

PMC-ND

(1.08.09.13)

**U.S. DEPARTMENT OF ENERGY**  
**OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY**  
**NEPA DETERMINATION**

**RECIPIENT:** Ahlstrom-Munksjo Mosinee LLC**STATE:** WI

**PROJECT TITLE:** Wisconsin Energy Innovation Grant 2020 - Activity 2 Energy Efficiency and Process Efficiency

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
SEP-ALRD-2020	DE-EE-0008669	GFO-0008669-004	

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), I have made the following determination:

**CX, EA, EIS APPENDIX AND NUMBER:**

Description:

- A9 Information gathering, analysis, and dissemination** Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)
- B1.31 Installation or relocation of machinery and equipment** Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts.
- B5.1 Actions to conserve energy or water** (a) Actions to conserve energy or water, demonstrate potential energy or water conservation, and promote energy efficiency that would not have the potential to cause significant changes in the indoor or outdoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, manufacturers, and designers), organizations (such as utilities), and governments (such as state, local, and tribal). Covered actions include, but are not limited to weatherization (such as insulation and replacing windows and doors); programmed lowering of thermostat settings; placement of timers on hot water heaters; installation or replacement of energy efficient lighting, low-flow plumbing fixtures (such as faucets, toilets, and showerheads), heating, ventilation, and air conditioning systems, and appliances; installation of drip-irrigation systems; improvements in generator efficiency and appliance efficiency ratings; efficiency improvements for vehicles and transportation (such as fleet changeout); power storage (such as flywheels and batteries, generally less than 10 megawatt equivalent); transportation management systems (such as traffic signal control systems, car navigation, speed cameras, and automatic plate number recognition); development of energy-efficient manufacturing, industrial, or building practices; and small-scale energy efficiency and conservation research and development and small-scale pilot projects. Covered actions include building renovations or new structures, provided that they occur in a previously disturbed or developed area. Covered actions could involve commercial, residential, agricultural, academic, institutional, or industrial sectors. Covered actions do not include rulemakings, standard-settings, or proposed DOE legislation, except for those actions listed in B5.1(b) of this appendix. (b) Covered actions include rulemakings that establish energy conservation standards for consumer products and industrial equipment, provided that the actions would not: (1) have the potential to cause a significant change in manufacturing infrastructure (such as construction of new manufacturing plants with considerable associated ground disturbance); (2) involve significant unresolved conflicts concerning alternative uses of available resources (such as rare or limited raw materials); (3) have the potential to result in a significant increase in the disposal of materials posing significant risks to human health and the environment (such as RCRA hazardous wastes); or (4) have the potential to cause a significant increase in energy consumption in a state or region.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to the Wisconsin Office of Energy to replace the existing turbine runner in a hydroelectric power generating unit with new hardware featuring an upgraded design. The upgrade would occur at the Ahlstrom-Munksjo Mosinee Hydroelectric Plant in Mosinee, WI. The hydroelectric plant provides power to Ahlstrom-Munksjo Mosinee's paper mill, which is adjacent to the plant. The upgraded turbine runner would allow for increased renewable energy output to match the capacity of its mated generator, as well as continuous remote monitoring and operation.

Proposed project work would include the completion of an engineering review/site inspection, equipment removal, new equipment installation, and system commissioning. Prior to removing existing equipment, various measures would be taken to prepare the site, including dewatering the chamber in which the turbine is located and disconnecting electric power. Once these tasks are completed, the turbine runner, casing, and associated equipment would be removed. Some of these parts would be refurbished and reinstalled. The controller systems and security systems would be fully upgraded with new equipment. For the controller/security systems, this would consist of the installation of new Supervisory Control and Data Acquisition (SCADA), continuous control, and video monitoring systems. Equipment would be installed at both the Ahlstrom-Munksjo Mosinee hydroelectric plant and at the adjacent paper mill in Mosinee, WI. Fiber connections would also be established between the hydroelectric plant and paper mill. These connections would be established utilizing existing poles and structures.

All project work would be coordinated by Ahlstrom-Munksjo Mosinee. Equipment removal and installation would be completed by qualified third-party contractors. Activities would be limited to work on existing infrastructure and equipment located indoors at the hydroelectric plant and paper mill and would not result in any alterations to the facility footprint. No ground disturbance, outdoor installation work, or changes to the use or mission of existing facilities would be required.

Installation of the new turbine runner would result in an increased power output limit – increased to 3500 kW from 3050 kW, requiring approval from the Federal Energy Regulatory Commission (FERC). On 8/2/2021, Ahlstrom-Munksjo Mosinee submitted an application to the FERC, which is currently under review. Ahlstrom-Munksjo Mosinee would not perform any equipment removal or installation work until it obtains FERC approval.

The Ahlstrom-Munksjo Mosinee Hydroelectric Plant is not listed with the National Register of Historic Places (NRHP). An existing Programmatic Agreement with the Wisconsin State Historic Preservation Office would be applicable to all activities proposed as part of this project. This Programmatic Agreement exempts the undertakings to be performed from Section 106 review. Accordingly, DOE has determined that there would be no potential to affect historic properties.

The U.S. Fish and Wildlife Service's Information for Planning and Consultation database shows that there are three Endangered Species Act (ESA) listed species with the potential to occur in the project area. These include a listed bat, bird, and butterfly species. However, because all project activities would be performed indoors and would modify only existing infrastructure, DOE has determined that there would be no effect to ESA-listed species or critical habitats.

Project work would involve the use and handling of powered equipment. Personnel would also work within emptied water chambers that are normally filled. All such work would be performed in a controlled environment. Potential hazards would be mitigated through adherence to established institutional health and safety policies and procedures. Protocols would include staff training and engineering controls. Existing equipment to be removed would be tested for asbestos due to its age. If asbestos is shown to be present, a qualified asbestos removal contractor would be contracted to remove the materials. Ahlstrom-Munksjo Mosinee and its project partners would adhere to all applicable Federal, state, and local health, safety, and environmental regulations.

## NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Weatherization and Intergovernmental Programs Office – State Energy Program  
This NEPA determination does not require a tailored NEPA Provision.  
NEPA review completed by Jonathan Hartman, 09/21/2021

## FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the Rationale above) fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless

the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal.

The proposed action has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

The proposed action is categorically excluded from further NEPA review.

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature: \_\_\_\_\_



Electronically Signed By: Casey Strickland

NEPA Compliance Officer

Date: 9/22/2021

**FIELD OFFICE MANAGER DETERMINATION**

- ☒ Field Office Manager review not required  
☐ Field Office Manager review required

**BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :**

Field Office Manager's Signature: \_\_\_\_\_

Field Office Manager

Date: \_\_\_\_\_