located so as to have comparable overall impacts relative to the factors in Minn. R. 7850.4100, as does the alignment identified in this permit, and shall be specifically identified and documented in and approved as part of the plan and profile submitted pursuant to Section 9.1 of this permit.

Where the transmission line parallels existing highway and other road rights-of-way, the transmission line right-of-way shall occupy and utilize the existing right-of-way to the maximum extent possible; consistent with the criteria in Minn. R. 7850.4100 and the other requirements of this permit; and for highways under the jurisdiction of the Minnesota Department of Transportation (Mn/DOT), the procedures for accommodating utilities in trunk highway rights-of-way.

5.0 GENERAL CONDITIONS

The Permittee shall comply with the following conditions during construction and operation of the transmission line and associated facilities over the life of this permit.

5.1 Notification

The Permittee shall provide all affected landowners with a copy of this permit and, as a separate information piece, the complaint procedures at the time of the first contact with the landowners after issuance of this permit. The Permittee shall contact landowners prior to entering the property or conducting maintenance along the route. The Permittee shall work with landowners to locate the high-voltage transmission line to minimize the loss of agricultural land, forest, and wetlands, and to avoid homes and farmsteads.

At the time of first contact, the Permittee shall also provide all affected landowners with a copy of the Department of Commerce's Rights-of-Way and Easements for Energy Facility Construction and Operation fact sheet.¹

5.2 Construction and Operation Practices

The Permittee shall follow those specific construction practices, operation practices, and material specifications described in the *Joint Application to the Minnesota Public Utilities Commission* for a Site Permit and Route Permit for the North Star Solar Electric Power Generating Plant and

 $^{^{1}\} http://mn.gov/commerce/energy facilities/documents/Easements\%20Fact\%20Sheet_08.05.14.pdf$

North Star 115 kV High-Voltage Transmission Line, dated February 11, 2015, the Addendum to the Joint Application, dated April 29, 2015, and the record of the proceedings unless this permit establishes a different requirement in which case this permit shall prevail.

5.2.1 Field Representative

The Permittee shall designate a field representative responsible for overseeing compliance with the conditions of this permit during construction of the project. This person shall be accessible by telephone or other means during normal business hours throughout site preparation, construction, cleanup, and restoration.

The Permittee shall file with the Commission the name, address, email, phone number, and emergency phone number of the field representative 14 days prior to commencing construction. The Permittee shall provide the field representative's contact information to affected landowners, residents, local government units and other interested persons. The Permittee may change the field representative at any time upon notice to the Commission, affected landowners, residents, local government units and other interested persons.

5.2.2 Employee Training and Education of Permit Terms and Conditions

The Permittee shall inform and educate all employees, contractors, and other persons involved in the construction and ongoing operation of the transmission line of the terms and conditions of this permit.

5.2.3 Public Services, Public Utilities, and Existing Easements

During construction, the Permittee shall minimize any disruption to public services or public utilities. To the extent disruptions to public services or public utilities occur these will be temporary and the Permittee will restore service promptly. Where any impacts to utilities have the potential to occur the Permittee will work with both landowners and local agencies to determine the most appropriate transmission structure placement.

The Permittee shall work with the landowners, townships, cities, and counties along the route to accommodate concerns regarding tree clearing, distance from existing structures, drain tiles, pole depth and placement in relationship to existing roads and road expansion plans.

The Permittee shall cooperate with county, city and township road authorities to develop appropriate signage and traffic management during construction.

5.2.4 Temporary Work Space

The Permittee shall limit temporary easements to special construction access needs and additional staging or lay-down areas required outside of the authorized right-of-way. Temporary space shall be selected to limit the removal and impacts to vegetation. Temporary easements outside of the authorized transmission line right-of-way will be obtained from affected landowners through rental agreements and are not provided for in this permit. Temporary driveways may be constructed between the roadway and the structures to minimize impact using the shortest route possible. Construction mats should be used to minimize impacts on access paths and construction areas.

5.2.5 Noise

The Permittee shall comply with noise standards established under Minn. R. 7030.0100 to 7030.0080, at all times at all appropriate locations during operation of the facility. Construction and maintenance activities shall be limited to daytime working hours to ensure nighttime noise level standards will not be exceeded.

