



CHARLES CENTER • P. O. BOX 1475 • BALTIMORE, MARYLAND 21203

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

April 30, 1990

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  
Description of Improvements in the Management of Regulatory  
Commitments

REFERENCES: (a) Letter from G. C. Creel (BG&E) to W. T. Russell (NRC) dated  
January 25, 1990, "Commitment Implementation Assessment Project"  
(b) NRC Inspection Report Nos. 50-317/90-81 and 30-318/90-81, NRC  
Region I Combined Inspection Report

Gentlemen:

In order to strengthen our ability to identify, implement and maintain the regulatory commitments for Calvert Cliffs Nuclear Power Plant, the Baltimore Gas and Electric Company has added a new Action Plan to the Performance Improvement Plan: the Regulatory Commitment Management (RCM) Project. This Project will establish a formal process for managing regulatory commitments. This process will control how regulatory commitments are made or identified, assigned, tracked, implemented, documented, revised, closed and maintained. The RCM Project also includes a comprehensive review of our historic licensing commitments. As we promised in Reference (a), Attachment A contains a description of the RCM Project. This description consolidates and supersedes all of our previous discussions and correspondence on this project.

In Reference (b), you requested that we also describe the current system for managing regulatory commitments and that we provide an update on the actions being taken to correct the non-conforming conditions identified during the Commitment Implementation Assessment Project. Attachment B and C, respectively, contain that information.

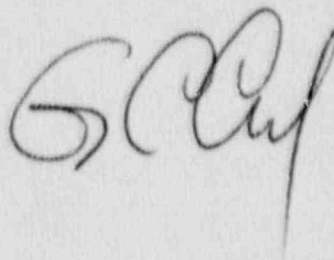
We will keep you informed on our progress on this initiative through the periodic Performance Improvement Plan updates given to the Resident Inspector and to Region I and with specific discussions with the Resident Inspector on this subject.

9005040052 900430  
PDR ALOCK 05000317  
P PDC

*Acc'd*  
*1/1*  
*Cent No*  
*P395887486*

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

Very truly yours,

A handwritten signature in cursive script, appearing to read "G. Capra".

GCC/BDM/db

Attachment

cc: D. A. Brune, Esquire  
J. E. Silberg, Esquire  
R. A. Capra, NRC  
D. G. McDonald, Jr., NRC  
T. T. Martin, NRC  
L. E. Nicholson, NRC  
R. McLean, DNR

## **ATTACHMENT A**

### **THE REGULATORY COMMITMENT MANAGEMENT PROJECT**

The Regulatory Commitment Management Project is divided into four tasks: 1) the Regulatory Commitment Management Process, 2) Source Document Storage and Retrieval, 3) Historical Commitment Identification, and 4) Historical Commitment Review. The current plans for each Task are described below.

#### Task 1 - Regulatory Commitment Management Process

This task will develop and implement a process for managing regulatory commitments. Managing regulatory commitments includes making, identifying, assigning, tracking, implementing, revising, closing and maintaining commitments.

The first step in this process will be to promulgate a policy on regulatory commitments. This policy will state the management expectations for managing regulatory commitments. It will include the definition of a "regulatory commitment". Further, it will describe the organizational responsibilities, authorities, and communications, and the scope of regulatory commitment management.

The process requirements will be developed following interviews with Calvert Cliffs management and selected Project Managers. The needs of other activities, such as the Procedures Upgrade Project, will be identified and addressed in the requirements. Information from the Regulatory Commitment Tracking Group (RCTG) and the experience of other utilities will be utilized in developing the scope of the process.

After the process scope has been established, draft procedures will be written to describe the process implementation. Following the testing of the draft procedures on a test population of documents, they will be used as the basis for developing the functional specifications for the

regulatory commitment database needed to support the process. The database will be the central repository for all of Calvert Cliffs regulatory commitments.

Process implementation will be accomplished following training and customer testing. Training on BG&E's regulatory commitment management policy will be provided to the responsible individuals, Calvert Cliffs management and, on a continuing basis, general employees. The draft procedures will be finalized and regulatory commitment information stored on the existing system will be transferred to the regulatory commitment database.

