

## **EERA's ROLE**

The Department of Commerce, Energy Environmental Review and Analysis (EERA) unit conducts environmental review on behalf of the Minnesota Public Utilities Commission (Commission) for energy facility permit applications submitted under the Power Plant Siting Act (PPSA).<sup>1</sup> EERA performs the same tasks for projects being reviewed under the Large Wind Energy Conversion System (LWECS) siting statute<sup>2</sup> and the pipeline routing statute.<sup>3</sup>

EERA also provides technical assistance to the Commission to aid in permitting these facilities and conducts compliance reviews of pre-construction, pre-operation and in-service projects.<sup>4</sup> See the attached “**2024 Project Status**” report for a record of permitting projects reviewed in the last year.

## **ENVIRONMENTAL REVIEW AND PERMITTING OF ENERGY FACILITIES**

**Legislative Changes.** During the 2024 session, the Minnesota Legislature enacted the Minnesota Energy Infrastructure Permitting Act. This act includes several changes to the Commission’s environmental review and permitting processes including:

- Providing uniform permitting processes for transmission lines, thermal generating plants, solar farms, wind farms, and energy storage systems.
- Expediting permitting processes by having permit applications serve as environmental review documents and by better fitting environmental review processes to specific project impacts and mitigation measures.
- Moving the EERA unit from the Department of Commerce to the Commission effective July 1, 2025.

**Carbon-Free Energy.** During the 2023 legislative session, the legislature set a goal of reducing statewide greenhouse gas emissions to net zero by 2050 and required 100 percent carbon-free electricity by 2040. These actions have influenced the number and types of energy facility projects applying for Commission approvals. In 2024, EERA and the Commission have experienced a significant increase in the number of permit applications for solar farms, energy storage systems, and high voltage transmission lines (see 2024 Project Status). Energy storage systems, previously proposed solely as adjuncts to solar farms, are now being proposed as stand-alone energy facilities.

**MISO Tranche 1 and Tranche 2.1 Transmission Line Portfolios.** In 2022, the Midcontinent Independent System Operator (MISO) approved an initial group of regional and interregional transmission line projects to ensure the reliable and efficient operation of the transmission grid in the Upper Midwest

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<sup>1</sup> Minnesota Statute 216E.

<sup>2</sup> Minnesota Statute 216F.

<sup>3</sup> Minnesota Statute 216G.

<sup>4</sup> Minnesota Statute 216E, Subd. 11.

(Tranche 1 portfolio).<sup>5</sup> Three of these projects are in Minnesota – the Northland Reliability Project, the Big Stone to Alexandria to Big Oaks Project, and the Mankato to Mississippi River Project. These 345 kilovolt (kV) projects are currently in a Commission permitting process or have completed such a process.

MISO is currently reviewing a Tranche 2.1 portfolio of high voltage transmission lines.<sup>6</sup> Tranche 2.1 includes four 345 kV transmission lines and a 765 kV transmission line in Minnesota. MISO anticipates approving the Tranche 2.1 portfolio in December 2024.<sup>7</sup>

**Carbon Dioxide Pipelines.** Carbon dioxide pipeline projects have been proposed in the Upper Midwest. The Summit Carbon Solutions project envisions transporting carbon dioxide from ethanol plants in the Midwest to facilities in North Dakota for permanent underground sequestration. The first Minnesota pipeline of the Summit Carbon Solutions project – the Otter Tail to Wilkin project – is currently in the environmental review and permitting process.

**Research on the Potential Ecosystem Benefits of Solar Farms.** EERA is participating in two research projects funded by grants from the U.S. Department of Energy to examine the potential ecosystem benefits of solar farms. A project led by the Argonne National Laboratory will quantify soil-related ecosystem services at solar farms, e.g., carbon storage in soils. A project led by the Great Plains Institute will develop tools and models to demonstrate the potential ecosystem benefits of solar farms. EERA's involvement in the research projects will provide valuable regulatory insight, ensuring the studies are aligned with regulatory priorities and facilitating the translation of findings into informed regulatory decisions.

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<sup>5</sup> MISO, Long Range Transmission Planning, LRTP Tranche 1 Portfolio, <https://www.misoenergy.org/planning/transmission-planning/long-range-transmission-planning/>.

<sup>6</sup> Id.

<sup>7</sup> Id.

## **Permits Issued in 2024**

### **TRANSMISSION LINES & GENERATION FACILITIES PERMITTED (MS 216E)**

- Minnesota Power HVDC Modernization Project (TL-22-611)
- Cedar Lake 115 kV Reroute Project (TL-23-170)
- Alexandria to Big Oaks 345 kV Transmission Line (TL-23-159)
- Lake Wilson Solar Energy Center (GS-21-792)
- Sherco 3 Solar Project (GS-23-217)
- Dodge County Wind 161 kV Transmission Line (TL-20-867)

### **LWECS PERMITTED (MS 216F)**

- Dodge County Wind Project (WS-20-866)

### **PIPELINES PERMITTED (MS 216G)**

- Pipestone Pipeline Reroute Project (PPL-23-109)
- Dooley's Renewable Natural Gas Pipeline (PPL-23-392)

