2

March 24, 1994

NOTE TO: Lawrence E. Kokajko
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Division of Reactor Projects III/IV/V

FROM: Warren H. Swenson, Chief
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SUBJECT: STATUS ON STAFF ACTION ITEM 1.B FROM SOUTH TEXAS DET

The following information is provided to update status on staff action item 1.b resulting from the Diagnostic Evaluation Team (DET) report on the South Texas Project:

Action 1.b of the staff action plan calls for NRR to "assess the generic implications of assigning conflicting multiple responsibilities to the operating staff for response to resource-intensive accidents such as fire brigade responsibilities plus support for shutdown from outside the control room."

The staff has addressed this South Texas specific item through the inclusion of the DET's observations as part of the operational data used in an ongoing NRC research project, "Nuclear Power Plant Shift Staffing Levels." The objective of the research project is to establish a technical basis for minimum shift staffing levels of licensed and non-licensed personnel at nuclear power plants to confirm the adequacy of the requirements of 10 CFR 50.54(m) or to establish a regulatory basis for modifying these requirements. The project team will conduct analysis to determine the workload and function allocation for licensed and non-licensed personnel both in and outside the control room for high workload transient responses. This research project is being tracked under NRR human factors research user need number 6, "Shift Staffing Levels."

On February 3-4, 1994, NRR and RES staff held discussions with the project team at Brookhaven National Laboratory regarding project status and details of the project plan. In addition to the South Texas DET report, operational data from other off-normal events (e.g., Quad Cities) where shift crews appear to have been challenged in their ability to mitigate events were specified to be included in the research data. The project team has completed the initial review of this data and has observed an emergency exercise to identify situations in which shift staffing may play a significant role. This

D/29

information will be used in the selection of scenarios for simulator research and task network modeling for establishing the regulatory basis for minimum staffing levels needed to successfully accomplish all necessary safety functions. The Office of Nuclear Regulatory Research has scheduled completion of this project for early 1995.

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