Following implementation, we will officially inform the Commission of our policies concerning the management of regulatory commitments.

This task is currently scheduled to be completed by the fourth quarter of 1991.

#### Task 2 - Source Document Storage and Retrieval

The purpose of this task is to retrieve and make readily available the docketed correspondence between BG&E and the NRC. Almost 11,000 documents comprising approximately 250,000 pages are currently on the Calvert Cliffs Units 1 and 2 docket. A consolidated, ordered collection of our docketed correspondence will be assembled. Our plan is to store the documents on an electronic system with search capabilities. The ability to add new correspondence to the electronic system will be provided so the collection can be kept current.

Besides the obvious benefits to the Project, this electronic document system will be useful to other activities at Calvert Cliffs and should facilitate an increase in the quality and timeliness of our correspondence with the NRC.

This Task is currently scheduled to be completed during the fourth quarter of 1990.



### Task 3 - Historical Commitment Identification

The purpose of this task is to review the docketed correspondence between BG&E and the NRC and to identify the commitments contained in that correspondence.

Procedures will be developed describing how to identify regulatory commitments in historical correspondence and on capturing the pertinent data from the document and entering it onto the regulatory commitment database created in Task 1.

This Task is currently scheduled to be completed in the third quarter of 1991.

### Task 4 - Historical Commitment Review

The purpose of this task is to review the regulatory commitments identified in Task 3.

The first activity of the historical commitment review will be to prioritize the regulatory commitments for review. Relative importance of commitments to plant safety will be considered in this prioritization.

During the review of the historical commitments, duplicate commitments will be consolidated and superseded commitments will be tied to their replacement commitment and closed. The remaining historical commitments will be separated into two categories: open and closed commitments. Specific definitions for open and closed historical commitments will be developed during the Project, however, in general, open historical commitments are those which impose current or future obligations. Closed historical commitments are those which have no current or future obligations. Open commitments will be investigated and compliance will be verified and documented. The justification for declaring a commitment closed will also be documented but the implementation of the commitment will not necessarily be investigated. As commitments are reviewed and documented, the regulatory commitment

database will be updated to contain commitment implementation information. All important aspects of the historical commitment review will be controlled by procedures.

Commitment information will be passed to the appropriate organizations for inclusion into plant documents (UFSAR, Technical Specification, and procedures).

Deficiencies identified as conditions adverse to quality will be entered into the corrective action system for prioritization, reportability determination, root cause analysis (if justified) and correction. The review priority may be adjusted if a trend of deviations is noted.

This task is currently scheduled to be completed by mid-1992.

### Conclusion

Baltimore Gas and Electric has embarked upon a major undertaking to improve our process for managing regulatory commitments and to identify and review our historical commitments. The Project will last two and a half years and is estimated to cost almost \$6 million. We believe that the resulting system for managing regulatory commitments and the information that will be made readily available describing our commitments and their implementation will provide a high assurance of past commitment accomplishment and the basis for reliably meeting future regulatory obligations.

**ATTACHMENT B**  
**DESCRIPTION OF THE CURRENT REGULATORY COMMITMENT**  
**MANAGEMENT SYSTEM**

Management of regulatory commitments is currently coordinated by the Nuclear Regulatory Matters Section (NRMS). Included in NRMS's responsibilities are:

- 1) Review of incoming correspondence from the NRC to identify commitments (i.e., stated expectations which constitute a requirement for action within BG&E).
- 2) Review of outgoing correspondence to the NRC to identify commitments to future action by BG&E.
- 3) Entry of commitments identified in 1) and 2), above, into the Commitment Tracking System. This includes assignment to the organization responsible for action and negotiation of due dates. NRMS oversees the NRC module of the Commitment Tracking System which is integrated into the site problem reporting and corrective action systems.
- 4) Providing routine reports to management on the status of commitments made to the NRC.
- 5) Review and close-out of commitments based on documents submitted by the responsible organizations identifying the actions taken to fulfill the commitment.
- 6) Reference assistance in reviewing past commitments and regulatory requirements affecting on-going activities such as 50.59 reviews and procedure revisions.

