

---

OFFICE OF THE INSPECTOR GENERAL

---

US NUCLEAR

---

REGULATORY COMMISSION

---

REVIEW OF NRC'S JUSTIFICATION  
FOR RENEWING ITS CONTRACT  
FOR FEDERALLY FUNDED  
RESEARCH AND DEVELOPMENT  
CENTER (FFRDC) OPERATIONS

OIG/93A-01

February 8, 1993

---

# AUDIT REPORT

---



240067

*Rev F. Marting*  
*LF03*  
*0/1*

---

**TABLE OF CONTENTS**

---

INTRODUCTION .....	1
Background .....	2
FINDING .....	3
Technical Needs and Mission .....	4
Consideration of Alternative Sources .....	4
Efficiency and Effectiveness .....	5
Cost Effectiveness .....	5
Criteria for Establishing the FFRDC .....	5
CONCLUSION .....	6
RECOMMENDATION .....	6
AGENCY COMMENTS .....	7
APPENDICES	
I     Objectives, Scope, and Methodology	
II    Excerpts From Federal Acquisition Regulation, Part 35	
III   Agency Comments on Draft Report	
IV    U.S. NRC Functional Organization Chart	
V     Major Contributors to this Report	

## INTRODUCTION

---

On September 16, 1992 the Office of Federal Procurement Policy (OFPP), Office of Management and Budget, requested the Office of the Inspector General (OIG) to review the nature and adequacy of the Nuclear Regulatory Commission (NRC) sole source renegotiation justifications of its Federally Funded Research and Development Center (FFRDC).

OFPP's request followed a July 8, 1992 report by the Senate Subcommittee on Oversight of Government Management. In that report, the Subcommittee found:

FFRDC operating contracts are generally awarded without competition. Competition was used in the initial award of operating contracts for 5 of the 9 FFRDCs established since enactment of the Competition in Contracting Act of 1984. Of the 34 FFRDC contracts renewed since 1984, only one was competed. Lack of competition to hold down contract prices increases the importance of cost, accounting and auditing controls to prevent excessive spending by FFRDCs.

For increasing competition, the Subcommittee recommended that the OFPP revise the appropriate acquisition regulations to enhance competition and to require sponsoring agencies to notify OFPP of a decision to renegotiate an FFRDC operating contract on a sole-source basis and provide a detailed justification for this decision not to compete.

OFPP's subsequent request to OIG contained the following background information and guidance:

We believe that FFRDC contracts are intended to be long-term in nature. However, the policy<sup>1</sup> requires that agencies conduct

---

<sup>1</sup>OFPP Policy Letter 84-1, "Federally Funded Research and Development Centers," which was incorporated into Federal Acquisition Regulation (FAR), Part 35, "Research and Development Contracting."

analyses prior to renewing FFRDCs to determine whether the unique FFRDC relationship is still needed. The analyses should address whether the marketplace has changed to the point where competition should be sought. They should also evaluate past performance and any future changes to the FFRDC's mission.

Appendix I contains additional details of our audit objectives, scope, and methodology.

## **BACKGROUND**

---

Currently, 7 Federal agencies sponsor 39 FFRDCs. NRC sponsors one FFRDC through its contract with Southwest Research Institute (SwRI) of San Antonio, Texas. SwRI established the Center for Nuclear Waste Regulatory Analyses in 1987 to provide technical assistance and research to the NRC in its licensing responsibilities under the Nuclear Waste Policy Act (NWPA) of 1982, as amended.

According to FAR, prior to extending the contract with an FFRDC, a sponsor shall conduct a comprehensive review of the use and need for the FFRDC. FFRDC review requirements include:

- (1) An examination of the sponsor's special technical needs and mission requirements that are performed by the FFRDC to determine if and at what level they continue to exist.
- (2) Consideration of alternative sources to meet the sponsor's needs.
- (3) An assessment of the efficiency and effectiveness of the FFRDC in meeting the sponsor's needs, including the FFRDC's ability to maintain its objectivity, independence, quick response capability, currency in its field(s) of expertise, and familiarity with the needs of its sponsor.
- (4) An assessment of the adequacy of the FFRDC management in ensuring a cost-effective operation.

- (5) A determination that the criteria for establishing the FFRDC continues to be satisfied and that the sponsoring agreement is in compliance with 35.017-1 [requirements that must be addressed in either a sponsoring agreement or agencies' policies and procedures].