### **CERTIFICATES OF NEED (MS 216B.243)**

- Minnesota Power HVDC Modernization Project (CN-22-607)
- Big Stone to Alexandria to Big Oaks 345 kV Transmission Line (CN-22-538)
- Lake Wilson Solar Energy Center (CN-21-791)
- Dodge County Wind Project (CN-20-865)

## **Environmental Review Completed In 2024**

### **ENVIRONMENTAL ASSESSMENTS RELEASED**

- Minnesota Power HVDC Modernization Project (TL-22-611)
- Cedar Lake 115 kV Reroute Project (TL-23-170)
- Alexandria to Big Oaks 345 kV Transmission Line (TL-23-159)
- Northland Reliability 345 kV Project (TL-22-415)
- Pilot Knob to Burnsville 115 kV Rebuild and Upgrade Project (TL-23-410)
- Sherco 3 Solar Project (GS-23-217)
- Plummer Solar Project (GS-22-451)

### **ENVIRONMENTAL IMPACT STATEMENTS RELEASED**

- Minnesota Energy Connection 345 kV (TL-22-132); Draft EIS
- Prairie Island Additional Spent Nuclear Fuel Storage (CN-24-68); Draft EIS
- Otter Tail to Wilkin Carbon Dioxide Pipeline Project (PPL-22-422); Final EIS

### **OTHER ENVIRONMENTAL DOCUMENTS RELEASED**

- Pipestone Pipeline Reroute Project (PPL-23-109); Comparative Environmental Analysis

## **Permits in Process in 2024<sup>1</sup>**

### **TRANSMISSION LINES, GENERATION, AND ENERGY STORAGE FACILITIES IN THE PERMITTING PROCESS (MS 216E)**

- Northland Reliability 345 kV Transmission Line Project (TL-22-415)
- Minnesota Energy Connection 345 kV (TL-22-132)
- Pilot Knob to Burnsville 115 kV Rebuild and Upgrade Project (TL-23-410)
- Dairyland Wabasha 161 kV Relocation Project (TL-23-388)
- Mankato to Mississippi River 345 kV Transmission Line Project (TL-23-157)
- Laketown 115 kV Transmission Line Project (TL-24-132)
- Beaver Creek 161 kV Transmission Line (TL-24-95)
- Forks-Rost 161 kV Transmission Line (TL-24-232)
- Big Stone to Alexandria 345 kV Transmission Line Project (TL-23-160)
- Plummer Solar Project (GS-22-451)
- Iron Pine Solar Project (GS-23-414)
- Gopher State Solar Project (GS-24-106)
- Birch Coulee Solar Project (GS-23-477)
- Benton Solar Project (GS-23-423; TL-23-425; ESS-24-283)
- Coneflower Solar Project (GS-24-415)
- Northern Crescent Solar and Energy Storage (GS-22-57; ESS-24-238)
- Solway Solar Project (GS-24-309)
- Snowshoe Energy Storage (ESS-24-279)

### **LWECS IN THE PERMITTING PROCESS (MS 216F)**

- None

### **PIPELINES IN THE PERMITTING PROCESS (MS 216G)**

- Otter Tail to Wilkin Carbon Dioxide Pipeline Project (PPL-22-422)

### **CERTIFICATES OF NEED (MS 216B.243)**

- Prairie Island Additional Spent Nuclear Fuel Storage (CN-24-68)
- Xcel Energy Competitive Resource Acquisition Process (CN-23-212)

### **PERMIT TRANSFERS (MS 216E)**

- Regal Solar Project (GS-19-395)

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<sup>1</sup> Does not include projects in a planning status. EERA is currently reviewing pre-application materials for several potential 2025 projects. Also, EERA is reviewing pre-construction plans and monitoring construction of a number of wind, solar, transmission and pipeline projects.

## **Environmental Review in Process in 2024**

### **ENVIRONMENTAL ASSESSMENTS IN DEVELOPMENT**

- Dairyland Wabasha 161 kV Relocation Project (TL-23-388)
- Laketown 115 kV Transmission Line Project (TL-24-132)
- Beaver Creek 161 kV Transmission Line (TL-24-95)
- Forks-Rost 161 kV Transmission Line (TL-24-232)
- Plummer Solar Project (GS-22-451)
- Iron Pine Solar Project (GS-23-414)
- Gopher State Solar Project (GS-24-106)
- Birch Coulee Solar Project (GS-23-477)
- Benton Solar Project (GS-23-423; TL-23-425; GS-24-283)
- Coneflower Solar Project (GS-24-415)
- Northern Crescent Solar and Energy Storage (GS-22-57; ESS-24-238)
- Solway Solar Project (GS-24-309)
- Snowshoe Energy Storage (ESS-24-279)

### **ENVIRONMENTAL IMPACT STATEMENTS IN DEVELOPMENT**

- Minnesota Energy Connection 345 kV (TL-22-132)
- Mankato to Mississippi River 345 kV Transmission Line Project (TL-23-157)
- Big Stone to Alexandria 345 kV Transmission Line Project (TL-23-160)
- Prairie Island Additional Spent Nuclear Fuel Storage (CN-24-68)

### **OTHER ENVIRONMENTAL REVIEW IN DEVELOPMENT**

- Xcel Energy Competitive Resource Acquisition Process (CN-23-212); Environmental Report