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GEORGE C. CREEL
VICE PRESIDENT
NUCLEAR ENERGY
(301) 260-4455

October 25, 1991

U. S. Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Document Control Desk

SUBJECT: Calvert Cliffs Nuclear Power Plant
Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318
NRC Region I Resident Inspection Report Nos. 50-317/91-16 and 50-318/91-16 (July 7, 1991 to August 10,1991)

REFERENCE: (a) Letter from Mr. C. J. Cowgill (NRC) to Mr. G. C. Creel (BG&E), NRC Region I Resident Inspection Report Nos. 50-317/91-16 and 50-318/91-16 (July 7, 1991 to August 10, 1991), dated September 25, 1991

Gentlemen:

Reference (a) forwarded a Notice of Violation [Appendix A to Reference (a)] regarding two violations. The first violation involved the failure to implement proper work controls during maintenance activities. Attachment (1) provides our response to this Notice of Violation as requested in the Reference (a). The second violation has been addressed in separate correspondence.

Should you have any further questions regarding this matter, we will be pleased to discuss them with you.

Very truly yours,

for GCC

GCC/REF/ref/bjd

Attachment

9110300250

cc: D. A. Brune, Esquire
J. E. Silberg, Esquire
R. A. Capra, NRC
D. G. McDonald, Jr., NRC
T. T. Martin, NRC
A. G. Howe, NRC
R. I. McLean, DNR
J. H. Walter, PSC

ATTACHMENT (1)

REPLY TO A NOTICE OF VIOLATION
INSPECTION REPORT NOS. 50-317/91-16 AND 50-318/91-16
VIOLATION NO. 1

I. DESCRIPTION AND CAUSE OF VIOLATION.

The Notice of Violation [Appendix A of Reference (a)] cites five examples that our maintenance activities have not been conducted in accordance with written procedures, instructions, or maintenance orders (MOs) that implement the requirements of 10 CFR 50, Appendix B Criterion V.

The last example provided in Reference (a) was the removal and reinstallation of a single circuit card for troubleshooting. This was cited as the "disassembly and reassembly" of a Unit 1 Reactor Protection System (RPS) channel. The "disassembly and reassembly" of a component under a generic "rover" MO is contrary to Calvert Cliffs Instruction (CCI)-200 requirements. This type of investigative activity, however, is properly characterized as troubleshooting in CCI-117. We consider the actions taken as appropriate and allowable under CCI-200.

The remaining examples cited were licensee identified instances of inappropriate maintenance actions. They were promptly and formally investigated by the responsible line organization and they were considered collectively as a potential trend. This potential was identified to the Plant Operations Experience Review (POER) organization, which conducted a detailed investigation of the occurrences.

The four instances were:

- the pulling of an energized relay to facilitate a modification installation, contrary to the requirements of an approved MO and CCI-200, "Nuclear Maintenance System,"
- the use of a Surveillance Test Procedure (STP) as informal guidance which led to the failure to remove an electric circuit jumper and resulted in the inoperability of one shutdown cooling suction and two safety injection tank outlet valves,
- the incorrect termination of containment sample valve power leads and the failure to properly verify the restoration, contrary to the requirements of CCI-117, "Temporary Modification Control," and
- the incorrect termination of turbine driven Auxiliary Feedwater pump steam admission valve wiring contrary to the requirements of an approved MO and CCI-200.

Our investigation determined that certain commonalities linked the event causes. Poor work practices (independent verification/self checking) contributed to each of these four events. Supervisory oversight deficiencies contributed to three events.

II. CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED.

The POER investigation identified the Human Performance issues associated with all four events and recommended corrective action to plant management. These corrective actions are currently being pursued and are discussed in Part III of this attachment.

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VIOLATION NO. 1

In parallel with the POER investigative efforts, the General Supervisor-Electrical and Controls Maintenance (GS-E&C) issued a memorandum to all E&C maintenance personnel. In this memo, he reinforced his expectations in three areas:

i.) Inform the Shift Supervisor of any abnormal conditions. E&C personnel should also consult with their own supervision, assuming there is no immediate safety concern.

ii.) Stop and resolve unanticipated occurrences during maintenance or testing.

iii.) Ask for help if it is needed. If technicians are not sure of the actions needed to be taken, then they should ask.

The line organization informed appropriate personnel of management expectations and concerns. The GS-E&C conducted a meeting with the E&C Section to discuss these events. The Plant General Manager addressed all attendees at this meeting. Additionally, the General Supervisor of Nuclear Plant Operations stressed continued reliance on administrative and implementing procedures to all Shift Supervisors.

