



**Commonwealth Edison**  
1400 Opus Place  
Downers Grove, Illinois 60515

November 18, 1993

U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Document Control Desk

**SUBJECT:** Dresden Nuclear Power Station Follow Up Response to Examination Report (Requalification, Requalification Retake and Initial License Examinations)  
Report No. 50-237/OL-93-01

- REFERENCE:**
- 1) D. L. Farrar letter to NRC, dated October 15, 1993, transmitting Examination Report 50-237/OL-93-01.
  - 2) W.L. Forney letter to L. O. DelGeorge, dated September 17, 1993, transmitting Examination Report 50-237/OL-93-01.

In Reference 1, Dresden Station stated, in part, that the inconsistent responses by three operating crews during the examination scenario involving high radiation condition in the reactor building was due to inadequacies in the Initial Licensed Training (ILT) program with regards to expected operator response when parameter values required to execute DEOP 300-1 are unavailable.

Upon review of exam results, corresponding procedures, training programs and instrumentation requirements by the Acting DEOP Coordinator, it was determined that the two potential causes identified by the NRC, failure of DEOPs to provide adequate guidance and inadequate ranging of specific control room radiation monitors, were not the root causes for the inconsistent responses by the operating crews. The basis for this determination is provided below.

The DEOPs are structured and written in a manner that is clear and concise. A minimum use of verbiage, procedure referencing and station operating philosophy are employed in the procedural text. The NRC Inspectors identified a concern which falls in the category of operating philosophy.

Operations personnel are taught that a conservative philosophy shall be employed in the operation of the plant and in the implementation of its procedures. If an instrument or indicator is reading erroneously, alternate indicators or methods shall be employed to obtain the necessary value. In the case

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of an area radiation monitor reading off scale high during the examination scenario, the appropriate action, in accordance with conservative operations philosophy, would have been to initiate an emergency depressurization in accordance with DEOP 300-1.

A previous audit of the DEOPs by the NRC identified that the existing plant DEOP radiation levels were too low, resulting in the potential for excessive RPV emergency depressurizations. Originally the maximum safe radiation level was 250 mr/hr. This value was increased to 2500 mr/hr to minimize the potential for early emergency depressurizations. During that audit, a review of the Emergency Procedure Guidelines was conducted to identify the requirements for the purposes of establishing these values. There were three key ingredients for the establishment of these values. These are: 1) The utility will utilize existing plant instrumentation; 2) Values will be determined by plant equipment protection; and 3) The values will include the affect on personnel.

Therefore, consistent with the key ingredients used for establishing the new DEOP value of 2500 mr/hr, there was no commitment made to initiate a plant modification for the purpose of installing additional radiation monitoring capabilities at the Dresden facility. Furthermore, equipment radiation levels leading to failure were not found to be the limiting factor. Lastly, personnel operation and exposure was the limiting and determining parameter. Therefore, the DEOP values were based on values utilized by other plants, and set at a level ensuring that they were still low enough to allow personnel access to the areas.

The ranges of the existing area radiation monitors are delineated by the defined purpose contained in the plant FSAR as: 1) To monitor the radioactivity level in areas where personnel may be required to work; 2) To alarm on a radioactivity level that exceeds a preset level; and 3) To provide a record of the radioactivity as a function of time at the location. FSAR table 7.6.3:1 Area Radiation Monitors -- Detector Location and Range delineates the ARM ranges which are utilized in the plant and also by the DEOPs. As a result of the required DEOP change to raise the maximum safe radiation levels, the eight ARMs on each unit no longer have ranges that overlap the DEOP values. The DEOP Coordinator has already identified the lack of range overlap and in February of 1993, initiated Plant Design Change Requests to install the 16 high range ARMs (8 per unit) identified for DEOP usage, if they could be cost justified by the Technical Review Board.

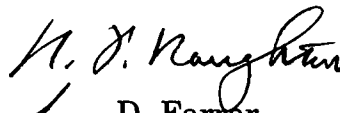
Dresden station makes no commitment to perform this plant design change and no commitment to review it.

The Licensed Operator Continuing Training program includes training on the conservative philosophy regarding expected responses when parameter values are unavailable. This training topic was not included in the Initial License Training program. Therefore, as stated in Reference 1, Dresden Station has

committed to performing the following to address the identified weakness in the Initial License Training program: 1) Changes will be made to the Initial License Training (ILT) program to include the philosophy statements addressing expected responses when parameter values are unavailable, specifically in the area of Secondary Containment Control. The philosophy statements added to ILT program will be those which are presently part of the Licensed Operator Continuing Training (LOCT). 2) All newly licensed operators, those newly licensed in 1993, will receive specific training addressing this issue.

If your staff has any questions concerning this letter, please refer them to Sara Reece-Koenig, Regulatory Performance Administrator at (708) 663-7285.

Sincerely,



*for* D. Farrar  
Nuclear Regulatory Services Manager

cc: J. B. Martin, Regional Administrator Region III  
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