

## 1650 CALVERT CLIFFS PARKWAY + LUSBY, MARYLAND 20657-4702

GEORGE C. CREEL VICE PRESIDENT NUCLEAR ENERGY (410) 260-8455

July 21, 1992

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 Generic Letter 88-20, Individual Plant Examination (IPE) for Severe Accident Vulnerabilities; Notification of Proposed Schedule Change (TAC Nos. M74392; M74393)

- REFERENCES: (a) Letter from Mr. G. C. Creel (BG&E) to NRC Document Control Desk, dated October 31, 1989, "Proposed Program for Completing the Individual Plant Examination - Initial Response to Generic Letter No. 88-20"
  - (b) Letter from Mr. D. G. McDonald, Jr. (NRC) to Mr. G. C. Creel (BG&E), dated February 1, 1990, "Review of 60-Day Response to Generic Letter 88-20 Individual Plant Examination (IPE)"

## Gentlemen:

As briefly described in Reference (a), the Calvert Cliffs Nuclear Power Plant (CCNPP) Individual Plant Examination (IPE) Project has been designed to meet the requirements of Generic Letter 88-20 and to enable the effective application of risk technology to the operation and maintenance of the plant. Although considerable effort has been expended, emerging technical issues identified through the initial quantifications of the IPE indicate that further refinement of the Level I (Unit 1) PRA model is necessary to achieve more realistic and credible results. This refinement has adversely impacted both the Level I PRA schedule and the completion of the Level II PRA which builds on the results of the Level I PRA.

We have evaluated the remaining technical actions to complete the IPE and concluded we cannot meet the original commitment date of September 30, 1992. We find it necessary to revise our scheduled submittal date to May 31, 1993. In Reference (b), the NRC requested notification of any proposed schedule change and the reason for the change.

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The CCNPP IPE is being developed by in-house engineers with minimal contractor support. This approach meets the spirit of the Generic Letter to develop a continuing appreciation of severe accident behavior by having utility engineers involved in the analysis as well as the technical review. The staffing of the IPE Project increased from two in January 1989 to the current level of six, with the rate of increase limited primarily by the availability of qualified PRA engineers. Although staffing had been aggressively increased, delays in obtaining and training the IPE staff resulted in some schedule erosion.

Calvert Cliffs Nuclear Power Plant's IPE Project is being designed to meet the requirements of Generic Letter 88-20 and to enable the effective application of risk technology to the operation and maintenance of the plant. Technical improvements such as the addition of a front-end Failure Modes and Effects Analysis for each component included in the IPE and the development of a component ranking are examples of the application orientation of CCNPP's PRA. In addition, we plan to maintain this PRA as a living analysis that is supported and used by a knowledgeable in-house staff. Ensuring the PRA has high quality and is a useful management tool has resulted in higher resource requirements than originally anticipated.

In summary, three issues resulted in the necessity to revise our original IPE schedule:

- 1. Emerging technical issues requiring refinement of the Level I PRA model:
- 2. Initial delays in achieving full staffing; and
- Going beyond the basic IPE requirements in order to build an application-oriented and living PRA.

Further, we have concluded an additional increase of short-term staff would not improve our ability to meet the original schedule. This is due to the high entry-level knowledge which is necessary for an engineer to become a productive member of the IPE project team. The staff addition would divert current resources for training with minimum productivity gain for achieving the original schedule.

Therefore, we are notifying you of our proposed schedule change to submit the summary report of our IPE by May 31, 1993.

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

Very truly yours,

GCC/JMO/dlm

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