August 29, 2002

The Honorable Ellie Kinnaird
North Carolina General Assembly, Senate Chamber
Room 2115, State Legislature Building
Raleigh, NC 27601-2808

Dear Ms. Kinnaird:

I am responding to the July 10, 2002, letter to the Executive Director for Operations of the U.S. Nuclear Regulatory Commission (NRC) from yourself, Senator Lee, and Representatives Insko and Hackney. Your letter requested information about radiological emergency planning for the nuclear power plants in North Carolina. Specifically, you asked how much utilities owning nuclear power plants in North Carolina pay for emergency planning, how the amounts are calculated, the control over their allocation, and how local government officials or citizens can challenge the adequacy of these payments. You also asked for information about the laws and regulations regarding evacuation planning and preparation, and evaluation of the evacuation plans, how a local or State government might establish its own nuclear emergency evacuation plan to coordinate with or supersede a utility plan, and whether a utility is required to develop plans for areas outside the 10-mile emergency planning zone (EPZ). Finally, you asked for copies of any proposed modifications to the emergency planning laws and regulations as a result of the terrorist attacks of September 11, 2001.

The NRC and the Federal Emergency Management Agency (FEMA) are the Federal agencies responsible for evaluating emergency preparedness at and around nuclear power plants. NRC regulations require that comprehensive emergency plans be prepared and periodically exercised to ensure that actions can and will be taken to notify and protect citizens next to a nuclear facility. The NRC has regulatory responsibility for the onsite emergency planning and requires licensees to have detailed procedures for handling accidents, promptly notifying the appropriate authorities, and providing accurate radiological information. FEMA is responsible for evaluating offsite radiological emergency planning and preparedness activities (e.g., activities that take place beyond the nuclear power plant site boundaries).

FEMA established the Radiological Emergency Preparedness Program to (1) ensure that the public health and safety of citizens living around commercial nuclear power plants can be adequately protected in the event of a nuclear power station accident, and (2) inform and educate the public about radiological emergency preparedness. In accordance with a Presidential directive and Federal mandates, FEMA issues policy and guidance to assist State and local governments in developing and implementing their radiological emergency response plans and procedures. Federal agencies have plans in place to coordinate their response activities and to support State and local officials during an emergency. In addition, the Federal agencies provide coordination activities including joint planning, training sessions, and exercises for nuclear utilities and State and local emergency response agencies.

The NRC's regulations dealing with emergency preparedness are provided in Title 10, "Energy," of the *Code of Federal Regulations* (10 CFR), Part 50, "Domestic Licensing of Production and Utilization Facilities." Specifically, 10 CFR §§50.33(g), 50.47, 50.54(q) through (u), and Appendix E to 10 CFR Part 50 provide the regulatory direction for NRC facility applicants and licensees. Section 50.33(g) of 10 CFR Part 50 requires an applicant for an operating license for a nuclear power reactor to provide the radiological emergency response plans of State and

local governmental entities that are wholly or partially within the plume exposure pathway EPZ, as well as the plans of State governments wholly or partially within the ingestion pathway EPZ.

The regulations dealing with the role of FEMA are found in Title 44, "Emergency Management and Assistance" of the *Code of Federal Regulations*, Part 350, "Review and Approval of State and Local Radiological Emergency Plans and Preparedness." In addition, there is the joint FEMA-NRC report "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (NUREG-0654/FEMA-REP-1, Rev. 1, November 1980), which FEMA and NRC use in reviewing, evaluating, and approving State and local radiological emergency plans and in making any findings and determinations with respect to the adequacy of the plans and the capabilities of State and local governments to implement them. In their authority for making findings on the adequacy of offsite emergency preparedness, FEMA has issued guidance and policy that clarifies, interprets, and enhances the planning standards and evaluation criteria of NUREG-0654/FEMA-REP-1, Rev. 1.

FEMA cooperates with State and local governments and other Federal agencies in developing State and local plans for coping with the offsite effects of radiological emergencies at commercial nuclear power facilities. FEMA developed and published the Federal Radiological Emergency Response Plan (50 FR 46542, November 8, 1985) to provide overall support to State and local governments for all types of radiological incidents including incidents at nuclear power plants.

You asked how a local or State government might establish its own nuclear emergency evacuation plan to coordinate with or supersede a nuclear utility's plan. FEMA's regulation in 44 CFR 350.6 states that:

> (a) An integrated approach to the development of offsite radiological emergency plans by States, localities and the licensees of NRC with the assistance of the Federal Government is the approach most likely to provide the best protection to the public. Hence, Federal agencies, including FEMA Regional staff, will be made available upon request to assist States and localities in the development of plans.
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> (b) There now exists in each of the ten standard Federal Regions a Regional Assistance Committee (RAC) (formerly the Regional Advisory Committee) chaired by a FEMA Regional official and having members from the Nuclear Regulatory Commission, Department of Health and Human Services, Department of Energy, Department of Transportation, Environmental Protection Agency, the United States Department of Agriculture and Department of Commerce. Whereas in 44 CFR part 351, the Department of Defense is listed as a potential member of the RACs, it is not listed in this rule because military nuclear facilities are not the subject of concern. The RACs will assist State and local government officials in the development of their radiological emergency response plans, and will review plans and observe

exercises to evaluate the adequacy of these plans and related preparedness. This assistance does not include the actual writing of State and local government plans by RAC members.

