

LEVINE

MAR 24 1989

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Dr. Richard F. Levine
Associate Chief of Staff for
Research and Development
Veterans Administration Medical Center
50 Irving Street, NW
Washington, D.C. 20422

Dear Dr. Levine:

As we discussed informally in February, the NRC has established a Federally Funded Research Development Center (FFRDC) to provide long-term continuous support, free from conflict of interest, for its high-level radioactive waste disposal program (see enclosed pre-print by Fortuna and Justus, in press). Specific attributes of an FFRDC are succinctly described in Office of Policy Procurement Letter OFPP-84-1 (enclosed). I believe that the National Science Foundation monitors the dozen or so existing FFRDCs and is the source of information on them.

NRC's expert on FFRDCs is Mr. Joseph O. Bunting. He was the driving force behind NRC's effort to establish its first FFRDC, the Center for Nuclear Waste Regulatory Analyses, and was its first Program Manager. Mr. Bunting can assist you in your endeavor to explore the FFRDC concept for your needs. He can be reached at the above address or by phone, 492-3394. He is the Chief of the Engineering Branch, High-Level Waste Management.

Sincerely,

151

Philip S. Justus, Section Leader
Geology-Geophysics Section
Geosciences & Systems Performance Branch
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosures:
As stated

cc: J.O. Bunting

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*verbal concurrence given by JOB via his secy on draft of 3/23/89

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

ENCLOSURE 1

1989
JAN 30 1989

Morton E. Wacks
Technical Program Chairman, Waste Management '89
Department of Nuclear and Energy Engineering
College of Engineering and Mines
University of Arizona
Tuscon, Arizona 85721

Dear Professor Wacks:

In accordance with the instructions for submission of Waste Management '89 papers, the following information is provided. The title of the paper is "The Nuclear Regulatory Commission's Federally Funded Research and Development Center for the High-Level Waste Disposal Program: The Center for Nuclear Waste Regulatory Analyses. The authors are Shirley L. Fortuna and Philip S. Justus who are employed by the U.S. Nuclear Regulatory Commission and can be reached on (301) 492-0427 and (301) 492-3460, respectively. The contact is Shirley Fortuna.

The paper is provided on the enclosed 5 1/4 "low density" floppy disc using the DisplayWrite 4 word processing program. Also enclosed are one original hard copy and four xerox copies (one of which has special effects noted) of the paper.

Sincerely,

Philip S. Justus for
Shirley L. Fortuna
CNWRA Deputy Program Manager

Enclosures:
As Stated

8903210466 LP.

THE NUCLEAR REGULATORY COMMISSION'S FEDERALLY FUNDED RESEARCH
AND DEVELOPMENT CENTER FOR THE HIGH-LEVEL WASTE DISPOSAL PROGRAM:
THE CENTER FOR NUCLEAR WASTE REGULATORY ANALYSES

BY:

Shirley L. Fortuna and Philip S. Justus, Division of High-Level Waste
Management, 4-H-3, U.S. Nuclear Regulatory Commission, Washington,
D.C. 20555

ABSTRACT

The U.S. Nuclear Regulatory Commission (NRC) has established a Center for Nuclear Waste Regulatory Analyses (CNWRA or Center) to perform research and provide technical assistance to support its long-term (decades) responsibilities in licensing a high-level radioactive waste repository. The Center is a special-category government contract (Federally Funded Research and Development Center (FFRDC)) designed to preclude conflict-of-interest and assure continuity of services beyond the statutory five-year tenure of private-sector contracts. It is chartered to work only on the high-level waste (HLW) program for the U.S. NRC. The Center's scope includes the application of all earth sciences, engineering, legal and information management disciplines relevant to repository siting and design, transportation, QA/QC, performance assessments, regulatory requirements analyses and confirmatory research. The Center is established at the Southwest Research Institute in San Antonio, Texas with a core staff of 29 (60 to be hired by 1991) and with requisite operations plans; QA Manuals and management information and control systems in place. Research has begun in the areas of waste package corrosion, seismic effects on underground structures, geochemistry and hydrology. Major studies have begun on regulatory requirements and uncertainty resolution strategies and on transportation risks. Transfer of technology (e.g., computer codes and documentation, reference libraries) from former NRC contractors is underway. The Center is tasked to assist NRC staff in its critique of the Site Characterization Plan for the Yucca Mountain, Nevada repository site.

INTRODUCTION

The Nuclear Regulatory Commission broke with its contracting tradition in October 1987, when it decided to consolidate its high-level waste technical contracts, normally obtained through the private sector and the DOE national laboratories, in a Federally Funded Research and Development Center called the Center for Nuclear Waste Regulatory Analyses based in San Antonio, Texas. The purpose of this paper is to describe this new center-of-excellence in the High-Level Waste Program; explain the Center's scope, function and responsibility; describe briefly Fiscal Year (FY) 1988 accomplishments and FY89 objectives; and demonstrate to the waste management community that the Center is functioning and growing.

