

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).¹ EERA performs the same tasks for projects being reviewed under the Large Wind Energy Conversion System (LWECS) siting statute² and the pipeline routing statute.³

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.⁴ See the attached “**2023 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 2023 session, the Minnesota Legislature passed several laws that affect the Commission’s environmental review and permitting processes. These included, but are not limited to:

- Requiring a state site permit for energy storage systems with a capacity of 10 megawatts (MW) or more.
- Affirming the Commission’s authority over the routing of pipelines that transport carbon dioxide.
- Removing the requirement for a certificate of need for wind farms and solar farms that require a site permit from the Commission.
- Expediting the environmental review process by allowing EERA to proceed with environmental review after a meeting and vote by the Commission without waiting for a written Commission order.

In addition, 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 are anticipated to influence the number and types of energy facility projects that will apply to the Commission for state approvals.

MISO Tranche 1 Transmission Line Portfolio. In 2022, the Midcontinent Independent System Operator (MISO) approved an initial group of regional and interregional transmission line projects to ensure the

¹ Minnesota Statute 216E.

² Minnesota Statute 216F.

³ Minnesota Statute 216G.

⁴ Minnesota Statute 216E, Subd. 11.

reliable and efficient operation of the transmission grid in the Upper Midwest (Tranche 1 portfolio).⁵ 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. The projects represent a substantial build-out of 345 kilovolt transmission infrastructure in the state.

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 (see 2023 Project Status).

Improved EERA Website. EERA is reworking its website to improve ease of use of the site and to make clearer the Commission approvals associated with each energy facility project. The new website is anticipated to be launched in early 2024.

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 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 aided development of the grant applications and establishment of research teams.⁶ EERA's participation in the research projects will ensure that the research is informed by a regulatory agency perspective and that the research includes pathways to translate research outcomes into informed regulatory decision-making.

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

⁶ Research teams includes several Minnesota state agencies – the Minnesota Pollution Control Agency, Minnesota Department of Natural Resources, Minnesota Department of Agriculture, and Minnesota Board of Soil and Water Resources.

Permits Issued in 2023

TRANSMISSION LINES & GENERATION FACILITIES PERMITTED (MS 216E)

- Byron Solar Project (GS-20-763); Byron Solar Transmission Line (TL-20-765)
- St. Joseph 115-kV Transmission Line and Substation Upgrade (TL-22-235)
- Duluth Loop Reliability Project (TL-21-141)
- Cambridge Station Unit 2 Combustion Turbine Fuel Conversion Project (GS-22-122); Minor Alteration

LWECS PERMITTED (MS 216F)

- Pleasant Valley Wind Project Repower (WS-09-1197)

PIPELINES PERMITTED (MS 216G)

- Heartland Corn Products Natural Gas Pipeline Project (PPL-23-43)

CERTIFICATES OF NEED (MS 116C)

- Monticello Nuclear Plant Additional Spent Fuel Storage (CN-21-668)

Environmental Review Completed In 2023

ENVIRONMENTAL ASSESSMENTS RELEASED

- Lake Wilson Solar Energy Center (GS-21-792)
- St. Joseph 115-kV Transmission Line and Substation Upgrade (TL-22-235)

ENVIRONMENTAL IMPACT STATEMENTS RELEASED

- Monticello Nuclear Plant Additional Spent Fuel Storage (CN-21-668); Certificate of Need

OTHER ENVIRONMENTAL DOCUMENTS RELEASED

- Cambridge Station Unit 2 Combustion Turbine Fuel Conversion Project (GS-22-122); Environmental Assessment Worksheet
- Heartland Corn Products Natural Gas Pipeline Project (PPL-23-43); Partial Exemption

Permits in Process in 2023¹

TRANSMISSION LINES & GENERATION FACILITIES IN THE PERMITTING PROCESS (MS 216E)

- Timberwolf Solar (GS-23-205)
- Xcel Energy Sherco 3 Solar Project (GS-23-217)
- Lake Wilson Solar Energy Center (GS-21-792)
- Elk Creek Solar Project (GS-19-495)
- Northland Reliability 345 kV Transmission Line Project (TL-22-415)
- Alexandria to Big Oaks 345 kV Transmission Line Project (TL-22-538)
- Cedar Lake 115 kV HVTL Reroute Project (TL-23-170)
- Minnesota Power HVDC Modernization Project (TL-22-611)
- Minnesota Energy Connection (Sherco to Lyon County 345 kV Transmission Line Project) (TL-22-132)
- Dodge County Wind 161 kV Transmission Line (TL-20-867)

LWECS IN THE PERMITTING PROCESS (MS 216F)

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

PIPELINES IN THE PERMITTING PROCESS (MS 216G)

- Dooley's Renewable Natural Gas Pipeline (PPL-23-392)
- Pipestone Pipeline Reroute Project (PPL-23-109)
- Otter Tail to Wilkin Carbon Dioxide Pipeline Project (PPL-22-422)

Environmental Review in Process in 2023

ENVIRONMENTAL ASSESSMENTS IN DEVELOPMENT

- Timberwolf Solar (GS-23-205)
- Xcel Energy Sherco 3 Solar Project (GS-23-217)
- Elk Creek Solar Project (GS-19-495)
- Cedar Lake 115 kV HVTL Reroute Project (TL-23-170)
- Northland Reliability 345 kV Transmission Line Project (TL-22-415)
- Alexandria to Big Oaks 345 kV Transmission Line Project (TL-22-538)
- Minnesota Power HVDC Modernization Project (TL-22-611)
- Dodge County Wind Project (WS-20-866)

ENVIRONMENTAL IMPACT STATEMENTS IN DEVELOPMENT

- Minnesota Energy Connection (TL-22-132)
- Otter Tail to Wilkin Carbon Dioxide Pipeline Project (PPL-22-422)

¹ Does not include projects in a planning status. EERA is currently reviewing pre-application materials for several potential 2024 projects. Also, EERA is reviewing pre-construction plans and monitoring construction of a number of wind, solar, transmission and pipeline projects.

COMPARATIVE ENVIRONMENTAL ANALYSIS IN DEVELOPMENT

- Pipestone Pipeline Reroute Project (PPL-23-109)