

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)
J. Silber (SARSC)