PMC-ND

(1.08.09.13)

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



RECIPIENT: TreadStone Technologies, Inc.

STATE: NJ

PROJECT TITLE:

Novel Structured Metal Bipolar Plates for Low Cost Manufacturing

Funding Opportunity Announcement Number

Procurement Instrument Number DE-EE0007732

NEPA Control Number CID Number GFO-0007732-001 GO7732

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. 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) laboratory operations, 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 federal funding to TreadStone Technologies, Inc. (TreadStone) to further develop the manufacturing process of TreadStone's doped bipolar plates for use in proton exchange membrane hydrogen fuel cells. This project builds on work completed as part of a previous DOE project (DE-EE0000463). This project work would occur within the same laboratory where work was completed for the previous award, TreadStone's leased research and development facility in Princeton, New Jersey. Testing would occur at both the TreadStone facility and the Hawaii Natural Energy Institute at the University of Hawaii.

Proposed project activities are designed to optimize TreadStone's physical vapor deposition coating process, characterize the effectiveness of the optimized process, and evaluate the coating process on stamped 304 stainless steel bi-polar plates in operating fuel cell tests. All activities would take place in existing facilities designed for this type of research; therefore no modifications, new permits, additional licenses and/or authorizations would be necessary. No ground disturbing activities, no changes in operation of existing facilities, and no installation of equipment outdoors would occur at facilities involved in the project. Project facilities are equipped and outfitted for hydrogen fuel cell research and there are safety and handling protocols in place for handling hydrogen gas and other laboratory scale chemicals, gases, and compounds. These policies and procedures include safety programs, OSHA requirements for chemical hygiene, hazardous communications protocols, respiratory protection, and personal protective equipment. Handling and disposal of all waste (hazardous and non-hazardous) would be managed in accordance with federal. state, and local environmental regulations. DOE does not anticipate any impacts to resources of concern due to the proposed activities of the project.

Based on the review of the proposal, DOE has determined the proposal fits within the class of action(s) and the integral elements of Appendix B to Subpart D of 10 CFR 1021 outlined in the DOE categorical exclusion(s) selected above. DOE has also determined that: (1) there are no extraordinary circumstances (as defined by 10 CFR 1021.410 (2)) related to the proposal that may affect the significance of the environmental effects of the proposal; (2) the proposal has not been segmented to meet the definition of a categorical exclusion; and (3) the proposal is not connected to other actions with potentially significant impacts, related to other proposals with cumulatively significant actions, or an improper interim action. This proposal is categorically excluded from further NEPA review.

NEPA PROVISION

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DOE has made a final NEPA determination for this award

Insert the following language in the award:

If the Recipient intends to make changes to the scope or objective of this project, the Recipient is required to contact the Project Officer, identified in Block 15 of the Assistance Agreement before proceeding. The Recipient must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved. If the Recipient moves forward with activities that are not authorized for Federal funding by the DOE Contracting Officer in advance of a final NEPA decision, the Recipient is doing so at risk of not receiving Federal funding and such costs may not be recognized as allowable cost share.

Note to Specialist:

Fuel Cell Technologies Office

This NEPA determination does not require a tailored NEPA provision.

NEPA review submitted by Casey Strickland 03/01/17

SIGNATURE OF THIS MEMORANDUM CO	NSTITUTES A RECORD OF THIS DECISION.	
NEPA Compliance Officer Signature:	NEPA Compliance Officer Date: 3/1/201	7
FIELD OFFICE MANAGER DETERMINATION	ON	
☐ Field Office Manager review required		
NCO REQUESTS THE FIELD OFFICE MAN	AGER REVIEW FOR THE FOLLOWING REASON:	
Manager's attention.	usion but involves a high profile or controversial issue that warrants Field Off regory 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	