May 28, 2002

MEMORANDUM TO: William D. Travers
Executive Director for Operations

FROM: Stephen D. Dingbaum/**RA**/
Assistant Inspector General for Audits

SUBJECT: MEMORANDUM REPORT: AUDIT OF NRC OVERSIGHT OF ITS FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTER (OIG-02-A-11)

At the request of the Executive Director for Operations, the Office of the Inspector General (OIG) conducted this audit to determine if the Nuclear Regulatory Commission (NRC) adhered to the Federal Acquisition Regulation (FAR) in preparing the renewal justification for its Federally Funded Research and Development Center (FFRDC). Additionally, OIG examined how NRC exercises technical oversight and contract administration of the FFRDC. OIG found that the agency's draft renewal justification, as revised on April 18, 2002, for continued use of the FFRDC satisfactorily addressed the FAR criteria. Furthermore, NRC's oversight and administration of the FFRDC contract are adequate. Therefore, OIG makes no recommendations.

BACKGROUND

In October 1987, NRC contracted with Southwest Research Institute (SwRI) to operate a Federally Funded Research and Development Center. SwRI established the Center for Nuclear Waste Regulatory Analyses (the Center) to provide long-term technical assistance and research related to NRC's High-Level Waste (HLW) Program authorized under the Nuclear Waste Policy Act of 1982, as amended. The agency sponsored an FFRDC to (1) avoid potential conflict-of-interest situations caused by hiring contractors who worked on or were competing for Department of Energy contracts, and (2) establish consistent long-term technical expertise. Under the Nuclear Waste Policy Act of 1982, as amended, NRC is responsible for licensing HLW storage and disposal facilities that will be sited, constructed, and operated by the Department of Energy, the licensee. Because of the nature of this relationship, it was and is critical that NRC's technical evaluations of Department of Energy license applications be free of any potential conflict-of-interest.

In October 1992, and again in September 1997, the agency extended its contract with SwRI for an additional five years. The current contract, with a ceiling of $87.6 million, expires on September 27, 2002. FAR Section 35.017 addresses FFRDCs and requires that, prior to extending a contract for an FFRDC, a sponsor must conduct a comprehensive review of the use of and need for the FFRDC. The review must:

1. Examine the Continuing Need for FFRDC;
2. Consider Alternative Sources;
3. Assess the Center's Efficiency and Effectiveness;
4. Determine if Center Operation is Cost-Effective;
5. Determine Agreement Compliance with FAR Section 35.017-1.

If the review determines that the need for the FFRDC still exists and that the Center has met the agency's needs, NRC may extend the contract for an additional 5-year period.

RESULTS

NRC's Draft Renewal Justification Fulfills the Requirements of FAR 35.017

The draft justification for renewal satisfactorily addressed the five FAR criteria and complied with agency requirements for documenting the review. The results of NRC's review are summarized below.

Continuing Need for FFRDC

The first FAR criterion requires the agency to determine if the special technical needs and mission requirements performed by the FFRDC continue to exist. The agency adequately justified its continued need for the Center.

NRC determined that the FFRDC was still needed to support the agency's special technical needs and mission. Prior to establishing the FFRDC, the agency's contractors had some association with the Department of Energy, thus creating a potential conflict-of-interest situation. The FFRDC has made it possible to retain qualified experts and avoid conflict-of-interest situations. Over the past 15 years, the continuity in and independence of the Center's technical support has provided NRC the experts it needs. These experts will be important for the adjudicatory licensing hearings for Department of Energy proposed HLW long-term storage and disposal facilities.

The first criterion also requires the agency to assess the resources needed to support NRC programs at the Center. The agency adequately assessed both the resources needed to support NRC programs and the Center's ability to provide those resources.

Consideration of Alternate Sources

FAR requires that the agency consider alternative sources to meet its technical needs. The agency adequately addressed this requirement by conducting a survey of current and previous technical staff familiar with the contract to determine if another contractor could meet the agency's needs. The Office of Federal Procurement Policy had previously said that this method was acceptable. The agency identified twenty-seven alternate contractors, but concluded that the problems originally encountered in using private-sector contractors and Department of Energy National Laboratories still existed. Specifically, the main problems continue to be the inability to provide long-term continuity and conflict-of-interest free technical assistance and research. Some contractors could not fully support NRC's HLW program, while others had some association with the Department of Energy.

The agency also considered re-competing the contract, but concluded that this action would have a negative impact on NRC's HLW program. Specifically, NRC's investment in establishing the Center and the high level of technical competency and regulatory expertise developed by the Center during the past 15 years would be lost. As a result, experienced technical and regulatory expertise would not be available in time for the Department of Energy license application hearings.

Finally, NRC compared the cost of operating the Center's technical assistance function to the in-house cost of the same body of work. The analysis, which covered FYs 2003 through 2005, showed that performing the Center's function in-house would cost approximately $6.8 million less over the three-year period. The renewal justification noted that there are unquantifiable costs such as start-up costs for staff learning new jobs, contract costs to replace laboratory services that the Center currently performs at SwRI laboratories, and signing bonuses for individuals in certain disciplines that are difficult to recruit. The agency concluded that the time to acquire and develop the required level of expertise could result in substantial costs and program impacts. Additionally, the analysis could not capture the cost of phasing out the contract. The agency's cost comparison asserts that the need for technical expertise that is long-term and conflict-of-interest free, and not cost, continue to be the primary consideration for maintaining the Center.

