

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



**RECIPIENT:** Opus One Solutions

**STATE:** NY

**PROJECT TITLE :** SECURITY CONSTRAINED ECONOMIC OPTIMIZATION OF PV AND OTHER DISTRIBUTED ASSETS

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	DE-EE0008010	GFO-0008010-004	GO8010

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 federal funding to Opus One Solutions (Opus USA) to design, develop, and demonstrate an integrated system that co-optimizes aggregated distributed energy resources (DERs) of all types to maximize host site energy benefits and utility grid services and features.

DOE completed an initial NEPA Determination for this project on August 10, 2017 (GFO-0008010-001; CXs A9, B3.6). At that time, Advanced Microgrid Solutions (AMS) was the prime recipient. The award was later novated to Opus USA. DOE completed a second NEPA Determination on July 25, 2018 (GFO-0008010-002; CXs A9, B3.6), which reviewed the novation. DOE completed a third NEPA Determination on April 07, 2021 (GFO-0008010-003; CXs A9, B3.6) when Opus USA's original utility partner, Georgetown Utility Services (GUS), was replaced by Commonwealth Edison (ComEd). Field demonstration activities that were originally proposed to be performed at facilities operated by GUS were instead proposed to be performed at a demonstration site operated by ComEd. The specific site had not yet been selected for field demonstration activities. Accordingly, DOE conditioned all field demonstration activities (Task 8) upon further NEPA review.

Opus One has now identified the site for the storage system demonstration and has also submitted a revised SOPO that moves some of the Task 8 activities, including the demonstration, from BP1 to BP2. The non-demonstration Tasks 8.1, 8.2, 8.3, and 8.4 (now designated Task 14.2) would be performed in the corporate offices and/or indoor laboratories of Opus One and ComEd. The demonstration Tasks 8.5 and 8.6 (now designated Tasks 14.3 and 14.4) would be performed on private property in Rockford, IL.

Proposed project activities include design, development and field testing of a distributed energy resource management system (DERMS) for controlling solar photovoltaic systems and other general distributed energy

resources (DERs) at existing utility customer sites, as well as a new battery energy storage system (BESS) that would be designed, fabricated, and deployed at the Rockford site. The DERMS is a hardware (computers, servers) and software system deployed at existing utility grid operations centers (utility control room, substation, etc.) The only new equipment and infrastructure proposed to be installed would be the BESS, as reviewed below. Opus USA remains authorized to complete all other project activities, the nature and locations of which remain unchanged from previous reviews.

ComEd has received a "Grant of Easement" from the property owner of the proposed BESS site (approximately 0.5 acres total property size located in a densely developed area). The intended use is outlined in the Grant of Easement for the transmission and distribution of electricity, communications, sounds, and signals. The site would contain a transformer, lithium battery, and switchgear. No large physical modifications would be required to accommodate this equipment, other than minor civil work to include grading and the installation of fencing and a simple concrete pad for equipment. Minimal excavation would be required for grading and installation of the concrete pad and steel fence. Requisite state and/or local environmental site assessments would be conducted prior to any construction; no new permits are anticipated to be required.

The proposed project activities would also include electrical work to connect the BESS to the area power system. The BESS would be approximately 250 kW/350 kWh sized, to be charged and discharged to support electric grid reliability and resiliency in accordance with the statement of project objectives. Appropriate control technologies and best management practices for the use of large lithium batteries would be incorporated. At the conclusion of the proposed project, the BESS would remain in place at the site for continued use. At the end of product life, it would be disposed of following applicable recycling and/or disposal requirements for this type of equipment. All mechanical, construction, and electrical work would be conducted in accordance with existing corporate health and safety policies and procedures.

Based on the types and footprint of activities proposed and the previously disturbed nature of the BESS site, DOE does not anticipate any impacts to resources of concern due to the project's demonstration tasks.

## NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Solar Energy Technologies Office (SETO)  
Review completed by Whitney Donoghue on 08/17/2022

## 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: [Lisa Jorgensen](#)

NEPA Compliance Officer

Date: 8/17/2022

**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: \_\_\_\_\_