



In the Matter of the Application of Benton Solar, LLC for a Site Permit for the 100 MW Solar Energy Generating System for the Benton Solar Project in Benton County, Minnesota

In the Matter of the Application of Benton Solar, LLC for a Site Permit for the 100 MW Battery Energy Storage System for the Benton Solar Project in Benton County, Minnesota

**ENVIRONMENTAL ASSESSMENT
SCOPING DECISION**

**DOCKET NOs. IP-7115/GS-23-423,
ESS-24-283, and TL-23-425**

In the Matter of the Application of Benton Solar, LLC for a Route Permit for a 115 kV High Voltage Transmission Line Associated with the Benton Solar Project in Benton County, Minnesota

The above matter has come before the Commissioner of the Department of Commerce (Department) for a decision on the scope of the environmental assessment (EA) to be prepared for Benton Solar LLC's proposed 100 megawatt (MW) solar energy generating system, 100 MW energy storage system, and 115 kilovolt (kV) transmission line in Minden Township, Benton County, Minnesota.

Project Description

The Benton Solar project consists of three major components that require permitting: a 100 MW solar facility, a battery energy storage system (BESS) with a capacity of 100 MW, and 0.5 mile long 115 kV transmission line to be constructed between the solar facility and an existing Great River Energy substation. The project is located four miles east of St. Cloud, Minnesota.

100 MW Solar Facility and 100 MW Battery Energy Storage System

Benton Solar proposes to construct and operate a 100 MW solar facility and BESS in Minden Township, Benton County, Minnesota. The project will occupy approximately 951.4 acres, of which 631.9 acres will be developed for the project (see Project Overview Map). The project will use photovoltaic solar panels mounted on single axis tracking systems. Collection cables will gather and send the electric power generated by the solar panels through inverters to a project substation. The project will also utilize a BESS in tandem with solar energy generation to provide power when it is most advantageous.¹

115 kV High Voltage Transmission Line

The project substation will interconnect with the electrical grid through a proposed 0.5 mile long 115 kV transmission line to a Great River Energy substation located south of the project.²

¹ Joint Site Permit Application, Section 3.

² Route Permit Application, Section 1.

Benton Solar indicates that a generator interconnection agreement with the Midcontinent Independent System Operator (MISO) for the project has been requested and was approved on December 7, 2022. Benton Solar is currently in the process of filing a surplus agreement with MISO for the BESS.³

Project Purpose

Benton Solar indicates that the project will assist the State of Minnesota in meeting its renewable energy objectives,⁴ diversify electricity sources, meet anticipated growth in electricity demand, and meet consumers' growing demand for renewable energy.⁵ Benton Solar is working to secure a power purchase agreement with customers to sell the electric power generated by the project.

Regulatory Background

Large Electric Power Generating Plant Site Permit and Energy Storage System Site Permit

In Minnesota, no person may construct a large electric power generating plant or an energy storage system without a site permit from the Commission.⁶ A large electric power generating plant is defined as a facility capable of operating at a capacity of 50 MW or more.⁷ An energy storage system is defined as a facility capable of a capacity of 10 MW or more.⁸ The Benton Solar project will be capable of producing up to 100 MW as well as storing 100 MW, and therefore requires site permits from the Commission. Because the project is powered by solar energy, the site permit application qualifies for Commission review under the alternative permitting process described in Minnesota Statute 216E.04, Subd. 2.

High Voltage Transmission Line Route Permit

In Minnesota, no person may construct a high voltage transmission line without a route permit from the Commission.⁹ A high voltage transmission line is defined as a conductor of electric energy designed for and capable of operation at a voltage of 100 kV or more and greater than 1,500 feet in length.¹⁰ The proposed project will consist of approximately 0.5 miles of 115 kV transmission line and therefore requires a route permit from the Commission. Because the applicants' proposed transmission line is under 200 kV, the project is eligible to use the alternative review process prescribed by Minnesota Statute 216E.04.¹¹

The applicants indicated their intent to use the alternative review process for all three permit applications by notice to the Commission on August 20, 2024.¹²

³ Joint Site Permit Application, Section 2.1.

⁴ Minnesota Statute 216B.1691.

⁵ Joint Site Permit Application, Section 1.1.

⁶ Minnesota Statute 216E.03.

⁷ Minnesota Statute 216E.01, Subd. 5.