These actions were initiated or revised from earlier systems in late 1989 or early 1990. Procedures to formalize these processes are currently in development with expected completion by July, 1990.

Regulatory commitment management is reviewed through Quality Assurance audits and surveillances. This includes review of generic issue correspondence (NUREGS, I&E Bulletins, Generic Letters), Licensee Event Reports, Technical Specifications, and the UFSAR. A requirement for specific consideration of regulatory commitment source documents was recently added to QA procedures. Additional monitoring of regulatory commitment management effectiveness will be conducted by the Independent Safety Evaluation Unit by examining missed commitments in their deficiency trending.



## ATTACHMENT C

### STATUS OF COMMITMENT IMPLEMENTATION ASSESSMENT PROJECT NON-CONFORMANCE REPORTS

- NCR 8220     DESCRIPTION: Sample Piping for the Unit 1 wide range noble gas monitor has no insulation. MR tag #26731 dated 1987 still attached to the monitor states that the heat tracing is unable to maintain sample temperature.
- STATUS: Higher rated heat tracing and new insulation installed in Unit 1 in March, 1990. Post installation testing verified operability of the system. The same work will be performed on Unit 2 this summer.
- NCR 8243     DESCRIPTION: LER 83-63 (dated 12/9/83) had corrective actions requiring the installation of locking devices to prevent inadvertent closure of containment particulate/gaseous monitor isolation valves during containment sampling. This has not been done.
- STATUS: Procedural controls have been put into place to prevent the inadvertent closure of the isolation valves.
- NCR 9232     DESCRIPTION: BG&E 1/4/80 letter to NRC on the environmental qualification of electrical equipment stated that the ESF equipment is qualified to 10E8 rads. The LPSI pump seals contain Teflon parts which are not stable past 10E5 rads. Post accident dose map 62143 indicates that the ECCS pump room will have at least 10E5 rads in the first 10 hours of a design basis accident. As a result of high postulated dose rates the LPSI pump seals may fail.
- STATUS: A safety evaluation determined that the Teflon seals were not a safety hazard. However, due to other undesirable characteristics of the seals, they are being replaced on Unit 1 and 2 during the present outage.
- NCR 9248     DESCRIPTION: BG&E committed to the NRC to install a MFW trip signal by November 17, 1983. The installation was made, but did not meet the stated requirements of the commitment.
- STATUS: This NCR was initiated due to a mis-interpretation of the design drawings. The trip system meets the requirements of the commitment.
- NCR 9249     DESCRIPTION: The SPDS was installed under FCR 83-1029. The safety analysis was sent to the NRC and OSSRC for review, but was not included in the FCR package. Therefore, field reviews by the RE and POSRC were not properly documented.
- STATUS: Investigation has revealed that there is no requirement to add the Safety Analysis to the FCR and that adequate reviews were performed.

NCR 9250 DESCRIPTION: The latest revision to CCI-159 omitted the Generic Letter 82-12 requirement to have eight hours between working periods.

STATUS: The revised procedure has been drafted and is in final review and approval with implementation expected in May, 1990.

NCR 9252 DESCRIPTION: BG&E 9/26/84 letter to the NRC states that two separate Surveillance Test Procedures (STPs) covering operability and under-voltage testing of the Emergency Diesel Generators "had been combined into one procedure, eliminating many redundant requirements." Contrary to this statement, such testing is presently conducted under four STPs.

STATUS: The procedures in question had been drafted but were not enacted. Subsequently, Emergency Diesel Generator maintenance has been substantially reviewed by the NRC. Significant steps to reduce diesel starts to the minimum allowed by the Technical Specifications have recently been implemented including physical circuitry modifications. Procedures accompanying these modifications have been drafted and are currently in the review and approval process.

NCR 9253 DESCRIPTION: BG&E 1/4/80 letter to the NRC states that dose calculations and time and motion studies will be performed for areas requiring post-accident access with dose rates greater than 100 mr/hr. BG&E also committed that there would be no areas requiring infrequent post-accident access with dose rates greater than 5 R/hr. There is no record of a time and motion study being performed for Operations. Chemistry performed a time and motion study following an NRC violation.

STATUS: A Project Team is being organized to examine procedures, determine if additional calculations or studies are necessary, and address whether additional administrative controls are needed.

