

Docket No. 50-352/353

JUN 2 1 1984

Mr. Edward G. Bauer, Jr.  
Vice President & General Counsel  
Philadelphia Electric Company  
2301 Market Street  
Philadelphia, Pennsylvania 19101

Dear Mr. Bauer:

Subject: Detailed Control Room Design for Limerick

The staff, with the assistance of consultants from Lawrence Livermore National Laboratory, conducted an audit of Limerick's Detailed Control Room Design Review. The audit was conducted at the Limerick Plant site, near Pottstown, Pennsylvania, on December 5 through December 9, 1983. The basis for the audit are the Commission approved requirements for a DCRDR as stated in NUREG-0737, Supplement 1.

The enclosed report contains the results of the audit. We are forwarding this to you as it contains guidance on the conduct of the remainder of the control room review.

One result from the In-Progress Audit was the staff's conclusion that the function and task analysis conducted for Limerick to establish a review basis for the control room was incomplete. The products from this analysis should identify control room operator tasks, and the operator's information and control needs for emergency operations. These needs serve as a review basis for the control room. The NRC In-Progress Audit of the applicant's DCRDR was unable to independently verify that an analysis was conducted to establish a review basis which was then used in the evaluation of the control room. In this regard, the staff concludes that the requirements for a DCRDR as stated in NUREG-0737 Supplement 1 are not being met.


The staff will continue its review of the DCRDR upon receipt of the DCRDR Summary Report and will report the results that review in a Supplement to the SER.

Sincerely,

A. Schwencer, Chief  
Licensing Branch No. 2  
Division of Licensing

Enclosure:  
As stated

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RMartin:bdm  
6/21/84

  
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Sincerely,

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

A. Schwencer, Chief  
Licensing Branch No. 2  
Division of Licensing

Enclosure:  
As stated

Limerick

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NRC COMMENTS  
ON THE  
LIMERICK DCRDR IN-PROGRESS AUDIT

The staff has reviewed the contractor's report (enclosed) on the findings of the audit and the recommendations for the applicants' DCRDR. The staff evaluated the recommendations and we are in general agreement with them. The staff recommends that the licensee implement these recommendations in the process of completing the Detailed Control Room Design Review.

During the In-Progress Audit, the NRC audit team determined that the Limerick DCRDR does not meet the requirements of Supplement 1 to NUREG-0737 for the following items:

1. The performance of system function and task analyses to determine operator information and control requirements during emergency operations, and,
2. The comparison of display and control requirements which were determined by the function and task analyses with a control room inventory to identify missing displays and controls.

In a recent meeting (Ref. 1) with the NRC staff, representatives of the BWROG Emergency Procedure Guidelines (EPG) and Control Room Design Review (CRDR) Committees discussed the task analysis requirements of Supplement 1 to NUREG-0737 (Generic Letter 82-33). The purposes of the meeting were (1) for the Owners' Group to discuss how the EPG development effort and the CRDR program addressed operator information and control needs, and (2) for the staff to determine any additional analyses or documentation needed for review of applicant and licensee submittals on the Detailed Control Room Design Review and Emergency Procedure Generation Package.

The staff concluded that:

1. Based on the presentations by Messrs. Stratman and Migas and the ensuing discussion, it appears that Revision 3 of the EPG provides a functional analysis that identifies, on a high level, generic information and control needs. However, these EPGs do not explicitly identify the plant-specific information and control needs, which are necessary for preparing emergency operating procedures and determining the adequacy of existing instrumentation and controls.
2. Because detailed plant-specific information and control needs cannot be extracted directly from the EPGs, plant-specific analysis is required.
3. Each licensee and applicant must describe the process used to identify plant-specific parameters and other plant-specific information and control capability needs and must describe how the



characteristics of needed instruments and controls will be determined. These processes may be described in either the Procedure Generation Packages or the DCRDR Program Plan with appropriate cross-referencing.

4. For each instrument and control used to implement the EOPs, there should be an auditable record that defines the necessary characteristics of the instrument or control and the bases for that determination. The necessary characteristics should be derived from analysis of the information and control needs identified in NRC approved EPGs and from analysis of plant-specific information.

The staff recommends that Limerick's Systems Function and Task Analysis incorporate the above described activities in the process of completing the DCRDR.

REFERENCE

Memorandum For: Voss A. Moore, NRC; from S. H. Weiss, NRC; Subject: Meeting Summary - Task Analysis Requirements of Supplement 1 to NUREG-0737, May 4, 1984 Meeting With BWR Owners' Group Emergency Procedure Guidelines And Control Room Design Review Committees, May 14, 1984.