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(1.08.09.13)

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

**RECIPIENT:** [New Jersey Institute of Technology](#)**STATE:** NJ

**PROJECT TITLE:** [The Re-Side Right Initiative: A Systems Approach to High Performance Re-Siding Projects](#)

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
<a href="#">DE-FOA-0001824</a>	<a href="#">DE-EE0008692</a>	<a href="#">GFO-0008692-001</a>	

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.)

**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 New Jersey Institute of Technology (NJIT) to test and validate a novel system for insulating residential housing. The "Re-Side Right" approach would combine the use of continuous R-5 exterior insulation with liquid flashing to create a more energy efficient insulation/air barrier/water-resistant barrier system. The project would include the installation of insulation materials and weather resistive barriers on approximately six (6) to twelve (12) privately-owned residential homes throughout the United States. The selected homes would already be undergoing re-siding and would have the "Re-Side Right" approach incorporated into this process. Qualified installers would be selected and trained on the "Re-Side Right"

approach and would then perform installations on select residences. The project would be completed over three Budget Periods (BPs), with a Go/No-Go Decision Point in between each BP.

After selecting houses for participation in the project, but prior to any installation activities, NJIT would work with DOE's Institutional Review Board (IRB) to determine if any of the work activities could be considered human subject research. Should this be determined to be the case, NJIT would obtain IRB approval before initiating installation activities.

Proposed project activities for BP1 and BP2 would include project planning, the selection of siding installers that would agree to incorporate "Re-Side Right" into their existing siding jobs, homeowner survey development, installer training, inspection of conditions at selected residences, installation of "Re-Side Right" packages on selected residences, and testing of post-siding conditions (e.g. blower door and combustion safety testing). Two cohorts of approximately six (6) homes would be selected for the installations in each BP. Proposed project activities for BP3 would include post-installation surveying of homeowner participants, energy modeling, project cost/savings analysis, and development of educational materials on implementation of the "Re-Side Right" approach.

NJIT would coordinate with the selected siding installers to select homes for the project from the installers' existing pools of upcoming re-siding jobs. Homes would be selected that are sided (not stucco or brick), have not been weatherized or undergone an energy efficiency program in the last 10 years, and are between 1,800 – 3,000 sq. ft. All relevant permits, including construction permits from local municipalities and signed participation agreements with homeowners and contractors, would be obtained prior to performing any construction activities on residential homes.

NJIT would screen all installers prior to selection to ensure that only qualified contractors are selected. Industry standard health and safety policies and procedures would be adhered to throughout the project. NJIT and its partners would observe all applicable health, safety, and environmental regulations.

DOE funding would not be used to cover the re-siding jobs, but rather, would be limited to training the installers on the "Re-Side Right" approach and the incremental cost of adding the air barriers/insulation to each re-siding job. The re-siding jobs are not considered connected actions to the DOE funded project because all have already been planned for the selected homes prior to, and would proceed regardless of, selection for participation in the DOE funded project.

Any impacts that could potentially occur to historic properties or districts would be associated with the re-siding of the property that is occurring regardless of the DOE funded project. The types of materials being installed as part of the DOE funded project (e.g. air barriers, water-resistant barriers, and insulation) are considered appropriate energy efficiency measures for use in historic properties when complete replacement of walls is required. These materials would not be visible either from inside or outside of the property once installed. Considering the above as well as how effect is defined at 36 CFR 800.16(i), DOE's Section 106 review determined, in accordance with 36 CFR 800.3(a)(1), that installation of the "Re-Side Right" materials would have no potential to cause effects to historic properties, assuming they were present, therefore DOE has no further obligations under Section 106 of the National Historic Preservation Act.

## NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Building Technologies Office

This NEPA determination does not require a tailored NEPA provision.

Review completed by Jonathan Hartman on 4/25/2019

## 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: \_\_\_\_\_



Casey Strickland

NEPA Compliance Officer

Date: 4/26/2019

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