

PUBLIC

DE-01

May 2, 1997

Mr. J. S. Perry  
Site Vice President  
Dresden Station  
Commonwealth Edison Company  
6500 North Dresden Road  
Morris, IL 60450

SUBJECT: DRESDEN CONFIRMATORY ACTION LETTER MEETING

Dear Mr. Perry:

This refers to the meeting conducted at the Training Center and the Dresden Nuclear Power Station in Morris, Illinois on April 14, 1997. This meeting was to discuss the status of your actions related to the NRC Confirmatory Action Letter (CAL) No. RIII-96-016.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosures (the agenda and handouts provided by your staff at the meeting) will be placed in the NRC's Public Document Room.

We appreciate your cooperation in this matter. If you have any questions regarding this meeting, please contact me at 630/829-9633.

Sincerely,

/s/ W. J. Kropp

Wayne J. Kropp, Chief  
Reactor Projects Branch 1

Docket No. 50-237

Docket No. 50-249

Enclosures: 1. Attendance List  
2. Licensee Presentation, Dresden Station  
Presentation to NRC on Status of CAL Action Items

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DATE	05/2/97		05/2/97					

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cc w/encl: T. J. Maiman, Senior Vice President  
Nuclear Operations Division  
D. A. Sager, Vice President,  
Generation Support  
H. W. Keiser, Chief Nuclear  
Operating Officer  
T. Nauman, Station Manager Unit 1  
M. Heffley, Station Manager Units 2 and 3  
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Manager  
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Enclosure 1

ATTENDANCE LIST

Commonwealth Edison (ComEd)

Dresden Station

J. S. Perry, Site Vice President  
R. D. Freeman, Site Engineering Manager  
F. A. Spangenberg, Regulatory Assurance Manager  
D. Winchester, Site Quality Verification Manager  
J. Basak, Engineering Assistance Group Manager  
R. Scott, Independent Safety Evaluation Group  
E. Connell, Design Engineering Superintendent

Corporate Office

E. Netzel, Supplier Evaluation Services Director  
R. Renuart, Configuration Management and Engineering Assurance

Nuclear Regulatory Commission (NRC)

G. E. Grant, Director, Division of Reactor Safety (DRS), RIII  
J. A. Gavula, Acting Chief, DRS, Engineering Specialists Branch 1, RIII  
G. Hausman, Reactor Inspector, DRS, RIII  
W. J. Kropp, Chief, DRP, Branch 1, RIII  
R. M. Lerch, Project Engineer, DRP, Branch 1, RIII  
D. Roth, Resident Inspector, Dresden

**AGENDA  
DRESDEN STATION  
PROGRESS MEETING FOR CONFIRMATORY ACTION LETTER  
APRIL 14, 1997**

Russell Freeman

Introduction / Opening Remarks.

Joseph Basak

Dresden Engineering Assistance Group  
DEAG) Recent Activity.

Peer Group Participation

Safety Evaluation Performance  
Indicator.

Effectiveness Of DEAG Review Of Safety  
Evaluation.

Edward Connell

Comparison of MCIP and 12 System Critical  
Parameter Review.

CCSW Pump Motor Performance Under  
Conditions Of Degraded Voltage.

Other DBDs For Which Crib House Water  
Level Is A Critical Parameter.

Twelve System Closure

Design Basis Reconstitution Program

Robert Scott

Review of level 3 Calculation Discrepancies

Russell Freeman

Closing Remarks

Status Of Commitments And Current  
Schedule.

