

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



RECIPIENT: Consolidated Edison Company of New York

STATE: NY

PROJECT TITLE: Project Title: Reliable Protection for an Inverter-Based Resources Dominant Grid: Technology Development and Field Demonstration

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0002745	DE-EE0010655	GFO-0010655-001	

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.)

B1.7 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.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to Consolidated Edison Company of New York (ConEd) for the research, development, and field deployment of a transmission system protection apparatus for existing commercial devices.

Proposed project activities would include simulation and modeling, development of a framework to analyze inverter-based resources (IBRs) and assess IBR penetration on transmission protection systems, development of a stability analysis software, and developing a commercialization roadmap. Testing would take place both in the lab and at utility sites. Lab testing would include developing protection schemes in lab and carrying out simulations. Utility field testing would take place at least three sites consisting of existing utilities. Field testing would be comprised of integrating and testing the developed software in preexisting standalone, floor mounted relay panels in the utility substation control houses.

ConEd (New York, NY) as well as V&R Energy (Los Angeles, CA) would perform literature reviews, data analyses, computer modeling, and concept design. Sandia National Laboratories (Albuquerque, NM) would develop computer programs and software. Quanta Technology (Raleigh, NC) and Dominion Energy (Glen Allen, VA) would carry out laboratory prototyping activities and software development. San Diego Gas and Electric (San Diego, CA) and Southern California Edison (Westminster, CA) would carry out energy testing and develop computer programs and software. ConEd's Astoria West Substation (Astoria, NY) would be the location of the field deployments, using their preexisting electric controller device at the substation.

The proposed project activities do not include any physical modifications of facilities, ground disturbances, or installation of equipment. Field deployment sites have existing operational permits.

DOE has considered potential impacts on resources, including those of an ecological, historical, cultural, and socioeconomic nature. DOE does not anticipate adverse impacts on these resources.

Any work proposed to be conducted at a federal facility may be subject to additional NEPA review by the cognizant federal official and must meet the applicable health and safety requirements of the facility.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Solar Energy Technologies Office (SETO)
NEPA review completed by Alex Colling on 08/04/2023.

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: Andrew Montano** Date: **8/9/2023**
NEPA Compliance Officer

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: _____ Date: _____
Field Office Manager