Prior to extending its 5-year contract with SwRI in 1992, NRC justified its renewal based on an FFRDC review conducted in accordance with FAR requirements (see Appendix II). The results of this FFRDC review were issued as an Office of the Secretary of the Commission (SECY) Paper (SECY-91-260) on August 16, 1991. This led to an October 31, 1991 NRC Commissioners' approval to extend the FFRDC operations for an additional 5 years and, subsequently, an October 15, 1992 contract extension. NRC's current FFRDC contract ceiling amount is \$134.7 million, including \$89.9 million for the 5-year extension through fiscal year 1997. The agreement represents NRC's largest active contract.

NRC staff said they began their review in December 1990, used the FAR requirements as their review plan, and SECY-91-260 contained their entire analysis. They stated that documents generated since 1987 during the normal course of project management (i.e., semiannual performance evaluations, bi-monthly performance monitor reports, and project management meeting minutes) would confirm the results of their analysis. They also told us they sought guidance from other FFRDC sponsors and the OMB on how to perform the FFRDC review.

## FINDING

---

We found that NRC addressed all five FAR requirements for an FFRDC review prior to extending the contract with SwRI. However, NRC was unable to provide adequate support for some of the statements made in addressing the FAR requirements. We are particularly concerned with NRC's effort to explore alternative sources to meet the agency's needs.

We recognize that FAR provides no specific requirements regarding how an FFRDC review is to be conducted or documented. However, in light of



recent Congressional and OMB interest in enhancing competition coupled with the size of NRC's contract with SwRI, we believe it would be prudent for NRC to develop a plan, including documentation needs, that addresses how NRC intends to meet FFRDC review requirements in the future. Details of our findings for each of the FFRDC review requirements are discussed below.

#### TECHNICAL NEEDS AND MISSION

In its 1985 Commission Paper (SECY-85-388) on the initial sponsorship of an FFRDC, NRC stated that DOE was scheduled to submit a geologic repository license application for review in 1991. However, in SECY-91-260, NRC stated that a license application was expected in 2001, with no mention of the previous forecasted application date of 1991. Therefore, we asked NRC to provide the impact on NRC and its FFRDC in terms of mission, level of effort, and direction of effort as a result of this 10-year license application date slippage. NRC responded that this subject was discussed at a previous project management meeting and it was agreed that changes were required in emphasis although the FFRDC's mission had not changed. No further details or support for NRC's response were provided to us to confirm the level of analysis actually conducted.

#### CONSIDERATION OF ALTERNATIVE SOURCES

We are particularly concerned with the support provided for this FFRDC requirement. In SECY-91-260, NRC stated that a significant number of contractors have and will continue to pursue more lucrative U.S. Department of Energy (DOE) contracts. Indications were that this would impact NRC's ability to effectively compete for necessary technical assistance and research skills. We asked NRC to describe the basis on which it concluded that a significant number of contractors were pursuing the more lucrative DOE contracts. NRC provided us with excerpts from various U.S. Government and commercial publications that contained references to monies available to DOE for high-level waste efforts. The number and names of specific contractors pursuing the DOE contracts, however, were not included in NRC's support to us.

## **EFFICIENCY AND EFFECTIVENESS**

---

In addressing the third FFRDC review requirement, SECY-91-260 says that the criteria NRC used in rating its FFRDC (during semiannual performance evaluations) encompass all the requirements prescribed in FAR for FFRDC renewal (with the exception of consideration of alternative sources). We asked NRC to demonstrate how the NRC rating criteria and actual FFRDC performance evaluations relate directly with the FAR requirements.

NRC was unable to support how its FFRDC performance rating criteria related to FAR's FFRDC review requirements. This support could have been used to link the results of actual FFRDC operations for the first 3 1/2 years with the specific FAR requirements and provide an historical basis for assessing the efficiency and effectiveness in meeting NRC's needs.

## **COST EFFECTIVENESS**

---

In SECY-91-260, NRC said the FFRDC was slow in identifying problems with cost variances, schedule variances, and the technical development of some products. Although overall costs were within budget, NRC stated that spending on some projects was higher than estimated, whereas other projects were well below the estimated cost. NRC could not provide supporting details on cost variances mentioned. The identification of and explanations for differences between actual costs and budgeted costs are important steps in assessing whether the FFRDC is operating efficiently.

## **CRITERIA FOR ESTABLISHING THE FFRDC**

---

As part of its FFRDC review, NRC is required to determine that the criteria for establishing the FFRDC continues to be satisfied and that the sponsoring agreement [contract] is in compliance with FAR. We found little support for the analysis performed by NRC in this area.