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NEED TO DEVELOP A FEDERALLY FUNDED RESEARCH & DEVELOPMENT CENTER

The need for a change in the traditional practices of procuring technical services arose from the Nuclear Waste Policy Act (NWPA) (1) which established an extraordinarily long development, pre-licensing and licensing process (estimated to be 20-25 years). Special problems are posed in two critical areas: 1. Conflict of Interest. A number of NRC contractors were competing for winning larger contracts from the Department of Energy's (DOE) Civilian Radioactive Waste Management program (licensee); some NRC contractors were DOE laboratories; both situations created a potential for conflict of interest (real or perceived); and 2. Continuity of Technical Assistance and Research. Federal procurement policy requirements limit the contracting period of performance to five years; an assessment of the competitive market would be required at each five-year period, requiring possible re-competition; thus, the very long-term continuity needed in technical assistance and research is not assured. These special problems threatened the credibility and continuity of NRC's technical program, which in turn jeopardized NRC's ability to complete its three-year statutory requirement for licensing a high-level waste repository. To resolve this problem NRC became the sole sponsor of the CNWRA, a Federally Funded Research and Development Center which is free of conflict of interest (both real and perceived) and which will ensure long-term continuity in technical expertise.

To begin to understand the special nature of the Center in the national program, one needs to know that a FFRDC is unique and its sponsor incurs certain substantial obligations. A summary of these characteristics is as follows (2,3).

Unique characteristics of a FFRDC are:

- It must be managed as a non-profit autonomous unit;
- It must remain free from conflict of interest;
- Its long-term relationship must be to the sponsor and evidenced by specific agreement; and
- Its charter limits its functions to the sponsor's specific needs.

The responsibilities and obligations of the FFRDC sponsor are (2,3):

- It must develop a long-term special relationship
 - provide continuity, i.e., continuous long-term contractual arrangements
 - attract high quality personnel, i.e., provide meaningful work and supplementary motivational imperatives
- It must assure continuity in level of support, i.e., annual budgets should not disrupt operations significantly
- It must control access to the FFRDC by third parties
- It must provide upper management oversight, i.e., guidance and appraisal of performance

- It must provide sufficient government technical expertise, i.e., technical direction must be given, technical quality and defensibility of deliverables must be assured by the sponsor - the user organization

PROCUREMENT AND CONTRACTUAL CONSIDERATIONS AND STATUS

The contract establishing the CNWRA at Southwest Research Institute (SwRI) in San Antonio, Texas, was executed on October 15, 1987. A cost plus award fee contract was deemed most appropriate to provide motivation for excellence in such areas as responsiveness, quality, timeliness, technical ingenuity and cost effective management over the long term in a non-competitive environment.

The requirements and considerations for awarding the contract are summarized from the Request for Procurement Action (4) as follows:

Mandatory Requirements

- Offeror had to clearly demonstrate the ability to provide the offices, facilities and equipment necessary to support the Center's missions
- Offeror had to clearly state a commitment to create the Center as a non-profit concern outside the control of any profit seeking concern

Special Considerations for Award

- Technical and management criteria were of equal importance, followed by cost
- Primary emphasis placed on the offeror's ability to form, establish, staff and sustain the Center based upon:
 - Source, type, and experience of personnel
 - Form and structure of the physical facilities
 - Ability to ensure continued technical interchange
 - Ability to attract high-level professional staff
 - Management approach ensuring long-term continuity of excellence devoted to NRC's needs
 - A thorough understanding of the technology and scientific and engineering disciplines required

ORGANIZATION OF THE CENTER

The Center is organized to perform technical assistance and research in support of NRC's licensing and regulation of the high-level waste program. The basic concept of organization is a matrix of six technical program elements, each with a key person in charge, able to direct a task group with support from the Washington, D.C. office and from scientists and engineers (including subcontractors and consultants) under common control of a Technical Director acting in concert with a systems engineering and integration group (5). The organization chart for the Center is shown in Fig. 1.

SCOPE OF WORK OF THE CENTER

The Center shall provide the personnel, materials, equipment, facilities, and other services necessary to conduct technical assistance and research for NRC in support of its regulatory program as related to activities under the NWPA (1) and Nuclear Waste Policy Amendments Act (NWPAA) (6) for a high-level radioactive waste disposal system (includes high level waste storage, transportation and disposal; and Section 151 activities concerning low-level waste). Specifically, technical assistance and research shall be furnished in support of NRC's development of regulations, regulatory guides, regulatory review methodologies and staff technical positions; special analytical studies; systems engineering; review of the DOE high-level waste program, which would include review of DOE documents, attendance at meetings between DOE and NRC, and participation in site visits; development of the capability to review a license application; and the providing of expert witnesses during NRC licensing hearings (4).

MAJOR PROGRAM ELEMENTS AND WORK CATEGORIES OF THE CENTER

NRC has pre-arranged to provide its specific technical directions to the Center in six major categories or program elements of work. Each program element has an element manager at the Center and a counterpart at NRC. Each of the elements has an annual budget and tasks described in an Operations Plan. The individual Program Element Operations Plans control the resources available, timing, level of effort and level of detail for each task or subtask. Subcontractors and consultants are available to support each element, on an as needed basis. Such experts are employed by the Center and are subject to the same conflict of interest and other requirements geared to achieve objectivity and independent judgements as the Center itself.

