



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 4, 1998

MEMORANDUM TO: Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

FROM: Frank P. Gillespie, Chair 
Ad-Hoc Review Panel

SUBJECT: DIFFERING PROFESSIONAL VIEW CONCERNING
TERMINATION OF THE OPERATIONAL SAFEGUARDS
RESPONSE EVALUATION PROGRAM

In memoranda dated August 7, 1998, August 21, 1998, Thomas W. Dexter, A. Bruce Earnest, Dennis W. Schaefer and David N. Omik forwarded to you the differing professional view concerning termination of the Operational Safeguards Response Evaluation Program (OSRE). The primary concern of the submitters was that the current regulations, as implemented, are deficient in assuring the level of protection required by NRC's Design Basis Threat (DBT) for radiological sabotage at nuclear power plants. Therefore, the on site reviews and exercises done as part of the conduct of an OSRE and the licensees' voluntary modifications, which have preceded or proceeded the OSRE, have become the vehicle for ensuring the needed level of protection. One submitter did raise the additional concern that following an OSRE, some licensees have discontinued the increased measures needed to meet the OSRE objectives. Additional concerns were developed during the Panel's review. All concerns are discussed in the enclosed report.

Your memorandum dated September 1, 1998, designated that an ad-hoc panel be formed to review this differing professional view. The members of the Ad-Hoc Review Panel were Frank P. Gillespie as Chair, Arthur B. Beach as a management member, and Elizabeth Q. Ten Eyck, as a staff member as recommended and agreed upon by all submitters.

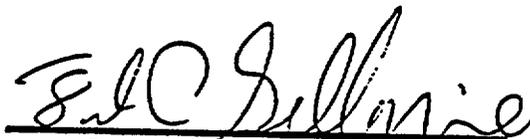
Enclosed is the Panel's report with its findings, conclusions, and recommendations.

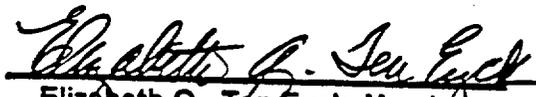
Enclosure: As stated

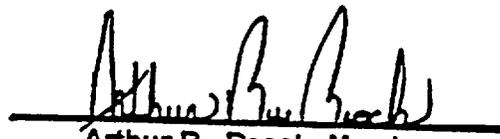
ATTACHMENT 3

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**AD-HOC REVIEW PANEL REPORT
ON THE DIFFERING PROFESSIONAL VIEW
THOMAS W. DEXTER, RIV
A. BRUCE EARNEST, RIV
DAVID N. ORRIK, HQ
DENNIS W. SCHAEFER, RIV**


Frank P. Gillespie, Chair
Ad-Hoc Review Panel


Elizabeth Q. Ten Eyck, Member
Ad-Hoc Review Panel


Arthur B. Beach, Member
Ad-Hoc Review Panel

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PANEL REPORT

The panel has met to review and develop recommendations concerning the consolidated D.P.V. which strongly disagrees with the decision of NRC management to eliminate the Operational Safeguards Response Evaluation (OSRE) program and what the submitters see as fundamental questions on the agency's approach to safeguards regulation for power reactors. The D.P.V. panel held a meeting on September 11, 1998, which included all the submitters by telephone except Mr. Orrick who was out of the office. The submitters supplemented their initial written package at this meeting with additional material relevant to their concerns.

A panel member supplied insights and subsequent information relevant to the international considerations, domestic considerations and internal consistency of the NRC's approach to performance testing of security equipment and security force response between fuel facilities and reactors. This additional information bears directly on the questions raised in the D.P.V. Following the meeting subsequent discussion between the panel members has occurred resulting in this draft set of recommendations for panel consideration.

The primary concern of the submitters was that the current regulations, as implemented, are deficient in assuring the level of protection required by NRC's Design Basis Threat (DBT) for radiological sabotage at nuclear power plants. Therefore, the on site reviews and exercises done as part of the conduct of an OSRE and the licensees' voluntary modifications, which have preceded or proceeded the OSRE, have become the vehicle for ensuring the needed level of protection. One submitter did raise the additional concern that following an OSRE, some licensees have discontinued the increased measures needed to meet the OSRE objectives.

During the discussions several considerations were surfaced which bear on the conclusions reached and the recommendations for subsequent actions. The foremost consideration deals with the relationship within 10CFR73.55 between the requirement to submit a security plan which ensures the facility can protect against the DBT and the approved plans which meet as a minimum the technical requirements of paragraphs (b) thru (h). The current NRR inspection program for the most part inspects against the requirements of the security plan at a facility and not necessarily against the facility's ability to protect against the DBT as demonstrated during an OSRE. Enforcement guidance has been issued that indicates that the sole basis for security enforcement action is the facility security plan. This has led most facilities to be in compliance with applicable requirements in the security plan, but not necessarily being able to demonstrate that they can protect against the DBT; the concern raised by the submitters. In discussions with the submitters, they recognized the corrective steps being taken by the licensees to the performance-based OSRE inspections as usually beyond the current requirements if based solely on the existing security plans, but within the scope of the NRC requirement to protect against the DBT. These extra security measures were viewed by the submitters as voluntary in nature.

The issues related to the effectiveness of safeguards requirements were documented in an Office of Inspector and Auditor report dated April 24, 1987 (ATTACHMENT 6), Regulatory Effectiveness Reviews for Operating Power Plants. The Regulatory Effectiveness Review (RER) program preceded the OSRE program. This report addressed both the problem of plant specific

backfit from each review and the need to re-examine the regulations and licensing basis of licensees for potential backfit requirements. This review was positive in its characterization of the RER assessments for evaluating safeguards effectiveness. This was the first of a number of documents reviewed which address the fundamental question raised by the submitters.

In a commission paper dated February 26, 1991 (SECY-91-052) (ATTACHMENT 1) which discussed the RER program, the question of backfit and the inconsistency mentioned above were briefly touched upon. Backfit and the relationship of the RER, now OSRE, to the security plan is specifically addressed on page 3.

"The staff has analyzed the results of the past RERs and concluded that, in general, performance weaknesses have not resulted from weaknesses in the related regulations of the NRC. Most of the significant weaknesses identified during RERs involve capability specifically required by 10CFR73.55. Primarily the weaknesses have occurred because the licensee's security systems had not been evaluated for performance using the design basis threat as a benchmark."

This conflict between the approved security plans potentially not resulting in a security program which can protect against NRC's DBT requirement, the cautions on the backfit implications, and the assertion that the rules were sufficient was not reconciled in the February 26, 1991 commission paper. In a subsequent paper dated December 18, 1992 (SECY-92-418) (ATTACHMENT 2), the transition from the RER to the OSRE program is described, as well as, a summary of the benefits that have accrued from conducting the assessments. In this paper, the same conflict is described, as the results of all assessments are referred to as weaknesses to be corrected by licensees in recognition that the findings were beyond enforceable requirements. Finally, in a Memorandum to the Director of NRR from the Chief of the Safeguards Branch dated September 27, 1996, the question of the need to address the inconsistency of security plan and the DBT through rule making was addressed. On page 4 of that memorandum it states:

"All four regions expressed a need for rule changes. These included rules to require improved planning for defending the plant, periodic response drills, improved training for armed response officers, changes to Appendix C Part 73, Contingency Plans, and changes to allow adversary interdiction within vital areas, consistent with OSRE methodology. We intend to revisit an earlier plan to ask the Office of Nuclear Regulatory Research to replace the highly prescriptive training and qualification requirements in Appendix B of 10CFR Part 73 with performance-oriented requirements that would enable licensees to tailor their training and qualification programs to the specific needs to their site-specific defensive strategy. We will also consider whether a sufficient basis exists to request the other rule changes suggested by the regions. We will also evaluate the possibility of issuing a generic communication or other documentation in response to Region III and IV recommendations to better communicate acceptable performance standards for security response, training, and performance testing."

This previous commitment to revisit the need to correct what appears to be a significant inconsistency remains valid. In addition, the consistency in approach to the safeguards regulations between the Office of Nuclear Materials Safety and Safeguards (NMSS) and NRR on the topic of response drills and exercises should also be addressed. NMSS addressed this issue in 10CFR73.46 as it relates to fuel facilities, by requiring certain exercises and the reporting of schedules to the NRC so that observation of the exercises by the NRC could be factored into the routine inspection program. A regulatory basis is also provided in 10 CFR 73.20 which requires NMSS licensees to maintain the ability to protect against the DBT.

The Safeguards Branch was asked to provide some perspective on the differences between the requirements of a facility security plan and OSRE results. Recognizing this is a force on force exercise, the differences were weaknesses in the numbers of guards and their response strategy. Attachment 7 is the material supplied and does provide a perspective on the range of differences. While additional rigor is need for a rulemaking or backfit analysis the changes that might evolve appear to be bounded.

RECOMMENDATIONS

1. Specific resources should be dedicated to satisfying the commitment in the September 27, 1996, Memorandum to the Director of NRR to reconcile as soon as possible the differences between facilities with security plans which are consistent with 10CFR73.55 (b) through (h) and which may not protect against the DBT for radiological sabotage as demonstrated by OSRE and RER results. In doing so, reconcile the differences in approach between NRR and NMSS as they relate to response testing and exercises. Based on their findings, a determination should be made whether to proceed to correct difficulties through order or through the normal rule making process, including consideration of 10CFR50.109 requirements as applied to backfit considerations.
2. Upgrades implemented by licensees to their security programs to demonstrate their ability to protect against the DBT for radiological sabotage as a result of the OSRE program may represent a backfit. OSREs should be terminated pending resolution of the first recommendation. The inspection program should then be adjusted, if applicable.
3. The regional assist or equipment testing efforts which are not connected with the force on force exercises appear to be less a question of backfit and more a question of responsibility for testing. If a parallel is drawn to other areas in the NRC inspection program, performance testing should be completed by the licensee and observed by NRC. If the testing requirements are consistent with guidance contained in Regulatory Guide 5.44 (ATTACHMENT 5) and committed to by the licensee in their security plans, a case for independent NRC testing has not been established. A memorandum from the Director of NRR to all Regional Administrators dated July 14, 1992 (ATTACHMENT 3), on testing appears to remain valid and should be enforced. This is referenced in Inspection Procedure 81700 Physical Security at Power Reactors.

"The guidance primarily applies to performance testing of security equipment. First, inspector requests for licensees to conduct equipment performance tests should be limited to tests specified in the licensee's security plan or tests normally performed by the licensee. Requests by inspectors for licensees to conduct such tests should be made as part of the preparation for an announced inspection. Second, regional inspectors should not conduct performance testing as part of routine inspections. There may be special circumstances appropriate for inspectors to conduct performance testing, such as follow up to an event. In those cases, approval should be obtained from the Director, Division of Reactor Inspection and Safeguards, NRR. Regions are encouraged to make use of the headquarters regional assist capability, which includes contractor support, when there is a determined need for the NRC to conduct performance testing of security equipment."

In this memorandum, the need for independent testing must first be established by the region before requesting assistance from NRR. This guidance was modified in April, 1994 through the updating of Inspection Procedure 81700 (ATTACHMENT 4) which incorporated performance testing as part of the normal program to be done by headquarters with contractor assistance every fourth inspection cycle. This change to the procedure and the need for NRC staff or contractors to conduct the test should be re-examined in view of the October 1997 Regulatory Guide 5.44 on testing.