

March 4, 2015

Daniel P. Wolf, Executive Secretary  
Minnesota Public Utilities Commission  
127 7th Place East, Suite 350  
St. Paul, MN 55101-2147

**Re: Application Completeness Review**  
North Star Solar Generation Project  
Docket No. IP6943/GS-15-33

Dear Mr. Wolf:

Attached are the review and comments of the Minnesota Department of Commerce Energy Environmental Review and Analysis (EERA) staff in the following matter:

**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**

North Star Solar PV, LLC has submitted an application for acceptance pursuant to Minnesota Statute 216E.04 and Minnesota Rule 7850.2800-3900 for a Site Permit to construct a 100 MW solar energy generating plant and a Route Permit for a 115 kV connecting high voltage transmission line.

This filing was made on February 11, 2015, by:

Eric Blank, Manager  
North Star Solar PV, LLC  
3 Radnor Corporate Center, Suite 300  
100 Matsonford Road  
Radnor, PA 19087

EERA staff is available to answer any questions the Commission may have.

Sincerely,



David Birkholz, Environmental Review Manager  
Energy Environmental Review and Analysis  
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**BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION**

**COMMENTS AND RECOMMENDATIONS OF THE  
MINNESOTA DEPARTMENT OF COMMERCE  
ENERGY ENVIRONMENTAL REVIEW AND ANALYSIS**

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

Date ..... March 4, 2015  
EERA Staff..... David Birkholz (651) 539-1838

**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 (Docket no. IP-6943/GS-15-33)**

**Issues Addressed:** *These comments and recommendations address the completeness of the site and route permit application, possible disputed issues of fact and the appointment of an advisory task force.*

**Additional documents and information can be found at**  
<http://mn.gov/commerce/energyfacilities/Docket.html?id=34064> or on eDockets at  
<http://www.edockets.state.mn.us/EFiling/search.jsp> (Year 15, Number 33).

This document can be made available in alternative formats; e.g., large print or audio tape by calling (651) 539-1530.

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## **Introduction and Background**

On January 29, 2015, North Star Solar PV, LLC (North Star) filed a letter<sup>1</sup> with the Public Utilities Commission (Commission) indicating its intent to submit a joint site and route application under the alternative permitting process (Minn. Rule 7850.2800-3900). On February 11, 2015, North Star submitted an application (Application)<sup>2</sup> to the Commission for the proposed 100 MW North Star Solar Project (Project) in Chisago County, which includes a one-half mile connecting 115 kV transmission line.

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<sup>1</sup> Notification of Intent to Submit Combined Site Permit Application and Route Permit Application as a Joint Proceeding, North Star Solar PV, LLC, January 29, 2015, eDocket no. [20151-106767-01](http://mn.gov/commerce/energyfacilities/Docket.html?id=34064)

<sup>2</sup> Joint Site and Route Permit Application, North Star Solar PV, LLC, February 11, 2015, <http://mn.gov/commerce/energyfacilities/resource.html?id=34078>

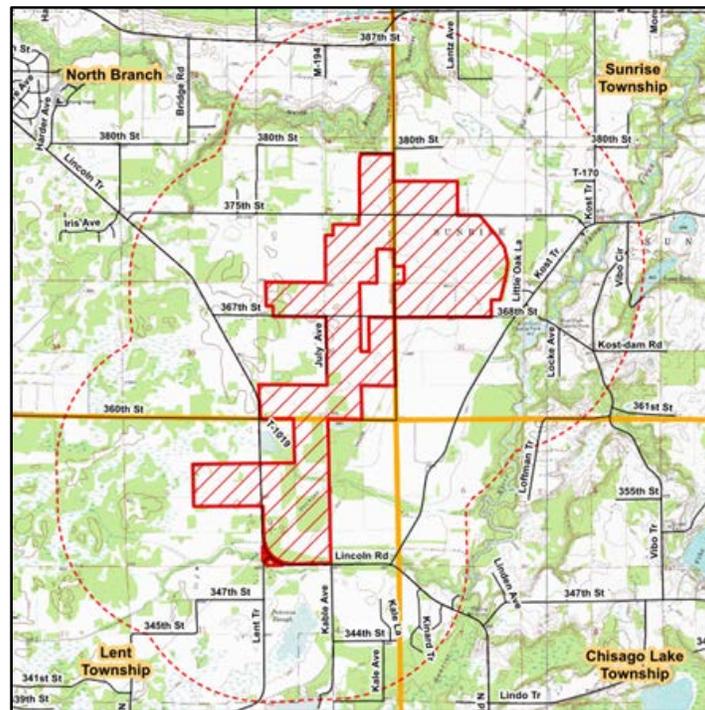
North Star proposes to construct 100 MW of photovoltaic (PV) solar generation in North Branch and in Lent and Sunrise townships. The Project would generate electricity from solar energy and is therefore eligible under 2014 Minnesota Session Laws, Chapter 254, Section 19 for review under the Alternative Permitting Process. The Project would be operational by the end of 2016.