A summary of task areas in each program element is as follows (4):

Waste Systems Engineering and Integration and Overall Program Activities

Work under this area may include, but is not limited to: (a) systems engineering and integration applied to the total high-level waste disposal system and subsystems, from NRC's regulatory perspective; (b) performance assessment of repository systems; (c) technical review of other NRC contractor activities and other external-NRC activities pertaining to the waste program under NWPA/NWPAA and utilization of the results of other NRC contractor activities involving high-level waste; and (d) provide support to NRC in implementing its requirements for a licensing support system to meet the legal requirement for the Discovery phase and hearings (DOE will actually procure the system) and its Open Item Management System which is intended to identify, track, and document (to resolution) all potential licensing issues.

Research

Work under this area may include but not be limited to development and conduct of a Research Program based on a Systems Analysis to identify the Research Program that offers the greatest promise to reduce uncertainties in the High-Level Waste Regulatory Program. Such a Program will consider the ongoing Research Program of the DOE, State and other parties as well as the Regulatory Program of the Nuclear Regulatory Commission.

Performance of the Geologic Setting

Work under this area may include, but is not limited to, the review and evaluation of technical issues associated with the near-term and long-term isolation of the geologic setting of a repository and the siting of a monitored retrievable storage (MRS) system. Tasks would encompass earth science areas such as surface water hydrology, saturated and unsaturated groundwater hydrology, geomorphology, seismicity, geophysics, stratigraphy, structural geology, geochemistry, solute transport, and natural resource analysis.

Performance of the Engineered Barrier System

Work under this area may include, but is not limited to, the review and evaluation of technical issues and design considerations associated with long-term isolation and containment of the engineered barrier system of a geologic repository and the siting of an MRS. Tasks would encompass areas such as nuclear engineering, mechanical engineering, mining engineering, materials science, corrosion engineering, manufacturing technology for metal and ceramic processing and geochemistry. Review and evaluation of adverse thermal and environmental conditions may also be required.

Repository Design, Construction and Operation

Work under this area may include, but is not limited to, the review and evaluation of technical issues and design considerations associated with the licensing, construction, and operational performance of an MRS and a high-level waste geologic repository. Tasks would encompass areas such as facility design, radiation protection, safety analysis, criticality, fire protection, process engineering, effluent treatment analysis, structural analysis, geotechnical engineering, and industrial and mine safety.

Special Projects, Analytical Evaluations/Transportation

Activities under this area may include, but are not limited to, the review and evaluation of selected DOE plans and reports; technical feasibility assessment; policy, transportation, environmental, socio-economic, institutional and legal analyses applied to NHPA waste management issues; and strategic planning studies, including analyses of alternative approaches. Development of the Center's internal quality assurance (QA) program; assistance to NRC in the development of QA requirements for the waste disposal system and assessment of

DOE QA program development are monitored by NRC under this program element. However, these activities are carried out by the Center's QA Director who reports directly to the Center President.

FIRST YEAR CENTER REQUIREMENTS/ACCOMPLISHMENTS

The start-up and planning activities of the Center were emphasized during its first year. Therefore, a concerted effort was made in Year 1 to curtail the rate of buildup relying principally on NRC staff and existing contractors for technical assistance work and existing research projects. During the first year, the CNWRA was required to address the physical aspects of implementing the Center; establish an effective organizational structure identifying roles, responsibilities, and applicable management and control techniques; develop technical and analytical capabilities including the initiation of a research program; and begin the development of the Program Architecture (described below) and the Program Architecture Support System (7).

The Center has been growing and developing as expected. Permanent office facilities which will accommodate planned growth of the core Center staff through FY91 have been established in San Antonio, Texas. A small CNWRA office has also been established in the Washington, D.C. area.

An eleven-man management team competent in the earth science and engineering disciplines applicable to deep geologic disposal of high-level waste was immediately hired upon execution of the contract. The Center's management has been engaged in learning the HLW program and coming to an understanding of exactly what NRC must accomplish to meet its statutory mission, and to secure the high-quality technical expertise in the appropriate disciplines. Although this learning process continues, significant insights were gained and a substantial increase in technical staffing was accomplished. By the end of FY89, the Center had 29 core staff members on board. Additional effort was supplied by SwRI staff, consultants and subcontractors. The Center used three subcontractors during the first year, ITASCA Consulting Group, Inc., Nuclear Waste Consultants, Inc., and Systems Support, Inc.

By the end of the year, the Center's management and technical staff had completed the preliminary design of the Program Architecture and developed and demonstrated a computer software support system to store and process the data developed for the Program Architecture. The Center, through its task of developing a "program architecture", supports a systems engineering analysis process of identifying, quantifying, and obtaining early resolution of technical, regulatory and institutional uncertainties in support of NRC's regulatory program. The entire life cycle of the repository which includes site characterization, construction, operation, operation monitoring, closure and decommissioning and post-closure monitoring will be addressed. This systems engineering process will result in the design of a system which will, in a timely manner, identify and provide recommendations and alternative solutions to technical, regulatory and institutional uncertainties prior to submission of DOE's initial license application, thus streamlining the

licensing process and facilitating the implementation of the NWPA and the NWPAA.

