

**Record of Categorical Exclusion  
for  
Wisconsin Power and Light's (WPL's)  
Grant County Battery Energy Storage System (BESS) Project**

**Description of Categorically Excluded Action:**

The United States Department of Energy (DOE) Loan Programs Office (LPO) is considering whether to issue a Title XVII Energy Infrastructure Reinvestment (EIR, 1706) Program loan guarantee to Wisconsin Power and Light (WPL) for the Grant County Battery Energy Storage System (BESS) Project (Project). WPL applied for a loan guarantee for a portfolio of individual projects under LPO's EIR Program. This program was established pursuant to the Inflation Reduction Act of 2022, which amended the Title XVII of the Energy Policy Act of 2005 to include the EIR Program. The EIR Program provides loan guarantees for projects that either: (1) retool, repower, repurpose, or replace energy infrastructure that has ceased operations; provided that if the project involves electricity generation through the use of fossil fuels, it is required to have controls or technologies to avoid, reduce, utilize, or sequester air pollutants and anthropogenic emissions of greenhouse gases; or (2) projects that enable operating energy infrastructure to avoid, reduce, utilize, or sequester air pollutants or anthropogenic emissions of greenhouse gases. LPO has determined that the Federal financial support (loan guarantee) request for each project within WPL's application constitutes a separate decision. Accordingly, the Proposed Action considered in this record of categorical exclusion is LPO's issuance of a loan guarantee for the Grant County BESS Project.

**Project Description:**

The Project consists of a 100-megawatt (MW) alternating current (AC)/400 megawatt-hour-AC (MWh<sub>AC</sub>) Lithium-Ion BESS and foundations, interconnecting wiring and cabling, auxiliary power system, and collector substation additions required to safely interconnect to the bulk electrical power system, which is needed to operate and maintain the system through a 20-year useful life. The Project will be constructed on approximately eight acres of land previously disturbed for Alliant Energy's existing Grant County Solar Facility, a 200 MW<sub>AC</sub> photovoltaic (PV) solar generating facility located on approximately 2,000 acres immediately adjacent to the Project Area in Grant County, Wisconsin. The Public Service Commission of Wisconsin (PSCW) authorized the addition of the BESS to the previously approved solar installation through its Order received August 7, 2023 (PSC ref# 474663) in response to a limited re-opening of Docket 9804-CE-100 "Application for Grant County Solar, LLC to Construct a New Solar Electric Generation Facility located near Potosi and Harison townships, in Grant County, Wisconsin".

The Project area was previously used as a laydown area for the Grant County Solar Facility, so no new grading will occur as a result of the Project. The laydown area for Project construction will be located adjacent to the facility on previously disturbed land. Construction of the Project will include minor earthwork (i.e., excavation) to allow for placement of Project components. BESS components include:

- Up to one hundred twenty-eight (128) battery containers with associated concrete pads;
- Thirty-two (32) power conversion systems (PCS) with skid-mounted PCS step-up transformers;
- Four (4) auxiliary switchboards;
- Eight (8) Energy Management System (EMS) Enclosures;
- Four (4) Uninterruptible Power Supply backup battery systems; and,
- Four (4) 2.0MVA auxiliary transformers.

Each battery container includes fire detection and deflagration prevention systems to monitor and respond to battery fires. The balance of plant system includes fire alarm systems to aggregate and communicate site hazards to operators and responders. Site fire water provisions are still under discussion with local authorities, but no onsite water storage or wells are planned. All water is expected to be brought to site by emergency vehicles, if required.

The BESS will be AC-coupled and interconnected at 34.5kV to an existing breaker bay provisioned for this purpose in the Grant County Solar Collector Substation located adjacent to the Project within the boundary of the Grant County Solar Facility. One new 34.5KV Power circuit breaker will be procured and installed for interconnection.

Prior to the placement of the battery containers, collector lines will be installed within the excavated area and trenched in previously disturbed areas to complete the connection to the nearby Grant County Solar Collector Substation. Two approximately 0.25-acre storm water retention basins will be constructed on previously disturbed land in the vicinity of the Project to reduce storm water runoff and maintain natural hydrology. The basins are Best Management Practices that will also meet the post-construction runoff management control requirements of Wisconsin Administrative Code Chapter NR 151. Runoff from the BESS will flow into grass lined ditches and will be collected in detention basins that are sized to reduce peak runoff flows from a 24-hour / 100-year storm event.

The BESS is anticipated to have a 20-year lifespan based on expected use. The BESS will have a full 4-hour discharge cycle and one full 4-hour charge cycle per day. The 128 battery containers will have a 489 MWh<sub>AC</sub> capacity when initially commissioned but will degrade with usage. In order to maintain the system's total rated capacity of 400MWh<sub>ac</sub> over the 20-year life, the current design allows for additional batteries and/or conduit to be installed within the existing site footprint if needed. Additional, minor modifications to site systems (e.g., control systems) may be required within the Project footprint over the anticipated 20-year lifespan of the Project.

After the expected lifespan of the Project, decommissioning activities will include complete removal of structures, equipment, and commodities to a typical depth of four feet below finish grade. Aggregate materials will be removed and stockpiled for salvage, and underlying geotextile fabric will be removed. Any infrastructure below four feet will be abandoned in place as they are not expected to impact future land use or agricultural operations. The storm water basin will be removed, filled with clean fill, finished with topsoil, and graded to restore pre-construction drainage patterns. Land use will be restored to its original pre-construction condition to the greatest extent possible.

