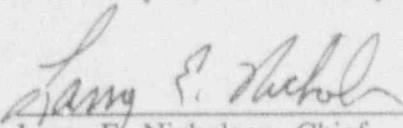


U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report Nos.: 50-317/92-16; 50-318/92-16
License Nos.: DPR-53; DPR-69
Licensee: Baltimore Gas and Electric Company
Post Office Box 1475
Baltimore, Maryland 21200
Facility: Calvert Cliffs Nuclear Power Plant, Units 1 and 2
Location: Lusby, Maryland
Inspection conducted: June 7, 1992, through July 4, 1992
Inspectors: Peter R. Wilson, Senior Resident Inspector
Allen G. Howe, Resident Inspector
Carl F. Lyon, Resident Inspector

Approved by:



Larry E. Nicholson, Chief
Reactor Projects Section No. 1A
Division of Reactor Projects

7-24-92

Date

Inspection Summary:

This inspection report documents resident inspector core, regional initiative, and reactive inspections performed during day and backshift hours of station activities including: plant operations; radiological protection; surveillance and maintenance; emergency preparedness; security; engineering and technical support; and safety assessment/quality verification.

Results:

See Executive Summary.

EXECUTIVE SUMMARY

Calvert Cliffs Nuclear Power Plant, Units 1 and 2

Inspection Report Nos. 50-317/92-16 and 50-318/92-16

Plant Operations: (Operational Safety Inspection Module 71707, Prompt Onsite Response to Events at Operating Power Reactors Module 93702) Operator performance during a manual trip of Unit 2 was good.

Maintenance and Surveillance: (Maintenance Observations Module 62703, Surveillance Observations Module 61726) A saltwater system return valve for the No. 12 ECCS pump room cooler was improperly assembled. The causes of this event indicate weaknesses in the maintenance processes. However, the event was thoroughly and promptly reviewed. The corrective actions recommended effectively addressed this issue.

Engineering and Technical Support: (Module 71707) The response by system engineering and civil engineering in evaluating missing belts on the containment air coolers was good.

Safety Assessment/Quality Verification: (Modules 71707, 30703) Inspectors assessed that non-licensed operators are providing accurate and complete log readings and are conducting rounds in a professional manner. Concerns were identified relating to the failure to perform required quality verification inspections. Management attention to these issues has not been rigorous. Conflicting and limited procedural guidance on rejected inspection points and stop work orders was considered to be a weakness. The Offsite Safety Review Committee was observed to make a positive contribution to plant safety.

DETAILS

1.0 SUMMARY OF FACILITY ACTIVITIES

Unit 1 was defueled in a refueling outage at the beginning of the inspection period. On June 14, the unit entered refueling (mode 6) with the commencement of core reload. Reload of the cycle 11 core was completed on June 18. Reactor vessel head installation was completed and the unit entered cold shutdown (mode 5) on June 24. The unit remained in mode 5 for the remainder of the period. The containment integrated leak rate test was conducted satisfactorily on July 4.

Unit 2 began the period at full power. The reactor was manually tripped on June 24 due to a loss of main condenser vacuum caused by the failure of the No. 21 condenser expansion joint (see section 2.2). The unit was cooled down to mode 5 to conduct repairs of the expansion joint and remained in mode 5 for forced outage work through the end of the period.

2.0 PLANT OPERATIONS

2.1 Operational Safety Verification

The inspectors observed plant operation and verified that the facility was operated safely and in accordance with licensee procedures and regulatory requirements. Regular tours were conducted of the following plant areas:

- control room
- primary auxiliary building
- radiological control point
- electrical switchgear rooms
- auxiliary feedwater pump rooms
- security access point
- protected area fence
- intake structure
- diesel generator rooms
- turbine building

Control room instruments and plant computer indications were observed for correlation between channels and for conformance with technical specification (TS) requirements. Operability of engineered safety features, other safety related systems and onsite and offsite power sources was verified. The inspectors observed various alarm conditions and confirmed that operator response was in accordance with plant operating procedures. Routine operations surveillance testing was also observed. Compliance with TS and implementation of appropriate action statements for equipment out of service was inspected. Plant radiation monitoring system indications and plant stack traces were reviewed for unexpected changes. Logs and records were reviewed to determine if entries were accurate and identified equipment status or deficiencies. These records included operating logs, turnover sheets, system safety tags and the temporary modifications log. Plant housekeeping controls were monitored, including control and storage of flammable material and other potential safety hazards. The inspector also examined the condition of various fire protection, meteorological, and seismic monitoring systems. Control room and shift manning were compared to regulatory requirements and portions of shift turnovers were observed. The inspectors found that control room access was properly controlled and that a professional atmosphere was maintained.