***Project Description and Purpose***

The Project was proposed in response to Xcel Energy’s Solar Request for Proposals (RFP) to help fulfill the Minnesota Solar Energy Standard which requires the company to serve 1.5 percent of its retail load with solar energy by the end of 2020. As a result of the RFP, Xcel Energy negotiated Power Purchase Agreements (PPA) with three of the competing proposals for a total of 187 MW. The three solar projects are (1) Marshall Solar, a 62.25 MW project located near Marshall; (2) MN Solar I, a 24.75 MW project located near Tracy; and (3) the North Star 100 MW Project near North Branch. Xcel Energy’s "Solar Portfolio" (see eDocket no. E002/M-14-162) was approved by the Commission at the February 12, 2015, Agenda Meeting.

North Star has secured rights for 1,112 acres of agricultural land north of the Chisago Substation (see Project Boundary map below). The final Project design is expected to occupy approximately 800 acres within that boundary. The Project’s primary components include PV modules mounted on a linear axis tracking system and solar inverters. The racking system foundations will utilize driven posts that for the most part would not require concrete. Other Project components include electrical cables, conduit, electrical cabinets, switchgears, step-up transformers, SCADA systems and metering equipment. The solar facility would be fenced and seeded in a low growth seed mix to reduce stormwater runoff and erosion.

**Project Boundary and One-Mile Buffer**



North Star expects to interconnect 100 MW of solar generation (accredited capacity of approximately 68 percent) at the 115 kV bus of the Chisago Substation in Lent Township (inside the southernmost portion of the Project boundary). This would require building approximately one-half mile of 115 kV line from the Project substation, across property owned by Xcel Energy to the Chisago Substation.

## **Regulatory Process and Procedures**

The size of the proposed Project meets the definition of a large energy facility requiring a Certificate of Need under Minnesota Statute 216B.2421, subd. 2. However, under Minn. Statute 216B.243, subd. 9, the proposed Project is exempt from the Certificate of Need requirement because it is a solar electric generating facility that is intended to be used to meet the obligations of Minn. Statute 216B.1691.

Minnesota Statute 216E.03, subd. 1 prohibits construction of a large electric generating plant without a Site Permit from the Commission. A large electric power generating plant is defined as electric power generating equipment and associated facilities designed for or capable of operation at a capacity of 50,000 kilowatts or more (Minnesota Statute 216E.01, subd. 5). Minnesota Statute 216E.03, subd. 2 prohibits construction of a high-voltage transmission line without a route permit from the Commission. A high voltage transmission line is defined as a conductor of electric energy and associated facilities designed for and capable of operation at a nominal voltage of 100 kilovolts or more and is greater than 1,500 feet in length (Minnesota Statute 216E.01, subd. 4).

Session Law 254 amended the types of projects that qualify for review under the alternative permitting process under Minnesota Statute 216E.04 to include large electric power generating plants powered by solar energy. Minnesota Statute 216E.04, subd. 2 (3), qualifies high-voltage transmission lines of 115 kV as eligible for review under the alternative permitting process.

