



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

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

December 20, 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
Assessment of Readiness to Commence Operation of Unit 2 and Response to
Remaining Confirmatory Action Letter Items

REFERENCE: (a) Letter from T. T. Martin (NRC) to G. C. Creel (BG&E), dated
April 10, 1990, Confirmatory Action Letter Supplement 2

Gentlemen:

This letter provides Baltimore Gas and Electric Company's (BG&E's) assessment of its readiness to commence operation of Unit 2 and responds to those remaining Confirmatory Action Letter items addressed in Reference (a).

Specifically:

MATERIAL READINESS

All repairs of Unit 2 pressurizer heater sleeves are complete. Details are discussed in Licensee Event Report 89-07 Revision 2 and its supporting documentation. The physical repairs, which included replacing 119 heater sleeves, have been accomplished. Analysis of the failure mechanism is complete. It determined the cause for the corrosion as well as determining that the safety significance of the stress corrosion cracking of the pressurizer sleeves and instrument nozzles was minimal.

Unit 2's material readiness for startup is nearing completion. Major repairs conducted in addition to the pressurizer repairs included extensive Saltwater System refurbishment, upgrades to the Instrument Air System, Auxiliary Feedwater System, Reactor Coolant Pump Seals, Rosemount Transmitters, and Nuclear Instruments. Unit 2's fuel load was completed on November 28, and the Unit is now in Mode 5. Remaining work includes replacement of one High Pressure Safety Injection Pump, performance of four remaining Local Leak Rate Tests and an Integrated Leak Rate Test of the containment, and completion and testing of an Auxiliary Feedwater System reliability improvement modification. Approximately 900 Maintenance Orders, including support orders for scaffolding, etc. are still open. Scheduled entry into Mode 2 based on current known work is January 21, 1991.

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READINESS TO OPERATE 2 UNITS

We have undertaken a comprehensive review of those aspects of operation which will be impacted by operating both Units simultaneously as part of our Startup Review Board process. Specific attributes being addressed include Control Room and Operations staffing, experience and training; maintenance and safety tagging capacity; status of procedure and drawing upgrades to support Unit 2; completion of Confirmatory Action Letter/Special Team Inspection items and other process improvements for Unit 2 to an equivalent level to Unit 1; corrective action system process and trends; spare parts support; and technical staff support. These areas are all currently evaluated as progressing satisfactorily to support operations on the current material readiness schedule. Items of note include:

- a. Trained and qualified Operations staff is available to support dual unit operation.
- b. Hardware modifications for Unit 2 have been accomplished to a level consistent with Unit 1.
- c. Maintenance capacity has been adequate to support preparing Unit 2 while reducing the backlog of Unit 1 deficiencies as part of our Quarterly Station Schedule maintenance program. Experience has demonstrated that the workload for Unit 1 was substantially reduced after starting; therefore, it is anticipated that the workload for dual unit operation will be less than our current demonstrated capability. Additionally, the pace of fly-up technical support requirements has been generally reduced during operation.
- d. A satisfactory 2-unit walkdown of AOP-9 to demonstrate our Fire Protection and Safe Shutdown capability has been performed.

MANAGEMENT CONTROLS

We intend to utilize our previously proven Startup Review Board process for managing the preparation, execution, and assessment of Unit 2's startup. We have continued implementation of the processes and philosophy embodied in our Performance Improvement Plan. These have improved our work control, our procedural adherence, and our self-assessment. We will continue these efforts as part of the Nuclear Program Plan subsequent to startup of Unit 2.

ASSESSMENT OF OPERATING EXPERIENCE

We have carefully reviewed the operation of Unit 1 to assess the effectiveness of our improvement programs. Unit 1's operation has showed that operators have capably handled dynamic situations and complex evolutions safely and knowledgeably. As part of this review, we evaluated several events which we had identified during the final stages of Unit 1's outage and the early portion of its power operation. These occurrences, which were below the threshold for reportability to the NRC, had been individually investigated and corrective actions taken, however, we were anxious to examine them for any common causal factors which required additional actions. This investigation has been conducted. It did not identify any single or even two common factors which tied these events together. In discussing the events with the operating crews and their supervision, the reviewers identified areas which are currently the subject of major improvement efforts such as work control processes and procedure quality which contributed to these occurrences. This information

did not indicate a significant deviation from the prevailing assessment of these action plans, and no immediate action plan revisions are proposed based on this review.

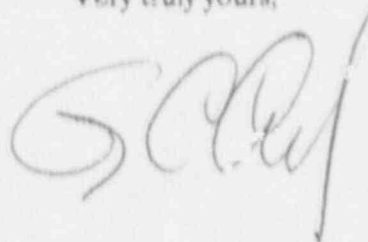
Some new information related to Operations teamwork and Control Room work practices was identified. While this data was too limited and scattered to identify clear specific corrective measures, these areas will be given additional attention to define appropriate actions if additional evidence can be discovered.

SUMMARY

Calvert Cliffs Unit 2 is nearing material readiness for startup. Management has taken measures to ensure its safe operation, including review of the impact of dual unit operation. Review of these measures is being conducted as part of the Startup Review Board process by which we evaluate startup readiness. All areas are either evaluated as complete or scheduled for future review. No known discrepancies exist which would impact our schedule.

We would be pleased to discuss the status of our preparations for Unit 2 startup at a Management meeting at your convenience. Should you have any further questions regarding this matter, we will be pleased to discuss them with you.

Very truly yours,



GCC/GLD/rcj

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. I. McLean, DNR