In addition to normal utility working hours, the review of plant operations was routinely conducted during portions of backshifts (evening shifts) and deep backshifts (weekend and midnight shifts). Extended coverage was provided for 78 hours during backshifts and 18 hours during deep backshifts. Operators were alert and displayed no signs of fatigue or inattention to duty.

The inspectors observed an acceptable level of performance during the inspection tours detailed above.

2.2 Followup of Events Occurring During Inspection Period

During the inspection period, the inspectors provided onsite coverage and followup of unplanned events. Plant parameters, performance of safety systems, and licensee actions were reviewed. The inspectors confirmed that the required notifications were made to the NRC. During event followup, the inspector reviewed the corresponding CCI-118N, "Nuclear Operations Section Initiated Reporting Requirements" (Calvert Cliffs Instruction) documentation, including the event details, root cause analysis, and corrective actions taken to prevent recurrence. The following event was reviewed.

-- Unit 2 Manual Trip

At 3:10 a.m. on June 24, Unit 2 was manually tripped from 100% power due to a loss of main condenser vacuum resulting from a rupture of the 21 condenser expansion joint. The expansion joint is a 10 inch wide rubber belt which connects the turbine exhaust and the condenser shell. Operators noted the lowering vacuum in the 21 and 22 condenser shells and the rapidly lowering main generator megawatts. They tripped the unit before the automatic turbine trip setpoint was reached. Following the trip, the main feed pumps automatically tripped due to low condenser vacuum. Operators controlled steam generator level using the 23 auxiliary feed pump. The unit was subsequently cooled down to mode 5 and entered a forced outage to conduct an investigation of the event and to perform repairs.

The inspectors reviewed plant conditions and discussed the event with operators. No unexpected conditions were identified and the plant responded as anticipated. Inspectors attended the post trip review and discussed the event with operations management.

BG&E concluded from their investigation of the event that the 21 condenser expansion joint had failed. The expansion joint dated from original construction and was due to be replaced during the 1993 refueling outage. The scheduled replacement was based on inspection done in 1989 that had concluded that it would remain functional until the 1993 outage. The 23 and 22 condenser shell expansion joints had been replaced with a larger size in 1982 and 1987, respectively, to account for a slight warping found in the Unit 2 condenser. The 22 and 23 condenser expansion joints were inspected to verify their integrity as part of the event investigation and corrective actions. The Unit 1 condenser expansion joints were not inspected as a result of this event because there is no history of failure or leaking of the seals on Unit 1; there is no warping of the Unit 1 condenser; and there were no deficiencies noted during the periodic maintenance inspections completed on the expansion joints during the current refueling outage.

Inspectors concluded that operator response to the loss of vacuum was good. BG&E followup and corrective actions were appropriate.

3.0 RADIOLOGICAL CONTROLS

During tours of the accessible plant areas, the inspectors observed the implementation of selected portions of the licensee's Radiological Controls Program. The utilization and compliance with special work permits (SWPs) were reviewed to ensure detailed descriptions of radiological conditions were provided and that personnel adhered to SWP requirements. The inspectors observed that controls of access to various radiologically controlled areas and use of personnel monitors and frisking methods upon exit from these areas were adequate. Posting and control of radiation areas, contaminated areas and hot spots, and labelling and control of containers holding radioactive materials were verified to be in accordance with licensee procedures.

Health Physics technician control and monitoring of these activities were determined to be adequate. Overall, an acceptable level of performance was observed.

A site radiological emergency preparedness drill was conducted on June 16. The scenario involved a fuel handling incident coincident with a leak from the spent fuel pool. No outside agencies were involved.