In addition, Minn. Rule 7850.1600 allows the proposer of a large electric power generating plant that will also require a high voltage transmission line to apply for both a site permit for the large electric power generating plant and a route permit for the high voltage transmission line in one application and in one process.

Considering all of the above, North Star Solar PV, LLC has submitted a combined Application for a Site Permit and a Route Permit for review under the provisions of the Alternative Permitting Process as outlined in Minnesota Statute 216E.04 and Minn. Rule 7850.2800-3900.

### ***Permit Application and Acceptance***

The Application must provide specific information about the proposed Project including, but not limited to, applicant information, site description, environmental impacts, alternatives and mitigation measures (Minn. Rule 7850.3100). The Commission may accept the Application as complete, reject the Application and require additional information to be submitted, or accept the Application as complete upon filing of supplemental information (Minn. Rule 7850.3200).

The review process begins with the determination by the Commission that the Application is complete. Application acceptance allows initiation of the public participation and environmental review processes. The Commission has six months to reach a final decision on the site and route permits from the date the Application is determined to be complete. The Commission may extend this limit for up to three months for just cause or upon agreement of the Applicant (Minn. Rule 7850.3900).

### ***Environmental Review***

Applications for site and route permits under the alternative permitting process are subject to environmental review, which is conducted by Energy Environmental Review and Analysis (EERA) staff under Minn. Rule 7850.3700. EERA staff will provide notice and conduct a public scoping meeting to solicit public comments on the scope of an Environmental Assessment (EA). Following the close of the comment period, EERA staff will file comments on possible alternative site and route proposals with the Commission. Based on the information received during the scoping process, the Deputy Commissioner of the Department of Commerce will determine the scope of the EA.

An EA is a written document that describes the human and environmental impacts of the proposed Project (and selected alternative sites and routes) and methods to mitigate such impacts. The EA will be completed and made available prior to the public hearing.

### ***Public Hearing***

Applications for site and route permits under the alternative permitting process require a public hearing upon completion of the EA. The hearing will be held in the Project area in accordance with the procedures provided in Minn. Rule 7850.3800. (The hearing is not a contested case hearing and is not conducted under Office of Administrative Hearings (OAH) Rule 1405.)

There are two options to proceed in regard to the public hearing. In either option, the Commission's regular course is to have an Administrative Law Judge (ALJ) preside at the hearing. In complicated proceedings, the Commission forwards the docket to OAH to conduct the hearing and prepare comments and recommendations. In other cases, the Commission more simply chooses to have the ALJ preside at the hearing and transfer the record back to the Commission. Whether there are competing alternatives or a significant number of human and environmental issues in dispute are two determinants for electing to have the ALJ create a report and recommendation.

Requesting an ALJ report can extend the length of the proceeding significantly (see comparative tentative schedules below). This would require the Commission to extend the expected six month timeframe for a final decision up to three months for just cause (Minn. Statute 216B.03, subd. 7).

### ***Public Advisor***

Upon acceptance of the Application, the Commission must designate a person to act as the public advisor on the Project (Minn. Rule 7850.3400). The public advisor is available to answer questions for the public about the permitting process. In this role, the public advisor may not act as an advocate on behalf of any person.

***Advisory Task Force***

The Commission may appoint an advisory task force (ATF) (Minnesota Statute 216E.08, subd. 1). Minn. Rule 7850.3600 directs the Commission to determine whether to appoint a task force as early in the process as possible. Should the Commission appoint a task force, the Commission must specify in writing the charge to the task force. The charge to the task force includes, at a minimum, identification of additional sites, routes or specific impacts to be evaluated in the EA.

A task force would terminate upon completion of its charge, designation of alternate sites to be included in the EA, or upon a specific date set by the Commission. An advisory task force appointed to evaluate sites and routes considered for designation must, at a minimum, include at least one representative from the applicable Regional Development Commission, county, municipalities and one town board member (Minn. Statute 216E.08, subd. 1).

