

August 15, 2001

The Honorable John Edwards
United States Senate
Washington, D.C. 20510-3201

Dear Senator Edwards:

I am responding on behalf of the Nuclear Regulatory Commission (NRC) to your letter of June 22, 2001, regarding your concern about the potential vulnerability of nuclear power plants to terrorist threats. You stated that this concern arose during a recent meeting you had with a group of elected officials in Wake County, North Carolina. In particular, your letter referred to a February 3, 1999, memorandum to Dr. William Travers, Executive Director for Operations at the NRC, from Mr. David Orrik, a Security Specialist in the Office of Nuclear Reactor Regulation (NRR), concerning the status of the Operational Safeguards Response Evaluation (OSRE) program. Although your letter references the Shearon Harris spent fuel pool expansion proceeding, my responses relate to the generic concerns raised by Mr. Orrik. This response is not related to any matter under consideration in the Shearon Harris matter, which is now pending before the United States Court of Appeals for the District of Columbia Circuit following completion of administrative proceedings.

Your letter specifically requested the following: (1) a report on the status of the OSRE program or any other NRC program with a similar mission, (2) an explanation of how the NRC gathers information about possible terrorist threats and how the agency evaluates that information with respect to the construction and operation of nuclear power plants, and (3) an explanation of the requirements with which nuclear power plants must comply to ensure their preparedness in the event of a terrorist attack, the manner in which the NRC evaluates their preparedness, and the frequency of the evaluations. A brief history of the OSRE program and responses to your requested information are described below.

In 1982, the staff began conducting onsite evaluations of power reactor licensee capabilities to respond to safeguards contingency events through the Regulatory Effectiveness Review (RER) program. In 1991, lessons learned from the RER program were folded into the OSRE program, the follow on program to conduct these reviews. In 1998, as a result of an integrated planning and budgeting process, the NRC staff decided to terminate the OSRE program at the end of fiscal year 1998. However, stakeholders were concerned about this decision and, as a result, the Commission directed the staff to reinstate the OSRE program in November 1998. After some program improvements, the OSRE program resumed in April 1999 and it continues to this day.

In the fall of 1998, NRR formed the Safeguards Performance Assessment (SPA) Task Force to explore whether there were more efficient and effective means of evaluating licensees' development and implementation of protective capabilities. On June 29, 1999, the Commission approved the recommendations forwarded by the Task Force and directed the NRC staff to

develop a plan to modify the regulations to require power reactor licensees to (1) identify target sets of equipment that must be protected to maintain safe operation or achieve safe shutdown of the plant, (2) develop strategies to protect against an assault by the design basis threat (DBT) for radiological sabotage, and (3) exercise these strategies periodically. On November 22, 1999, the Commission approved the rulemaking plan for the re-evaluation of 10 CFR 73.55, "Requirements for Physical Protection of Licensed Activities at Nuclear Power Reactors Against Radiological Sabotage." The NRC staff then conducted a series of public meetings to obtain feedback from stakeholders. The Commission is currently considering the proposed rule.

The staff has undertaken several initiatives to clarify and improve the OSRE program. These initiatives have involved the conduct of public meetings with stakeholders on OSRE issues and the development and issuance of guidance documents providing rules of engagement and clarification of the OSRE adversary characteristics. The staff continues to identify and address lessons learned from the conduct of the OSRE program and is using this information to improve the program and enhance the rulemaking effort. Related safeguards assessment activities include an industry-initiated SPA program, which is intended to pilot new concepts for the self-assessment of performance by licensees subject to independent evaluation by the NRC. Development of the SPA program has involved extensive interactions with internal and external stakeholders, and the Commission recently approved a one-year pilot of the SPA program. The lessons learned from the SPA pilot will be considered in the 10 CFR 73.55 rulemaking effort.

On August 7, 1998, Mr. Orrik provided a Differing Professional View (DPV) regarding the termination of the OSRE program in a memorandum to Samuel J. Collins, Director of NRR (Enclosure 1). Mr. Collins designated a three-member panel to review Mr. Orrik's DPV, and in accordance with NRC procedures, the panel reported its findings, conclusions, and recommendations in a memorandum to Samuel J. Collins dated November 4, 1998 (Enclosure 2). Mr. Collins directed the NRC staff to follow-up on the report in a December 11, 1998, memorandum to Jack W. Roe, Acting Director of the Division of Reactor Program Management (Enclosure 3).

On February 3, 1999, Mr. Orrik provided a Differing Professional Opinion (DPO) regarding the NRC staff recommendations for a follow up OSRE program in his memorandum to William D. Travers. The memorandum expressed concerns and disagreement with the conclusions and recommendations of the DPV panel. The NRC reviewed Mr. Orrik's concerns, while at the same time continuing its review of existing physical security requirements through the SPA Task Force and the proposed rulemaking activities. As a result of these activities, the NRC was able to address and resolve Mr. Orrik's concerns. Mr. Orrik was kept informed of this determination and has stated that his concerns have been addressed.

You also requested an explanation of how the NRC gathers information about possible terrorist threats and how the agency evaluates that information with respect to the construction and operation of nuclear power plants. The NRC defined a DBT in the late 1970s that is to be used in designing safeguards systems to protect against acts of radiological sabotage or theft of special nuclear material. NRC requires nuclear power reactor licensees to establish and maintain an onsite physical protection system and security organization that are designed to protect against the DBT. The characteristics embodied in the DBT are guided by consultation with the Intelligence Community and are based on extensive analyses of actual terrorist and

other criminal characteristics that could reasonably be expected in an adversary. To assure the continuing adequacy of the DBT, the staff routinely interacts with the Federal Bureau of Investigation (FBI), the Department of Energy (DOE), and other Federal agencies concerned with counterterrorism and threats. The results of these efforts and staff conclusions are formally documented and provided to the Commission every six months, or as needed. In addition, during the past year, the staff has begun formally documenting the sensitive details of the adversary characteristics described in the DBT and the methodology for developing these details.

Your letter also requested an explanation of the requirements with which nuclear power plants must comply to ensure their preparedness in the event of a terrorist attack and the manner and frequency in which the NRC evaluates their preparedness. Nuclear power plants are protected by physical security programs designed to meet the requirements set forth in 10 CFR § 73.55. The requirements relate to the physical security organization, physical barriers, detection and assessment systems, access controls, alarm stations, communications, equipment testing and maintenance, and response strategies. The NRC conducts annual inspections of licensees' security forces to ensure compliance with the regulations, the licensees' commitments, and the facilities' NRC-approved physical protection plans. These inspections are accomplished through implementation of the baseline reactor inspection program in areas such as facility access authorization, access control measures, response to contingency events, and on-site observations. In addition, as part of the OSRE program, the NRC conducts force-on-force exercises with mock adversaries to assess each power reactor licensee's protective strategy. Since 1991, the NRC has conducted approximately eight OSREs each year. During fiscal year 2002, the Commission has approved a reduction to six OSREs to be conducted concurrently with an expected eight additional NRC-observed SPA pilot evaluations.

As I stated earlier in my letter, the NRC is considering a proposed rulemaking to amend physical protection requirements at nuclear facilities. In addition, as noted above, the NRC is implementing the SPA pilot program to assess the effectiveness of licensees' physical protection programs. These efforts are being undertaken with significant external and internal stakeholder input.

Thank you for conveying your concerns in this area to the NRC. I trust this letter has been responsive to your concerns, and I welcome any further questions you may have regarding this issue.

Sincerely,

/RA/

Richard A. Meserve

Enclosures:

1. 8/7/98 Differing Professional View
2. 11/4/98 Memorandum to Samuel J. Collins
3. 12/11/98 Memorandum to Jack W. Roe