

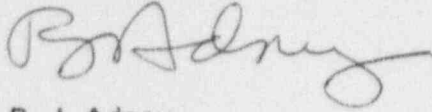
U.S. Nuclear Regulatory Commission

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August 18, 1995

If you have any questions concerning this submittal, please telephone S. D. Gilley at (615) 843-7427.

Sincerely,



R. J. Adney

Enclosure

cc (Enclosure):

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ENCLOSURE
RESPONSE TO NRC INSPECTION REPORT
NOS. 50-327, 328/95-15
ELLIS W. MERSCHOFF'S LETTER TO OLIVER D. KINGSLEY, JR.
DATED JULY 25, 1995

VIOLATION 50-327/95-15-01

"10 CFR 50, Appendix B, Criterion XVI, requires, in part, that for significant conditions adverse to quality, the cause of the condition is determined and corrective action taken to preclude repetition.

"LER 50-327/94008, dated May 25, 1994, detailed corrective action for a Unit 1 automatic reactor trip on May 1, 1994. The root cause of the trip was personnel error. Corrective actions included site management's continued reinforcement of the self-check process.

"The licensee's response to violation 50-327/94-18-02, dated September 14, 1994, and LER 50-327/94011, dated August 12, 1994, discuss details regarding a Unit 1 reactor trip on July 15, 1994. The violation response stated that the cause of the trip was personnel error; failure to self-check. Corrective actions included steps taken to reemphasize work standards, including the proper application of self-checking. Reinforcement of the self-check process was continuing through training, supervisory observation, and coaching in the field.

"Contrary to the above, corrective actions were not adequate to preclude repetition, in that on June 23, 1995, a Unit 1 reactor trip occurred due to failure to use established self-checking techniques.

"This is a severity level IV violation (Supplement 1)."

Reason for the Violation

This violation is associated with personnel error in the establishment of a clearance that resulted in a reactor trip. The reason for this violation was that prior corrective actions were not fully effective in preventing this type of error, and as a result, the self-checking process known as STAR (Stop-Think-Act-Review) was not followed. A contributing factor for this event was that the personnel involved did not consider this to be a significant activity since the intent was to remove power from a radiation monitor. The clearance should have tagged out two essential raw cooling water (ERCW) radiation monitors and was believed to be a routine manipulation. Instead of tagging the breaker to remove power from the radiation monitors, the breaker that was tagged removed power from 1R3 Process Protection Set I. Several barriers were in place that could have prevented this error. The individual placing the clearance entered 125-V Vital Battery Board Room I, instead of 125-V Vital Battery Board Room II. Once inside the room, the panel was misread. The panel where the tag was hung was 125-V AC Vital Instrument Power Board 1-I; it should have been placed in 125-V AC Vital Instrument Power Board 1-II. Breaker No. 48, which was the breaker number listed on the clearance, was located. However, both of the panels mentioned

have a breaker No. 48. The nomenclature tag was not read to verify that the proper breaker No. 48 was being tagged. The breaker that was opened was '1R3 Process Protection Set I'; the correct breaker nomenclature would have read 'ERCW Radiation Monitor O-RE-90-134 & O-RE-90-141.' Another barrier that might have prevented this event was the color coding associated with process protection set channels. The breaker that was opened had a red label (Channel I), and the correct breaker had a black label (Channel II).

Corrective Actions That Have Been Taken and the Results Achieved

The personnel involved in this event received the appropriate disciplinary action.

An additional barrier has been instituted temporarily for any manipulation involving electrical components in pulling or inserting fuses, opening or closing breakers, and lifting or landing leads. This additional barrier requires the use of concurrent verification. Concurrent verification is the process where an agreement must be reached between the performer and the verifier that the activity/manipulation to be performed is understood prior to initiation. The need for this additional barrier will be reevaluated in the future and may be deleted if conditions warrant.

This event has been communicated to the Operations department in a series of meetings which emphasized that the trip could have been avoided if the STAR process of self-checking had been used. This event was also used to illustrate the point that the STAR process cannot be selectively applied to only those activities that are believed to have potentially serious consequences because any activity that is not performed correctly has the potential for serious unforeseen consequences. The meetings also introduced the new Sensitive Activities Manual which has been developed to assist personnel with the appropriate precautions to use when dealing with sensitive equipment.

Through this event, management has reemphasized that personnel will be held accountable for preventable errors.

Operations management has performed evaluations of Operations personnel to assess the implementation of management's expectations. Several individuals were restricted from performing shift activities as a result of the evaluations. These individuals are undergoing personalized instruction that focuses on the identified deficiencies. They will be reevaluated in the future to determine whether they will be returned to shift duty. Additionally, the evaluations indicated that several other individuals in the Operations department needed additional instruction, but did not indicate a need to remove these individuals from shift activities. Corrective actions will be established for the deficiencies identified for these individuals.

The following actions were not initiated as a direct result of this event but will have a positive effect on preventing events of this type in the future. Measures have been taken to improve communications within the Operations department, including a change in shift turnover meetings to a routine in line with industry norms. As a result

of rotational development initiatives, 10 positions in Operations have been filled with new managers or front-line supervisors. Site Training personnel will observe in-plant Operations activities using the man-model that Operations' managers developed based on critical performance criteria. Deficiencies observed will be reported to management for correction and incorporation into revised training activities.

The Corrective Steps That Will be Taken to Avoid Future Violations

Corrective actions to prevent future violations are stated above.

Date When Full Compliance Will be Achieved

The completed corrective actions stated above bring TVA into full compliance.