5.2.6 Aesthetics

The Permittee shall consider input pertaining to visual impacts from landowners or land management agencies prior to final location of structures, rights-of-way, and other areas with the potential for visual disturbance. Care shall be used to preserve the natural landscape, minimize tree removal and prevent any unnecessary destruction of the natural surroundings in the vicinity of the project during construction and maintenance.

Structures shall be placed at a distance, consistent with sound engineering principles and system reliability criteria, from intersecting roads, highway, or trail crossings.

5.2.7 Soil Erosion and Sediment Control

The Permittee shall implement those erosion prevention and sediment control practices recommended by the Minnesota Pollution Control Agency (MPCA) Construction Stormwater Program.

The Permittee shall implement reasonable measures to minimize erosion and sedimentation during construction and shall employ perimeter sediment controls, protect exposed soil by promptly planting, seeding, using erosion control blankets and turf reinforcement mats, stabilizing slopes, protecting storm drain inlets, protecting soil stockpiles, and controlling vehicle tracking. Contours shall be graded as required so that all surfaces provide for proper drainage,

blend with the natural terrain, and are left in a condition that will facilitate re-vegetation and prevent erosion. All areas disturbed during construction of the facilities shall be returned to preconstruction conditions.

Where larger areas of one acre or more are disturbed or other areas designated by the MPCA, the Permittee shall obtain a National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Construction Stormwater permit from the MPCA that provides for development of a stormwater pollution prevention plan (SWPPP) that describes methods to control erosion and runoff.

5.2.8 Wetlands and Water Resources

Wetland impact avoidance measures that shall be implemented during design and construction of the transmission line will include spacing and placing the power poles at variable distances to span and avoid wetlands, watercourses, and floodplains. Unavoidable wetland impacts as a result of the placement of poles shall be limited to the immediate area around the poles. To minimize impacts, construction in wetland areas shall occur during frozen ground conditions. When construction during winter is not possible, wooden or composite mats shall be used to protect wetland vegetation. Soil excavated from the wetlands and riparian areas shall be contained and not placed back into the wetland or riparian area.

Wetlands and riparian areas shall be accessed using the shortest route possible in order to minimize travel through wetland areas and prevent unnecessary impacts. No staging or stringing set up areas shall be placed within or adjacent to wetlands or water resources, as practicable. Power pole structures shall be assembled on upland areas before they are brought to the site for installation.

Areas disturbed by construction activities shall be restored to pre-construction conditions. Restoration of the wetlands will be performed by the Permittee in accordance with the requirements of applicable state and federal permits or laws and landowner agreements.

All requirements of the U.S. Army Corps of Engineers (wetlands under federal jurisdiction), Minnesota Department of Natural Resources (Public Waters/Wetlands), and County (wetlands under the jurisdiction of the Minnesota Wetland Conservation Act) shall be met.

5.2.9 Vegetation Removal and Protection

The Permittee shall minimize the number of trees to be removed in selecting the right-of-way specifically preserving to the maximum extent practicable windbreaks, shelterbelts, living snow fences, and vegetation in areas such as trail and stream crossings where vegetative screening may

minimize aesthetic impacts, to the extent that such actions do not violate sound engineering principles or system reliability criteria.

Tall growing species located within the transmission line right-of-way that endanger the safe and reliable operation of the transmission facility will be removed by the Permittee. The Permittee shall leave undisturbed, to the extent possible, existing low growing species in the right-of-way or replant such species in the right-of-way to blend the difference between the right-of-way and adjacent areas, to the extent that the low growing vegetation that will not pose a threat to the transmission facility or impede construction.

5.2.10 Application of Herbicides

The Permittee shall restrict herbicide use to those herbicides and methods of application approved by the Minnesota Department of Agriculture and the U.S. Environmental Protection Agency. Selective foliage or basal application shall be used when practicable. The Permittee shall contact the landowner or his designee to obtain approval for the use of herbicide prior to any application on their property. The landowner may request that there be no application of herbicides on any part of the right-of-way within the landowner's property. All herbicides shall be applied in a safe and cautious manner so as not to damage crops, orchards, tree farms, or gardens. The Permittee shall provide notice of herbicide application to known beekeepers operating apiaries within one mile of the project site at least 14 days prior to such application.