NRC referred to previous statements made in SECY-91-260 and the original FFRDC justification paper (SECY-85-388) as support that the criteria used to establish the FFRDC continued to be satisfied. However, NRC did not specifically identify which previous statements in either SECY-91-260 or

SECY-85-388 were applicable. Additionally, in addressing whether the sponsoring agreement is in compliance with FAR, NRC merely referred to the original contract between NRC and SwRI that was prepared when the FFRDC was established. During our review, we asked NRC staff what support was available to demonstrate how the sponsoring agreement met the FAR requirements. We were told that the current contract paragraphs are identified with FAR requirement references and that no NRC actions were required.

## CONCLUSION

---

Although we found that NRC addressed all five FAR requirements for an FFRDC review prior to extending the contract with SwRI, NRC was unable to provide adequate support for some statements made in its renewal justification. Of particular concern was NRC's limited efforts in evaluating the availability of alternative sources to meet the agency's needs.

We recognize that FAR provides no specific requirements regarding how an FFRDC review is to be conducted or documented. However, we believe it would be prudent for NRC to develop a plan, including documentation needs, that addresses how NRC intends to meet FFRDC review requirements in the future. This is especially important in light of Congressional and OMB interest in enhancing competition and the size of NRC's contract with SwRI. Additionally, the need for procedures becomes increasingly important to preserve contract management continuity as changes occur in NRC's FFRDC project management. For example, both coauthors of SECY-91-260 have been reassigned to non-FFRDC work.

## RECOMMENDATION

---

To sufficiently plan and document the level of analysis necessary to support conclusions as the result of any future FFRDC review, we recommend that NRC develop a plan, or procedures, that covers justification requirements. Minimally, the plan should:



- ▶ Address the five FAR FFRDC review criteria; special emphasis should be placed on ensuring a full consideration of alternative sources to meet the agency's needs.
- ▶ Include steps to ensure that all criteria are compared with actual conditions; if certain criteria are not applicable, reasons for not covering the criteria should be provided.
- ▶ Require that the justification effort and all analyses be documented.

## AGENCY COMMENTS

On February 4, 1993, the Deputy Executive Director for Nuclear Materials Safety, Safeguards and Operations Support (DEDO) provided comments on our draft report. Appendix III contains a copy of the DEDO's comments.

The DEDO agreed with our recommendation. He also hoped that the results of our review and other agency OIG reviews will be used by the OFPP to provide guidance on how the review should be conducted, the level of documentation required, and especially the threshold for considering alternative sources.

Although the DEDO agreed with this recommendation, he indicated that NRC will develop the procedures following receipt of OFPP guidance. OFPP's schedule indicates that any additional guidance may not be finalized until January 1994. To effectively use and apply the experience gained during NRC's initial FFRDC contract notification review, we believe NRC should begin to develop procedures now. If additional guidance is received from OFPP at a later date, the procedures should then be revised accordingly.

## OBJECTIVES, SCOPE, AND METHODOLOGY

---

In response to a September 16, 1992 request from the Office of Federal Procurement Policy (OFPP), Office of Management and Budget, we conducted a review of Nuclear Regulatory Commission (NRC) sole source renegotiation justifications of its Federally Funded Research and Development Center (FFRDC) prepared since 1985. OFPP's request was prompted by a recent Senate Subcommittee report of FFRDCs and recommendations made to strengthen Federal controls over FFRDC operations.

Our specific audit objective was to determine the nature and adequacy of NRC's one and only FFRDC sole source renegotiation justification prepared in 1991. That renegotiation justification was incorporated into an FFRDC review in accordance with Federal Acquisition Regulation (FAR).

FAR, Part 35.017, Federally Funded Research and Development Centers, was used as criteria for our review. In particular, FAR 35.017-4, Reviewing FFRDC's, describes the requirements of an FFRDC review. FAR 35.017-4 is shown in Appendix II.

We conducted our audit at NRC Headquarters between September and December 1992. We interviewed managers and administrative staff at the Office of Nuclear Material Safety & Safeguards, the Office of Nuclear Regulatory Research, and the Division of Contracts & Property Management, Office of Administration. Our audit of NRC's justification included an examination of an August 16, 1991 Office of the Secretary of the Commission (SECY) Paper (SECY-91-260, "Staff Review of the Use and Need for Continued Sponsorship of the Center for Nuclear Waste Regulatory Analyses"), the current FFRDC contract and contract files, and project files containing project management information such as Performance Monitor Reports, Performance Evaluation Reports, Fee Determination Reports, and Periodic Progress Reports submitted by the FFRDC contractor.