4.0 MAINTENANCE AND SURVEILLANCE

4.1 Maintenance Observation

The inspector reviewed selected maintenance activities to assure that:

- the activity did not violate TS Limiting Conditions for Operation and that redundant components were operable;

- required approvals and releases had been obtained prior to commencing work;
- procedures used for the task were adequate and work was within the skills of the trade;
- activities were accomplished by qualified personnel;
- where necessary, radiological and fire preventive controls were adequate and implemented;
- quality control hold points were established where required and observed; and
- equipment was properly tested and returned to service.

Maintenance activities reviewed included:

- | | |
|-------------|--|
| MO 19205037 | Replace 11 EDG intercooler gaskets |
| MO 19203654 | Install valves and test equipment connections on No. 11 diesel generator heat exchangers for performance testing |
| MO 19200419 | Install tubing and supports for FCR 89-26 (AFW modification) |
| MO 19204152 | Determine cause of binding and repair No. 11 saltwater pump |
| MO 19204193 | Replace No. 10 injector on No. 11 diesel generator |
| MO 19200470 | Repair seat leakage on 1-SW-5175 |
| MO 19204330 | Reinstall actuator on 1-SW-5175 (installed backwards) |
| MO 29202547 | Replace UV coil on TCB 9 |

The work observed was performed safely and in accordance with the proper procedures. Inspectors noted that an appropriate level of supervisory attention was given to the work depending on its priority and difficulty. Uncertainties or doubts concerning maintenance orders or work observations were resolved before proceeding with the activity.

An example of a good work practice and resolution was observed during MO 29202547. The replacement undervoltage coil was noted by the quality verification inspector to have a different part number than that required for the MO. It was surmised that the number had been administratively changed by the vendor; however, rather than proceed and install the suspect part, another coil with the correct number was procured. An issue report was generated to resolve the discrepancy with the part number. Additional notable observations are documented below.

4.2 Improper Reassembly of No. 12 ECCS Pump Room Cooler Outlet Valve, 1-SW-5175

Plant operators discovered that 1-SW-5175 was installed backwards (would fail close vice fail open) following maintenance. The inspectors reviewed this issue for safety significance, causes, BG&E response, and corrective actions. Valve 1-SW-5175 is the No. 12 emergency core cooling pump room cooler outlet valve. Unit 1 was in mode 6 (refueling) when the problem was discovered.

The inspectors reviewed BG&E's investigation of the issue, reviewed the associated documentation for maintenance and post maintenance testing, and discussed the issue with cognizant personnel. Maintenance management was concerned with this event and initiated a thorough and prompt review. BG&E concluded that a worker error caused the improper assembly and that incomplete post maintenance testing (PMT) failed to identify the error. An inadequate questioning attitude during the work and PMT contributed to the event.

While performing the repair, the worker was not certain of the orientation of the valve. Piping diagrams and operations personnel were consulted. However, the worker erroneously concluded that the valve operated in a fail close mode and reassembled it for this mode of operation. The worker noted that the local position indication was the opposite of the valve position and assumed that the wrong part was installed from the previous work. An attempt was made to obtain a new part but none was available. Maintenance supervision was apparently not involved in resolving worker concerns with the valve position. The maintenance procedure, while technically adequate, was difficult to use because various sections of the technical manual to repair the valve were referenced and may have contributed to the error.

An inadequate questioning attitude during the PMT and incomplete PMT contributed to the event. The instrument shop elected to perform the PMT on the valve to resolve questions by operations regarding the mismatch between local and remote position indication. This PMT was performed while the saltwater system was drained. The initial test was unsatisfactory because of the position indication problem. The position indication was assumed to be in error because of the recent maintenance, was adjusted 180 degrees, and the PMT was successfully reperformed and signed off as complete. An adjustment of 180 degrees was not considered unusual by the workers. The sign-off for completed PMT was in error because there were additional seat leak and valve stroke tests required.