5.2.11 Invasive Species

The Permittee shall employ best management practices to avoid the potential spread of invasive species on lands disturbed by project construction activities.

5.2.12 Noxious Weeds

The Permittee shall take all reasonable precautions against the spread of noxious weeds during all phases of construction. When utilizing seed to establish temporary and permanent vegetative cover on exposed soil the Permittee shall select site appropriate seed certified to be free of noxious weeds. To the extent possible, the Permittee shall use native seed mixes. The Permittee shall consult with landowners on the selection and use of seed for replanting.

5.2.13 Roads

The Permittee shall advise the appropriate governing bodies having jurisdiction over all state, county, city or township roads that will be used during the construction phase of the project. Where practical, existing roadways shall be used for all activities associated with construction of

the solar facility. Oversize or overweight loads associated with the facility shall not be hauled across public roads without required permits and approvals.

The Permittee shall construct the least number of site access roads it can. Access roads shall not be constructed across streams and drainage ways without the required permits and approvals. Access roads shall be constructed in accordance with all necessary township, county or state road requirements and permits.

The Permittee shall promptly repair private roads or lanes damaged when moving equipment or when obtaining access to the site, unless otherwise negotiated with the affected landowner.

5.2.14 Archaeological and Historic Resources

The Permittee shall make every effort to avoid impacts to identified archaeological and historic resources when constructing the transmission facility. The Permittee shall consult the State Historic Preservation Office (SHPO) on the need to conduct a survey of the project site. If a survey is required, the results shall be submitted to the Commission with the plan and profile pursuant to Section 9.1.

In the event that a resource is encountered, the Permittee shall contact and consult with SHPO and the State Archaeologist. Where feasible, avoidance of the resource is required. Where not feasible, mitigation must include an effort to minimize project impacts on the resource consistent with SHPO and State Archaeologist requirements.

Prior to construction, workers shall be trained about the need to avoid cultural properties, how to identify cultural properties, and procedures to follow if undocumented cultural properties, including gravesites, are found during construction. If human remains are encountered during construction, the Permittee shall immediately halt construction and promptly notify local law enforcement and the State Archaeologist. Construction at such location shall not proceed until authorized by local law enforcement or the State Archaeologist.

5.2.15 Avian Mitigation

The Permittee's standard transmission design shall incorporate adequate spacing of conductors and grounding devices in accordance with Avian Power Line Interaction Committee standards to eliminate the risk of electrocution to raptors with larger wingspans that may simultaneously come in contact with a conductor and grounding devices.

The Permittee will consult with the Minnesota Department of Natural Resources (DNR) regarding type and placement of bird diverters.

5.2.16 Restoration

The Permittee shall restore the right-of-way, temporary work spaces, access roads, abandoned right-of-way, and other public or private lands affected by construction of the transmission line. Restoration within the right-of-way must be compatible with the safe operation, maintenance, and inspection of the transmission line. Within 60 days after completion of all restoration activities, the Permittee shall advise the Commission in writing of the completion of such activities.

5.2.17 Cleanup

All waste and scrap that is the product of construction shall be removed from the right-of-way and all premises on which construction activities were conducted and properly disposed of upon completion of each task. Personal litter, including bottles, cans, and paper from construction activities shall be removed on a daily basis.

5.2.18 Pollution and Hazardous Wastes

All appropriate precautions to protect against pollution of the environment must be taken by the Permittee. The Permittee shall be responsible for compliance with all laws applicable to the generation, storage, transportation, clean up and disposal of all wastes generated during construction and restoration of the right-of-way.

5.2.19 Damages

The Permittee shall fairly compensate landowners for damage to crops, fences, private roads and lanes, landscaping, drain tile, or other damages sustained during construction.

