PMC-ND

(1.08.09.13)

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



**RECIPIENT:** Nuvista Light & Electric Cooperative, Inc.

STATE: AK

PROJECT TITLE Nuvista Kwethluk Energy Storage - Battery Storage Resiliency Project

Funding Opportunity Announcement Number Procurement Instrument Number NEPA Control Number CID Number DE-FOA-0002032 DE-IE0000123 GFO-0000123-001

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,

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 analysis, and dissemination (including, but not limited to, document publication and distribution, and classroom training and dissemination 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 Nuvista Light & Electric Cooperative (Nuvista) to install an ABB E-Mesh PowerStore battery energy storage system (BESS) module at an existing winddiesel power plant in Kwethluk, AK. The BESS would have a power conversion capacity of 500 kW and an electrical energy storage capacity of 670 kWh. Once installed, the BESS would have the capacity to be repeatedly recharged using the power plant's wind system and would provide increased grid stability to the community in Kwethluk by integrating variable wind into the grid for increased fuel displacement. The project would be completed over a single **Budget Period.** 

Proposed project activities would revolve around the procurement, installation, and monitoring of the BESS module. Specific tasks would include the negotiation of procurement/working agreements, project planning activities (e.g. development of implementation/installation plans), collection of onsite data, equipment procurement/mobilization, BESS/control system integration, integration of the BESS into the existing grid, verification testing, and post-installation equipment monitoring. Nuvista would oversee all project activities in coordination with its partners Kwethluk, Inc. and the Organized Village of Kwethluk. Installation activities would be performed by qualified vendors that would be selected based on procurement negotiations, which would take place after commencement of the project.

Installation of the BESS module is anticipated to begin in summer 2020 and is expected to be completed by the end of the year. Monitoring of the system would begin shortly after installation. Installation activities would require the construction of a deck adjacent to the existing power plant in order to house the BESS module. The deck would measure approximately 12' x 20' and would be built on a post-and-pad foundation, with no associated ground disturbance. The power plant where installation activities would be performed is not near any listed historical buildings or landmarks, or any properties that are eligible for listing. Consequently, there would be no potential to cause effects on historic properties.

Nuvista and its project partners would adhere to all local, state, and Federal health, safety, and environmental regulations when performing project activities.

# NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Office of Indian Energy Policy and Programs
This NEPA determination does not require a tailored NEPA provision.
Review completed by Jonathan Hartman, 08/02/2019

# 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	Date: 8/5/2019	
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U.S. DOE: Office of Energy Efficiency and Renewable Energy - Environmental Questionnaire

NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION				
<ul><li>✓ Field Office Manager review not required</li><li>☐ Field Office Manager review required</li></ul>				
BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:				
Field Office Manager's Signature:	Date:			
Field Office Manager				