The analyses which have and will continue to be conducted are focused on identifying each regulatory requirement, its elements of proof (what is to be proven), the compliance demonstration methods by DOE and compliance determination methods by NRC. The lack of certitude about what the regulation requires and what technical and institutional limitations exist will also be assessed and the Center will recommend technical programs and priorities to reduce the uncertainties to an acceptable level. Finally, the system will reflect the NRC decisions regarding recommended technical programs and priorities. Once the decisions have been made on the uncertainty reduction methods, the system will include the corresponding specifics for NRC's Format and Content Guide and Standard Review Plan keyed to each regulatory requirement.

In June 1988, the Program Architecture development was accelerated. The Center was directed to concentrate on those regulatory requirements that pertain to siting and to produce, to the extent practicable, interim products to assist the NRC management and staff in meeting the programmatic production schedule for site characterization analyses and rulemakings. During the first year, the Center also started work on four research projects in the following areas: (a) long-term degradation of waste package materials; (b) seismic effects on underground repository structures; (c) geochemistry aspects of radionuclide transport in the repository geologic environment; and (d) characteristics of thermohydrologic phenomena on the scale of the repository and of the waste-packages in unsaturated geologic media.

Technology transfer to the Center has also begun. For example, a computer code and the technology related to the code, which were previously developed by an NRC contractor, were transferred to the Center. This code (CONVO), which is used to assist in assessing waste package performance, is now up and running on the Center's computer and is undergoing modification and further development by the Center.

Other first year accomplishments were the development of detailed "Operation Plans" which defined the specific deliverables, costs and schedules for Years 1 and 2; the development and implementation of a large number of management and administrative procedures; the initiation of a three-year transportation risk study; the preparation of a number of miscellaneous deliverables (e.g. the completion of three special studies: Analyses of NWPAA; Possible Conflict of Interest in using the Bureau of Mines or U.S. Geological Survey in the Technical Evaluation of the Natural Resources Regulatory Requirement; and State of Knowledge in Waste Confidence) and the development of the Center Quality Assurance Manual which meets the requirements of 10 CFR 50 Appendix B as applicable and the NRC HLWM QA Standard Review Plan. The QA Manual goes beyond these requirements by including a Decision Support System to enhance the quality of management discussions made at the Center (7).

SECOND YEAR CENTER OBJECTIVES

NRC originally envisioned a three-year phase-in plan for the establishment of the Center and the transfer of essentially all NRC technical assistance work from existing contractors. However, in Year 2 NRC decided to accelerate this plan and phase out nearly all of its existing contractors by the end of the second year of operation. The level of both proactive and reactive support will, therefore, increase throughout the second year. The Center will provide technical support to the NRC staff in the reactive area by recommending regulatory requirements that should receive priority attention during NRC's review of DOE's site characterization program, by assisting in NRC's review of DOE's Site Characterization Plan (SCP); by assisting NRC in resolving technical concerns raised in NRC's comments on DOE's CDSCP (such as those raised regarding the exploratory shaft); by assisting in quality assurance audits; and by providing technical support to the staff in developing Technical Positions and assessment capability (e.g. preclosure performance assessment strategy).

During the second year, the Center will continue to develop its technical and analytical capabilities, including planning activities and the hiring of additional technical staff. New hires are planned to increase total staffing from 29 to about 41 by the end of FY89. Emphasis will continue to be placed on the development of the Program Architecture. By the end of FY89, the overall Program Architecture will be developed to the point that it can be baselined. Further enhancements will be made in out-years under specified configuration control procedures. Also of interest is the scheduled delivery of an integrated research plan. This plan will recommend research necessary to reduce significant technical uncertainties identified during the course of the Center's Program Architecture development. The Center's recommendations will be considered with additional findings on research needs which may evolve from the NRC staff's development of its performance assessment capabilities.

The Center will continue work on the four research projects begun in Year 1, as appropriate. In addition, two new research projects will be started late in FY89 dealing with flow and transport in unsaturated geologic media. The three-year transportation risk study initiated in Year 1 will also continue.

If the above expectations are met, the Center will be ahead of the original three year phase-in plan with regard to its ability to provide necessary technical support to the NRC (7).

REFERENCES

1. Nuclear Waste Policy Act of 1982, (NWPA), Public Law 97-425, 96 Stat. 2201, 42 U.S.C. 10101, January 7, 1983 (1983).
2. Office of Federal Procurement Policy, Letter 84-1, To Heads of Executive Departments and Establishments, from Donald E. Sowle, dated April 4, 1984, subject, "Federally Funded Research and Development Centers," 8 pp. (1984).

3. U.S. Nuclear Regulatory Commission, Commission Paper SECY-88-96, dated April 5, 1988, subject, "Status of the Establishment and Operation of The Center for Nuclear Waste Regulatory Analyses (CNWRA or The Center), 8 pp. enclosures (1988).
4. U.S. Nuclear Regulatory Commission, Request for Procurement Action, Solicitation No. RS-NMS-87-005, date issued, 11/25/86, for Operation of The Center for Nuclear Waste Regulatory Analyses, contact Mary Mace, 70 pp. attachments (1986).
5. Southwest Research Institute, A Proposal for Establishment of The Center for Nuclear Waste Regulatory Analyses. Vol. III-Management: SWRI Proposal No. 66-6032, 45 pp. [currently incorporated into NRC Contract NMS-87-005, B&R 50-19-03-11, FIN D1035-8, executed 10/15/87] (1987).
6. Nuclear Waste Policy Amendments Act of 1987, (NWPAA), Public Law 100-203, December 22, 1987 (1987).
7. U.S. Nuclear Regulatory Commission, Commission Paper SECY-88-293, dated October 14, 1988, subject, "Center for Nuclear Waste Regulatory Analyses (CNWRA or the Center) Accomplishments and Planned Activities," 5 pp. (1988).