5.3 Electrical Performance Standards

5.3.1 Grounding

The Permittee shall design, construct, and operate the transmission line in a manner so that the maximum induced steady-state short-circuit current shall be limited to five milliamperes root mean square (rms) alternating current between the ground and any non-stationary object within the right-of-way, including but not limited to large motor vehicles and agricultural equipment. All fixed metallic objects on or off the right-of-way, except electric fences that parallel or cross the right-of-way, shall be grounded to the extent necessary to limit the induced short-circuit current between ground and the object so as not to exceed one milliampere rms under steady state conditions of the transmission line and to comply with the ground fault conditions specified

in the National Electric Safety Code. The Permittee shall address and rectify any induced current problems that arise during transmission line operation.

5.3.2 Electric Field

The transmission line shall be designed, constructed, and operated in such a manner that the electric field measured one meter above ground level immediately below the transmission line shall not exceed 8.0 kV/m rms.

5.3.3 Interference with Communication Devices

If interference with radio or television, satellite, wireless internet, GPS-based agriculture navigation systems or other communication devices is caused by the presence or operation of the transmission line, the Permittee shall take whatever action is feasible to restore or provide reception equivalent to reception levels in the immediate area just prior to the construction of the line.

5.4 Other Requirements

5.4.1 Safety Codes and Design Requirements

The transmission line and associated facilities shall be designed to meet or exceed all relevant local and state codes, the National Electric Safety Code, and North American Electric Reliability Corporation requirements. This includes standards relating to clearances to ground, clearance to crossing utilities, clearance to buildings, strength of materials, clearances over roadways, right-of-way widths, and permit requirements.

5.4.2 Other Permits and Regulations

The Permittee shall comply with all applicable state rules and statutes. The Permittee shall obtain all required permits for the project and comply with the conditions of these permits. A list of the permits known to be required is included in the permit application. The Permittee shall submit a copy of such permits to the Commission upon request.

6.0 SPECIAL CONDITIONS

The Permittee shall provide a report to the Commission as part of the plan and profile submission that describes the actions taken and mitigative measures developed regarding the project and the following special conditions. Special conditions shall take precedence over other conditions of this permit should there be a conflict.

6.1 Tree Removal Timetables

Tree removal required by the project shall be done between October 1st and March 30th to mitigate negative impacts to the northern long-eared bat and to minimize potential impacts on migratory birds, unless other appropriate time limitations on tree clearing are determined in consultation with the U.S. Fish and Wildlife Service (USFWS). The Permittee shall file an account of that consultation as part of the plan and profile submission.14 days prior to the preconstruction meeting.

7.0 DELAY IN CONSTRUCTION

If the Permittee has not commenced construction or improvement of the route within four years after the date of issuance of this permit the Permittee shall file a report on the failure to construct and the Commission shall consider suspension of the permit in accordance with Minn. R. 7850.4700.

8.0 COMPLAINT PROCEDURES

Prior to the start of construction, the Permittee shall submit to the Commission the procedures that will be used to receive and respond to complaints. The procedures shall be in accordance with the requirements of Minn. R. 7829.1500 or Minn. R. 7829.1700, and as set forth in the complaint procedures attached to this permit.

Upon request, the Permittee shall assist the Commission with the disposition of unresolved or longstanding complaints. This assistance shall include, but is not limited to, the submittal of complaint correspondence and complaint resolution efforts.

9.0 COMPLIANCE REQUIREMENTS

Failure to timely and properly make compliance filings required by this permit is a failure to comply with the conditions of this permit. Compliance filings must be electronically filed with the Commission.

9.1 Plan and Profile

At least 30 days before right-of-way preparation for construction begins on any segment or portion of the project, the Permittee shall provide the Commission with a plan and profile of the right-of-way and the specifications and drawings for right-of-way preparation, construction, structure specifications and locations, cleanup, and restoration for the transmission line. The

documentation shall include maps depicting the plan and profile including the right-of-way, alignment, and structures in relation to the route and alignment approved per this permit.

The Permittee may not commence construction until the 30 days has expired or until the Commission has advised the Permittee in writing that it has completed its review of the documents and determined that the planned construction is consistent with this permit. If the Permittee intends to make any significant changes in its plan and profile or the specifications and drawings after submission to the Commission, the Permittee shall notify the Commission at least five days before implementing the changes. No changes shall be made that would be in violation of any of the terms of this permit.

