

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



**RECIPIENT:** stepwise electric inc

**STATE:** NY

**PROJECT TITLE:** Low Wires and Modular Electric Service Upgrade

**Notice of Funding Opportunity Number**  
DE-FOA-0003158

**Procurement Instrument Number**  
DE-EE0011596

**NEPA Control Number**  
GFO-0011596-001

**CID Number**  
GO11596

**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.

**Rationale for determination:**

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Stepwise Electric Inc. for the design, development, and field testing of integration hardware for heat pumps and water heaters with the goal of reducing the cost and complexity of residential energy service upgrades.

This project would be implemented over three Budget Periods (BPs). BP 1 would consist of development of grid-interaction functionalities, initiating equipment integration, and starting control algorithm development. BP2 would consist of prototype development, selection of field test sites, and prototype installation. BP3 would consist of field testing and developing a pathway for market delivery.

At this time, the locations of the field test sites have not been determined and there is insufficient information to review BP2 task 7 and BP3 activities. As such, this NEPA determination (ND) applies only to BP1 (all tasks) and BP2 (tasks 1 through 6). An additional NEPA review would be required for BP2 (task 7) and all activities under BP3.

Project management, data collection, analysis, reporting, prototype development, and prototype testing would occur at Stepwise Electric in Buffalo, NY; laboratory testing would occur at University of California, Davis in Davis, CA.

Project activities would involve typical hazards associated lab work and prototype development, including exposure to chemicals and fabrication equipment. Existing health and safety policies and procedures would be followed, including employee training, proper protective equipment, engineering controls, monitoring, and internal assessments. Additional policies and procedures would be implemented as necessary as new health and safety risks are identified

All project work would be performed at existing, purpose-built facilities. No modifications to existing facilities, ground disturbing activities, or changes to the use, mission, or operation of existing facilities would be required. DOE does not anticipate any impacts to resources of concern due to the proposed award activities.

EERE is aware of the November 12, 2024, decision in *Marin Audubon Society v. FAA*, No. 23-1067 (D.C. Cir. Nov. 12, 2024). To the extent that a court may conclude that the Council on Environmental Quality (CEQ) regulations implementing NEPA are not judicially enforceable or binding on this agency action, EERE has nonetheless elected to follow those regulations at 40 C.F.R. Parts 1500-1508, in addition to DOE's procedures/regulations implementing NEPA at 10 C.F.R. Part 1021, to meet the agency's obligations under NEPA, 42 U.S.C. §§ 4321 et seq.

## NEPA PROVISION

DOE has made a conditional NEPA determination.

The NEPA Determination applies to the following Topic Areas, Budget Periods, and/or tasks:

[Budget Period 1 \(all tasks\)](#)

[Budget Period 2 \(tasks 1 through 6\)](#)

The NEPA Determination does not apply to the following Topic Area, Budget Periods, and/or tasks:

[Budget Period 2 \(task 7\)](#)

[Budget Period 3 \(all tasks\)](#)

Notes:

[Building Technologies Office \(BTO\)](#)

[NEPA review completed by Jason Spencer, 1/16/2025](#)

## 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.

A portion of the proposed action is categorically excluded from further NEPA review. The NEPA Provision identifies Topic Areas, Budget Periods, tasks, and/or subtasks that are subject to additional NEPA review.

## SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: \_\_\_\_\_



[Matthew Blevins](#)

NEPA Compliance Officer

Date: [2/21/2025](#)

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