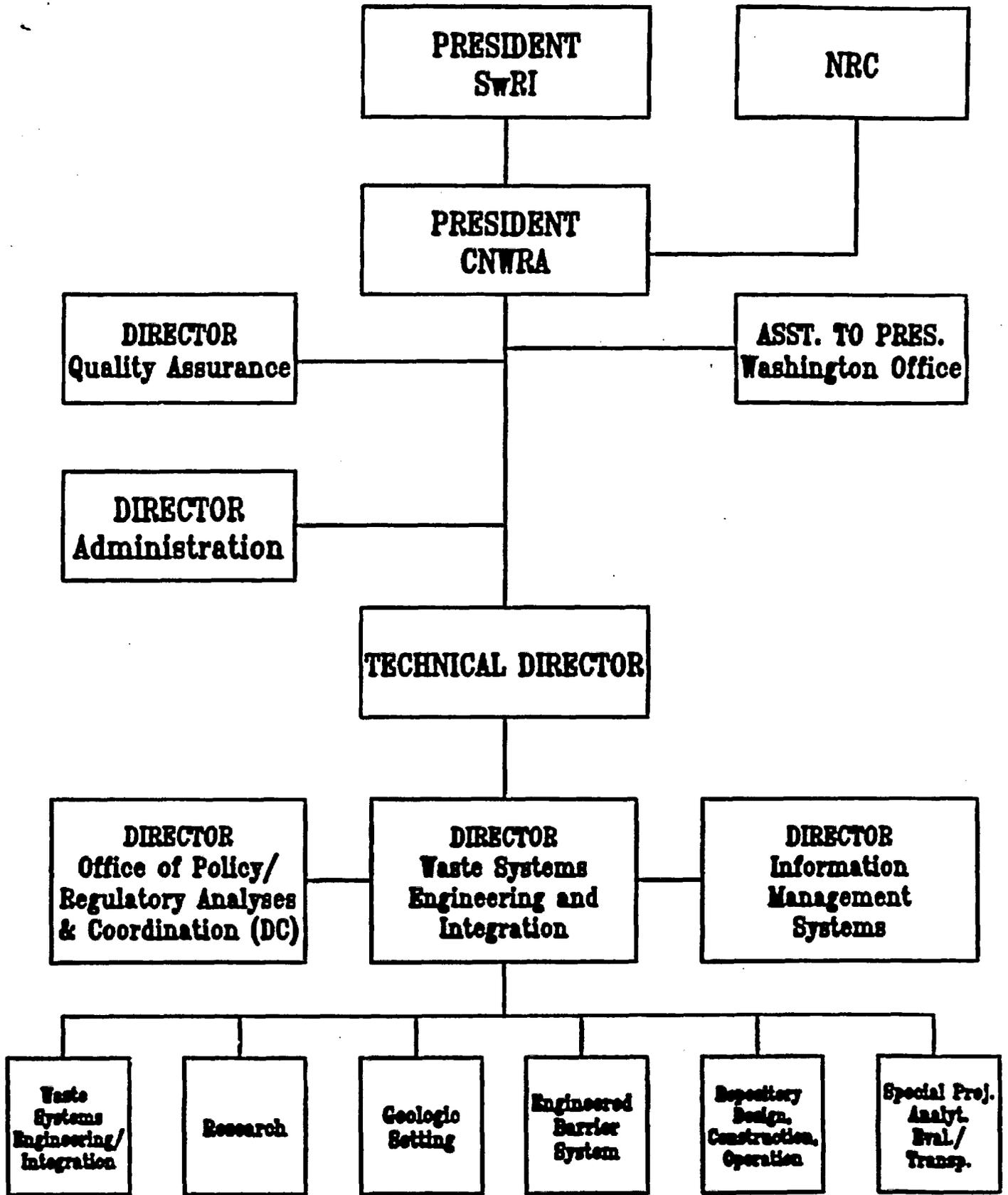


Figure 1. Organizational Chart of the Center for Nuclear Waste Regulatory Analyses



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

OFFICE OF FEDERAL
PROCUREMENT
POLICY

APR 4 1984

OFPP POLICY LETTER 84-1

TO THE HEADS OF EXECUTIVE DEPARTMENTS AND ESTABLISHMENTS

SUBJECT: Federally Funded Research and Development Centers

1. Purpose. This policy letter establishes Government-wide policies for the establishment, use, periodic review, and termination of the sponsorship of Federally Funded Research and Development Centers (FFRDCs).

