



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

ARTHUR E. LUNDVALL, JR.
VICE PRESIDENT
SUPPLY

June 21, 1982

U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Washington, DC 20555

ATTENTION: Mr. Robert A. Clark, Chief
Operating Reactors Branch #3
Division of Licensing

SUBJECT: Calvert Cliffs Nuclear Power Plant
Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318
Request for Amendment

Gentlemen:

The Baltimore Gas and Electric Company hereby requests an amendment for its operating license DPR-53 and DPR-69 for Calvert Cliffs Units 1 and 2, respectively, with the submittal of the following proposed change to the Technical Specification (TS).

TECHNICAL SPECIFICATION CHANGE (BG&E FCR 82-99)

Replace pages 3/4 1-21 and 3/4 1-22 with the attached pages.

DISCUSSION AND SAFETY EVALUATION

The following excerpt from the NRC Letter of February 8, 1982, is still applicable.

"Each control rod drive mechanism at Calvert Cliffs Units 1 and 2 is provided with a reed switch system which provides positive indication of control rod insertion status. The reed switch CEA position indication system utilizes a series of magnetically actuated reed switches, spaced at 2-inch intervals along the CEA housing and arranged with precision resistors in a voltage divider network, to provide voltage signals proportional to CEA position. These signals are displayed in bar chart form by a cathode ray tube (CRT) on the main control board. A logic package associated with the CRT provides redundant alarm functions. A backup readout is provided which can be utilized to read the output of any reed switch voltage divider. The collection of position indicating reed switches for CEA are referred to as a reed switch position indicating channel. In addition to the position indicating reed switches placed at 2-inch intervals, additional reed switches are located at the "full out" and "full in" CEA positions. These reed switches provide

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verification of full-out/full-in status on a core mimic which is located on the main control panel. At the present time, TS 3.1.3.3 allows "credit" for the full-out or full-in reed switches. Upon failure of up to one position indicating reed switch channel per CEA group, TS 3.1.3.3 allows power operation to continue provided that the positions of the associated CEAs are periodically verified via the full-out or full-in reed switches.

The Basis for TS 3.1.3.3. states, in part,

"The CEA "Full In" and "Full Out" limits provide an additional independent means for determining the CEA positions when the CEAs are at either their fully inserted or fully withdrawn positions. Therefore, the ACTION statements applicable to inoperable CEA position indicators permit continued operations when the positions of CEAs with inoperable position indicators can be verified by the "Full In" or "Full Out" limits."

Startup of the reactor with inoperable reed switch position indicating channel(s) is prohibited, however, since the requirements of TS 3.0.4* are applicable to TS 3.1.3.3."

During the 1982 Unit 1 outage a second reed switch stack was installed to provide position indication at 1.5 inch intervals. The same modification will be performed on the U-2 system during the upcoming outage. At present the Unit 2 system is accurately described by the above paragraph.

This submittal would provide exemption from TS 3.0.4 allowing plant startup with inoperable position indication channel(s). It accomplishes this by restructuring action statement b so that it addresses two different situations. Section b.1 remains unchanged in content and will apply to any situation other than plant startup. Section b.2 is a rephrasing of the material in what is existing action statement b.4 and is applicable to position indication failures only during a plant startup. This distinction is made so that a plant startup will not be prohibited by a limited loss of position indication. The restructuring of the TS was found necessary in order to eliminate confusion over which action statement and which times were applicable. The safety evaluation of these changes yields the following supportive statements:

1. The original TS allows six hours to reduce power to 70% of rated thermal power and four hours to establish a "full out" position indication for the effected rod. The Basis indicates this is to ensure compliance with CEA alignment and insertion limits, and to ensure proper rod block circuit operation. These items in turn ensure local burnup, peaking factors, and shutdown margin are within design limits.

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During a plant startup, flux levels are lower than those at power and, as actions of the proposed TS must be completed prior to 70% power, would never be as high as those possible for situations action statement b.1 addresses. Therefore, the requirement of ten hours to obtain full out indication is consistent with current safety analysis.

2. Transition between modes presents neither a significant increase in risk to the health and safety of the public nor a conflict with current safety analysis. The change in primary parameters during the transition is not large enough in magnitude or duration to effect peaking factors and local burnup. The short duration for loss of position indication and the limited scope of this loss is acceptable for ensuring SDM has not decreased since the last accurate indication.

In conclusion, this requested change conflicts with no existing safety analysis and poses no significant increase in the risk to the health and safety of the public.

SAFETY COMMITTEE REVIEW

This proposed change to the Technical Specifications has been reviewed by our Plant Operations and Safety and Off-Site Safety Review Committees, and they have concluded that implementation of this change will not result in an undue risk to the health and safety of the public.

FEE DETERMINATION

We have determined, pursuant to 10 CFR Part 170, Paragraph 170.22, that this Amendment request consists of Class III and I amendment for Calvert Cliffs Unit No. 1 & 2, respectively, and accordingly, we are including BG&E Check No. A049160 in the amount of \$4,400.00 to cover the fee for this request.

BALTIMORE GAS AND ELECTRIC COMPANY

By: 

Vice President - Supply

cc: J. A. Biddison, Esquire
G. F. Trowbridge, Esquire
D. H. Jaffe
R. E. Architzel

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STATE OF MARYLAND :
 : TO WIT:
CITY OF BALTIMORE :

Arthur E. Lundvall, Jr., being duly sworn states that he is Vice President of the Baltimore Gas and Electric Company, a corporation of the State of Maryland; that he provides the foregoing response for the purposes therein set forth; that the statements made are true and correct to the best of his knowledge, information, and belief; and that he was authorized to provide the response on behalf of said Corporation.

WITNESS my Hand and Notarial Seal:

Luth H. Grese
Notary Public

My Commission Expires:

July 1, 1986