

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
OFFICE OF NUCLEAR REACTOR REGULATION  
WASHINGTON, DC 20555

November 8, 2002

**NRC REGULATORY ISSUE SUMMARY 2002-21  
NATIONAL GUARD AND OTHER EMERGENCY RESPONDERS  
LOCATED IN THE LICENSEE'S CONTROLLED AREA**

**ADDRESSEES**

All holders of operating licenses for nuclear power reactors, including those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel.

**PURPOSE**

The U.S. Nuclear Regulatory Commission (NRC) is issuing this regulatory issue summary (RIS) to remind addressees that their existing emergency plans and procedures must accommodate the potential deployment of the National Guard, State police and other emergency responders in the controlled and unrestricted areas at a nuclear power station. This guidance covers both emergency preparedness and personnel radiation protection issues for emergency responders. This RIS does not transmit any new requirements or staff positions and does not require any specific action or written response.

**SUMMARY OF ISSUE**

At the direction of responsible State authorities, National Guard and State police may be established around nuclear power plants in response to perceived threats to the Nation's infrastructure. Effective integration of these additional assets into the overall emergency response scheme depends heavily on in-depth planning and coordination between State and local officials and the licensee. Preparatory activities for accepting augmentation forces such as National Guard troops and State police should be as realistic as reasonably possible. For example, while it may not be appropriate to bring National Guard troops to a reactor site for a drill, it is appropriate to ensure that all involved parties can effectively communicate via radio. Also, protective measures strategies should be well thought out before they need to be implemented. For instance, identifying the organization (licensee, State, or local) that will be responsible for providing potassium iodide (KI) to National Guard troops and State police will ensure appropriate and timely implementation of this measure, if needed. Adequate planning will ensure more effective use of additional security forces ordered to a facility site while maintaining radiation doses as low as reasonably achievable (ALARA) under normal and emergency conditions.

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## DISCUSSION

In response to the terrorist events of September 11, 2001, some States ordered National Guard units to provide augmented site security at the nuclear reactor facilities in their States. Subsequently, NRC inspectors conducted a routine baseline inspection in the emergency preparedness area at one of these reactor facilities. The inspection identified potential generic issues concerning the deployment of National Guard troops and State police at the site. One of these generic issues was the adequacy of coordination and communication between licensee site security personnel and National Guard troops. Another generic issue was how National Guard troops should be treated in the event of an onsite radiological emergency, including whether National Guard troops should be considered essential personnel and remain within the controlled area or whether they should be treated as nonessential personnel and evacuated from the controlled area. The health and safety of emergency responders are significant concerns, particularly if the responders must remain on duty in close proximity to the plant for extended periods.

### Emergency Preparedness Perspective

NRC regulations in 10 CFR 50.47(b) address the standards for onsite and offsite emergency response plans for reactor facilities. Planning standard 10 CFR 50.47(b)(3) requires that arrangements for requesting and effectively using assistance resources shall have been made. Additional clarification is provided in NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants." Item C.4 of Section II, "Planning Standards and Evaluation Criteria," states: "Each organization shall identify nuclear and other facilities, organizations or individuals which can be relied upon in an emergency to provide assistance. Such assistance shall be identified and supported by appropriate letters of agreement." Section IV. A.7. of Appendix E specifically requires licensee emergency plans to include "Identification of, and assistance expected from, appropriate State, local, and Federal agencies with responsibilities for coping with emergencies." This assistance may be provided by the National Guard or State police, who may require access to areas of the facility to perform augmented security functions in and around the plant. In this augmentation capacity, during a security-related declared event, the National Guard or State police personnel would be emergency workers subject to the Environmental Protection Agency's (EPA's) emergency worker radiological dose guidelines. A lack of proper planning and coordination could lead to unnecessary dose, injury, or life-threatening situations. Licensee emergency plans must be maintained up to date in accordance with 10 CFR 50.54(q). Therefore, in light of the post-September 11 threat, it may be appropriate for licensees to review their emergency plans and if necessary bring the National Guard and State police under planning standard 10 CFR 50.47(b)(3).

In a radiological emergency that did not involve a credible security threat, evacuating the National Guard troops and State police would be consistent with 10 CFR 50.47(b)(10) and (b)(11) since timely evacuation is the most effective protective measure for individuals that are not performing an emergency worker function. In this situation the onsite National Guard and/or State police may be considered nonessential personnel relative to the emergency and evacuated from the site. However, they would still be under the authority of the State government which may deploy them in a manner consistent with the implementation of the State or local emergency response plan. They would then be emergency workers (outside the

site boundary) performing an emergency role. However, if the State elects not to use the National Guard or State police as emergency workers, then these individuals would be subject to the protective actions provided for members of the public.

#### Radiation Protection Perspective

The following discussion provides guidance on when responders should be considered occupational workers and when they should be considered members of the public and on the dose limits that apply in and around a nuclear facility.

Under normal plant operating conditions, it is good practice to treat National Guard troops and State police as members of the public whenever reasonable and practical. Therefore, while in the controlled area, National Guard troops and State police would be subject to the public dose limits in 10 CFR 20.1301(a)(1), which is consistent with maintaining doses ALARA. Also, National Guard troops and State police stationed in the unrestricted area (defined in 10 CFR Part 20.1003) would also be subject to the EPA public dose limits in 40 CFR Part 190. Additionally, the plant technical specifications require the licensee to maintain doses from effluents ALARA, consistent with the criteria in Appendix I to 10 CFR Part 50. Thus, licensees should evaluate the requirements of their Offsite Dose Calculation Manual (ODCM) and make changes, as needed, to account for the deployment of National Guard troops and State police, the duration of their stay, and doses received from routine operation of the facility. If National Guard troops and State police are required to “establish residency” within the site boundary, the NRC anticipates that changes will need to be made to the ODCM.

Licensees have the flexibility under normal (nonemergency) plant operating conditions to apply occupational dose limits to National Guard troops and State police in the controlled area if doses approach public dose limits. This could happen as a result of normal external radiation doses from water storage tanks or other plant radiation sources close to the National Guard troops and State police.

When additional security personnel are designated as occupational workers, the licensee is responsible in accordance with 10 CFR Part 19 to provide appropriate instruction to the workers. This includes precautions and procedures to minimize exposure to radiation and/or radioactive materials and the appropriate response to warnings about conditions that may involve exposure to radiation and/or radioactive materials, pursuant to 10 CFR 19.12. The licensee is also responsible for implementing other pertinent 10 CFR Part 20 requirements.

#### **BACKFIT DISCUSSION**

This RIS does not require any action or written response, or any modification to plant structures, systems, components, or facility design; therefore, the staff did not perform a backfit analysis.

**FEDERAL REGISTER NOTIFICATION**

The staff did not publish a notice of opportunity for public comment in the *Federal Register* because this RIS is informational.

**PAPERWORK REDUCTION ACT STATEMENT**

This RIS does not request any information collection.

If you have any questions about this matter, please contact one of the persons listed below.

***/RA/***

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