PMC-ND

(1.08.09.13)

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



RECIPIENT: The Levy Partnership, Inc. STATE: NY

PROJECT TITLE: Getting to Zero Energy Ready: A Plan for Transforming the Manufactured Housing Market

Funding Opportunity Announcement Number Procurement Instrument Number NEPA Control Number CID Number

DE-FOA-0002196 DE-EE0009737 GFO-0009737-002 NT9737

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 Smallscale 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 funding to The Levy Partnership, Inc., to design, develop, and demonstrate the technical viability and market potential of net zero design of manufactured homes (NZMHs). The project would create, prototype, and test NZMHs in three geographically and climatically diverse locations, cold (HUD zone 3), mixed-humid (HUD zone 2) and hot-humid (HUD zone 1). The award is being novated from the Systems Building Research Alliance to The Levy Partnership. Project tasks within the approved Statement of Project Objectives (SOPO) are being updated and are described further below. This NEPA Determination (ND) reviews the currently planned project with the changes to the SOPO since completion of the previous ND on 2/4/2022.

All design, planning, development, analysis, reporting, and coordination for the project would take place at The Levy Partnership located in New York City, NY. The construction of the prototype test homes would take place at a yet to be selected manufactured home plant(s). The project would incorporate advanced energy saving features and renewables into homes that are already being manufactured at an existing facility. Lastly, the Next Step Network, Inc. in Louisville, KY, would assist with identifying and qualifying potential home buyers as well as assisting with facilitating home purchase, delivery, and installation.

This project would take place over three budget periods (BPs) consisting of 12 to 18 months each, with a Go/No-Go Decision Point in between each BP. BP1 would include assessing the current NZMHs program requirements and compliance procedures and recommend modifications that would offer a better pathway to program compliance for manufactured home building. BP2 would include demonstrating the commercial viability and the ability to apply NZMH requirements in a production setting through the construction and placement of prototype homes. In partnership with affordable housing developers, three homes (one in each of three locations) will be built as prototypes for evaluation. Homes will be occupied upon completion. BP3 would be comprised of demonstrating energy and comfort performance of the three NZMH prototypes by collecting and analyzing data including disaggregated energy consumption, temperature, and humidity from each home. Post data analysis activities would include NZMHs program requirement refinements and facilitation of volume production and certification. Final results would be shared with the manufactured home industry through a robust program of information dissemination and outreach. Final results would be documented in a technical report, including energy consumption and comfort metrics of each prototype home, lessons learned from the design, production and occupancy of the homes and recommendations for program refinements. Lastly, The Levy Partnership will determine interest from developers to build approximately 70 additional NZMHs spread over two to four markets. This NEPA Determination would be applicable to all of BP1, as well as BP2

Task 6 through Subtask 7.1. Subtask 7.2 in BP2 and Tasks 8-9 in BP3 are restricted because at this time there is not enough information to complete a review of the proposed installation activities. Once the installation locations are selected, another NEPA review will be required to assess potential impacts associated with the installation of the manufactured homes.

Proposed project activities in BP1 would consist of convening a panel of stakeholders to provide advice and to review interim work products. Recommendations to DOE on ways to tailor the NZMH criteria toward manufactured home practices will also be developed to include the envelope (walls and roof), mechanical system design and selection, building tightness and other considerations that result in reductions in energy use and carbon and other GHG emissions. Other criteria found within the DOE Zero Energy Ready Homes Program, such as durability and indoor air quality, will also be considered. BP1 will include coordination with DOE's ABC Initiative to explore opportunities for cost savings through factory productivity improvements, as well as DOE's Manufactured Home Task Force and Accelerator Project, to identify potential synergies between this effort and those initiatives.

BP2 activities in Task 6 and Subtask 7.1 would entail developing specifications and drawings and soliciting bids and the production of the three NZMH prototypes. Production of the prototypes would occur at established manufactured home plant(s) where such homes are already produced. However, incorporating new technologies into the production process would be considered to meet the NZMH specifications.

There are no additional health or safety hazards due to the work that would be performed as part of the DOE funded project. No physical modifications to existing facilities, ground disturbing activities, or changes in the use, mission, or operation of existing facilities would be required for the completion of the project activities reviewed.

NEPA PROVISION

DOE has made a conditional NEPA determination.

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

Task 1.0: Overall project management and planning

Task 2.0: Project Coordination and Stakeholder Participation

Task 3.0: Develop NZMHs program requirements and procedures

Task 4.0: Identify and vet potential core technologies

Task 5.0: Vet program design with panel and other key stakeholders

Task 6.0: Prepare for prototype production and evaluation

Subtask 7.1: Oversee production

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

Subtask 7.2: Supervise installation and collect short-term performance data

Task 8.0: Evaluate homes

Task 9.0: Transforming industry practice - Documentation and outreach

Notes:

Building Technologies Office (BTO)
Review completed by Andrew M. Montano, 10/14/2022

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.

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:	Electronically Signed By: Casey Strickland	Date:	10/14/2022
	NEPA Compliance Officer	_	
FIELD OFFICE MANAGER DETERMIN	ATION		
✓ Field Office Manager review not require	od.		
☐ Field Office Manager review required			
BASED ON MY REVIEW I CONCUR WI	TH THE DETERMINATION OF THE NCO:		
Field Office Manager's Signature:		Date:	
	Field Office Manager	_	