

December 29, 1997

FOR: The Commissioners
FROM: L. Joseph Callan /s/ Executive Director for Operations
SUBJECT: IMPROVING ACCESS TO RESEARCH INFORMATION

PURPOSE:

To inform the Commission of the plans for improving access to research information during the early phases of the work.

ISSUE:

In its Staff Requirements Memorandum, COMSECY-96-066 - RESEARCH (DSI-22) (Attachment 1), the Commission directed the staff to "examine the feasibility of improving access to research information during the early phases of the work."

BACKGROUND:

Comments from stakeholders during the Strategic Assessment and Rebaselining Initiative characterized the NRC research program as being a closed process. Stakeholders further held that:

Documentation available to the public concerning NRC's research program, prior to publication of final reports, was "very limited".

Contractors conducting research for the NRC did not interact with industry researchers studying the same issues.

This closed approach has, on occasion, led to inefficiencies and delays in the regulatory process due to the need to reconcile conflicting results from industry and NRC research.

There was a question of how much work being done by industry has to be duplicated by NRC in light of reduced resources on both sides. The implication here was that duplication could be minimized by making early information available and encouraging early interaction.

The NRC research program currently provides information on research plans and results to the public and industry in several ways. First, during the budget cycle, a description of the planned research to be conducted in the next fiscal year(s) is provided annually in the budget that is submitted to Congress by the President (NUREG-1100). After funds are appropriated, NRC announces contracting opportunities for its new commercial research projects through the Commerce Business Daily and through the NRC "Forecast of Contract Opportunities" located on the external Internet server. Later, in some cases, as research projects are underway, public workshops are held to collect and discuss input from attendees. Often progress on individual research projects is discussed in public forums such as Advisory

Committee on Reactor Safeguards meetings or the Water Reactor Safety Information Meeting. Research is also discussed in meetings with the American Society of Mechanical Engineers, the Electric Power Research Institute, the Nuclear Energy Institute, and the Department of Energy (DOE). Eventually all research results are made publicly available through such vehicles as NUREGs, NUREG-CRs, and peer-reviewed journals.

DISCUSSION:

The NRC external server on the Internet currently has no direct identifiable link that could inform the public of NRC research being planned or accomplished. Given the current level of public access to the Internet, the NRC can use this vehicle to provide research information to the public earlier and more easily than in the past. This appears to be a Government-wide trend since other Government agencies, such as DOE, the National Aeronautics and Space Administration, the Environmental Protection Agency, and the Department of Transportation post research information on the Internet. Although abstracts and full text versions of some NUREGs and NUREG-CRs are now provided in the "NRC Reference Library" link on the NRC external server homepage, they are not identified uniquely as research projects.

To achieve the stated purpose of COMSECY 96-066, the staff plans to utilize existing Web technology to establish a link from the NRC external server homepage that would allow the public to have greater access to information about research plans and results. More specifically:

The RES portion of the budget (NUREG-1100) will be posted once it becomes public.

Synopses of all of the current fiscal year's research projects will be posted annually. These synopses would include each research project's objective, how the results will be used in the regulatory process and a brief scope of work. This information currently resides on a network file server in RES and can easily be made available to a Web link. Points of contact, telephone numbers, and E-mail addresses will be identified so that members of the public can easily contact the research staff.

Abstracts of contractor research reports will be posted soon after the reports are submitted to NRC (i.e., prior to NRC and peer review) with an appropriate disclaimer that states that the results are preliminary and have not been reviewed by the NRC staff.

The number of research final NUREGs and NUREG-CRs that are available at the NRC's Web Reference Library will be expanded and each one will be specifically identified as a research product.

As an aid to potential offerors, a link will be established between the RES information and the Division of Contracts and Property Management's portion of the NRC external server which is called "Doing Business with NRC".

When posting the above information, the staff will ensure that only such information that is authorized by law to be disclosed will be made available.

RESOURCES:

No additional resources are needed or requested to implement this initiative. It is expected that the above will be phased in over the next six months.

COORDINATION:

This paper has been coordinated with the Office of the General Counsel which has no legal objection to its issuance. The Office of the Chief Financial Officer has reviewed this Commission Paper for resource implications and has no objections. The Office of the Chief Information Officer has reviewed this paper for information technology impacts and has no objection.

original /s/ by
Hugh L. Thompson, Jr., for
L. Joseph Callan
Executive Director for Operations

Contact: A. J. Burda, RES
(301) 415-6662

Attachment: As stated

March 28, 1997

MEMORANDUM TO: L. Joseph Callan
Executive Director for Operations

FROM: John C. Hoyle, Secretary /s/

SUBJECT: STAFF REQUIREMENTS - COMSECY-96-066 - RESEARCH (DSI 22)

The staff should continue with the research program, which should include elements of both confirmatory and exploratory research (option 4), balanced in such a way that both current as well as potentially emerging issues are being addressed. The research program should focus on programs with the highest safety and regulatory significance, coupled with the maintenance of the necessary technical capability. This option permits response to programmatic needs, as well as anticipation of future needs. The term "exploratory research" which is used to describe that part of the research effort that addresses anticipated needs of the Program Offices should be changed to "anticipatory research."