All

Open Discussion



DRESDEN STATION

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*Dresden Station  
Presentation To NRC  
on Status of CAL Action Items*

*April 14, 1997*



DRESDEN STATION

# AGENDA

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- |                 |   |   |
|-----------------|---|---|
| Russell Freeman | - | Introduction / Opening Remarks                                      |
| Joseph Basak    | - | Dresden Engineering Assurance Group (DEAG) Recent Activity          |
|                 | - | Peer Group Participation  |
|                 | - | Safety Evaluation Performance Indicator                             |
|                 | - | Effectiveness of DEAG Review of Safety Evaluation                   |
| Edward Connell  | - | Comparison of MCIP and 12 System Critical Parameter Review          |
|                 | - | CCSW Pump Motor Performance Under Conditions of Degraded Voltage    |
|                 | - | Other DBDs For Which Crib House Water Level Is A Critical Parameter |
|                 | - | Twelve System Closure   |
|                 | - | Design Basis Reconstitution Program                                 |
| Robert Scott    | - | Review of Level 3 Calculation Discrepancies                         |
| Russell Freeman | - | Closing Remarks   |
|                 | - | Status of Commitments And Current Schedule                          |
| All             | - | Open Discussion   |



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# *Engineering*

R. D. Freeman  
Site Engineering Manager



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# *Dresden Engineering Assurance Group*

Joe Basak





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# *DEAG Status*

- Organization
- Significant Work Activities
  - Completed D3R14 Mod Reviews
  - Switchyard Bypass Temp Alt Support
  - RB Temperature Operability
  - Shutdown Cooling

# *DEAG Status (cont'd)*

- 38 Engineering Products Reviewed

10	Safety Evaluations	7 comments	2 PIF's
6	Operability Assessments	1 comment	
2	Calculations	1 comment	1 PIF
14	Design Changes	7 comments	1 PIF
2	Temporary Alterations	0 comments	
1	Special Procedures	1 comment	
3	Correspondence	3 comments	

# *DEAG Status (cont'd)*

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- ESPT Training
  - Difference Between “Editorial”, “Design”, and “Technical” Change to UFSAR
  - Proper Use And Referencing Of Inputs
  - Administrative Requirements
- EAG Peer Group
  - Corporate Charter and Desk Top Instruction
  - Common Classification of Discrepancies

# *Safety Evaluations*

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## Engineering Performance Indicator

- EAG Review Classification
  - 1,2 Comments but acceptable
  - 3 Comments require incorporation for clarity
  - 4 Incorrect references, undocumented assumptions, undocumented judgments (PIF required)
  - 5 Error that could affect end result (PIF required)
- Tracking Percentage of 4's and 5's

# *Safety Evaluations (cont'd)*

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## DEAG Performance Indicator

