PDR

July 2, 1985

NOTE TO: William J. Dircks
Executive Director for Operations

FROM: C. J. Heltemes, Jr., Director
Office for Analysis and Evaluation
of Operational Data

SUBJECT: STATUS REPORT FROM THE NRC INCIDENT INVESTIGATION TEAM

1. The team continues to analyze the event, maintain contact with the licensee concerning the results of the equipment inspections and prepare initial inputs to the report.

2. On June 27, 1985 the team met with the licensee and Region III to review several action plans for troubleshooting equipment on the quarantined list. The team has now received copies of all action plans related to the most significant equipment problems (MSIV closure, AFW turbine trips, isolation valve inoperability and failure of PORV to fully close). As a result of the June 27 meeting, the licensee is making significant revisions to the plan to determine the cause of the spurious main steam line isolation valve closures. The revised plan will be reviewed by the team prior to the licensee beginning the troubleshooting, and the team will then determine if another meeting is required on this plan.

3. At this time it appears that the closure of the main steam line isolation valves may have been a result of an automatic actuation of the steam feedwater rupture control system (SFRCS). Based upon information from Babcock & Wilcox, the licensee's hypothesis of the cause of this SFRCS actuation is that a pressure phenomenon occurred upstream of the turbine stop valves following the reactor/turbine trip. The pressure phenomenon caused the redundant level instrumentation channels to oscillate widely for about 10 seconds which in turn resulted in the SFRCS spurious signal to close the MSIVs.

4. The licensee has not yet initiated much of the troubleshooting which is necessary to determine the root cause of the numerous equipment malfunctions that occurred during the event. Some troubleshooting procedures may involve the plant heating up to hot standby in order to attempt to reproduce the failure and to investigate the failure cause. The licensee continues to perform analyses and evaluations in support of the troubleshooting plans, and to proceed in a very deliberate, thorough manner.

5. The team is tentatively planning to go to the Davis Besse site the week of July 8 to review the status of troubleshooting efforts. It is unlikely that all root causes for the equipment malfunctions will have been determined by the time the team's report is issued (July 22). Consequently, the current approach being pursued by the team is to: document what happened during the event; include known information on the results of the troubleshooting activities; reflect postulated failure modes and uncertainties and the actions necessary to assure proper completion of the troubleshooting activities; and provide the team's assessment of the event significance and the implications and concerns which warrant additional attention and action.

(signed by)

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