All applicable permits have been obtained for this project, including:

- Generator Interconnection Agreement [Executed January 4, 2023]
- Construction Site Storm Water Runoff General Permit (WPDES Permit No. WI-S067831-06) [Approved February 27, 2024]. This approval also meets the erosion control standards promulgated by the Village of Potosi and Grant County.
- Wisconsin Department of Natural Resources Endangered Resources Review Verification [Approved January 23, 2024].

In accordance with the Endangered Species Act, LPO's review of the Project found that there would be no effect to listed species or critical habitat. LPO identified that the Project site is completely disturbed and contains no suitable habitat or biological resources, and there will be no disturbance from construction or operation activities on listed species or their designated critical habitat.

In accordance with the National Historic Preservation Act (NHPA), LPO consulted with the Wisconsin State Historic Preservation Office (SHPO). The Wisconsin SHPO concurred with LPO's finding of no historic properties affected for this Project on April 3, 2024. DOE identified federally recognized Native American Indian Tribes (Tribes) that may have an interest in the Project area. DOE notified the following twelve (12) federally recognized Tribes to see if they have an interest in the Project: Fort Belknap Indian Community of the Fort Belknap Reservation of Montana; Ho-Chunk Nation of Wisconsin; Kickapoo Tribe of Oklahoma; Lac Vieux Desert Band of Lake Superior Chippewa Indians of Michigan; Little Traverse Bay Bands of Odawa Indians, Michigan; Menominee Indian Tribe of Wisconsin; Miami Tribe of Oklahoma; The Osage Nation; Sac & Fox Nation of Missouri in Kansas and Nebraska; Sac & Fox Nation, Oklahoma; Sac & Fox Tribe of the Mississippi in Iowa; and Winnebago Tribe of Nebraska. DOE received requests from the Ho-Chunk Nation of Wisconsin, Sac & Fox Tribe of the Mississippi in Iowa, and the Winnebago Tribe of Nebraska to be notified of unanticipated discoveries. In the event of a post-review unanticipated discovery of cultural resources and/or human remains during construction, DOE LPO will determine actions to resolve adverse effects and notify the SHPO, any Tribe that might attach religious and cultural significance to the affected property, and the Advisory Council on Historic Preservation (ACHP) within 48 hours of the discovery, pursuant to 36 CFR 800.13(b)(3).

**Number and Title of Categorical Exclusion(s):**

The actions being proposed under this Title XVII loan guarantee for the Project are consistent with and covered by DOE categorical exclusions in 10 Code of Federal Regulations (CFR) Part 1021, Appendix B4, Categorical Exclusions Applicable to Electric Power and Transmission. The Project is covered by DOE Categorical Exclusions B1.7, B4.6, and B4.11.

***B1.7 Electronic Equipment***

Acquisition, installation, operation, modification, and removal of electricity transmission control and monitoring devices for grid demand and response, communication systems, data processing equipment, and similar electronic equipment.

***B4.6 Additions and Modifications to Transmission Facilities***

Additions or modifications to electric power transmission facilities within a previously disturbed or developed facility area. Covered activities include, but are not limited to, switchyard rock grounding upgrades, secondary containment projects, paving projects, seismic upgrading, tower modifications, load shaping projects (such as the installation and use of flywheels and battery arrays), changing insulators, and replacement of poles, circuit breakers, conductors, transformers, and crossarms.

***B4.11 Electric Power Substations and Interconnection Facilities***

Construction or modification of electric power substations or interconnection facilities (including, but not limited to, switching stations and support facilities).

**Regulatory Requirements defined in 10 CFR § 1021.410(b):**

The proposed loan guarantee for the Project and related construction, operation, maintenance, and decommissioning actions described above were subjected to an environmental due diligence review by DOE LPO staff to ensure they are consistent with the specific category of actions (categorical exclusion) contained in Appendix B of 10 CFR Part 1021 and the conditions for applying categorical exclusions specified in Section 410 of Part 1021. To ensure the requirements of Appendix B were met, LPO staff reviewed numerous project-related documents obtained between January 2024 and May 2024 and participated in several conference calls with WPL staff to ensure a complete understanding of the activities associated with the project. Further, LPO staff conducted a site visit on April 29, 2024.

The environmental due diligence review determined that there is no controversy regarding the potential environmental impacts of the Project, and that the actions associated with the loan guarantee would not adversely affect any physical, biological, or socio-cultural resources associated with the deployment of the project. The environmental due diligence review determined the Proposed Action has not been segmented to meet the definition of a categorical exclusion.

The Comment section below is provided for any necessary clarifications concerning the findings listed above. Signature by WPL's designated representative in the Corporate Validation section is an indication of WPL's concurrence with the findings and determinations presented above.

**Comment(s):**

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**Corporate Validation:**

Name and Title (Print):

RAJA SUNDARARAJAM

EVP STRATEGY & CUSTOMER SOLUTIONS

Signature and Date:

S. Raja

5/2/24

**Determination:**

Based on my review of information conveyed to me and in my possession concerning the actions associated with the proposed EIR Program (1706) loan guarantee described above, as National Environmental Policy Act (NEPA) Compliance Officer (as prescribed in DOE Policy Directive 451.1), I have determined that the actions involve no extraordinary circumstances and fit within the specified category of actions in Appendix B of 10 CFR Part 1021 described above, and are hereby categorically excluded from further review under NEPA (42 United States Code 4321, as amended).

**Signature and Date:**

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Todd Stribley, LPO NEPA Compliance Officer  
Director, Environmental Compliance  
Loan Programs Office