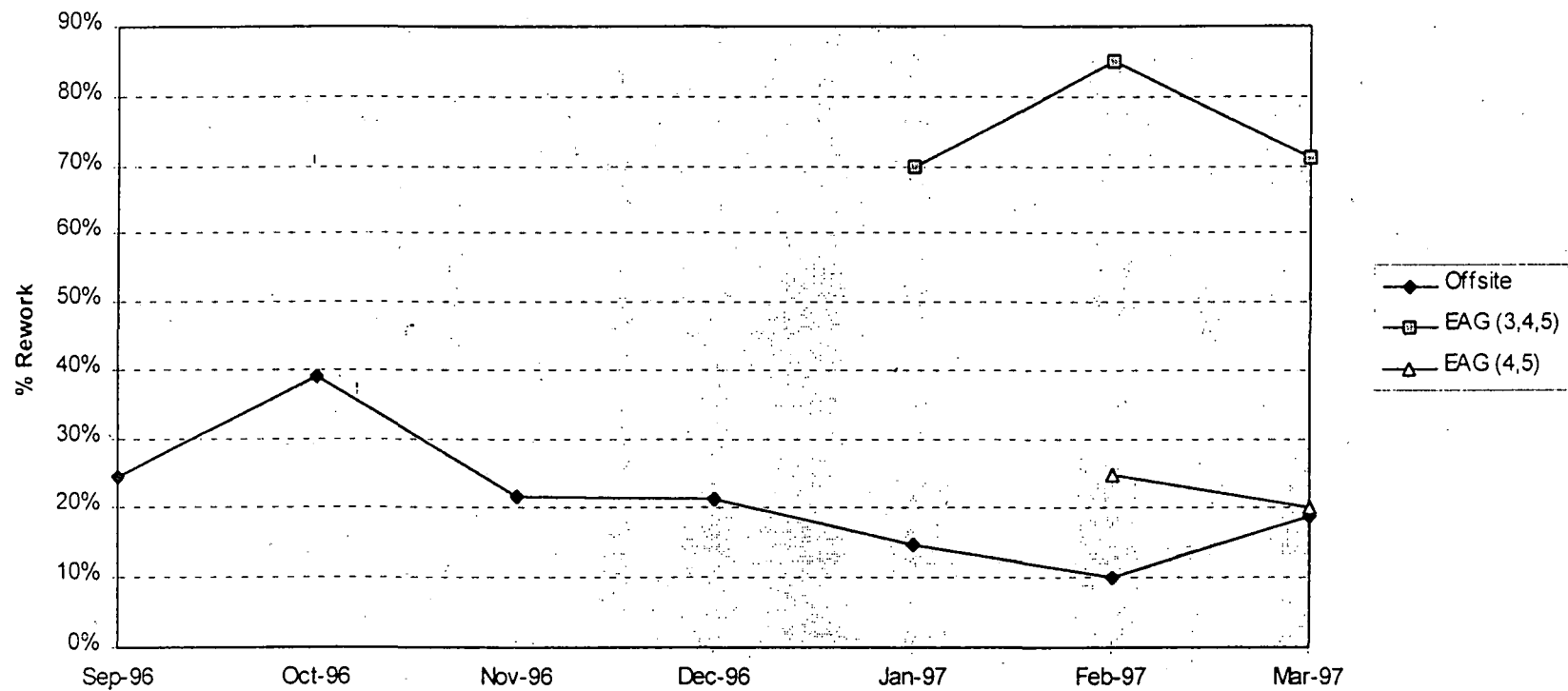
- Offsite Assessment
  - 6 Areas of Review
  - 3 Grades - Unacceptable, Satisfactory, Good
  - Tracking % of Unacceptable
- PORC Acceptance
  - No rejections for Safety Issues



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# *Safety Evaluations (cont'd)*

Dresden Safety Evaluation Performance Indicators





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# *DEAG Activities*

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## Planned Activities for April

- Track the Performance of 3 Engineering Outage Projects and Evaluate
- Improve Performance Trending



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# *Design Engineering CAL Actions*

E. C. Connell, III

Design Engineering Superintendent





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# *Presentation Outline*

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- 12 System Key Parameter Screening
  - Closure
- Adequacy and Availability of Design Basis
  - Project Status



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*Screening Verification of Key  
Parameters for Twelve Risk  
Significant Systems*



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# *ComEd Commitments*

- 
- Screening of key operating parameters on the twelve systems most important from a risk perspective to verify that calculations exist to support those parameters by February 28, 1997.
  - The NRC will be immediately informed if critical parameters on any of the twelve systems are discovered to be outside of normal acceptance values.
  - Results of the screening will be provided to the NRC on a monthly basis through a meeting and docketed response.



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# *Key Parameter Project Summary*

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- Project completed on Schedule
- A total of 56 PIFs were initiated. Only one resulted in Degraded Plant Operability
- Discrepancies identified were similar to those identified during the Dresden self assessment and the NRC ISI



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# *Summary of Findings* *(Continued)*

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- ISI Corrective Actions are adequate to address the finding
  - Engineering Assurance Group Overview
  - NEPs Revisions
  - Reconstitution or Validation of calculations for portions of Systems affected by Modifications
  - Reconstitution or Validation of the design basis calculations for the 12 risk significant systems
  - Review of UFSAR requirement against Design Basis Documents



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# *12 System Key Parameter Screening Closure*

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- Response to Questions from February CAL Meeting
- Key Parameter Training
- Key Parameter Maintenance

