

memorandum

DATE: September 7, 2006 Audit Report Number: OAS-L-06-19

REPLY TO: IG-32 (A06CH002)

ATTN OF: IG-32 (A06CH002)

SUBJECT: Audit of the Department's Hydrogen Projects

TO: Assistant Secretary for Energy Efficiency and Renewable Energy

INTRODUCTION AND OBJECTIVE

The Department of Energy's (Department) Office of Energy Efficiency and Renewable Energy has several programs which are designed to enable the transition to the future hydrogen economy. The Hydrogen, Fuel Cells & Infrastructure Technologies Program is responsible for research activities involving fuel cells, hydrogen production, storage, and delivery. The overall vision of these programs is to integrate clean, abundant, reliable, and affordable hydrogen energy and fuel cell power into all sectors of the economy throughout the country.

To accomplish this mission, the Department awards grants, cooperative agreements, and contracts. Both the Hydrogen Future Act of 1996 and the Energy Policy Act of 2005 require the Department's Hydrogen Programs to use competition in the project selection process, and to use cost sharing agreements with the private sector when appropriate. In addition, the Department directly funds work at its national laboratories. The objective of our audit was to determine whether the Department was effectively administering hydrogen technology projects.

CONCLUSIONS AND OBSERVATIONS

Nothing came to our attention to suggest that the Department was not properly administering the hydrogen technology projects. We found that the Department generally awarded grants and cooperative agreements based upon a competitive solicitation followed by a peer review to determine the merit of the proposed projects. Also, the work funded at a national laboratory, while non-competitively awarded, appeared to be within the laboratory's mission. Likewise, we found that the Department required the appropriate levels of cost sharing from the awardees. However, we noted that the Department had not always conducted effective cost reviews during the performance period of the agreements.

The Golden Field Office, which is responsible for administering the agreements, had not effectively conducted incurred cost reviews to determine the allowability of costs reported and to verify cost share totals. We sampled costs reported for six judgmentally selected awardees and found that the Golden Field Office had not

determined that three of the six had incorrectly reported the amount of costs shared. In one case, the awardee included cash received from another Federal source as a cost share contribution and included unallowable meal costs in its reported costs. In another instance, the awardee overstated its cost share, but corrected the error in a subsequent report. Finally, a third awardee understated its cost share total, but had yet to correct the mistake. These instances were identified in the supporting documents supplied to us by the awardees and could have been easily found had a cost review been performed.

During the course of our audit, we learned that the Golden Field Office was implementing new procedures to review submitted costs on a more frequent basis. The new procedures will require higher levels of cost reviews, including desk reviews and audits for projects above certain dollar thresholds. However, since the procedures were still being implemented, we were unable to test their effectiveness. Accordingly, we suggest that the Golden Field Office ensure that the procedures adequately address the control weaknesses noted in this audit and that a review be conducted at an appropriate interval after implementation to evaluate the effectiveness of these procedures.

SCOPE AND METHODOLOGY

The audit was performed from April through August 2006, at the Golden Field Office in Golden, Colorado; Argonne National Laboratory, in Argonne, Illinois; and the Office of Energy Efficiency and Renewable Energy in Washington, DC. The audit scope included projects funded by the Department's Hydrogen Program in Fiscal Years 2004 through 2006.

To accomplish our audit objective, we reviewed:

- Applicable laws governing the competition and cost share requirements of the Department's Hydrogen Program;
- Prior audits and reviews related to the Hydrogen Program and financial assistance agreements;
- Performance measures established for the Hydrogen Program;
- Strategic plans such as the National Hydrogen Energy Roadmap, budgets, and publications; and,
- Project selection process to determine whether projects funded have been selected using full and open competition.

Additionally, to meet our objectives, we:

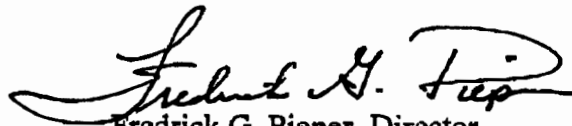
- Interviewed program officials to determine the rationale for funding decisions;

- Selected and reviewed 30 projects awarded as grants, cooperative agreements, and contracts by the Golden Field Office;
- Selected and reviewed 10 projects funded at Argonne National Laboratory; and,
- Selected and validated claimed costs and cost share totals submitted by 6 awardees.

The audit was performed in accordance with generally accepted Government auditing standards for performance audits and included tests of internal controls and compliance with laws and regulations to the extent necessary to satisfy the audit objective. Because our review was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our audit. We evaluated performance measures established under the *Government Performance and Results Act of 1993* and found measures related to hydrogen, fuel cells, and infrastructure technologies. When appropriate, we performed limited test work of data reliability during our audit and determined that we could rely on the computer-processed data.

An exit conference was held with representatives of the Office of Energy Efficiency and Renewable Energy on August 25, 2006.

We appreciate the cooperation of your staff during our review. Because no formal recommendations are being made in this report, a formal response is not required.



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cc: Under Secretary for Science
Under Secretary for Energy
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