9.2 Status Reports

The Permittee shall report to the Commission on progress regarding finalization of the route, design of structures, and construction of the transmission line. The Permittee need not report more frequently than monthly.

9.3 Notification to Commission

At least three days before the line is to be placed into service, the Permittee shall notify the Commission of the date on which the line will be placed into service and the date on which construction was complete.

9.4 As-Builts

Within 60 days after completion of construction, the Permittee shall submit copies of all final asbuilt plans and specifications developed during the project.

9.5 GPS Data

Within 60 days after completion of construction, the Permittee shall submit to the Commission, in the format requested by the Commission, geo-spatial information (e.g., ArcGIS compatible map files, GPS coordinates, associated database of characteristics) for all structures associated with the transmission line and each substation connected.

10.0 PERMIT AMENDMENT

This permit may be amended at any time by the Commission. Any person may request an amendment of the conditions of this permit by submitting a request to the Commission in writing describing the amendment sought and the reasons for the amendment. The Commission will mail

notice of receipt of the request to the Permittee. The Commission may amend the conditions after affording the Permittee and interested persons such process as is required.

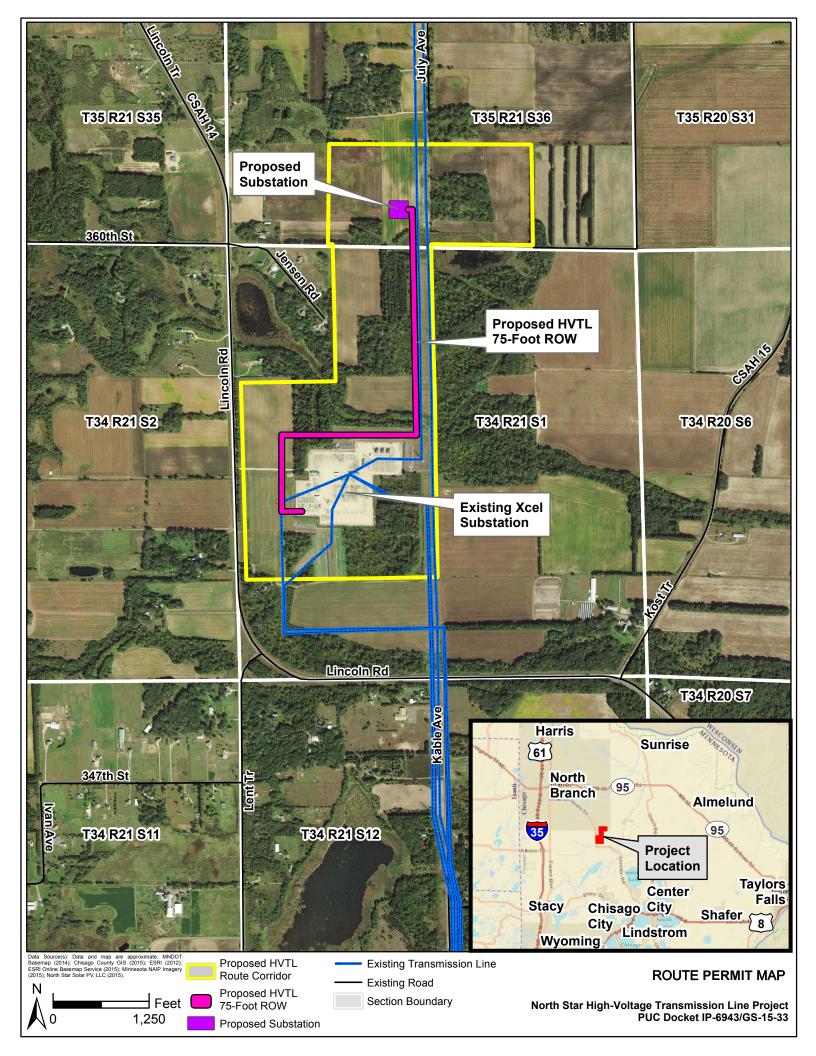
11.0 TRANSFER OF PERMIT

The Permittee may request at any time that the Commission transfer this permit to another person or entity. The Permittee shall provide the name and description of the person or entity to whom the permit is requested to be transferred, the reasons for the transfer, a description of the facilities affected, and the proposed effective date of the transfer.

The person to whom the permit is to be transferred shall provide the Commission with such information as the Commission shall require to determine whether the new Permittee can comply with the conditions of the permit. The Commission may authorize transfer of the permit after affording the Permittee, the new Permittee, and interested persons such process as is required.

12.0 REVOCATION OR SUSPENSION OF THE PERMIT

The Commission may initiate action to revoke or suspend this permit at any time. The Commission shall act in accordance with the requirements of Minn. R. 7850.5100, to revoke or suspend the permit.



MINNESOTA PUBLIC UTILITIES COMMISSION COMPLAINT HANDLING PROCEDURES FOR PERMITTED ENERGY FACILITIES

A. Purpose

To establish a uniform and timely method of reporting complaints received by the permittee concerning permit conditions for site preparation, construction, cleanup and restoration, operation, and resolution of such complaints.

B. Scope

This document describes complaint reporting procedures and frequency.

C. Applicability

The procedures shall be used for all complaints received by the permittee and all complaints received by the Minnesota Public Utilities Commission (Commission) under Minn. R. 7829.1500 or Minn. R. 7829.1700 relevant to this permit.

D. Definitions

Complaint: A verbal or written statement presented to the permittees by a person expressing dissatisfaction or concern regarding site preparation, cleanup or restoration or other route and associated facilities permit conditions. Complaints do not include requests, inquiries, questions or general comments.

Substantial Complaint: A written complaint alleging a violation of a specific permit condition that, if substantiated, could result in permit modification or suspension pursuant to the applicable regulations.

Unresolved Complaint: A complaint which, despite the good faith efforts of the permittee and a person, remains to both or one of the parties unresolved or unsatisfactorily resolved.

Person: An individual, partnership, joint venture, private or public corporation, association, firm, public service company, cooperative, political subdivision, municipal corporation, government agency, public utility district, or any other entity, public or private, however organized.

E. Complaint Documentation and Processing

- 1. The permittee shall designate an individual to summarize complaints for the Commission. This person's name, phone number and email address shall accompany all complaint submittals.
- 2. A person presenting the complaint should to the extent possible, include the following information in their communications:
 - a. name, address, phone number, and email address;
 - b. date of complaint;
 - c. tract or parcel number; and
 - d. whether the complaint relates to a permit matter or a compliance issue.
- 3. The permittee shall document all complaints by maintaining a record of all applicable information concerning the complaint, including the following:
 - a. docket number and project name;
 - b. name of complainant, address, phone number and email address;
 - c. precise description of property or parcel number;
 - d. name of permittee representative receiving complaint and date of receipt;
 - e. nature of complaint and the applicable permit condition(s);
 - f. activities undertaken to resolve the complaint; and
 - g. final disposition of the complaint.

F. Reporting Requirements

The permittee shall commence complaint reporting at the beginning of project construction and continue through the term of the permit. The permittee shall report all complaints to the Commission according to the following schedule:

Immediate Reports: All substantial complaints through the term of the permit shall be reported to the Commission the same day received, or on the following working day for complaints received after working hours. Such reports are to be directed to the Commission's Consumer Affairs Office at 1-800-657-3782 (voice messages are acceptable) or consumer.puc@state.mn.us. For e-mail reporting, the email subject line should read "PUC EFP Complaint" and include the appropriate project docket number.

Monthly Reports: During project construction and restoration a summary of all complaints, including substantial complaints received or resolved during the preceding month, shall be filed by the 15th of each month to Daniel P. Wolf, Executive Secretary, Public Utilities Commission, using the eDockets system. The eDockets system is located at: https://www.edockets.state.mn.us/EFiling/home.jsp

If no complaints were received during the preceding month, the permittee shall file a summary indicating that no complaints were received.

