



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

COMMISSION  
CORRESPONDENCE

June 12, 1980

OFFICE OF THE  
CHAIRMAN

The Honorable James T. McIntyre, Jr.  
Director  
Office of Management and Budget  
Washington, D. C. 20503

Dear Mr. McIntyre:

This letter is in response to John White's request of January 21, 1980, for a report on plans for full-time monitoring of vital nuclear power plant operations, the resource requirements for the plan, and a schedule for its implementation. It was also requested that we provide a review of a range of alternative plans for ensuring continued Federal presence in the control room.

We contracted with Sandia Laboratories for a systems study of a computer-based Nuclear Data Link which would allow certain plant information from nuclear power reactors to be monitored in the NRC Headquarters Operations Center. Sandia has provided to the Commission their report (NUREG/CR-1451, SAND 80-1032) which includes: (1) recommendation of the most cost-effective system for monitoring plant parameters at the NRC operations center once it has been activated in response to a plant incident; (2) the rationale for that recommendation; and (3) estimates of the associated resource requirements. A copy of this report is enclosed.

A computer-based system is of interest because: (1) the technology is well developed and has been successfully applied; (2) such systems have demonstrated reliability in operation; and (3) the operating costs of a well-designed system is reasonable. We hope to have a system in operation at the NRC Operations Center during 1982 that will acquire, transmit and display selected plant parameters at the NRC Operations Center. Our ability to achieve this goal could be affected by the associated resource requirements and by budget constraints and other related requirements which will be placed on licensees. We will be in a better position to evaluate these needs after staff review of the Sandia study and consideration of other alternatives for acquiring these data, and determining the relationship of the Nuclear Data Link to the on-site technical support centers, which are being established by all operating reactor licensees.

As you know, we have also established a system of dedicated telephone lines between the control rooms of each operating reactor facility and our Headquarters Incident Response Center. This system, which is designed to ensure the timely flow of information during off-normal conditions, will greatly assist our confirmatory incident analysis efforts.

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The need for Federal presence in the control room of each operating reactor was examined in USNRC Report NUREG-0425, "NRC Inspection Alternatives: A Study Report." A copy of this report is enclosed.

The use of a full-time Federal inspector in the control room of an operating reactor is not considered viable at this time because of the large manpower requirement and less efficient utilization of that manpower. Important inspection activities such as independent verification of safety system operability and direct verification of maintenance, calibration and testing, would be limited if the inspector were confined to the control room. Hiring, training and keeping personnel on the job could also be a serious and costly problem, because of the limited amount of actual work required. More importantly, the qualifications for a control room inspector are necessarily different from those of current NRC resident inspectors. While control room inspectors would need knowledge of NRC rules and regulations, they would also require training and experience equivalent to that of senior reactor operators to meaningfully monitor control room activities. In situations where prompt and responsible actions on the part of the licensed operator are needed, the tendency may exist to consult with or defer to the NRC control room inspector those decisions that must be made by responsible licensee management. Accordingly, the Commission has significantly increased requirements for licensee manning of control rooms and for the qualification and training of licensed operators.

Other alternatives for full-time control room inspectors, each of which may not provide the needed public reassurance or satisfy the President's desire for "increased Federal presence," might be the following:

1. Use a licensee employee. This arrangement would be similar to that used by the Federal Aviation Administration in the periodic inspection of commercial aircraft. In that case, the inspecting mechanics are paid by the aircraft operator but are certified by and responsible to the FAA. They cannot be discharged by the operator for any actions as part of their responsibilities to the FAA. Similarly, licensee employees could be used as control room inspectors who are certified by and responsible to the NRC.
2. Provide personnel through an independent contractor. A contract would be established with a qualified company. Personnel would be trained and certified by NRC and located at the licensee's site. Although no survey has been made, it is believed that it would be very difficult, if at all possible, to locate an outside firm that could supply the qualified personnel required in the numbers needed.
3. Provide personnel through an independent industry group, such as INPO. These personnel would be under contract and certified by NRC. It is not known whether INPO or any other industry group would accept such a contract.

The Honorable James T. McIntyre, Jr. -3-

As you are aware, we are in the process of implementing an expanded resident inspector program. Full implementation of the resident inspector program at operating power reactor sites is expected by September 1980. In the near future, however, we will have the equivalent of at least one full-time (40 hours per week) inspector stationed at each operating reactor site. Full implementation will involve not less than two full-time inspectors at each site, with at least one inspector for each unit at each multi-unit site. Under this program, resident inspectors at each plant provide direct observation and verification of activities important to safety both inside and outside the control room. This program provides efficient utilization of the inspectors' time.

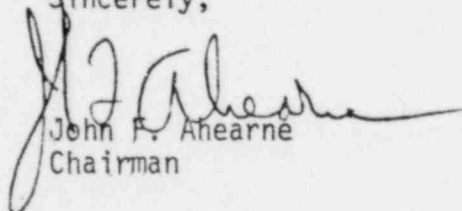
We continue to believe that our presently planned Resident Inspector program, in conjunction with the Nuclear Data Link, will provide a sound program for an effective Federal presence.

We will keep you informed of our progress in developing the Nuclear Data Link concept and will provide your staff with appropriate information and plans as they become available. Should the concept prove to be acceptable, we will work closely with your staff in obtaining the necessary funding.

I should note that the Commission has held two meetings on this subject, at which preliminary guidance was provided to the staff concerning the Data Link. In particular, at the May 15, 1980 meeting, the staff was requested to direct their efforts toward data link options which rely heavily on the on-site technical support center now being implemented by licensees to improve their response to emergency situations. Within the next two months, the staff will look at the various options and concerns discussed at the May 15 meeting and provide the Commission with an action paper requesting a decision on implementation of a Nuclear Data Link.

With regard to the Commission goal of having a computer-based nuclear data link operational in 1982, Commissioner Gilinsky believes it premature to set a goal at this time in the absence of a better definition of the nature of the data link. He has requested the views of the Advisory Committee on Reactor Safeguards; that exchange of correspondence is enclosed. Until further staff studies are completed, Commissioner Gilinsky reserves judgment on the need for a computer-based data link. Commissioner Kennedy agrees with Commissioner Gilinsky in this regard.

Sincerely,

  
John P. Ahearne  
Chairman

Enclosures;

1. NUREG/CR-1451, SAND 80-1032
2. NUREG-0425: NRC Inspection Alternatives: A Study Report
3. Memo Cmr. Gilinsky to Milton Plesset, ACRS, dtd 3/7/80
4. Ltr. M. Plesset to Cmr. Gilinsky dtd 5/6/80

NUREG/CR-1451  
SAND80-1032  
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# Conceptual and Programmatic Framework for the Proposed Nuclear Data Link

Compiled and Edited by  
System Safety Information Division

Printed April 1980



Prepared for  
U. S. NUCLEAR REGULATORY COMMISSION



PB 277 478

NUREG-0425

# NRC INSPECTION ALTERNATIVES

## A Study Report

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NATIONAL TECHNICAL  
INFORMATION SERVICE  
U. S. DEPARTMENT OF COMMERCE  
SPRINGFIELD, VA. 22161

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U. S. Nuclear Regulatory Commission