Efficiency and Effectiveness of the Center

The third criterion requires that the agency assess the Center's efficiency and effectiveness in meeting the agency's needs. The agency adequately addressed this criterion. The Center Review Group (CRG), which consists primarily of senior NRC managers, oversees the Center's activities and performance. This group meets semiannually to review and evaluate the Center's performance. Since renewal of the contract in September 1997, the Center has received "excellent" ratings for its performance in the "Technical" and "Management and Staffing" area. Some concerns were raised over the past 5-year period, but Center management quickly resolved them.

The CRG's ratings indicated that the Center has demonstrated the ability to maintain objectivity, independence, quick-response capability, and currency in its fields of expertise.
The CRG determined that the Center's level of support exceeds normal expectations and that deliverables are of high quality.

Cost-Effective Operation

The fourth criterion requires that the agency assess the adequacy of the FFRDC management in ensuring a cost-effective operation. The CRG's semiannual evaluation of the Center, discussed in the previous section, addressed this criterion. The CRG evaluated the Center's performance against the "Cost Control and Contract Administration" Award-Fee criteria, which include the adequacy of Center management in ensuring a cost-effective operation. The overall evaluations resulted in "excellent" to "high-excellent" ratings for the Center in this area. The Center developed detailed spending plans and provided information that substantiated certain proposed costs. The CRG rated the Center's cost control, measured by actual cost expenditures compared to the spending plan, as "excellent" during this period.

Agreement Compliance with FAR Section 35.017-1

Finally, FAR requires that the agency determine that the guidelines for establishing the FFRDC continue to be satisfied and that the contract is in compliance with FAR 35.017-1. NRC concluded that the criteria for establishing the Center continue to be satisfied because the agency's mission in the HLW area has not changed. The agency still needs long-term, conflict-of-interest free technical support. According to Section 35.017 of the FAR, an FFRDC is established to meet special long-term research or development needs that cannot be met as effectively by existing in-house or contractor resources. FFRDCs enable agencies to accomplish tasks that are integral to the mission and operation of the sponsoring agency through an organization that is required to conduct its business free from organizational conflicts of interest. As discussed under the first section, "Continuing Need for FFRDC," NRC determined that its HLW program requires this type of support.

Additionally, NRC's contract for the operation of the Center contains provisions required under FAR Section 35.017-1. For example, the contract addresses the purpose and mission of the FFRDC and delineates procedures to be followed in accepting work from other than a sponsor.

Oversight of NRC's FFRDC is Adequate

NRC's technical monitoring and administration of the contract are adequate. Because the FFRDC contract is the agency's largest contract and is unique in nature, it receives a higher level of oversight than other NRC contracts.

Technical Oversight

NRC staff provided adequate oversight of the technical areas. Under the terms of the contract, NRC Program Element Managers (PEM) are the NRC Contracting Officer's (CO) authorized representative for the seventeen technical areas. The contract stipulates PEM oversight responsibilities.

During this review, OIG interviewed five NRC PEMs, representing about 30 percent of the total staff assigned to technical areas. The PEMs provided a general overview of the procedures used to monitor assigned technical areas and explained how they tracked contract deliverables and verbal or written interactions with Center staff. Most PEMs said that the most effective control was the operation plan that is drafted at the beginning of each fiscal year. The plan, which contains milestones and deliverables, is drafted through a cooperative effort between NRC PEMs and Center staff. NRC PEMs made the final determination as to what technical work the Center would conduct.

Further, before authorizing payment of an invoice, PEMs reviewed monthly program manager progress reports to ensure that resources expended by the Center were commensurate with work accomplished. Many PEMs prepared extended comments to support their evaluations. Additional oversight measures included frequent telephone and e-mail contact with Center staff and semiannual evaluations of Center performance which PEMs provided to the Center Review Group.

Contract Administration

Contract administration by the Division of Contracts and Property Management (DCPM) meets the criteria in NRC Management Directive 11.1 for invoice payment procedures, and Part 11.5.2, which assigns specific responsibilities to DCPM, the Program Office, and the Division of Accounting and Finance.

Because of the size and importance of the FFRDC contract, the agency has assigned a contract specialist to work full-time on Center issues. The contract specialist reviewed invoices to ensure that (1) costs were within the spending plan for each program element and (2) invoices were approved in a timely manner so that payment was made within the required 30 days. Of the twenty-six invoices submitted by the Center for FY 2001, only one invoice was not paid within the 30 days required.

The contract specialist also coordinated the agency's evaluation of Center requests for authorization to accept work from entities other than NRC. Further, the contract specialist received notification of a conflict-of-interest issue, coordinated the agency review and decision process, and issued a decision letter. Other contract administration measures included maintaining frequent contact with the Center and ensuring that FFRDC contract files were adequately maintained.

CONCLUSION

The NRC's draft renewal justification adequately addresses the FAR criteria. The agency also provides effective technical oversight and administration of the agency's contract with the Center.

SCOPE/CONTRIBUTORS

OIG evaluated management controls related to NRC oversight of its FFRDC. We conducted our work from October 2001 to March 2002 in accordance with generally accepted Government auditing standards. Kathleen Stetson and Yvette Russell conducted this audit.

If you have any questions or concerns regarding this report, please contact Anthony Lipuma, Team Leader, at 301-415-5910 or me at 415-5915.

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