2. Supersession. Memorandum from the Chairman to the Members of the Federal Council for Science and Technology, dated November 1, 1967, which set forth criteria for identification of FFRDCs and the requirement for a master Government listing of these centers, is superseded by this policy letter.

3. Authority. This policy letter is being issued pursuant to Sections 6(a), 6(d)(1) and 6(d)(8) of the Office of Federal Procurement Policy Act, as amended, 41 U.S.C. 405 (a), (d)(1) and (d)(8), which empower the Administrator of OFPP to prescribe Government-wide procurement policies and to complete action on the recommendations of the Commission on Government Procurement.

4. Background. The Departments of Energy, Defense, Health and Human Services, the National Aeronautics and Space Administration and the National Science Foundation currently sponsor a total of 34 FFRDCs. Non-sponsoring departments and agencies also utilize these FFRDCs. Federal funding of FFRDCs currently exceeds 4 billion dollars per year.

In 1967, a Government-wide policy for the identification and maintenance of a master listing of these FFRDCs was issued (reference paragraph 2 - Supersession). In 1972, the Commission on Government Procurement recommended that the Federal Government keep open the option to organize and use FFRDCs to satisfy needs that cannot be satisfied effectively by other organizational resources. The Commission also recommended that agency heads periodically review the continuing need for existing FFRDCs and approve any proposal for new FFRDCs, with specific attention paid to the method of ultimate termination of sponsorship. This policy letter is based on the executive branch consideration of the Commission's recommendations.

5. Definitions

a. Primary Sponsor — The executive agency which manages, administers or monitors overall use of the FFRDC.

b. Sponsor means an executive agency which funds and monitors specific work of a continuing nature with an FFRDC and is party to a sponsoring agreement. Multiple sponsorship of an FFRDC is possible so long as one agency agrees to act as the primary sponsor for administrative purposes.

c. Federally Funded Research and Development Center (FFRDC).

(1) FFRDCs do not have a prescribed organizational structure. They can range from the traditional contractor-owned/contractor-operated or Government-owned/contractor-operated (GOCO) organizational structures to various degrees of contractor/Government control and ownership. In general, however, all of the following criteria should be met before an activity is identified as an FFRDC:

- (a) Performs, analyzes, integrates, supports (non-financial) and/or manages basic research, applied research, and/or development. (Activities primarily engaged in routine quality control and testing, routine service activities, production, mapping and surveys, and information dissemination, even though otherwise meeting the requirements of paragraph 5.c., are specifically excluded from FFRDC designation).
- (b) Performance of the functions in 5.c.(1)(a) is either upon the direct request of the Government or under a broad charter from the Government, but in either case the results are directly monitored by the Government. However, the monitoring shall not be such as to create a personal services relationship, or to cause disruptions that are detrimental to the productivity and/or quality of the FFRDC's work.
- (c) The majority of the activity's financial support (70% or more) is received from the Government with a single agency usually predominating in that financial support.
- (d) In general, most or all of the facilities are owned by the Government or funded, under contract, by the Government.
- (e) The activity is operated, managed and/or administered by either a university or consortium of universities, other non-profit organization or industrial firm as an autonomous organization or as an identifiable separate operating unit of a parent organization.
- (f) A long term relationship evidenced by specific agreement exists or is expected to exist between the operator, manager, or administrator of the activity and its primary sponsor.

- (2) In addition to the above criteria, the relationship between the activity and the Government should exhibit the following characteristics in order to qualify for FFRDC identification:
- (a) The activity (organization and/or facilities) is brought into existence at the initiative of a Government agency or bureau to meet some special research or development need which, at the time, cannot be met as effectively by existing in-house or contractor resources.
 - (b) Work from other than a sponsoring agency is undertaken only to the extent permitted by the sponsoring agency and in accordance with the procedures of the sponsoring agency.
 - (c) The activity, whether the operator of its own or a Government-owned facility, has access, beyond that which is common to the normal contractual relationship, to Government and/or supplier data, employees, and facilities needed to discharge its responsibilities efficiently and effectively, whether the data is sensitive/proprietary or not.
 - (d) The primary sponsor undertakes the responsibility to assure a reasonable continuity in the level of support to the activity consistent with the agency's need for the activity and the terms of the sponsoring agreement.
 - (e) The activity is required to conduct its business in a responsible manner befitting its special relationship with the Government, to operate in the public interest free from organizational conflict of interest, and to disclose its affairs (as an FFRDC) to the primary sponsor.

6. Policy.

a. General. Agencies will rely, to the extent practicable, on existing in-house and contractor sources for satisfying their special research or development needs consistent with established procedures under The Economy Act of 1932 (31 USC 1535), other statutory authority or procurement/assistance regulations. A thorough assessment of existing alternative sources for meeting these needs is especially important prior to establishing an FFRDC. This Policy Letter does not apply to the performance of commercial activities. Performance of commercial activities is governed by OMB Circular No. A-76.

b. Establishment of an FFRDC. In establishing an FFRDC, the sponsoring agency shall ensure that:

