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March 14, 1984

ARTHUR E. LUNDVALL, JR.
VICE PRESIDENT
SUPPLY

Director of Nuclear Reactor Regulation
Attention: Mr. J. R. Miller, Chief
Operating Reactors Branch #3
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Calvert Cliffs Nuclear Power Plant
Units Nos. 1 & 2; Dockets Nos. 50-317 and 50-318
NUREG-0737 Supplement 1
Emergency Operating Procedures Upgrade

Gentlemen:

NUREG-0737 Supplement 1 (Generic Letter 82-33, dated December 17, 1982) required the development of human-factored, function-oriented emergency operating procedures (EOPs) aimed at improving operator reliability in mitigating the consequences of a broad range of events without the need to specifically diagnose events. As the foundation for these new procedures, NUREG-0737, Item I.C.1 required the preparation of technical guidelines which would identify operator tasks and information and control needs based on analyses of postulated transients and accidents.

To insure a consistent and comprehensive approach to the revision of EOPs, NUREG-0737 Supplement 1 required the preparation and use of a procedures generation package (PGP) consisting of the technical guidelines, an EOP writer's guide, and a description of the programs for procedure validation and operator re-training. The NRC requested that the PGP be submitted for review at least three months prior to the date formal operator training is scheduled to begin on the upgraded procedures.

By letters dated April 15, July 22, and November 18, 1983 we provided you with our plan and schedule for implementing the basic requirements of NUREG-0737 Supplement 1. That schedule included a submittal date of March 15, 1984 for the procedures generation package and a schedule for implementing the upgraded EOPs.

Accordingly, this letter submits our implementation schedule for the new function-oriented emergency operating procedures (Enclosure 1) and forwards the Calvert Cliffs EOP Procedures Generation Package (Enclosure 2) for your review.

As indicated by our letter dated July 15, 1983, our Procedures Generation Package makes reference to the Combustion Engineering Generic Emergency Procedure Guidelines (CEN-152, Revision 1). The PGP is comprised of the following elements:

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1. EOP Writer's Guide
2. EOP Verification/Validation Plan
3. EOP Training Plan

The Writer's Guide is designed to (1) provide the procedure writer/s with a statement of philosophy and basic objectives for the new EOPs, (2) identify all reference documentation containing valid source data for inclusion in the procedures including plant-specific operator actions and information needs, (3) specify the process to be followed in developing the actual plant-specific procedures using the information presented in the generic guidelines, including the process by which any plant-specific deviations are documented and resolved, and (4) provide for consistency in format and level of detail during procedure writing, thus enhancing the general useability of the procedures in recognition of accepted human factors principles.

To facilitate this last aspect, our present plan requires a review by plant operating staff as the initial EOP drafts are generated. This step helps to ensure early operator familiarity with the function-oriented concept and also provides for operator feedback during the procedure generation process so as to improve procedure quality and build operator support for the new procedures before formal training actually commences. This operator feedback will also be used to make improvements to the Writer's Guide, as appropriate.

EOP validation, at least during the initial EOP implementation cycle, will be based on step-by-step walkthroughs using the control room and/or control room mockups. The validation program will be supplemented in the future by the use of an onsite plant-specific simulator. The simulator will provide a more direct gauge for EOP adequacy by allowing the operator to respond to actual plant upset conditions using the new procedures while he monitors the effects of his actions.

Following validation, the EOP training program as outlined in the enclosed PGP will ensure operator familiarity with the new procedures and the safety function concepts they are based upon.

The EOP upgrade effort is one facet of an integrated program to improve emergency response capability at Calvert Cliffs. This larger effort includes a review of existing control room instrumentation for conformance with Regulatory Guide 1.97 "Instrumentation to Assess Plant and Environs Conditions During and Following an Accident." The purpose of this review is to ensure that all important plant parameters are displayed in the control room and that these parameters are presented with sufficient range and reliability to support all conceivable operator actions in response to an accident.

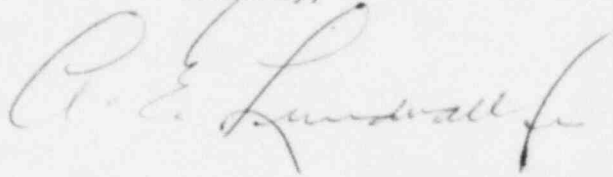
In addition to the above review, we are completing a detailed review of the control room design to identify modifications that will significantly enhance the operator's response to plant upset conditions. The human engineering deficiencies (HEDs) that have been identified during our review are now being screened for needed corrective actions.

We believe that our EOP development effort, as a component of the integrated program for upgrading overall emergency response capability at Calvert Cliffs satisfies the requirements of NUREG-0737 Supplement 1.

March 14, 1984

If you should have any questions concerning the enclosed schedule or procedures generation package, please do not hesitate to contact us.

Sincerely,

A handwritten signature in cursive script, appearing to read "R. E. Architzel".

AEL/BSM/vf

Enclosures

cc: J. A. Biddison, Jr., Esq.
G. F. Trowbridge, Esq.
Mr. D. H. Jaffe, NRC
Mr. R. E. Architzel, NRC
Mr. R. R. Mills, CE
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ENCLOSURE 1

EOP IMPLEMENTATION SCHEDULE

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|---|-------------------|
| o Initial EOP Drafts Complete | December 31, 1984 |
| o EOP Verification/Validation and Operator
Training Complete EOPs issued for use | January 1, 1986 |