The inspectors independently drew similar conclusions. These included the initial worker error, an inadequate questioning attitude regarding the position indication on two occasions, less than effective supervisory involvement, and the incomplete PMT. Adequate PMT to identify the improper valve installation was recommended in the MO but only the instrument maintenance portion of the PMT was performed. Mechanical maintenance was not informed of the requirement to perform PMT due to inadequate supervisory review of the MO by the PMT group. The incomplete PMT was not noted until it had already been discovered by operators that the valve was installed backwards.

Corrective actions included ensuring that a new valve maintenance procedure captures the lessons learned, inclusion of this event in training, continued emphasis on supervisory involvement, and the continuation of actions to improve the PMT program. The inspectors concluded that suitable corrective actions were identified which effectively addressed this issue and the PMT concerns. These included corrective actions already begun but not yet completed for a recent failure to perform required testing on spent fuel pool filters (NKC Inspection Report 50-317 and 50-318/92-07).

The inspectors assessed the actual safety significance of the event as low because the room cooler was not required to be in operation during existing plant conditions. However, the event was a concern due to the maintenance processes that allowed the error and failed to detect it. The causes of this event indicate weaknesses in the maintenance processes for the repair and post maintenance test of this valve. The inspectors found that the failure to perform adequate PMT was a violation of TS 6.8.1.c, which requires that written procedures shall be established, implemented, and maintained covering surveillance and test activities of safety related equipment. The failure to follow TS 6.8.1.c is not being cited because the criteria specified in Section V.G. of the NRC Enforcement Policy, 10 CFR 2, Appendix C, were satisfied. This determination was based on the fact that the violation was identified by the licensee, the safety significance was minimal, it was not reportable, corrective actions were taken, and it was not willful. The inspectors determined that additional NRC review is not required.

4.3 Surveillance Observation

The inspectors witnessed/reviewed selected surveillance tests to determine whether properly approved procedures were in use, details were adequate, test instrumentation was properly calibrated and used, TSs were satisfied, testing was performed by qualified personnel, and test results satisfied acceptance criteria or were properly dispositioned. The following surveillance testing activities were reviewed:

STP O-8B-2 Monthly test of 21 EDG and 4Kv bus 24 LOCI sequencer

STP O-5A-2 AFW system quarterly test

An overall acceptable level of knowledge and performance was observed of the test personnel. The tests were properly performed and no discrepancies in the test data were noted.

5.0 EMERGENCY PREPAREDNESS

The inspectors toured the onsite emergency response facilities to verify that these facilities were in an adequate state of readiness for event response. The inspectors discussed program implementation with the applicable personnel. The resident inspectors had no noteworthy findings in this area.

6.0 SECURITY

During routine inspection tours, the inspectors observed implementation of portions of the security plan. Areas observed included access point search equipment operation, condition of physical barriers, site access control, security force staffing, and response to system alarms and degraded conditions. These areas of program implementation were determined to be adequate. No unacceptable conditions were identified.

7.0 ENGINEERING AND TECHNICAL SUPPORT

-- Containment Air Cooler Bolts

On July 1, during a pre-test walkdown of the containment air coolers (CACs), engineers discovered that the coil frames containing the individual cooling coil units were not bolted to their support structure. There are 12 coil units in each CAC. The discovery placed the seismic analysis for the CACs in doubt. Both units were in mode 5 at the time of the discovery, so the CACs were not required to be operable. The concern was immediately reported to the shift supervisor, an issue report was written, and a mode restraint was placed on both units until resolution of the issue.

The coil frames are intended by the manufacturer, American Air Filter, to act as the seismic support or restraining mechanism for the coil coolers themselves. Manufacturer's requirements are for each coil frame to be attached to its support structure using six bolts or machine screws, a total of 72 bolts per CAC. Of the four CACs in Unit 2, none had any bolting installed. The Unit 1 CACs were in similar condition.

The condition was promptly referred to the civil engineering unit for an operability determination. Through analysis and discussion with the manufacturer, it was determined that the lack of bolts on the coil frames did not compromise the seismic analysis for the CACs. Adequate restraint was provided in each direction of motion by the CAC framing and by the service water piping supplying the coils. The CACs were determined to be operable.

Nevertheless, a modification was processed and adequate machine screws were installed in the Unit 2 CACs before mode change to restore them to the intended configuration. The Unit 1 CACs are scheduled to be restored to configuration before the end of the current outage.

