

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20655

MAY 1 8 1989

Astoria, New York 11103

Dear Ms. D'Amico:

This is in response to your letter of April 18, 1989, that requested clarification of the scope of the required evacuation and the supporting traffic management for a serious emergency at the Shoreham facility.

NRC has determined that there is reasonable assurance that protective measures, including evacuation, will be taken in response to an emergency at the Shoreham facility. Our regulations specify plume exposure pathway emergency planning zones (EPZs) around all nuclear reactor sites. The size of the EPZ is based on the amount of detailed planning judged necessary to ensure prompt and effective measures to protect the public in the event of a nuclear power plant accident. In a particular emergency, protective measures might be needed in only a limited part of the established EPZ. On the other hand, the detailed planning required for the EPZ provides a substantial base for expansion of emergency response actions outside the zone if such actions became necessary. The NRC staff has determined that for a typical reactor facility site an area about 10 miles in radius is sufficient for emergency planning purposes.

The Shoreham EPZ is also approximately 10 miles in radius. The development of the Shoreham EPZ included consideration of factors such as demography. transportation network, land use, and special facilities such as schools. daycare centers, hospitals, and nursing homes. The NRC staff has reviewed the information on the Shoreham EPZ in the onsite and offsite emergency plans, has been cognizant of the issues raised during the course of the Shoreham proceedings. and has visited the site and toured the plume exposure pathway EPZ on numerous occasions. The NRC staff has also relied upon its collective experience acquired through the review of emergency planning for other nuclear power plant sites across the country to evaluate the Shoreham plan. The staff has determined that the Shoreham site compares favorably with other nuclear power plant sites in the United States. For example, the Shoreham EPZ is located on a flat coastal plain as opposed to the complex terrain in which many other nuclear power plants are located. The road system around Shoreham compares favorably with other nuclear power plant sites, and the population density in the Shoreham EPZ is less than that for several other sites. In summary, the staff is not aware of any special circumstances or unique features involving the Shoreham EPZ that were not envisioned in the development of the lu-mile EPZ. Thus, plans to evacuate all of Long Island are not considered reasonable or necessary, and are therefore not required by the NRC.

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With respect to your concern about traffic management, peak traffic conditions are not analogous to evacuation traffic conditions. An evacuation for the Shoreham EPZ has been designed to expedite traffic leaving the EPZ. The plan considers road capacities, residential areas, special facilities such as schools, and the locations of the reception centers. During an evacuation, traffic will be directed to follow predetermined routes specified in the evacuation plan. In addition, the plan identifies key intersections that will be controlled by traffic guides and designates certain two-way roads that will be converted to one-way roads. The evacuation plan and the evacuation time estimates were reviewed by the NRC staff as part of the review of the offsite emergency plan for Shoreham and were determined to be adequate to protect the health and safety of the public.

I hope that this information answers your questions about the emergency plans for the Shoreham facility.

Sincerely,

Thomas E. Murley, Director
Office of Nuclear Reactor Regulation

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I hope that this information answers your questions about the emergency plans for the Shoreham facility.

Sincerely.

[Original signed by Steve Varga]

(for)

Thomas E. Murley, Director Office of Nucleam Reactor Regulation

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Previously concurred*

TECH ED* BCalure 05/11/89

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