

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



RECIPIENT: Randolph Area Community Development Corporation

STATE: VT

PROJECT TITLE: Salisbury Square Redevelopment: Achieving Home Affordability and Energy Resilience via a Microgrid

Funding Opportunity Announcement Number Congressionally Directed Project	Procurement Instrument Number DE-EE0010163	NEPA Control Number GFO-0010163-001	CID Number
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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:

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| 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. |
| 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 administer Congressionally Directed Spending to the Randolph Area Community Development Corporation (RACDC) to design, procure, and install a Direct Current (DC) microgrid connecting Zero Energy units of an affordable housing project currently under development in Randolph, VT. In addition, the project would install a microgrid control system and a backup battery energy storage system (BESS) in the basement of an existing building on-site as well as purchase and install DC appliances and lighting in newly constructed buildings.

RACDC is an affordable housing and community development nonprofit. The project would take place at its Salisbury Square Planned Community, a residential low-moderate income (LMI) housing community that is partially constructed and planned to undergo additional development. The microgrid would serve the new units in the community. The property is owned and managed by RACDC as Managing General Partner of a Low-Income Housing Tax Credit Partnership. Construction of the housing itself is not within the scope of the proposed project, which would be conducted in parallel to the ongoing development of solar-powered LMI residential buildings. The proposed project would improve the site with microgrid connections to the homes, as well as equipment, controls, and battery storage to enable energy resiliency benefits to the community members, and ancillary benefits to the larger community from the ability of the power utility to discharge stored energy to reduce peak costs during non-islanded periods.

For the purposes of the proposed project, RACDC would acquire and install commercially available equipment, hardware, and software to interconnect the buildings. The proposed project scope does not include physical product manufacturing or field testing. Establishment of the microgrid would require the installation of underground conduit with electrical wiring to connect the various residential lot locations with the central microgrid controls and BESS. Laying underground wiring and conduit would require modest additional excavation beyond what will already be required for the housing construction itself; however, no new or additional permits are anticipated to be required to bury the underground wiring as site permits obtained for the residential development are expected to cover the proposed groundwork. The Salisbury Square site is a former Brownfield from historic use as a furniture factory for over 100 years, remediated through the VT Brownfield Program with assistance from the Environmental Protection Agency during the site's initial phase of development (the Certificate of Completion [SMS #2005-3445] was signed in July of 2012). No portion of the site on which the proposed activities would be undertaken are subject to any ongoing conditions of that cleanup.

The planned microgrid is expected to fall below the permit threshold for the Vermont Department of Public Service. RACDC would secure a Memorandum of Understanding (MOU) between RACDC and the local power utility which would operate the microgrid, as well as perform any necessary code upgrades. The basement of an existing building on-site (a cast concrete building with a separate basement entry) is the planned location of the microgrid controls, equipment, and battery storage. Minor interior modifications may be required to accommodate use of the room, such as additional lighting, power receptacles, ventilation, or other interior fit-up, and access for underground microgrid wiring into the basement. The building is already equipped with a sprinkler system. The backup batteries on site may include lithium-ion batteries. These batteries have internal fire suppression controls to mitigate against potential hazard once installed. Upgrades to the basement of the building, if necessary, may require standard building modification permits from the state Fire Marshal's office. Certain DC appliances purchased through the proposed project for the residential units would also require approval from the State Fire Marshal's office to enable their use in residential settings.

The first phase of residential development at Salisbury Square was completed a decade ago, and the planned development of new housing units (to be served by the microgrid under the proposed project) is the second phase of its development. The U.S. Department of Housing and Urban Development (HUD) prepared an Environmental Assessment for "Salisbury Square Phase II" and issued an Environmental Review Release in July of 2022. The scope of work as defined in the HUD Environmental Review Record covers the activities being proposed. The proposed basement location of the equipment is in an historic building which was rehabilitated as part of the first phase of development to the standards of the VT State Historic Preservation Office (SHPO). The SHPO reviewed updated site plans under the HUD "Salisbury Square Phase II" grant application, in which the microgrid development was discussed, and requires no additional consultation. Based on the types of activities proposed within the context of past, ongoing, and future site development, DOE does not anticipate any impacts to resources of concern due to the proposed activities of the project.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

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**
NEPA Compliance Officer

Date: 2/21/2023

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: _____