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MEMORANDUM FOR: Chairman Palladino  
Commissioner Roberts  
Commissioner Asselstine  
Commissioner Bernthal  
Commissioner Zech

FROM: William J. Dircks  
Executive Director for Operations

SUBJECT: COMMENTS ON THE BROOKHAVEN NATIONAL LABORATORY  
STUDY DATED FEBRUARY 15, 1985 ENTITLED, "AN  
INDEPENDENT SAFETY ORGANIZATION"

The need for an independent organization to investigate operational events at NRC-licensed facilities has been debated and discussed for a number of years. It has been a subject of high interest and considerable controversy. Most recently, Congress required, in conjunction with the NRC Appropriations Act, that the NRC conduct a study of the need for and feasibility of an independent organization responsible for conducting investigations of significant safety events at NRC-licensed facilities. We contracted with Brookhaven National Laboratory (BNL) to conduct the study.

BNL has forwarded their final report which provides the results of their study. Based on this study, BNL recommends the establishment of a quasi-independent, statutory Office of Nuclear Safety (ONS) headed by a Director reporting to the Commission and having the primary responsibility for conducting investigations of significant events at NRC-licensed facilities. BNL further recommends that this new office absorb the current responsibilities of AEOD.

In my comments on BNL's recommendations, I would like to focus on two fundamental points: (1) the basis for establishing a new office; and (2) the resources required by such an office.

In assessing the need for a new and "independent" office to implement the functions of AEOD and to investigate significant events, it is important to review the basis for such a major restructuring and shift of responsibilities. It seems clear from the BNL study and other reviews that there are no major deficiencies that require the formation of a new office as needed corrective action. In fact, BNL concluded that, in general, the NRC investigations of operational events have been conducted in a "proficient and technically competent" manner. Further, BNL found no indication of bias in the NRC investigations examined as part of the study. While BNL suggested a number of improvements for event investigations, they noted that, for the most part, these improvements could be implemented within the present organizational structure.

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Rather than correcting an existing deficiency, the "need" or justification for a new office seems to rest almost entirely upon the perceived need to minimize or eliminate any potential conflict of interest in order to gain increased public, media, and congressional confidence in the investigatory process and in the performance of the nuclear industry. Thus, the degree to which one supports the need for a new independent safety organization seems to be a strong function of one's confidence or lack of confidence in the objectivity, competence, and dedication of the NRC to fulfill its responsibilities. It is reasoned that an independent ONS would increase confidence in the investigatory process by relieving the NRC of responsibility "...to investigate and determine the cause of an event to which its [the NRC's] own regulatory and compliance activities might have been contributing factors." However, neither the BNL report nor the ACRS letter addresses how establishing a new office that reports to the Commission would resolve this potential conflict of interest. AEOD is already organizationally independent of licensing, inspection, and enforcement responsibilities. In addition, since the Commission is ultimately responsible for all regulatory activities, a Commission-level office would not be perceived as being "independent" and therefore free from charges involving "conflict of interest" (i.e., those individuals and organizations that lack confidence in the objectivity of the existing process will likely make no distinction between Commission-level or staff-level offices).

On the other hand, an in-house, "quasi-independent" office with the functions of AEOD and the responsibilities and authorities similar to NTSB will cause a major disruption in ongoing activities (see enclosures), will result in an extensive realignment of current office responsibilities, will require major additional resources, and will still be vulnerable to charges of "conflict of interest."

However, I recognize that the establishment of such an office could be viewed by some as a positive step - one that may help alleviate the perceptions regarding conflict of interest. Thus, the Commission may feel compelled to seriously consider the establishment of a new office. However, as noted above, the only real solution to avoiding a perceived conflict of interest is an independent agency which is organizationally and financially separate from the NRC. Consequently, if the Commission feels that it is essential to avoid such perceptions and thereby gain increased public confidence in the regulatory process, I recommend that the Commission endorse the establishment of an independent agency along the lines of the BNL recommendation. Prior to any such endorsement, however, I recommend that the Commission receive additional input on this subject through solicitation of public comment.