NCR 9254 DESCRIPTION: The post accident radiation dose maps 62143 through 62147 have not been kept up to date. Specifically, 1) Bechtel DCN 62-146-001 written in 1987 has not been incorporated. This DCN increases the estimated dose outside the emergency escape hatch), 2) the floor plan changes on the 69' have not been incorporated, and 3) several shield walls shown on the drawings do not reflect the plant configuration.

STATUS: A drawing change request (GCR 90-354) has been issued to correct the drawings and the change is in final review.



NCR 9255 DESCRIPTION: BG&E 6/7/83 letter to the NRC stated that reverse flow testing or other closure integrity testing would be performed on a periodic basis on the Emergency Diesel Generator Cooling Water Discharge Check Valves (1-SRW-321 and 322, 2-SRW 321). This periodic testing has not been implemented.

STATUS: In our 6/7/83 letter, we stated that the only required position of these check valves was open. Subsequent analysis showed that reverse flow testing the valves would cause additional diesel starts and, therefore, reverse flow testing was not implemented. A Facility Change Request has been approved to remove the internals of the check valves.

NCR 9256 DESCRIPTION: In BG&E's response to Generic Letter 88-05, we committed to implement a program to address the corrosive effects of RCS leakage on carbon steel. The CIA Project reviewer considered the procedure inadequate to ensure the required surveillance.

STATUS: Based upon an independent review of the inspection procedure by Bechtel, it was concluded that the procedure was adequate to ensure the required surveillance.

NCR 9257 DESCRIPTION: BG&E 3/14/84 letter to the NRC stated that a report describing the seismic qualification of the Auxiliary Feedwater System was in our files. This documentation could not be found.

STATUS: A copy of the report was retrieved from Bechtel and placed in our files.

NCR 9265 DESCRIPTION: In BG&E's response to IE Bulletin 78-08 we committed to posting the radiation hazard around the fuel transfer tube during fuel movement. There is no procedural requirement to post the area.

STATUS: Fuel handling procedures have been revised to requiring posting of the radiation hazard area.

NCR 9276 BG&E 1/4/80 letter to the NRC on environmental qualification of electrical equipment stated that no equipment required to function in an accident would be adversely degraded by radiation, and that the ESF equipment was qualified to 10E8 rads. However, there is no evidence that the mechanical ESF components were reviewed for this degradation.

STATUS: A review of our correspondence has determined that there was no commitment to establish an environmental qualification program for mechanical components. However, we are required by GDC 4 to ensure that all necessary equipment will operate under accident conditions. We are currently considering what, if any, additional actions are required to assure complete compliance with that criteria.

NCR 9350 DESCRIPTION: From a review of the QA evaluation of 3/12/86 performed on the Technical Support Center it cannot be determined if recommendations 5, 6, 7 and 8 have been completed as committed to the NRC.

STATUS: A review of the design basis of the HVAC system to which these recommendations referred is in progress but is not yet complete.

NCR 9351 DESCRIPTION: Audit recommendation QC-25-85-1 suggested that procedures require education verification of prospective inspectors as recommended by ANSI N45.2.6 and Reg Guide 1.58. QCP-3, CCIs 613 and 520 do not specify that minimum education and experience records be verified for accuracy.

STATUS: Verification of education is currently performed during security screening. Therefore, specific verification for inspectors is not required.

NCR 9352 DESCRIPTION: The preventative maintenance requirement to perform fuel oil leak checks were dropped on #12 EDG after LER 79-74/3L stated that the leak requirements were the corrective actions to resolve the concern of small fuel oil leaks on the EDG.

STATUS: Bi-weekly testing was replaced with operator watch rounds performed each shift and by monthly testing performed under STP-0-8.

NCR 9353 DESCRIPTION: A Quality Assurance audit recommendation stated that Radiation Safety has no procedural guidance as to when to describe "Special Maintenance" in the annual report to the NRC required by Reg Guide 1.16 and Technical Specifications 6.9.1.5a.

STATUS: Investigation revealed that BG&E's reporting is consistent with the Reg. Guide, Technical Specifications, and industry practice.