The Commission is not required to assign an advisory task force for every project. In the event that the Commission does not name a task force, a citizen may request appointment of a task force (Minn. Rule 7850.3600). If such a request were made, the Commission would then need to determine at a subsequent meeting whether a task force should be appointed.

The decision whether to appoint an advisory task force does not need to be made at the time of accepting the application; however, it should be made as soon as practicable to ensure its charge can be completed prior to the EA scoping decision by the Department.

**EERA Analysis and Comments**

EERA staff conferred with North Star about the project as the Application was developed and provided feedback on pre-filing drafts. Subsequently, EERA staff has conducted a completeness review of the Joint Application filed with the Commission on February 11, 2015, relative to the application content requirements specified in Minn. Rule 7850.3100. North Star has included a Completeness Checklist table on pages 78 through 80 of the Application that lists the required information and where the information can be found within the document.

EERA staff believes that its comments on the draft application have largely been addressed and that the application meets the content requirements of Minn. Rule 7850.3100, and by reference Minn. Rule 7850.1900, and is substantially complete.

***Disputed Issues of Fact***

EERA staff is not aware at this time of any disputed issues of fact with respect to the representations in the Joint Application. However, issues may be identified during the Environmental Assessment scoping process that could affect the Commission's decision on whether to request findings of fact and a recommendation from the ALJ.

***Advisory Task Force***

In analyzing the merits of establishing an Advisory Task Force for a project, EERA staff considers four project characteristics: size, complexity, known or anticipated controversy and sensitive resources. The proposed design information and preliminary environmental data contained in the Application were used to complete the following evaluation:

**Project Size:** Although of moderate size in terms of total nameplate capacity (100 MW), the North Star Solar Project is large in terms of total land requirements. North Star has identified a total Project area of 1,112 acres, with an approximated development area of 800 acres, or eight acres per MW. This land requirement is consistent with other solar facilities, including Aurora (E6928/GS-14-515), which estimated an average of nine developed acres per MW at the individual facility locations.

**Complexity:** Although the proposed project is novel in locating 100 MW of solar generation at one location, at least in Minnesota, EERA staff does not believe the proposed project is complex in comparison to many of the linear or generation projects permitted by the Commission in other proceedings. The Project sits at a nexus of four local governments in one county.

Site preparation and construction for photovoltaic facilities is relatively straight-forward. Construction of the project would not entail large-scale excavation or deep foundations. Additionally, the Project has a very short (.05 mile) transmission requirement for interconnection at the nearby Chisago Substation.

**Known/Anticipated Controversy:** To date, EERA staff has not fielded objections or specific concerns about the project. EERA staff notes "Speak Up!" concerns that local zoning is followed; that the Project have sighting protection by buffering, screening or set-backs; and wildlife habitat and corridors are preserved. The public will have ample opportunity to raise these and other issues in meetings and public hearings, and to get responses to them from the Applicant and in the Department's EA. EERA also notes that North Star does not have the authority to exercise eminent domain to acquire the land necessary for the solar generation or transmission and must acquire the necessary land through negotiated purchase or lease from directly impacted landowners.

**Sensitive Resources:** Approximately 90 percent of the land in the development area is currently in agricultural use. A records search of the facility location has identified documented occurrences of some endangered, threatened, or special concern species near or within the area of site control. The primary likely occurrence would be the Blanding's Turtle. North Star has not identified any federally listed species within the area of land control, although the Project area is within the known range of the Northern Long-eared Bat. The Project has no biologically significant areas (e.g. Regionally Significant Ecological Areas, Native Plant Communities, or Sites of Biodiversity Significance) located within or adjacent the Project boundary. Janet Johnson Wildlife Management Area (WMA) and Carlos Avery WMA are both within one mile of the Project boundary.

Due to the lack of eminent domain and the necessity for the Applicant to obtain easements to construct and operate the Project, there are inherent difficulties in suggesting alternative site locations (e.g., would landowners in the suggested area be willing to host the Project). In the same light, the transmission line is one-half mile long on one owner's (Xcel Energy) property.