G. Complaints Received by the Commission

Complaints received directly by the Commission from aggrieved persons regarding site preparation, construction, cleanup, restoration, operation and maintenance shall be promptly sent to the permittee.

H. Commission Process for Unresolved Complaints

Commission staff shall perform an initial evaluation of unresolved complaints submitted to the Commission. Complaints raising substantial permit issues shall be processed and resolved by the Commission. Staff shall notify the permittee and appropriate persons if it determines that the complaint is a substantial complaint. With respect to such complaints, each party shall submit a written summary of its position to the Commission no later than ten days after receipt of the staff notification. The complaint will be presented to the Commission for a decision as soon as practicable.

I. Permittee Contacts for Complaints and Complaint Reporting

Complaints may filed by mail or email to:

Billy Scarborough Swinerton Renewable Energy 16798 West Bernardo Drive Sand Diego, CA 92127 760-317-8803 sre_north_star@swinerton.com

This information shall be maintained current by informing the Commission of any changes as they become effective.

MINNESOTA PUBLIC UTILITIES COMMISSION COMPLIANCE FILING PROCEDURE FOR PERMITTED ENERGY FACILITIES

A. Purpose

To establish a uniform and timely method of submitting information required by the Commission energy facility permits.

B. Scope and Applicability

This procedure encompasses all compliance filings required by permit.

C. Definitions

Compliance Filing: A filing of information to the Commission, where the information is required by a Commission site or route permit.

D. Responsibilities

1. The permittee shall file all compliance filings with Daniel P. Wolf, Executive Secretary, Public Utilities Commission, through the eDockets system. The eDockets system is located at: https://www.edockets.state.mn.us/EFiling/home.jsp

General instructions are provided on the eDockets website. Permittees must register on the website to file documents.

- 2. All filings must have a cover sheet that includes:
 - a. Date
 - b. Name of submitter/permittee
 - c. Type of permit (site or route)
 - d. Project location
 - e. Project docket number
 - f. Permit section under which the filing is made
 - g. Short description of the filing

3. Filings that are graphic intensive (e.g., maps, engineered drawings) must, in addition to being electronically filed, be submitted as paper copies and on CD. Paper copies and CDs should be sent to: 1) Daniel P. Wolf, Executive Secretary, Minnesota Public Utilities Commission, 121 7th Place East, Suite 350, St. Paul, MN 55101-2147, and 2) Department of Commerce, Energy Environmental Review and Analysis, 85 7th Place East, Suite 500, St. Paul, MN 55101-2198.

The Commission may request a paper copy of any electronically filed document.

PERMIT COMPLIANCE FILINGS¹

PERMITTEE: North Star Solar PERMIT TYPE: High-Voltage Transmission Line Route Permit PROJECT LOCATION: Chisago County PUC DOCKET NUMBER: IP-6943/GS-15-33

Filing Number	Permit Section	Description of Compliance Filing	Due Date
	5.2.1	Field Representative	14 days prior to commencing construction
	5.2.14	Historic and Cultural Resource Survey	30 days prior to commencing construction, if required
	5.2.16	Site Restoration Report	60 days after completion of all restoration activities
	6.0	Special Conditions Report	30 days prior to commencing construction
	6.1	Tree Removal Consultation	30 days prior to commencing construction
	7.0	Failure to Construct	Four years after permit issuance, as necessary
	9.1	Plan and Profile	30 days prior to commencing construction
	9.1	Changes to Plan and Profile after Authorization	Five days prior to implementing changes
	9.2	Status Reports	Monthly

¹ This compilation of permit compliance filings is provided for the convenience of the permittee and the Commission. It is not a substitute for the permit; the language of the permit controls.

Filing Number	Permit Section	Description of Compliance Filing	Due Date
	9.3	Notice of Operation and Completion of Construction	Three days prior to commercial operation
	9.4	As-Builts	60 days after construction is complete
	9.5	GPS Data	60 days after construction is complete
	Complaint Reporting	Monthly Complaint Reports	Monthly during project construction and restoration
	Complaint Reporting	Immediate Complaint Reports	By the following day throughout the life of the permit