My second fundamental comment on the BNL recommendations concerns the resource commitment required to implement an in-house, "quasi-independent" ONS. It is my opinion that in assessing the costs and benefits of an ONS, BNL has substantially underestimated the resources that would be required by such an office. There are fundamental inconsistencies in the BNL report in terms of the scope and responsibilities of the new office (ONS) and the estimate of resources. For example, BNL recommends that the new office "...determine the facts, conditions, circumstances, and the cause of accidents and significant safety events at NRC-licensed facilities," and "...have the primary jurisdiction over the investigation of all operational events at NRC-licensed facilities, but have the power to delegate investigations of less significant operational events as it deems fit." BNL noted that, at a minimum, the new office should investigate all Abnormal Occurrences and all events that are in the alert or higher emergency category. In this regard, in 1983 there were 14 events at power reactors that were alerts and/or Abnormal Occurrences. In addition, there were 8 Abnormal Occurrences at other NRC-licensed facilities. However, BNL estimated that the new office would conduct full investigations of only 8 to 12 events per year. To conduct 12 investigations, BNL believed a staff of 25-30 was necessary.

Thus, on one hand, BNL defines the scope of the new office as covering event investigation at all NRC-licensed facilities (i.e., reactor and nonreactor); but, on the other hand, resources are included for the investigations of only 8 to 12 events at commercial reactors. BNL includes no estimate of resources for events involving nonreactor licensees or for investigating events that proved to be less significant than originally thought. The new office would have to react to a spectrum of events as reported to the NRC, all varying in significance and circumstances. In addition, as the reaction time for such a "go-team" concept is shortened, the information becomes more preliminary and the "false alarm" rate increases. Frequently, in fact, an extensive investigation is required to determine that an event is not significant. As a result, a relatively large number of events must be investigated in order to identify the events that are significant and worthy of consideration as Abnormal Occurrences.

A perspective on the number of events that are now considered significant and warrant specific attention can be gained by considering: (1) there were 430 Preliminary Notifications of Events of safety or public interest significance issued in 1984; (2) approximately 220 of the operating events reported each year to the NRC Operations Center are classified as "unusual events" in accordance with site emergency plans; (3) INPO issued 87 Significant Event Reports in 1984 on reactor events that were individually

significant; and (4) there were more than 230 nonreactor events reported to the NRC in 1983 (excluding medical misadministrations). It seems likely that an ONS would be required to screen and investigate, to varying degrees, a relatively large number of these operational events.

Another perspective on resources can be gained by comparing the scope, activities, and resources of the NTSB to the scope and activities of the new office as defined by BNL. Both organizations would have primary responsibility for event investigation and special reports. In addition, the NRC office would have a number of additional functions now being performed by AEOD. The total number of events to be screened and acted upon seems to be about the same for both the new ONS and the NTSB (on the order of 3500 per year), and the number of significant events also seems to be similar (there are on the order of ten major airplane accidents/investigations per year). For example, in 1983 the NTSB staff completed 37 Board-approved investigations and two special studies. This may be close to the range of significant events in the nuclear industry that might warrant extensive investigation by the new office. Further, the organizational structure recommended by BNL for the new office seems to parallel that of NTSB. Recognizing all of the above similarities, the current authorized NTSB staff level is about 340 and the budget is in excess of 20 million dollars.

The point of this discussion of resources is not to suggest that 340 people be assigned to a new office. The point is to emphasize that one will not get investigative results comparable to the NTSB for 25-30 additional FTE. Either the resources allocated must be substantially increased or the expectations about results must be substantially reduced.

In sum, to implement the recommendations of the BNL study would be costly and disruptive, would not result in unique improvements, and would provide little or no benefits in terms of public perceptions. Consequently, I recommend that an ONS not be established. However, I do agree with a number of the recommendations made by BNL for improving the existing incident investigation process. I have initiated steps to review these recommendations in detail and intend to make appropriate changes in how the staff conducts investigations of potentially serious or significant events.

*William J. Dircks*

William J. Dircks  
Executive Director for Operations

Enclosures:

1. Memo for the Commission from W. Dircks dated April 20, 1984
2. NRC Office Comments on the BNL Study

cc w/enclosures:

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