⁸ Minnesota Statute 216E.01, Subd. 5.

⁹ Minnesota Statute 216E.03.

¹⁰ Minnesota Statute 216E.01.

¹¹ Minnesota Statute 216E.04, Subd. 2 (noting those projects that are eligible to proceed under an alternative permitting process).

¹² Notice of Intent to File a Route Permit and Joint Site Permit Applications for the Benton Solar Project Pursuant to the Alternative Permitting Process, August 20, 2024, eDockets Numbers [20248-209653-01](#), [20248-209654-01](#), and [20248-209655-01](#).

Certificate of Need

As Benton Solar is an independent power producer, a certificate of need (CN) is not required for the project. The project is exempt under Minnesota Statute 216B.243, subd. 8(a)(8), which provides that a CN is not required for a “solar energy generating system, as defined in section 216E.01, subdivision 9a, for which a site permit application is submitted by an independent power producer under chapter 216E.”¹³

The proposed 115 kV HVTL for the project will operate at a voltage greater than 100 kV but will have a length in Minnesota less than ten miles; accordingly, the project is not considered a large energy facility and does not require a certificate of need from the Commission.¹⁴

Environmental Review

Department of Commerce, Energy Environmental Review and Analysis (EERA) staff is responsible for conducting environmental review for site permit applications submitted to the Commission.¹⁵ EERA staff will prepare an environmental assessment (EA) for the project. An EA contains an overview of the resources affected by the project. It also discusses potential human and environmental impacts and possible mitigation measures.¹⁶ Under the alternative permitting process, an EA is the only required state environmental review document.

Scoping Process

Scoping is the first step in the environmental review process. The scoping process has two primary purposes: (1) to gather public input as to the impacts and mitigation measures to study in the EA and (2) to focus the EA on those impacts and mitigation measures that will aid in the Commission’s decision on the site permit application.

Staff use the information gathered during scoping to inform the content of the EA. EERA staff gathered input on the scope of the EA through public meetings and an associated comment period. This scoping decision identifies the impacts and mitigation measures that will be analyzed in the EA.

Public Information and Scoping Meetings

On January 14, 2025, Commission and EERA staff jointly held a public meeting in Sauk Rapids, Minnesota. Approximately 40 people attended this meeting; seven attendees provided public comments.¹⁷ The following evening, January 15, 2025, Commission and EERA staff held a remote-access public meeting. Ten people attended this meeting; one attendee asked verbal questions and one attendee asked questions via the chat function.¹⁸

¹³ Minnesota Statute 216B.243, Subd. 8(a)(8)

¹⁴ Minnesota Statute 216B.2421; Minnesota Statute 216B.243.

¹⁵ Minnesota Rule 7850.3700.

¹⁶ Minnesota Statute 216E.04, subd. 5; Minnesota Rule 7850.3700, Subp. 4.

¹⁷ Benton Solar Project, Oral Comments on the Scope of the Environmental Assessment, eDockets Number [20252-214999-01](#).

¹⁸ Id.

Written Public Comments

A comment period ending on January 31, 2025, provided the public with an opportunity to provide input on the scope of the EA. Thirty written comments were received; two from state agencies, one from the Minnesota Future Farmers of America, one comment from a collective of residents, and twenty-six from individuals.¹⁹

Several individuals and organizations raised concerns with the project, while several addressed support for the project and the applicant. Topics of concern included potential impacts associated with aesthetics, property values, cultural values, topography/drainage, land use, health and safety, noise pollution, wildlife, water and soil resources, vegetation, archaeological and historic lands, road use, and airports.

The Minnesota Department of Natural Resources provided comments regarding project fencing and lighting as well as potential impacts to Blanding's turtles and bats.²⁰ The Minnesota Department of Transportation (MnDOT) noted the proximity of the project to Trunk Highway 95. MnDOT provided comments regarding potential impacts related to cultural resources, protected species, and water basins.²¹

On February 7, 2025, EERA staff filed a scoping summary and recommendations regarding alternatives to study in the EA with the Commission.²² EERA staff recommended that the EA study solely the site and route proposed by Benton Solar in its site and route permit applications.²³ On March 4, 2025, and March 18, 2025, the Commission agreed with and adopted the recommendations made by EERA.²⁴

HAVING REVIEWED THE MATTER, consulted with EERA staff, and in accordance with Minnesota Rule 7850.3700, I hereby make the following scoping decision:

MATTERS TO BE ADDRESSED

The EA will describe the project and the human and environmental resources of the project area. It will provide information on the potential impacts of the project as they relate to the topics outlined in this scoping decision and possible mitigation measures. It will identify impacts that cannot be avoided and irretrievable commitments of resources, as well as permits from other government entities that may be required for the project. The EA will discuss the relative merits of the proposed project site with respect to the siting factors in Minnesota Rule 7850.4100.