Inspectors discussed the issue with system engineering and civil engineering personnel and reviewed the operability determination for adequacy.

BG&E's investigation into the event determined that the bolts had been missing since initial construction. They expect that a new preventive maintenance requirement to inspect the CACs during every refueling outage will enhance the identification of any future degraded condition.

The inspectors assessed that the prompt response to the issue by system engineering and civil engineering was good.

8.0 SAFETY ASSESSMENT AND QUALITY VERIFICATION

8.1 Plant Operations and Safety Review Committee

The inspector attended several Plant Operations and Safety Review Committee (POSRC) meetings. TS 6.5 requirements for member attendance were verified. The meeting agendas included procedural changes, proposed changes to the TS, Facility Change Requests, and minutes from previous meetings. Items for which adequate review time was not available were postponed to allow committee members time for further review and comment. Overall, the level of review and member participation was adequate in fulfilling the POSRC responsibilities. No unacceptable conditions were identified.

8.2 Offsite Safety Review Committee

On June 26, the inspectors attended portions of the Offsite Safety Review Committee (OSSRC) meeting. The OSSRC composition and agenda were in compliance with the requirements of TS 6.5.4. All committee members were involved in the discussions of the issues and reviews were thorough and insightful. The inspectors concluded that the function of the OSSRC continued to be a strength.

8.3 Quality Verification Issues

The purpose of quality verification hold points was to provide for independent verification of critical characteristics and/or predetermined quality acceptance criteria to ensure safety related components were maintained in accordance with design requirements. During the period, the inspectors reviewed several concerns regarding quality verification of maintenance activities. These concerns included several instances where quality verification inspection hold points were missed and weaknesses in procedural guidance on rejected hold points and stop work orders. These were determined to be long-standing problems. The inspection of these issues was not complete when the period ended.

BG&E's quality verification (QV) program utilizes a methodology where inspections and surveillances are concentrated on safety and risk significant activities rather than QV coverage of all safety related work. During the work planning phase of a safety related activity, BG&E's Quality Engineering Unit (QEU) reviews the work documents and determines required inspection hold points. The QEU also prepares a Quality Verification Inspection Instruction (QVII) which details the specific hold points and acceptance criteria for that activity. The maintenance order (MO) for that activity is then required to be annotated that QV coverage is necessary.

a. Missed QV Inspection Hold Points

During routine review of issue reports the inspectors, noted that several issue reports had been generated concerning the failure of maintenance personnel to notify QV when required. This failure to notify QV resulted in several inspection hold points being missed; i.e., the inspections were not performed. BG&E's interdepartmental administrative procedure MN-1-100, "Conduct of Maintenance," step 5.4, required maintenance personnel to notify QV before work began if the MO "QV Inspect" block was marked yes or if the MO was marked "QV Notification Required." In addition, MN-1-100 required QV be notified during the performance of the work activity when directed by the job step or prior to QV hold points. Some examples of activities where required QV inspections were not performed included calibration checks of protective relays for four 4 Kv emergency switchgear breakers, torquing of a No. 12 steam generator hand hold cover plate, and reassembly of low pressure safety injection flow control valve CV-306.

The inspectors performed a detailed review of the missed hold points associated with the 4 Kv emergency switchgear. Between May 9 and 12, 1992, BG&E's Electric Test organization performed calibration checks for the two supply breakers to emergency bus No. 14 (MO 19202980), the No. 12 containment spray (CS) pump breaker (MO 19202982), and the No. 12 low pressure safety injection (LPSI) pump breaker (MO 19202981). The QVII prepared for each calibration check contained approximately ten inspection hold points per breaker, including verification of relay set points and material condition. The above MOs were performed without QV notification. On May 13, the above breakers were returned to service.

On May 18, the missed hold points for the CS pump and the emergency bus were discovered by a maintenance supervisor during the MO close out review. An issue report (IRO-014-014) was generated to document this deficiency. The missed hold points associated with the LPSI pump were not discovered during the maintenance supervision close out review of the MO. On June 2, a maintenance clerk found the deficiency while placing the MO in the maintenance historical file. An issue report (IRO-011-976) was subsequently issued to document the problem.