The statutory definition of an advisory task force (Minn. Statute 216E.08, subd. 1) requires participation of a cross-section of local and regional governmental entities. EERA staff can easily communicate with the relevant entities throughout the process, or even convene ad hoc meetings to address any specific issues that may arise.

EERA staff believes that the alternative permitting process will provide adequate opportunity for residents and state and local governmental units to identify issues (or alternatives) to be addressed in the EA. As it has in prior projects, EERA staff will assist citizens and governmental units in understanding the scoping process and the process for identifying issues to be addressed and site and alignment alternatives to be considered.

## **EERA Conclusions and Recommendations**

Commerce EERA staff recommends that the Commission accept the Joint Application for the North Star Solar Generation Project as substantially complete. EERA staff also recommends that the Commission take no action on an Advisory Task Force at this time.

EERA does not believe there are disputed issues of fact in the Application, so ALJ findings and a recommendation would not necessarily be required. EERA recommends the Commission put a decision on hold for requesting ALJ comments and recommendations until it has considered EERA's recommendation on alternatives following the public information/scoping meeting.

Since solar site permitting is new in the state, this will also give the Commission further time to evaluate the complexity of any issues raised by the public, agencies and local governments. The Commission may then choose to request comments and a recommendation from the Administrative Law Judge, even if there are no alternative sites or routes to consider. However, if most evidence suggests the normal process can provide the information the Commission needs to make its decision, the Commission should consider that the choice to request an ALJ report has a significant impact on the length of review. It is not logistically possible to complete the alternative process in 180 days if an ALJ report is required.

### ***Schedule***

The following is a tentative schedule for comparative purposes (it is not a schedule recommended for adoption in and of itself). The schedule already includes what EERA considers to be an abbreviated time period in which to prepare the Environmental Assessment. Even so, requesting an ALJ's comments and recommendation would require the Commission to extend the six month requirement for a decision for just cause.

### North Star Solar Generation Project – EERA Tentative Schedule

Approximate Date	Day	Permit Application Process Step	Responsible Actor
February 11, 2015		Application Submitted	North Star
March 4, 2015		Application Completeness Comments	Agencies/Public
March 11, 2015		Reply Comments	North Star
April 2, 2015		Commission considers Application Acceptance	Commission
April 3, 2015		Public Information Meeting and EA Scoping Notice	Commission/EERA
Acceptance through Environmental Assessment			
April 15, 2015	0	Application Acceptance Order	Commission
April 23, 2015	10	Public Information/Scoping Meeting	Commission/EERA
May 4, 2015	20	EA Scoping Comment Period Closes	EERA
May 14, 2015	30	Memo to Commission on alternative sites	EERA
June 4, 2015	50	Commission considers alternative sites for EA scope	Commission
June 12, 2015	60	Scoping Decision Issued	Department
August 17, 2015	120	EA Issued/Public Hearing Notice	EERA/Commission
Alternative Process			
August 27, 2015	130	Public Hearing	OAH
September 8, 2015	140	Public Hearing Comment Period Closes Draft Findings of Fact	OAH North Star
September 17, 2015	150	ALJ Transmits Record	OAH
September 21, 2015	155	Comments on Draft FOF/Technical Analysis Response to Hearing Comments	EERA North Star
<b>October 15-22, 2015</b>	<b>180</b>	Commission considers Site and Route Permits Issuance	Commission
Alternative Process with ALJ Report			
August 27, 2015	130	Public Hearing	OAH
September 8, 2015	140	Public Hearing Comment Period Closes Draft Findings of Fact	OAH North Star
September 21, 2015	155	Comments on Draft FOF/Technical Analysis Response to Hearing Comments	EERA North Star
October 21, 2015	185	ALJ Findings of Fact and Recommendation	OAH
November 5, 2015	200	Exceptions to ALJ Report	EERA, North Star
<b>Nov. 23-Dec. 3, 2015</b>	<b>225</b>	Commission considers Site and Route Permits Issuance	Commission