The first two requests in your letter address financial arrangements. NRC has no jurisdiction over the financial matters involving a nuclear power plant and adjacent counties. NRC and FEMA regulations require that adequate emergency facilities and equipment be provided and maintained to support the emergency response and that adequate methods, systems, and equipment be used for assessing and monitoring the actual or potential offsite consequences of a radiological emergency condition. It is the responsibility of the local jurisdiction to work with the licensee to provide appropriate financial resources to obtain and maintain adequate emergency facilities and equipment. The emergency plans should include provisions for requesting and effectively using assistance resources, and accommodating State and local staff at the licensee's near-site emergency operations facility, and should identify other organizations capable of augmenting the planned response.

With regard to the proper procedure for local government officials or citizens to challenge the adequacy of the emergency plans, please refer to 10 CFR Section 2.202, "Orders." Furthermore, 10 CFR Section 2.206 states that any person may file a request to institute a proceeding to modify, suspend, or revoke a license, or for any other action as may be proper and any member of the public may raise potential health and safety issues in a petition to the NRC requesting that the NRC take specific enforcement action regarding a licensed, operating facility. Also, 10 CFR Section 2.802, "Petition for rulemaking," allows any person or interested group to petition the Commission to issue, amend, or rescind any Commission regulation.

With regard to whether utilities are required to prepare evacuation plans for areas beyond the 10-mile EPZ, NUREG-0654/FEMA-REP-1 defines EPZs as areas for which planning is needed to assure that prompt and effective actions can be taken to protect the public in the event of an accident. The size (10 miles) of the plume exposure EPZ is based on conservative accident analyses. These analyses show that projected doses from most core melt sequences would not exceed the levels above which Federal guidelines recommend protective actions for the plume exposure EPZ. For the low probability worst core melt sequences, the detailed planning within the plume exposure EPZ provides a substantial base for expansion of response efforts in the event that this proved necessary.

State and local agencies are responsible for protecting the public from the offsite consequences of a nuclear power plant accident. State and local officials base their decisions on the recommendations of the nuclear power plant operator. The plant operator cannot declare a state of emergency or order an evacuation of the area around the plant; the operator can only recommend protective actions to the appropriate offsite officials. These officials decide to notify the public to implement any protective actions.

There have been no recent modifications to the emergency planning regulations. However, the NRC has directed licensees to take a number of actions in response to the events of September 11, 2001. On February 25, 2002, the NRC issued orders to all licensees of operating power reactor facilities to take certain compensatory security measures beyond those called for by current regulations. The Orders formalized a series of steps that the NRC advised nuclear power plant licensees to take in the aftermath of the terrorist attacks on September 11 and prescribed certain additional security enhancements. For security reasons, the details cannot be made public, but the requirements include additional personnel access controls,

enhanced requirements for guard forces, stricter control of vehicles approaching nuclear facilities, and heightened coordination with appropriate local, State, and Federal authorities. The actions with regard to emergency preparedness include the following:

- Determine the potential effects of damage to nearby hazardous facilities, dams, and other sites, on the plant and on site evacuation strategies given the increased terrorist threat, and modify procedures and equipment as necessary.

- Review the site security and emergency plans and take actions to assure that emergency onsite staffing, facilities, and procedures are adequate to respond to terrorist threats.

- Provide emergency action levels (EALs) to ensure that a site-specific credible threat results in a declaration of at least a notification of unusual event (NOUE). Review and validate the strategy for escalation to higher-level event classifications.

We continue to have confidence in emergency preparedness for licensed nuclear reactors. NRC regulations require drill and exercise programs to maintain emergency response proficiency. The NRC and FEMA work together in evaluating periodic emergency response exercises. These exercises are integrated efforts involving the plant, State and local radiological emergency response personnel. Emergency preparedness and planning at nuclear power plants ensure a high level of protection of public health and safety.

Thank you for your interest in these matters of importance to your legislative district, the Nation, and nuclear power plant emergency preparedness. If you should have any further questions, please call me at 301-415-1485.

Sincerely,
/RA/

Herbert N. Berkow, Director
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

cc: Senator Howard N. Lee
Representative Verla C. Insko
Representative Joe Hackney

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Representative Joe Hackney

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