The issues outlined below will be analyzed in the EA for the project. This outline is not intended to serve as a table of contents for the document itself.

¹⁹ Benton Solar Project, Written Comments on the Scope of the Environmental Assessment, eDockets number [20252-214999-02](#).

²⁰ Id.

²¹ Id.

²² EERA Alternatives Identified during Scoping Comment Period, eDocket number [20252-215079-01](#).

²³ Id.

²⁴ Commission Order, eDockets numbers [20253-216032-01](#) and [20253-216512-01](#).

I. GENERAL DESCRIPTION OF THE PROJECT

- A. Project Description
- B. Project Purpose
- C. Project Costs

II. REGULATORY FRAMEWORK

- A. Site Permits
- B. Route Permit
- C. Environmental Review Process
- D. Other Permits and Approvals

III. ENGINEERING AND DESIGN

- A. Solar Arrays
- B. Battery Energy Storage System
- C. Substation
- D. Transmission Line
- E. Associated Facilities

IV. CONSTRUCTION AND OPERATION

- A. Construction
- B. Operation and Maintenance
- C. Repowering and Decommissioning

V. AFFECTED ENVIRONMENT, POTENTIAL IMPACTS AND MITIGATIVE MEASURES

The EA will include a discussion of the human and environmental resources potentially impacted by the project. Potential impacts of the project will be described and characterized. Based on the impacts identified, the EA will describe mitigation measures that could reasonably be implemented to reduce or eliminate the identified impacts. The EA will describe any unavoidable impacts resulting from implementation of the project.

Data and analyses will be commensurate with the level of impact for a given resource and the relevance of the information to consider mitigation measures. EERA staff will consider the relationship between the cost of data and analyses and the relevance and importance of the information in determining the level of detail of information to be prepared for the EA. Less important material may be summarized, consolidated, or simply referenced.

If relevant information cannot be obtained within timelines prescribed by statute and rule, the costs of obtaining such information is excessive, or the means to obtain it is unknown, EERA staff will include in the EA a statement that such information is incomplete or unavailable and the relevance of the information in evaluating potential impacts or alternatives.

- A. Environmental Setting
- B. Human Settlements
 - 1. Noise
 - 2. Aesthetics
 - 3. Displacement
 - 4. Property Values

5. Zoning and Land Use Compatibility
6. Topography
7. Cultural Values
8. Transportation and Public Services
- C. Socioeconomics
 1. Environmental Justice
 2. Local Economies
- D. Public Health and Safety
 1. Electric and Magnetic Fields
 2. Emergency Services and Response
- E. Land Based Economies
 1. Agriculture
 2. Forestry
 3. Mining
 4. Recreation and Tourism
- F. Archaeological and Historic Resources
- G. Natural Environment
 1. Water Resources
 2. Soils
 3. Geology
 4. Flora
 5. Fauna
 6. Air Quality
 7. Climate Change / Climate Resiliency
- H. Threatened / Endangered / Rare and Unique Natural Resources
- I. Electric System Reliability
- J. Adverse Impacts that Cannot be Avoided
- K. Irreversible and Irretrievable Commitments of Resources

ISSUES OUTSIDE THE SCOPE OF THE EA

The EA will not address following topics:

- Any site or route other than the project site and route proposed by the applicant.
- The manner in which landowners are compensated for the project.

SCHEDULE

The EA is anticipated to be completed and available in July 2025. Public hearings will be held in the project area after issuance of the EA. Comments on the EA may be submitted into the hearing record.

Signed this 26th day of March, 2025

STATE OF MINNESOTA
DEPARTMENT OF COMMERCE

A handwritten signature in black ink, reading "Pete Wyckoff", is written over a light gray rectangular background.

Pete Wyckoff, Deputy Commissioner

Benton Solar Project Overview Map