We also contacted Inspector General representatives at the National Science Foundation, the Department of Energy, and the Department of Defense to learn how other Federal agencies justify their FFRDC renewals.

Our audit was performed in accordance with generally accepted Government auditing standards and included such tests of the data and records and other auditing procedures as we considered necessary.

## EXCERPTS FROM FEDERAL ACQUISITION REGULATION, PART 35

### 35.017-4

### FEDERAL ACQUISITION REGULATION (FAR)

#### 35.017-4 Reviewing FFRDC's

(a) The sponsor, prior to extending the contract or agreement with an FFRDC, shall conduct a comprehensive review of the use and need for the FFRDC. The review will be coordinated with any co-sponsors and may be performed in conjunction with the budget process. If the sponsor determines that its sponsorship is no longer appropriate, it shall apprise other agencies which use the FFRDC of the determination and afford them an opportunity to assume sponsorship.

(b) Approval to continue or terminate the sponsorship shall rest with the head of the sponsoring agency. This determination shall be based upon the results of the review conducted in accordance with paragraph (c) of this subsection.

(c) An FFRDC review should include the following:

(1) An examination of the sponsor's special technical needs and mission requirements that are performed by the FFRDC to determine if and at what level they continue to exist.

(2) Consideration of alternative sources to meet the sponsor's needs.

(3) An assessment of the efficiency and effectiveness of the FFRDC in meeting the sponsor's needs, including the FFRDC's ability to maintain its objectivity, independence, quick response capability, currency in its field(s) of expertise, and familiarity with the needs of its sponsor.

(4) An assessment of the adequacy of the FFRDC management in ensuring a cost-effective operation.

(5) A determination that the criteria for establishing

the FFRDC continue to be satisfied and that the sponsoring agreement is in compliance with 35.017-1.

## AGENCY COMMENTS ON DRAFT REPORT



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

February 4, 1993

MEMORANDUM FOR: Thomas J. Barchi  
Assistant Inspector General for Audits  
Office of the Inspector General

FROM: Hugh L. Thompson, Jr.  
Deputy Executive Director for  
Nuclear Materials Safety, Safeguards  
and Operations

SUBJECT: DRAFT REPORT - REVIEW OF NRC'S JUSTIFICATION FOR RENEWING  
ITS CONTRACT FOR FEDERALLY FUNDED RESEARCH AND DEVELOPMENT  
CENTER (FFRDC) OPERATIONS

This responds to your January 15, 1993, memorandum transmitting the subject draft audit report. We are pleased that you found NRC addressed all Federal Acquisition Regulations (FAR) requirements for an FFRDC renewal prior to extending its contract with Southwest Research Institute for operation of the Center for Nuclear Waste Regulatory Analyses (CNWRA).

Your recommendation and our response are:

### Recommendation

To sufficiently plan and document the level of analysis necessary to support conclusions as the result of any future FFRDC review, we recommend that NRC develop a plan, or procedures, that covers justification requirements. Minimally, the plan should:

- o Address the FAR FFRDC review criteria; special emphasis should be placed on ensuring a full consideration of alternative sources to meet the agency's needs.
- o Include steps to ensure that all criteria are compared with actual conditions; if certain criteria are not applicable, reasons for not covering the criteria should be provided.
- o Require that the justification effort and all analyses be documented.

### Response

We agree with your recommendation that a plan or procedures for future reviews is desirable, even though, as you noted, no specific requirements regarding how an FFRDC review is to be conducted or documented currently exist. We believe that such a plan is desirable from the perspective of upgrading NRC standards. It is hoped that the

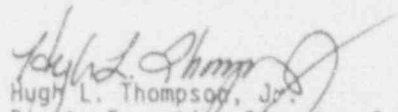


Thomas J. Barchi

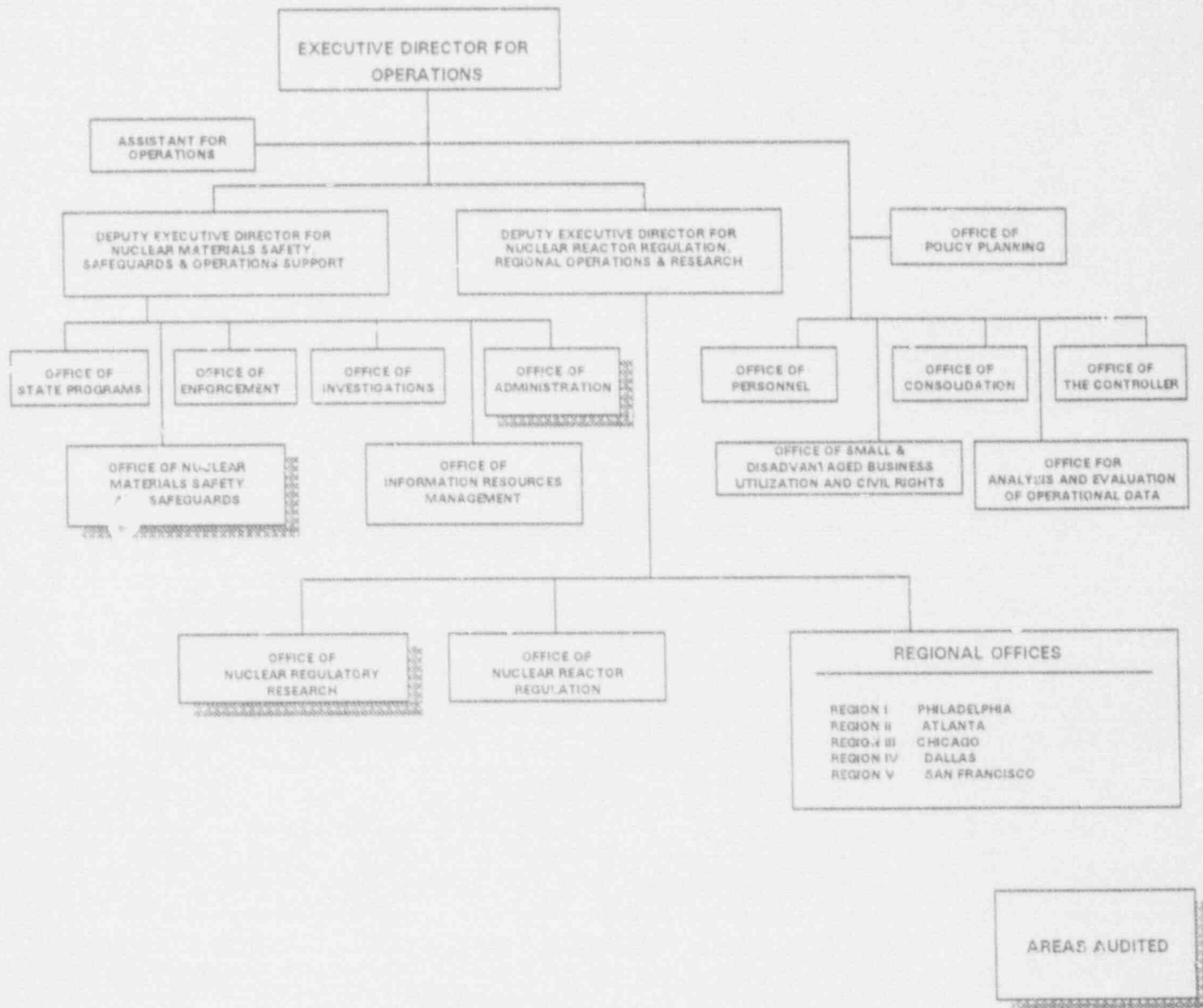
- 2 -

results of your review and other Inspector General reviews will be used by the Office of Federal Procurement Policy (OFPP) to provide guidance on how the review should be conducted and the level of documentation required. We would especially welcome guidance from OFPP on the threshold for considering alternative sources. This guidance should distinguish between a contractor-owned/contractor-operated FFRDC and a government-owned/contractor-operated FFRDC, since costs associated with terminating and recompeting a contractor-owned/contractor-operated FFRDC are considerably greater. This OFPP guidance will be evaluated and reflected in our procedures. We propose to develop these procedures following receipt of OFPP guidance. If your audit has revealed any areas where the information is deficient such that procedures are needed earlier, please advise. Completion date: Within 60 days of receipt of OFPP guidance.

If you have any additional questions or require additional information, please contact Shirley Fortuna on 504-2427.

  
Hugh L. Thompson, Jr.  
Deputy Executive Director for  
Nuclear Materials Safety, Safeguards  
and Operations

## U.S. NRC FUNCTIONAL ORGANIZATION CHART



## **MAJOR CONTRIBUTORS TO THIS REPORT**

---

William L. Glenn, Jr., Team Leader

Russell Irish, Senior Auditor

George Pourchot, Contract Auditor