

PMC-ND
(1.08.09.13)

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

**RECIPIENT:** StorEdgeAI LLC**STATE:** WA

PROJECT TITLE: Re-thinking solar energy delivery: Non-wire solar-powered energy-carriers, integrated with utility-scale generation, to advance solar adoption to 30% of the total generation before 2030

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0002243	DE-EE0009331	GFO-0009331-002	

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.)

B3.6 Small-scale research and development, laboratory operations, and pilot projects Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

B5.15 Small-scale renewable energy research and development and pilot projects Small-scale renewable energy research and development projects and small-scale pilot projects, provided that the projects are located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to StorEdgeAI to develop and test a novel solar-powered non-wire energy carrier. The device would be designed to store energy produced by solar photovoltaic (PV) systems. Prototype versions of the energy carrier device would be developed and tested in laboratory settings and outdoors at a dedicated solar farm. The project would be completed over two Budget Periods (BPs), with a Go/No-Go Decision Point in between each BP.

A previous NEPA Determination (GFO-0009331-001; CXs A9, B3.6, B5.15; 12/23/2020) reviewed all project activities. Since that time:

- The awardee has proposed that some of the testing activities originally planned to be conducted at Marquette University would be conducted instead at the Bordentown, NJ solar farm owned and operated by NWL. There are no changes to the scope of work or the type of testing being conducted. This purpose-built location was previously reviewed in the original NEPA Determination and no new environmental impacts have been identified that would result from implementation of additional testing activities at NWL.
- A new location (the University of Washington Clean Energy Testbed facility in Seattle, WA) has been proposed for

certain project activities. Limited work would happen at this facility, mostly storage and assembly of equipment, and initial laboratory-scale testing to check the assembled prototype unit is functioning. No change in the use, mission, or operation of this existing facility would arise out of project efforts. The facility has all applicable permits in place, and would not need additional permits for the proposed activities.

Upon review of the proposed location changes, DOE has determined that project activities would still fall within the category of actions covered by the CXs that were previously applied to this award.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Solar Energy Technologies Office

This NEPA determination does not require a tailored NEPA Provision.

NEPA review completed by Whitney Doss Donoghue, 7/27/2021

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:

 Kristin Kerwin
NEPA Compliance Officer

Date: 7/27/2021

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: _____