

Commonwealth Edison Company  
Dresden Generating Station  
6500 North Dresden Road  
Morris, IL 60450  
Tel 815-942-2920



April 24, 1997

JSPLTR #97-0082

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

Subject: Dresden Station Units 2 and 3  
Confirmatory Action Letter Action Item Update  
NRC Docket Nos. 50-237 and 50-249

Reference: NRC Confirmatory Action Letter RIII-96-016,  
A. Bill Beach to J. S. Perry dated November 21, 1996.

The purpose of this letter is to provide the monthly update of activities identified in the above reference.

The fourth monthly meeting to provide the status of activities was held at Dresden Station on April 14, 1997. At this meeting, activity of the Dresden Engineering Assurance Group (DEAG), open items from the screening of the twelve system key parameters, design basis reconstitution, and review of the level 3 calculation discrepancies were discussed.

**Dresden Engineering Assurance Group (DEAG) Activities**

- **DEAG Organization:** The Station is searching for a permanent replacement for the DEAG Supervisor who left the Company last month. In addition a part time structural engineer is also sought for the DEAG.
- **Significant Activities of the DEAG:** Completed the review of fifteen modifications (Mods) which was a sample of those planned for completion during the current Unit 3 refueling outage (D3R14). Only one Problem Identification Form (PIF) was written as a result of this effort.

The temporary alteration in the 345KV Switchyard to support the new 345 KV line was reviewed.

The Engineering Department operability evaluation associated with the Reactor Building Temperature was reviewed.

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The need for the Shutdown Cooling System to support the fuel off load at the beginning of D3R14 was evaluated when some difficulty was encountered in getting that system lined up to the reactor vessel.

Thirty-eight other engineering products were reviewed during the period which included ten safety evaluations, six operability assessments, fourteen design changes. Four PIFs were generated as a result of this effort.

The DEAG supported Engineering Support Personnel Training (ESPT) in defining "editorial", "design", and "technical" changes to the Final Safety Evaluation Report (FSAR).

Development of the EAG Peer Group charter and desk top instruction was supported as well as development of a ComEd seven site common scheme for classification of discrepancies.

- Performance Indicators for the DEAG: Performance Indicators are still under development, and a classification of DEAG review comments is evolving. The two most significant categories being tracked by the DEAG are the results of Offsite Review assessments and Plant Operational Review Committee evaluations.
- Function of the DEAG: The function of the DEAG in terms of oversight and in-line function continues to evolve. The goal for the group is to perform strictly an oversight function, however, there are a small number of activities performed by the Engineering Departments such as Safety Evaluations for which the Site Engineering Manager requires DEAG acceptance prior to release to the field.
- Future DEAG Activity: The DEAG will be evaluating and tracking the performance of three Engineering Department outage projects. In addition, refinements to performance indicator trending will continue.

### **Closure of the Twelve Systems Key Parameter Screening**

- The project was completed on time with a total of fifty-six PIFs generated. The discrepancies noted were similar to those found during the Dresden self-assessment and the NRC Independent Safety Inspection (ISI). Based on the discrepancies noted in this effort, it appears that the corrective actions specified in the Dresden ISI response are acceptable.
- Performance and results of the key parameter review have been incorporated into the ESPT.
- Procedure revisions are scheduled to be complete by April 30, 1997, to maintain the key parameter for these systems. This includes key parameters found in plant modifications and calculations, UFSAR, or Technical Specification Revisions.

### **Materiel Condition Improvement Program (MCIP) Comparison to Key Parameter Review**

The two programs were complimentary in scope. The MCIP looked for latent materiel condition problems which could affect system performance and reliability. The purpose of the twelve system key parameter review was to verify that key parameters were supported by design basis calculations.

The MCIP found 494 latent problems related to maintenance, procedure changes, or training. Nine problems were related to design basis documents for non-safety related systems.

Fifty-six discrepancies were found in the twelve system parameter review. In general it was found that there is adequate calculational support for safety-related systems, but often few calculations for non-safety related ones.

**Review of Design Basis Documents (DBD)  
for which Crib House Water Level is a Parameter**

During the last meeting, it was noted that Crib House water level for the Containment Cooling Service Water (CCSW) Pumps varied between references. It was determined that 500' Elevation was acceptable, whereupon Dresden was asked to determine the status of other systems for which crib house water level was a critical parameter. Three other systems, Service Water Pumps, Emergency Diesel Generator Cooling Water Pumps, and the Fire Pump were evaluated for Net Positive Suction Head (NPSH) at elevation 501'. The technical specification limit of 500 feet for the CCSW pump is also acceptable for these systems because the NPSH has so much margin.

**CCSW Pump Motor Performance under Degraded Voltage Conditions**

The twelve system key parameter review determined that no calculation existed to document acceptable CCSW pump motor performance under conditions of degraded voltage. These motors are rated for continuous operation at 90% rated voltage or 3600 volts. Dresden has not experienced this level of voltage as this is indicative of a severe degradation of the off site power grid.

Under conditions of degraded voltage or a loss of off site power, the 4kv busses would separate from the system. Dresden General Abnormal Procedure DGA-12 specifies operator actions to restore operation of the pumps from the output of the emergency diesel generators.

**Design Basis Review Project**

- There are four goals of the project as follows:
  1. Establish consistency between the UFSAR, Upgraded Technical Specifications (TSUP), Design Basis Documents and calculations, plant procedures, and plant configuration.
  2. Ensure ownership and understanding of the design basis by ComEd personnel.

3. Assure high confidence that the plant is operating within the design basis.
  4. Establish a fast retrieval system of key parameters.
- The project status:

Logistic requirements for equipment and space have been established. The Project Plan and four engineering procedures have been developed. A pilot program has started at Zion for fast retrieval of the key parameters, and it is expected to begin at Dresden in May, 1997. Staffing has begun for the project.

#### **Review of Sargent & Lundy Audit Calculation Review**

The purpose of this discussion was to clarify how the six significant calculational errors were identified. This is a followup item to the previous CAL meeting. Four of the errors were identified by Site Quality Verification (SQV). One level 3 was found by Dresden's Independent Safety Engineering Group (ISEG) and this was made part of the S&L audit. One level 3 and two level 2 errors were found during the S&L audit. The remaining two were identified by NRC inspectors during the ISI, and were brought into the audit for validation of the significance of the items and to verify the S&L corrective actions.

The five levels of deficiencies are summarized below:

<b><u>Level</u></b>	<b><u>Description</u></b>
0	Editorial
1	No Impact on Design Margin
2*	Potential Impact on Design Margin
3*	Design Margin Eroded
4*	Design Margin Exceeded

\* Considered Significant Deficiencies


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The next meeting to review progress of the CAL items will be on May 13, 1997, at Dresden Station. At this meeting the results of the Site Engineering, DEAG, Duke Engineering, and Westinghouse Fuel Design audits will be discussed.

If you have any questions concerning this issue please contact Mr. Russell Freeman, Dresden Station Site Engineering Manager, at (815) 942-2920, extension 3700.

Sincerely,



J. Stephen Perry  
Site Vice President  
Dresden Station

Attachment

cc: A. Bill Beach, Administrator USNRC Region III  
J. F. Stang, Project Manager, NRR  
D. Roth Acting Senior Resident Inspector, Dresden Station  
Office of Nuclear Facility Safety - IDNS