The inspectors questioned the acting General Supervisor - QV about how the above deficiencies were resolved. He stated that the resolution of the missed hold points were still under "negotiation" with the Electric Test organization. Since the quality of the above relays had not been verified, the inspectors also questioned whether an operability determination had been made. No operability determination had been performed. BG&E subsequently determined that the suspect relays were operable based on the satisfactory performance of other relay calibration adjustments that had been inspected by QV. No calibration adjustments were performed on the suspect relays.

When asked by the inspectors, neither the maintenance or QV organizations could provide a listing of all QV inspection points that had been missed during the current Unit 1 outage. The inspectors found that the Independent Safety Evaluation Unit (ISEU) was trending issue reports involving missed QV hold points. However, the ISEU data base only included those missed hold points that had been identified and documented in an issue report.

The inspectors discussed the above concerns with various site managers. BG&E initiated several corrective actions. These included the initiation of a detailed root cause analysis of the concerns, the initiation of a detailed review of MOs and QVIs to find any missed hold points not previously documented in an issue report, and the performance of operability determinations for components with associated missed hold points. These corrective actions were still in progress at the end of the inspection period. In addition, on July 2, all maintenance personnel received written guidance requiring QV to be notified prior to performing any safety related work regardless of the MO requirement.

b. Ineffective Corrective Action

The inspectors found that failures to notify QV during maintenance activities was a long-standing and recurring problem. The ISEU began tracking and trending these failures in 1990. In January 1991, the ISEU documented this concern in an issue report. This issue was brought to the attention of BG&E's senior site management by the supervisor of the ISEU during Management Review Board meetings conducted on May 3, June 14, and August 14, 1991.

To correct the problem, maintenance craft awareness training was conducted in late 1991 to stress the need to make QV notification. The inspectors concluded that the corrective action was ineffective given the continuing occurrences of failure to notify QV.

c. Working Past Rejected QV Inspection Hold Points and Stop Work Orders

Another concern regarding quality verification involved an instance where work continued past a rejected QV hold point and a stop work order. On June 8, 1992, a QV technician, while performing a hold point inspection, identified that a stud that was to be used to fasten one of the No. 12 steam generator hand hole covers had no visible markings and could not be verified as meeting ASME code requirements. The QV technician rejected the hold point and QV management issued a stop work order. Discussions were held between the Superintendent-Nuclear Maintenance and the Manager of Nuclear Quality Assurance to determine an acceptable course of action. It was agreed that the hand hole cover could be installed with the potentially nonconforming stud provided an issue report was generated and a mode restraint was placed on the unit until the deficiency was resolved. The maintenance personnel were then directed to proceed; however, the QV personnel were not informed of the agreement. The cover was subsequently installed. The stop work order was never rescinded and the maintenance personnel never received written concurrence from QV prior to working past the rejected hold point.

The resident inspectors conducted a detailed review of this occurrence. The instructions concerning rejected hold points were found in various procedures. The inspectors found that the guidance was not consistent. Quality Verification Procedure (QVP) 4, "Preparation of Inspection Instructions," stated that work was not permitted to proceed through a rejected hold point without the documented concurrence of QV.

The inspectors found conflicting guidance in step 5.4 of MN-1-100 which allowed work to proceed through a rejected hold point when maintenance personnel disagreed with QV provided that the QV technician documented the rejected hold point in an issue report, the issue report number was written on the applicable maintenance order, and the responsible maintenance supervisor concurred. The above guidance in MN-1-100 was also found to be contrary to NRC regulations. 10 CFR 50 Appendix B Criterion X describes a hold point as that point which work cannot proceed without the consent of the licensee's designated representative (QV).

The procedural guidance for stop work orders involving maintenance activities was found in Calvert Cliffs Instruction (CCI) 116, "Program Deficiency Report Program." CCI 116 contained only limited instructions concerning the issuance of stop work orders. The procedure contained the definition of a stop work order and a note instructing QV technicians who issued stop work orders to inform their supervisor, the shift supervisor, and the responsible system engineer. The note also required the QV technician to write an issue report and the Quality Assurance organization to prepare a problem report.