In order to develop the scope of these technical capabilities the Office of Research should develop criteria for determining core research capabilities for Commission approval prior to going forward. Therefore, the Commission also approves option 5 in conjunction with option 4. RES should develop a set of core research capabilities for the NRC in consultation with the other program offices.

(EDO)

(SECY Suspense: 6/1/97)

In addition to the core research capabilities, it is essential that the NRC, as a knowledge-based organization, monitor the overall technical capabilities of its staff to ensure that the necessary core capabilities are maintained. The staff should recommend the appropriate office within the agency and provide the estimated resources to perform this function. To assist top agency management, the selected office should create and maintain an agency-wide database that contains an inventory of the technical core capabilities of the NRC staff.

(EDO)

(SECY Suspense: 6/1/97)

The Commission supports increasing the percentage of the research budget executed by universities, but wants to consider additional approaches to working with universities besides the current Educational Grant Program. Such approaches might enhance achievement of the goals of the NRC research program and provide additional benefits useful to the NRC. In keeping with the NRC designation as a Procurement Reinvention Laboratory, RES should coordinate with the Division of Contracts in exploring innovative ways to engage universities in NRC's research program (e.g., through use of cooperative agreements, contracts and purchase orders, or through establishment of research consortia or institutes in areas such as PRA). Grants would be utilized where they are the most appropriate mechanism for achieving a purpose of the research program. The staff would have the flexibility to award grants of up to \$100,000 per year. The staff should develop this approach, including an appropriate higher goal for the percentage of research carried out directly by universities, and submit it for Commission consideration.

(EDO)

(SECY Suspense: 6/1/97)

The staff should continue to support active participation in International Safety Programs (option 7). The staff should ensure that these international activities and the related programs are prioritized and appropriately integrated with other NRC research efforts (option 4), and also are properly considered in the establishment and maintenance of core research capabilities (option 5). All research activities should be evaluated by the Office of

Research for effectiveness, program of work, structure and budget, accomplishment of stated objectives and should include a sunset provision. The programmatic review should be coordinated with the Research Effectiveness Review Board or Executive Council, as appropriate.

The staff should explore the option of performing cooperative research with both industry, and the DOE, so as to minimize duplicative work -- where appropriate. Legal ramifications, independence, and public perception should be considered when exploring any cooperative research program. The staff should also examine the feasibility of improving access to research information during the early phases of the work.

(EDO/OGC)

(SECY Suspense: 10/1/97)

There are many key questions raised in the research DSI paper -- note in particular pages 13, 14 , and 18 of the DSI dated September 16, 1996 (pages attached and marked) -- that require much thought to resolve, but whose answers will have a strong bearing on how the agency will operate in the future. Implementation of Option 4 should include development of an integrated set of recommendations to be provided for Commission consideration.

(EDO)

(SECY Suspense: 8/1/97)

The Commission has decided that the preparation and coordination of rulemaking should move from RES to the Program Offices, and that most confirmatory research activities now in the Program Offices should move to RES. The staff should develop and submit to the Commission an implementation plan, with possible options for carrying out this decision, including the necessary partnership activities.

(EDO)

(SECY Suspense: 8/1/97)

In conjunction with its development of an implementation plan, the staff should consider the creation of a Research Effectiveness Review Board. This board would be composed of representatives of the Program Offices and the Research Office. Its purpose would be to advise the Director of Research and the Directors of the Program Offices on the effectiveness of the research programs in meeting the needs of the users and on the effectiveness of the program offices in supporting and in articulating their needs and priorities to the research offices. The Board would periodically review the bases for initiating, continuing, and terminating specific research programs giving particular attention to the effectiveness of broad based long range programs and the capabilities of the staff to address core research needs. The usefulness and advisability of its continuation should be examined by the Commission every three years.

(EDO)

(SECY Suspense: 8/1/97)

Finally, the high-level staff task force (set up under DSI-2) should also identify the impact on research needs of NRC oversight of Department of Energy (DOE) nuclear facilities, and advise the Commission on the resource implications of those impacts.

Attachment: As stated

cc: Chairman Jackson
Commissioner Rogers
Commissioner Dicus
Commissioner Diaz
Commissioner McGaffigan
CIO
CFO
OCA
OIG
Office Directors, Regions, ACRS, ACNW, ASLBP
E. Jordan (SARSC)
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