- (1) Existing alternative sources for satisfying agency requirements cannot effectively meet the special research or development needs (6.a).
- (2) At least three notices are placed over a 90-day period in the Commerce Business Daily and The Federal Register indicating the agency's intention to sponsor an FFRDC and the scope and nature of the effort to be performed by the FFRDC.
- (3) There is sufficient Government expertise available to adequately and objectively evaluate the work to be performed by the FFRDC.
- (4) Controls are established to ensure that the costs of the services being provided to the Government are reasonable.
- (5) The responsibility for capitalization of the FFRDC has been defined in such a manner that ownership of assets may be readily and equitably determined upon termination of the FFRDC relationship with its sponsor(s).
- (6) The purpose, mission and general scope of effort of the FFRDC is stated clearly enough to enable differentiation between work which should be performed by the FFRDC and that which should be performed by a non-FFRDC.

c. Sponsoring Agreements. When FFRDCs are established, long-term Government relationships are encouraged in order to provide the continuity that will attract high quality personnel to the FFRDC. This relationship should be of a type to encourage the FFRDC to maintain currency in its field(s) of expertise, maintain its objectivity and independence, preserve its familiarity with the needs of its sponsor(s), and provide a quick response capability. A contract is the generally preferred instrument under which an FFRDC accomplishes effort for its sponsor(s). However, there may be instances where other legal instruments may be appropriate. A written agreement of sponsorship between the FFRDC and its sponsor or primary sponsor where more than one sponsor is involved may be used in addition to the contract or other legal instrument under which an FFRDC accomplishes effort. The specific content of a sponsoring agreement will vary depending on the situation. However, there are certain areas common to all situations that must be addressed. The following requirements must be addressed in either a contract, a sponsoring agreement or sponsoring agency's policies and procedures.

(1) Mandatory Requirements

- (a) A delineation of the purpose for which the FFRDC is being brought into being along with a description of its mission, general scope of effort envisioned to be performed, and the role the FFRDC is to have in accomplishment of the sponsoring agency's mission. This delineation must be consistent with the definition of an FFRDC set forth in paragraph 5.c(1)(a) and will be sufficiently descriptive so that work to be performed by the FFRDC can be determined to be within the purpose, mission and general scope of effort for which the FFRDC was established and differentiated from work which should be performed by a non-FFRDC. This delineation shall constitute the base against which changes in an existing FFRDC's purpose, mission or general scope of effort will be measured.**
- (b) Provisions for the orderly termination or nonrenewal of the agreement, disposal of assets and settlement of liabilities. The term of the sponsoring agreement will not exceed five years but can be renewed, as a result of periodic review, in not to exceed five year increments.**
- (c) A prohibition against the FFRDC competing with any non-FFRDC concern in response to a Federal agency formal Request For Proposal for other than the operation of an FFRDC. This prohibition is not required to be applied to any parent organization or other subsidiary of the parent organization in its non-FFRDC operations. However, sponsoring agencies may expand this prohibition as they determine necessary and appropriate.**
- (d) A delineation of whether or not the FFRDC may accept work from other than the sponsor(s). If non-sponsor work can be accepted, a delineation of the procedures to be followed along with any limitations as to the clients (other Federal agencies, State or local governments, non-profit or profit organizations, etc.) from which work may be accepted. Limitations and procedures with respect to responding to requests for information as to an FFRDC's capabilities or qualifications are inherently a part of the "work for others" question and will be addressed by the sponsoring agency.**

(2) Other Requirements As Appropriate

- (a) When cost type contracts are used, the sponsor(s) should identify any cost elements which will require advance agreement. Such items may be, but are not necessarily limited to, salary structure, depreciation, various indirect costs such as independent research and development or others as determined appropriate by the sponsor(s).**
- (b) Where fees are determined by the sponsor(s) to be appropriate, considerations which will affect their negotiation should be identified. Such considerations may be, but are not necessarily limited to, weighted guidelines, risks, use of Government furnished property and facilities, needs or others as determined appropriate by the sponsor(s).**

(c) Other provisions as determined appropriate by the sponsor(s).

d. Changing the Basic Scope of an Existing FFRDC's Sponsoring Agreement.

In changing the purpose, mission and general scope of effort to be performed or role of an existing FFRDC as set forth in its sponsoring agreement (see 6.c.(1)(a)), the sponsoring agency shall make such changes consistent with its statutory authority and the requirements for establishing a new FFRDC as set forth in paragraph 6.b.

e. Use of the FFRDC by the Sponsor or Primary Sponsor in the Case of Multiple Agency Sponsorship.

The sponsor, or primary sponsor in the case of multiple sponsorship, will ensure that all work it places with its FFRDC(s) is within the purpose, mission, and general scope of effort of the FFRDC (paragraph 6.c.) and in accordance with this Policy Letter. This includes work a sponsoring agency agrees to accept from a non-sponsoring Federal agency under the provisions of The Economy Act of 1932 (31 USC 1535) or other statutory authority. Sponsoring agencies must comply with applicable procurement or assistance statutes, policies and regulations for non-competitive actions before placing work which is outside the scope of the sponsor's contractual or sponsoring agreement with an FFRDC.

f. Use of an Existing FFRDC by a Non-Sponsoring Federal Agency.

