



National Environmental Policy Act (NEPA) Determination Categorical Exclusion

Recipient: Alliance for Renewable Clean Hydrogen Energy Systems (ARCHES)

State: California

Project Title: ARCHES DOE H2 Hub

Funding Opportunity Announcement Number: DE-FOA-0002779

Award Number: DE-CD0000041

OCED NEPA Control Number: OCED -0000041-001-CX

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:

CATEGORICAL EXCLUSION APPENDIX, NUMBER, AND 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.)

B3.1 Site characterization and environmental monitoring: Site characterization and environmental monitoring (including, but not limited to, siting, construction, modification, operation, and dismantlement and removal or otherwise proper closure (such as of a well) of characterization and monitoring devices, and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis). Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance. Covered activities include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. (This class of actions excludes activities in aquatic environments. See B3.16 of this appendix for such activities.) Specific activities include but are not limited to: (a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, radar, and temperature gradient), geochemical, and engineering surveys and mapping, and the establishment of survey marks. Seismic techniques would not include large-scale reflection or refraction testing; (b) Installation and operation of field instruments (such as stream-gauging stations or flow[1]measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools); (c) Drilling of wells for sampling or monitoring of groundwater or the vadose

(unsaturated) zone, well logging, and installation of water-level recording devices in wells; (d) Aquifer and underground reservoir response testing; (e) Installation and operation of ambient air monitoring equipment; (f) Sampling and characterization of water, soil, rock, or contaminants (such as drilling using truck-or mobile-scale equipment, and modification, use, and plugging of boreholes); (g) Sampling and characterization of water effluents, air emissions, or solid waste streams; (h) Installation and operation of meteorological towers and associated activities (such as assessment of potential wind energy resources); (i) Sampling of flora or fauna; and (j) Cultural resource (archeological and historic) identification in compliance with 36 CFR part 800 and 43 CFR part 7.

Rationale for Determination:

DOE’s Office of Clean Energy Demonstrations (OCED) is proposing to provide funding to Alliance for Renewable Clean Hydrogen Energy Systems (ARCHES) in support of the ARCHES DOE Hydrogen Hub project. The ARCHES Hub would comprise an integrated network of hydrogen projects in California that includes hydrogen suppliers, off takers and distribution systems. The projects will support several key sectors—power, transportation (heavy-duty truck and transit), and marine port operations.

At this time, DOE is proposing to provide funding in support of ARCHES Phase 1 activities which include planning and design activities, information gathering and field surveys to inform additional DOE NEPA review and a go/no-go decision prior to authorizing federal funding in support of subsequent project phases. The ARCHES Hydrogen Hub’s Phase 1 activities are described below and would be performed by the following projects within the Hub:

- ARCHES HQ
- AES + AP JV (Twin
- Air Products
- Alameda-Countra Costa Transit District
- Amazon
- Element Resources Inc.
- Los Angeles Department of Water and Power
- Mote, Inc.
- National Renewable Energy Laboratory
- Scripps Institution of Oceanography
- SoCal Gas
- Sunline Transit Agency
- Center for Transportation and the Environment
- Chevron U.S.A Inc.
- Foothill Transit
- Fresno Area Express
- Dash Clean Energy
- OmniTrans
- Orange County Transportation Authority
- Pilot Transit Centers LLC
- Santa Cruz Metropolitan Transit District
- University of California, Davis
- University of California, Irvine
- University of California, Berkeley
- H Cycle
- Northern California Power Agency (NCPA)
- Lawrence Berkeley National Laboratory
- Linde Inc.

- Gold Coast Transit District
- Port of Long Beach
- Port of Los Angeles
- Port of Oakland
- San Joaquin Regional Transit District
- San Luis Hydrogen Partners, LLC
- San Mateo County Transit District
- First Element Fuel
- Plug Power Mendota
- Intersect Power, LLC
- North County Transit District
- Livermore Amador Valley Transit Authority
- Nikola
- Renewables 100
- Rincon Band of Luiseno Indians One Government
- Riverside Transit Agency
- San Diego Gas & Electric
- Universal Hydrogen

The ARCHES Phase 1 scope includes preliminary design and engineering, agency coordination for permits and approvals, engagement with Tribes for proposed future project activities, and Community Benefits planning and stakeholder coordination. The following specific activities are planned:

- Business Development & Management
- Engineering, Procurement, Construction, & Administrative Operations
- Safety, Security, & Regulatory Requirements
- Risk Analysis & Mitigation
- Technical Data & Analysis
- Technical Reports & Resource Assessments
- Community Benefits Activities

The following Phase 1 site characterization activities, by project, are proposed:

San Luis Hydrogen Partners, LLC Merced County, CA

The following field surveys are proposed to be conducted across more than a dozen parcels of land and open water, under a combination of private and federal ownership. Total area to be surveyed is approximately 8,425 acres:

- Jurisdictional delineation of wetlands and other waters regulated under the federal Clean Water Act (CWA)
- Habitat assessment for federally listed rare, threatened, or endangered species
- Botanical surveys
- Cultural resource surveys
- Phase I Environmental Site Assessment
- Visual impact assessment at key observation points

Dash Clean Energy, Lancaster, CA

The following site characterization activities are proposed to be conducted on a 10-acre area:

Biological Resource Assessment

- General reconnaissance survey and habitat assessments.
- Vegetation mapping
- Focused Burrowing Owl and Desert Tortoise surveys

Phase 1 Cultural Resource Assessment (See associated requirements in “Notes” below.)

- Archaeological records search
- Paleontological records search
- Historic maps and imagery
- Pedestrian field survey
- Tribal outreach

Noise Technical Report

- A noise technical study is proposed to support the environmental document. The field tasks necessary to complete the noise technical study may include measuring existing noise levels and/or vibration levels.

Consultations (Section 106 NHPA, Section 7 ESA, etc.): None required at this time. See “Notes” below for preliminary Section 106 requirements.

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 1501.9(e)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.1(g)(3)) 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.

DOE has determined that work to be carried out outside of the United States, its territories and possessions is exempt from further review pursuant to Section 5.1.1 of the DOE Final Guidelines for Implementation of Executive Order 12114; “Environmental Effects Abroad of Major Federal Actions.”

The proposed action is categorically excluded from further NEPA review.

A portion of the proposed action is categorically excluded from further NEPA review.

Notes:

This categorical exclusion determination does not authorize ARCHES to conduct work on federal lands. ARCHES are responsible for ensuring all necessary permits and authorizations are in place with land management agencies, as required.

All cultural resource identification activities (e.g., archaeological, historic above ground, historic visual assessments) must be completed in accordance with applicable guidelines and standards provided by the California State Office of Historic Preservation (OHP) or Tribal Historic Preservation Office (THPO) and the Secretary of the Interior’s Identification Standards. Coordination with DOE is required to establish an Area of Potential Effects (APE) and scope of effort (i.e., research design) prior to geotechnical surveys and cultural resource field investigations. The DOE will initiate Section 106 consultation prior to geotechnical surveys and cultural resource field investigations in order to support coordination with OHP/THPO, Tribes, and other Section 106 consulting parties. Formal consultation as part of the Section 106 process will be led by and carried out in coordination with OCED staff.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

OCED NEPA Compliance Officer Signature:

Date: