



U.S. Department of Energy

Categorical Exclusion Determination Form

Program or Field Office: Advanced Research Projects Agency - Energy

Project Title: (0471-1544) Sheetak Inc. - Thermoelectric Reactors for Efficient Automotive Thermal Storage

Location: *- Multiple States - New York, Pennsylvania, Texas

Proposed Action or Project Description:

American Recovery and Reinvestment Act:

Funding will support development of a novel system of thermoelectric reactors for efficient automotive thermal energy storage (TREATS) in electric vehicle and plug-in hybrid electric vehicle Heating, Ventilation, and Cooling (HVAC) systems.

Proposed work consists of indoor laboratory-based research and development, including (1) experimentation and analysis to assess the mechanics and dynamics of thermoelectric reactors, (2) design, fabrication, testing, and analysis of hot and cold reactors, (3) design, fabrication, testing, and analysis of a thermoelectric module, and (3) design, fabrication, testing, and analysis of an integrated TREATS system. Project work will take place at dedicated laboratory and industrial facilities located at Sheetak Inc. (Austin, TX), Delphi Automotive Systems LLC (Lockport, NY), and Alcoa North American Rolled Products (Lancaster, PA).

Categorical Exclusion(s) Applied:

B3.6 - Small-scale research and development, laboratory operations, and pilot projects

*-For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, see Subpart D of 10 CFR 10.21 [Click Here](#)

This action would not: threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including DOE and/or Executive Orders; require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities, but may include such categorically excluded facilities; disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; or adversely affect environmentally sensitive resources (including but not limited to those listed in paragraph B.(4) of Appendix B to Subpart D of 10 CFR 1021). Furthermore, there are no extraordinary circumstances related to this action that may affect the significance of the environmental effects of the action; this action is not "connected" to other actions with potentially significant impacts, is not related to other proposed actions with cumulatively significant impacts, and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211.

Based on my review of information conveyed to me and in my possession (or attached) concerning the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

NEPA Compliance Officer:

Date Determined: Nov 10, 2011

Comments:

Webmaster:

