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

RECIPIENT: Center for Transportation and the Environment **STATE:** GA

PROJECT TITLE : Fuel Cell Hybrid Electric Van Deployment Project

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0000828	DE-EE0006523	GFO-0006523-002	GO6523

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), 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.
B5.15 Small-scale renewable energy research and development and pilot projects	Small-scale renewable energy research and development projects and small-scale pilot projects, provided that the projects are located within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to the Center for Transportation and the Environment (CTE) to develop, validate, and deploy fuel cell hybrid electric walk-in delivery trucks/vans. The fuel cell hybrid delivery vehicle design would be able to achieve extended range through a combination of fuel cell and battery power while producing zero emissions.

Projects tasks are broken out into two DOE Budget Periods (BP). This determination is being conducted to release the remaining tasks under BP1 only. For BP2, CTE is proposing to deploy an additional sixteen fuel cell hybrid walk-in vans. The activities and sites proposed under BP2 have not been sufficiently defined in order to conduct a meaningful NEPA review; therefore these are conditional pending further NEPA review.

A previous determination (GFO-0006523-001) was completed for this project which allowed Tasks 1.1 and 1.2. This determination is being completed to review the rest of Task1.0 (subtasks 1.3-1.10), Task 2.0, Task 3.0 and Task 4.0.

Tasks for BP1 include the following:

Task 1.0 – Vehicle Build

Task 1.1: Final Vehicle Specification and Development of Acceptance Plan (CX'd in previous NEPA review)
Task 1.2: Hybrid Powertrain Sub-system Design Confirmation and Schematics (CX'd in previous NEPA review)
Task 1.3: Order Long Lead Time Components (for Task 1.0 and 3.0 activities)
Task 1.4: Battery Pack Build & Test
Task 1.5: Base Electric Drive Van (EV-WI) Assembly and Commissioning at EVI
Task 1.6: Base Vehicle Delivered to CEM
Task 1.7: Vehicle Hydrogen Storage System Integration
Task 1.8: Vehicle Fuel Cell Power System Integration
Task 1.9: Vehicle Commissioning and Specification Validation

Task 1.10: Vehicle Delivered to Operation Site

Task 2.0: Training and Education

Task 3.0: Demonstration Vehicle Test and Evaluation

Task 4.0: Project Management – Budget Period 1

CTE is partnering with the University of Texas – Center for Electromechanics (CEM), Electric Vehicles International (EVI), Hydrogenics USA, Valence Technology, and United Parcel Service (UPS) as part of this project.

Tasks 1.3-1.10 would involve building and testing the fuel cell power module at Hydrogenics manufacturing facilities in Mississauga, Canada. After successful test the fuel cell would be shipped to CEM for installation into the demonstration vehicle. A diesel-powered walk-in van provided by UPS will be converted to electric drive. CEM would integrate Hydrogenics' fuel cell, as well as the power electronics, hydrogen storage system, and controls into a base electric vehicle. The assembled vehicle would be lab tested for two weeks to identify any potential issues. After the tests and service, the van would be shipped to the UPS site in West Sacramento, California.

Tasks 1.3-1.10 would take place at existing laboratory and manufacturing facilities. No modifications would be needed to the facility or to the existing permits. CTE and their partners have all appropriate health, safety, and hazardous waste policies and procedures in place for each facility. These actions are consistent with DOE CX 3.6 (small-scale research and laboratory operations).

Task 2.0 would involve planning and document preparation only. CTE and project partners would develop operator's manuals and training plans for operators of the vehicle. CTE would then conduct training for UPS operators, as necessary. Activities proposed under this task are all administrative in nature and are consistent with DOE CX A9 (information gathering, analysis, dissemination; including document publication and classroom training).

Task 3.0 would involve the real-world demonstration and testing of the prototype vehicle with UPS at their site in California. After delivery of the vehicle, UPS would use the vehicle in a local delivery route for a period of six months. During this period, maintenance and operational support will be provided by CTE. The modified UPS van would replace a currently engaged UPS van and travel standard postal delivery routes to businesses and residential areas. The drivers would be trained before use in safety and fueling processes. Activities proposed in this task would fall into DOE CX B5.15 (small-scale renewable energy research and development and pilot projects).

DOE has determined that Task1.0, Task 2.0, Task 3.0, and Task 4.0 are consistent with actions covered under DOE CX A9, B3.6 and B5.15; and therefore are categorically excluded from further NEPA review.

NEPA PROVISION

DOE has made a conditional NEPA determination for this award, and funding for certain tasks under this award is contingent upon the final NEPA determination.

Insert the following language in the award:

You are restricted from taking any action using federal funds, which would have an adverse affect on the environment or limit the choice of reasonable alternatives prior to DOE/NNSA providing either a NEPA clearance or a final NEPA decision regarding the project.

Prohibited actions include:
All Budget Period 2 activities:

TASK 5.0: Vehicle Build
TASK 6.0: Training and Education
TASK 7.0: Vehicle Test and Evaluation
TASK 8.0: Project Management - Budget Period 2

This restriction does not preclude you from:
All Budget Period 1 activities:

Task 1.0: Vehicle Build
Task 2.0: Training and Education
Task 3.0: Demonstration Vehicle Test and Evaluation
Task 4.0: Project Management – Budget Period 1

If you move forward with activities that are not authorized for federal funding by the DOE Contracting Officer in advance of the

final NEPA decision, you are doing so at risk of not receiving federal funding and such costs may not be recognized as allowable cost share.

Insert the following language in the award:

You are required to:
DOE is required to complete a NEPA review for Budget Period 2 activities. The recipient must submit an additional EQ1 in order to initiate the NEPA review process for BP2. The EQ1 should provide details including (1) the vehicle assembly and testing locations, (2) information regarding applicable permits and state/local approvals needed to conduct all activities, (3) the vehicle demonstration programs including route locations, duration and miles of use per vehicle, and (4) training, and safety plans for vehicle operators and maintenance personnel.

Note to Specialist :

1. Fuel Cell Technologies Office

2. This NEPA Determination requires a tailored NEPA provision

3. NEPA review completed by Laura Margason on November 19, 2014

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____ Date: 11/24/2014
NEPA Compliance Officer

FIELD OFFICE MANAGER DETERMINATION

☐ Field Office Manager review required

NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:

☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____ Date: _____
Field Office Manager