Non-sponsoring Federal agencies may use an FFRDC only if the terms of the FFRDC's sponsoring agreement or contract permit work from other than a sponsoring agency. Where use by a non-sponsor is permitted by the Sponsoring Agreement, the work must require the special relationship of an FFRDC as defined in paragraph 5.c. and either be treated as a direct procurement (action) or processed under The Economy Act of 1932 (31 USC 1535) or other statutory authority. Work processed under The Economy Act of 1932 (31 USC 1535) or other statutory authority must clearly fall within the purpose, mission and general scope of effort established by the sponsoring agency for the FFRDC (paragraph 6.c.). Processing under the Economy Act or other statutory authority is subject to agreement by the receiving agency. Non-sponsoring agencies must fully comply with procurement or assistance statutes, policies and regulations for non-competitive actions prior to placing work directly with a specific FFRDC. The FFRDC must comply with the procedures established by the sponsoring agency (paragraph 6.c.(1)(d)) before accepting work from a non-sponsoring Federal agency.

g. Use of an Existing FFRDC by Other Than a Federal Agency.

Work from other than a Federal agency may be accepted only to the extent permitted by the sponsoring agency. The FFRDC must comply with the procedures established by the sponsoring agency (paragraph 6.c.(1)(d)) before accepting work from other than a Federal agency.

h. Consulting Services. Agencies sponsoring FFRDC work which constitutes consulting services, as defined by OMB Circular No. A-120, will comply with the provisions of that Circular.

i. Production/Manufacturing. FFRDCs will not be asked to perform quantity production and manufacturing work unless authorized by legislation. Such activities as breadboarding, modeling or other tasks inherent to R&D are permissible.

j. Periodic Review. Prior to renewal of a sponsoring agreement, agencies shall conduct a comprehensive review of their use and need for each FFRDC that they sponsor. Where multiple agency sponsorship exists this review will be a coordinated interagency effort. When the funding for an FFRDC is a specific line item within the sponsoring agency's budget, the comprehensive review may be done in conjunction with the budget process or the review may be done separately. The sponsoring agency(s) shall apprise other agencies who use the FFRDC of the scheduled review and afford them an opportunity to assume sponsorship in the event the current sponsorship is determined no longer appropriate. Final approval to continue or terminate an agency's sponsorship arrangement with a given FFRDC as a result of this review shall rest with the head of that sponsoring agency. The results of this review will be formally documented. The periodic review should include:

- (1) An examination of the agency's special technical needs and mission requirements to determine if and at what level they continue to exist.
- (2) Consideration of alternative sources to meet the agency's needs. Such consideration will include compliance with the Notice and Publication requirements of P.L. 98-72 (15 USC 637(e)) prior to renewal of the contract or Sponsoring Agreement unless otherwise exempted.
- (3) An assessment of the efficiency and effectiveness of the FFRDC in meeting the agency's needs.
- (4) An assessment of the adequacy of the FFRDC management in assuring a cost effective operation.
- (5) A determination that the guidelines of section 6 are being satisfied.

k. Termination or nonrenewal of an FFRDC Relationship. When a sponsor's need for the FFRDC no longer exists, the sponsorship may be transferred to one or more Government agencies, if appropriately justified. Otherwise it shall be phased out, the assets disposed of and all liabilities settled as provided by the terms and conditions of the sponsoring agreement.

7. Action Requirements.

a. Not later than September 30, 1984, each agency currently sponsoring an FFRDC will review the terms of its existing agreements with the FFRDCs for compliance with this policy letter. Where existing agreements do not comply with this policy letter the primary sponsor will develop a schedule to bring the agreements into compliance not later than the next contract renewal or five years from the effective date of this policy letter, whichever comes first.

b. Where the review required by 7.a. reveals that a clear statement of the purpose, mission and general scope of effort, as described in paragraph 6.b.(6) and 6.c.(1)(a), does not exist, the sponsoring agency shall ensure such a statement is developed not later than September 30, 1984.

c. The primary sponsor will notify the Office of Science and Technology Policy prior to designating any new organization as an FFRDC (paragraph 6.b.), changing the basic scope of effort of an existing FFRDC (paragraph 6.d.) or changing the status of an existing FFRDC (paragraph 6.k.).

d. The National Science Foundation will maintain a master Government list of FFRDCs based upon the definition in this Policy Letter.

e. FFRDCs will be identified by their primary sponsors who will provide information, including funding data, on the type of R&D being performed by the FFRDCs to the National Science Foundation upon their request for such information.

f. Each agency head is responsible for ensuring that the provisions of this policy are followed.

8. Effective Date. The Policy Letter is effective (60 days after publication in the Federal Register).

9. Implementation. Aspects of this policy letter requiring implementation will be covered by the Department of Defense, the General Services Administration and the National Aeronautics and Space Administration in the Federal Acquisition Regulation not later than 180 days from the date of this policy letter. Implementation will be written so as to be compatible with the requirements, as of the date of this policy letter, of FAR 17.6 "Management and Operating Contracts" when the arrangement with an FFRDC constitutes a management and operating contract.

10. Information Contact. All questions or inquiries about this policy letter should be submitted to the Office of Management and Budget, Office of Federal Procurement Policy, telephone (202) 395-6810.

11. Sunset Review Date. This policy letter will be reviewed no later than six years after its effective date for extension, modification, or rescission.


Donald B. Sowle
Administrator