

November 21, 2001

Mr. David A. Lochbaum  
Nuclear Safety Engineer  
Union of Concerned Scientists  
1707 H Street NW Suite 600  
Washington, D.C. 20006-3962

Dear Mr. Lochbaum:

The purpose of this letter is to respond to your correspondence regarding the subject of "Credit for Operator Actions in Response to Radiological Sabotage" dated September 11, 2001. In your letter, you indicated that "To be consistent with Environmental Protection Agency (EPA) guidelines on radiation exposure ..., the operators must have discretion in whether they undertake the added risk." Your concern is appreciated and we agree that the safety of operators and other personnel is of great importance. As such, the NRC does require licensees to take measures to ensure that operators are not placed in environmental conditions which are not consistent with the EPA Protective Action Guidelines (PAGs). Additionally, the increased risks incurred during security contingency events are evaluated in the process of Target Set Development (TSD). The inclusion of these actions in the TSD for force-on-force exercises follows the five criteria listed in the memorandum, "Conduct, Agenda, and Rules of Engagement for Operational Safeguards Response Evaluations," dated November 17, 2000, under "Credit for Operator Actions." Due to the importance of ensuring the safety and security of the working environment in a recovery action, Criterion 2 requires that "environmental conditions allow access where needed" to complete any functions necessary to prevent core damage. Criterion 2 includes consideration of the EPA's PAGs and the added personnel risks associated with security contingency. The issuance of the November 17, 2000 memorandum has made clear to nuclear power plant licensees the staff's position that in order for operator actions to be considered during an OSRE, the operators must be afforded protection from the adversaries.

In general, the additional actions beyond the normal and abnormal operational actions performed by the operators during a security contingency are primarily conducted in the control room. The actions performed by operators outside of the control room are limited, but if the adversaries are not neutralized or contained, the operators must be provided appropriate protection. Following the security contingency, activity will be allowed only in those areas deemed environmentally accessible. An example is the case of a control room evacuation (in which the operators must leave the control room for their own safety). The control room personnel must have an armed escort to a safe location to perform their activities. The licensee is to ensure that any increased risk to personnel performing their required duties during a security contingency is comprehensively identified, fully understood by the personnel, and in accordance with regulations and plant procedures.

The NRC will continue to take an active role in the comprehensive evaluation of licensee integrated security contingency response capabilities. In addition to evaluation of operational solutions and credit for operator actions, we are currently reexamining: adversary characteristics, the design basis threat, protective strategies, delay barriers, procedures, facilities, and other licensee contingency response preparations to assess additional methods of evaluating the effectiveness of licensee's physical protection programs. With the full support of the Commission for long term changes in nuclear security at facilities, the Chairman has directed the NRC staff to thoroughly reevaluate the NRC's safeguards and physical security programs. This reevaluation will be a top-to-bottom analysis involving all aspects of the Agency's safeguards and physical security programs. The NRC will use these results and the knowledge gained from the September 11, 2001 terrorist attacks to shape future integrated operations and security evaluations, as well as to enhance ongoing regulation development. We will continue to consider the information in your letter, as well as any future input you may provide, in these efforts.

If you have any further questions on these matters, please contact me.

Sincerely,

**/RA/**

Glenn M. Tracy, Chief  
Reactor Safeguards, Radiation Safety  
and Emergency Preparedness Branch  
Division of Inspection Program Management Branch  
Office of Nuclear Reactor Regulation

The NRC will continue to take an active role in the comprehensive evaluation of licensee integrated security contingency response capabilities. In addition to evaluation of operational solutions and credit for operator actions, we are currently reexamining: adversary characteristics, the design basis threat, protective strategies, delay barriers, procedures, facilities, and other licensee contingency response preparations to assess additional methods of evaluating the effectiveness of licensee's physical protection programs. With the full support of the Commission for long term changes in nuclear security at facilities, the Chairman has directed the NRC staff to thoroughly reevaluate the NRC's safeguards and physical security programs. This reevaluation will be a top-to-bottom analysis involving all aspects of the Agency's safeguards and physical security programs. The NRC will use these results and the knowledge gained from the September 11, 2001 terrorist attacks to shape future integrated operations and security evaluations, as well as to enhance ongoing regulation development. We will continue to consider the information in your letter, as well as any future input you may provide, in these efforts.

If you have any further questions on these matters, please contact me.

Sincerely,

*/RA/*

Glenn M. Tracy, Chief  
Reactor Safeguards, Radiation Safety  
and Emergency Preparedness Branch  
Division of Inspection Program Management Branch  
Office of Nuclear Reactor Regulation

**Accession Number: ML013250094**

OFFICE	IRSB/RSOS	IRSB/RSOS	IRSB/RSOS:SC	IRSB/EPHP:SC	OGC	DIPM:D	DIPM/IRSB:BC
NAME	Z Hsu *	J Arildsen *	A Madison *	K Gibson *	S Lewis *	B Boger *	G Tracy*
DATE	10/24/01	10/25/01	10/29/01	11/15/01	11/14/01	11/16/01	11/20/01

**Official Record Copy**