

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



RECIPIENT: kWh Analytics

STATE: CA

PROJECT TITLE : Completing the Feedback Loop: Linking Data, O&M, Manufacturers and Insurance Markets

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0002378	DE-EE0009827	GFO-0009827-001	

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, 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.)

A11 Technical advice and assistance to organizations Technical advice and planning assistance to international, national, state, and local organizations.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to kWh Analytics to aggregate and analyze photovoltaic O&M data in order to create a feedback loop incorporating insight from upstream and downstream renewable energy stakeholders. This project would work to ensure insights reach manufacturers and financiers, in order to extend the service life of photovoltaics, and would take place over two budget periods.

Analyses would be performed by kWh Analytics, based in San Francisco, CA. Sandia National Laboratories in Albuquerque, NM and NREL in Golden, CO would provide technical assistance related to the project data analysis and data acquisition. Award activities would comprise exclusively intellectual, academic, or analytical activities.

Proposed project activities would include the acquisition, integration, and analysis of at least 50,000 O&M events to identify top failure mode drivers and their solutions. O&M event data from kWh Analytics and Sandia would be aggregated and processed in a machine-readable format, HelioStats. Logged events would be analyzed to identify top photovoltaic failure modes and their drivers, using National Language Processing (NLP) software developed by Sandia. Solutions would be identified for each of the failure modes determined. Stakeholders would be engaged at every step of the process, and provide feedback and ensure support. A minimum of one minority-serving institution or underserved community would be engaged. Identified solutions would be used by kWh Analytics to develop an insurance model and develop a price signal in order to increase adoption of practices by owners, manufacturers, and providers. Letters of intent would be obtained from asset owners and project sponsors to participate in the program. Lastly, findings would be disseminated nationwide. This would be done via publication in journals, open-source software, and presentation to the DOE.

Any work proposed to be conducted at a federal facility may be subject to additional NEPA review by the cognizant federal official and must meet the applicable health and safety requirements of the facility.

NEPA PROVISION

DOE has made a final NEPA determination.

Notes:

Solar Energy Technologies Office (SETO)
This NEPA determination does not require a tailored NEPA provision.
Review completed by Alex Colling on 01/31/21.

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:  _____ Date: 2/1/2022
NEPA Compliance Officer

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: _____ Date: _____
Field Office Manager