We began training selected senior E&C personnel in the Human Performance Evaluation System (HPES) to enhance their ability to conduct barrier analysis in their pre-job reviews and briefings. This training will allow them to better understand the causal factors that may effect human performance.

Shortly after these events, we proceduralized a Troubleshooting Guide which clarifies and strengthens our maintenance program and work practices.

III. CORRECTIVE ACTIONS WHICH WILL BE TAKEN TO AVOID FURTHER VIOLATIONS.

As a result of our investigation into these events, we plan to take the following corrective actions:

- emphasize the self-checking/verification process routinely in the Maintenance Supervisory Job Observation program and in lab qualification practice and exercises,
- include requirements in the Planner Work Development Guidelines to include precautions in work packages for equipment not completely de-energized or depressurized,
- stress in pre-task briefs the need for supervisory involvement when problems or questions arise,
- discuss these and other similar industry events at the next E&C Industry and Recent Events training session,
- prepare a procedure to reaffirm the appropriate uses of the term independent verification, and
- continue providing HPES training to senior level E&C personnel.

ATTACHMENT (1)

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INSPECTION REPORT NOS. 50-317/91-16 AND 50-318/91-16
VIOLATION NO. 1

IV. DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED.

Full compliance was achieved on July 15, 1991 when the GS-E&C distributed his memorandum to E&C personnel concerning his expectations. Maintenance continues to be conducted in accordance with procedures, approved maintenance orders, and instructions. Compliance will be checked regularly during periodic maintenance job observations.

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Gentlemen:

Reference (a) forwarded a Notice of Violation [Appendix A to Reference (a)] regarding two violations. The second violation concerned actions taken by a Shift Supervisor on a Reactor Protection System channel during surveillance testing. Attachment (1) provides our response to this Notice of Violation as requested in Reference (a). The first violation has been addressed in separate correspondence.

Should you have any further questions regarding this matter, we will be pleased to discuss them with you.

Very truly yours,

for GCC

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ATTACHMENT (1)

REPLY TO A NOTICE OF VIOLATION
INSPECTION REPORT NOS. 50-317/91-16 AND 50-318/91-16
VIOLATION NO. 2

I. DESCRIPTION AND CAUSE OF VIOLATION.

On July 24, 1991, Reactor Protection System (RPS) channel B was placed in OPERATE for the purposes of conducting surveillance testing, then returned to BYPASS without formally declaring the channel OPERABLE. This is contrary to Technical Specification 3.3.1.1 ACTION Statement 2, which requires an inoperable RPS channel to be in either the bypass or trip condition until it is declared OPERABLE.

This violation was caused by personnel error. The Shift Supervisor considered the channel OPERABLE but elected not to exit the ACTION Statement until the Certificate of Compliance was received, certifying the safety related qualification of replacement parts used during maintenance on channel B. Subordinate shift operators were aware that the parts had been verified as acceptable and therefore did not challenge the Shift Supervisor's decision. He could have determined a correct course of action had he consulted with the appropriate level of Engineering and Operations Supervision. By failing to involve senior level personnel, he directed actions which failed to meet the ACTION Statement requirements.

II. CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED.

The Shift Supervisor involved was counselled concerning his error. This counselling covered the following issues:

- all maintenance, testing, and administrative requirements must be fully met prior to restoring equipment to OPERABLE status,
- the declaration of a component or system's operability must be formal and clear-cut with no confusion between OPERABLE and functional,
- the Shift Supervisor should call senior supervisory personnel when necessary to resolve plant-limiting problems.

The General Supervisor-Nuclear Plant Operations (GS-NPO) issued Night Orders to all Operations personnel describing this incident and explaining the same issues discussed with the Shift Supervisor involved.

III. CORRECTIVE ACTIONS WHICH WILL BE TAKEN TO AVOID FURTHER VIOLATIONS.

The GS-NPO is conducting training with licensed operators clarifying management guidance and expectations regarding the handling of functional equipment and the restoration of equipment to OPERABLE status. This training will reinforce his expectations that Operations supervisors solicit the support they need to resolve potentially limiting operations and equipment issues. Additionally, this event will be presented at Operator Requalification and SRO Upgrade training.

ATTACHMENT (1)

REPLY TO A NOTICE OF VIOLATION
INSPECTION REPORT NOS. 50-317/91-16 AND 50-318/91-16
VIOLATION NO. 2

IV. DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED.

Full compliance was achieved on July 24, 1991 when RPS channel B was returned to BYPASS.