The inspectors concluded that the installation of the hand hole cover while a stop work order was in effect was of minor safety significance. Adequate controls had been established to ensure the resolution of the potential nonconforming condition before the plant changed operating mode. The stop work order was not lifted due to a failure to communicate to the QV organization the decision of the QA Manager to continue work. The inspectors did not find any other instances where work proceeded past a rejected QV hold point.

However, the inspectors were concerned that conflicting and limited guidance existed relating to rejected hold points and stop work orders. This concern was discussed with the BG&E site management. The QA Manager stated that he shared this concern and had already developed new comprehensive guidance that was in the final review process. The conflicting guidance in MN-1-100 was revised on July 3 to prevent proceeding past a rejected QV hold point without QV supervisor concurrence. In addition, all maintenance personnel were given written notification of this change.

d. Preliminary Conclusions

The inspection of these issues was in progress at the end of the period. The inspectors were particularly concerned that QV hold points were missed given the methodology utilized by BG&E which limits verification inspections to those activities which are safety and risk significant. Prior corrective action to address this concern was limited and ineffective. Prior BG&E site management attention to this concern was not rigorous. In one instance the MO closeout review of a completed MO by maintenance supervision was not thorough. Additional weaknesses were identified in the procedural guidance for rejected QV hold points and stop work orders. These issues are Unresolved (50-317 and 50-318/92-16-01) pending further NRC inspection.

8.4 Plant Operator Activities

The inspectors performed a followup of BG&E response to NRC Information Notice (IN) 92-30, "Falsification of Plant Records." The purpose of the followup was to independently assess BG&E's ability to obtain accurate and complete log readings from non-licensed operators. The evaluation was performed using the guidance of NRC Region 1 Temporary Instruction (TI) 92-01, "Inspection of Plant Operator Activities."

Inspectors accompanied a random selection of non-licensed operators over a period of four weeks to assess the proficiency and completeness with which operators are conducting rounds and taking equipment logs. Inspectors also reviewed Calvert Cliffs Instruction (CCI) 114, "Plant Logs," and discussed IN 92-30 with the operations superintendent and several of his subordinate managers to determine their expectations for completing rounds.

The inspectors accompanied auxiliary building, turbine building, and outside operators. Two of the operators had shift technical advisor trainees under instruction with them. The operators' experience with BG&E varied from one to eleven years.

In all cases operators conducted their rounds thoroughly and professionally. They were knowledgeable of the equipment and conscientious in investigating and reporting abnormal conditions to the control room. Operators were aware in varying levels of detail of the issue of falsification of logs at some other plants. They also understood operations management's expectations for the conduct of rounds as promulgated in CCI 114. Operators displayed a good attitude toward their work and toward procedural adherence.

The process for revising the logs per CCI 114 was reviewed and discussed with operators. It appeared to work well and was responsive to requirements.

BG&E has implemented an evaluation plan for validation of operator rounds. The validation is being done by the Plant Operating Experience Review group and is expected to be completed by mid-July. It will be reviewed in a future NRC inspection.

9.0 MANAGEMENT MEETING

During this inspection, periodic meetings were held with station management to discuss inspection observations and findings. At the close of the inspection period, an exit meeting was held to summarize the conclusions of the inspection. No written material was given to the licensee and no proprietary information related to this inspection was identified.

On June 17, an enforcement conference with BG&E was held at the Region 1 office to discuss the apparent violations documented by the Electrical Distribution System Functional Inspection team in NRC Inspection Report 50-317/92-80 and 50-318/92-80.

9.1 Preliminary Inspection Findings

One unresolved item: (50-317 and 50-318/92-16-01) was identified during this inspection period as discussed in section 8.3 of this report.

A non-cited violation of technical specification was identified during this period and is discussed in section 4.2 of this report.

9.2 Attendance at Management Meetings Conducted by Region Based Inspectors

<u>Date</u>	<u>Subject</u>	<u>Inspection Report No.</u>	<u>Reporting Inspector</u>
6/26/1992	IST Program	50-317/92-18 50-318/92-18	A. Lopez-Goldberg