- Compare MCIP to Key Parameter Review

	<u>MCIP</u>	<u>Key Parameter Review</u>
<u>Purpose</u>	Identify latent material condition problems which may affect system performance and reliability for 27 systems	Verify that key parameters are supported by design basis calculations for 12 risk significant systems
<u>Focus</u>	Review operations, maintenance and testing of Systems/Components	Review licensing and design basis documents for Systems/Components
<u>Results</u>	494 latent problem observations mainly related to maintenance, procedure changes or training related. Nine related to design basis documents <ul style="list-style-type: none"><li>- Confusing, inaccurate or missing design basis documents for non-safety systems</li></ul>	56 discrepancies related to Licensing basis and design basis documents and calculations. <ul style="list-style-type: none"><li>- Adequate calculation support for safety systems</li><li>- Few calculations for no-safety systems</li></ul>

- The two projects were complementary in scope

# *Response to CAL Questions*

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- Review DBDs for which Crib House Water Level is a Parameter
  - SW and EDG system NPSH evaluation use 501' as the minimum water level, Adequate NPSH with 500'
  - FP system design basis NPSH can not be located, Adequate NPSH with 500'
  - PIFs initiated to resolve the discrepancies related to SW, EDG and FP systems





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# *Response to CAL Questions*

- CCSW pump motor performance under degraded voltage conditions
  - Motors will operate continuously, without damage or loss of performance, at 90% rated voltage (3600V). Dresden historically has not experienced operating voltages below 3600V on Buses 23 & 24 since it will indicate a severe degradation of the Off Site Power Grid impacting the system stability
  - LOOP or sustained low voltage conditions on Buses 23 & 24 would cause tripping of the CCSW pump motor supply breaker by the bus under voltage relay
  - DGA-12 lists manual operator actions to run the CCSW pump while its supply bus is fed from the EDG



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# *Key Parameter Training*

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- All Dresden Engineering Staff Trained
  - Training Covered Objective, Selection, Results and Maintenance of 12 System Key Parameters
  - Training Completed During March 1997 as part of ESPT



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# *Key Parameter Maintenance*

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- Procedure Revisions to Ensure Maintenance of 12 Systems Key Parameters
  - Plant Modification and Calculation, UFSAR, or Technical Specification Revision Procedures
  - Procedure Revisions in Progress
  - Scheduled Completion: April 30, 1997



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# *Adequacy and Availability of Design Basis Project*

Two Year Corporate Program



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# *Project Goals*

- Consistency between UFSAR, TSUP, Design Basis documents and calculations, plant procedures and plant configuration
- Ownership and understanding of plant Design Basis by ComEd personnel
- High confidence that plant is operating within Design Basis
- Fast retrieval of system Key Parameters



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# *Project Status*

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- Logistic requirements established (space, computers, etc.)
- Project plan and four engineering procedures developed
- Pilot program initiated
- Staffing initiated



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# *S & L Audit Calculation Review*

Bob Scott

ISEG Supervisor Dresden



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# *Six Significant Errors Identified*

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## Four Identified by SQV/Audit

- One Level 3 Found during ISEG Surveillance
- One Level 3 Found during Audit
- Two Level 2s Found during the Audit





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# *Six Significant Errors Identified (CONT'D)*

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## Two Identified by ISI

- Used to validate ISI findings
- Used to verify S & L  
Corrective Action Program



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# *Significant Errors*

## *Level 3*

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- 0591-387-003 (SQV)  
Containment Venting
- VR-10 (SQV)  
Rx Bldg. Volume
- ATD-0216 (ISI)  
CCSW Pp Disch Pressure
- ATD-0253 (ISI)  
CCSW Pp Rm Cooler Orifice



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# *Significant Errors*

## *Level 2*

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- MPED 9621-100-00 (SQV)  
SDC HX Relief Valve Flow
- DRE96-0134 (SQV)  
RBV Chiller