



November 13, 1996

JSPLTR #96-0216

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

Subject: Dresden Nuclear Power Station Units 1, 2, and 3  
Response to Notice of Violation; Inspection Report 50-010/96009,  
50-237/96009, and 50-249/96009.  
NRC Docket Numbers 50-10, 50-237, and 50-249.

Reference: J. Caldwell letter to J. S. Perry, dated October 16, 1996, transmitting  
NRC Inspection Report No. 50-010/96009, 50-237/96009, and  
50-249/96009.

The purpose of this letter is to provide ComEd's response to the Notice of Violation transmitted in the Reference letter. Violations were identified for failure to review a special test procedure, returning an individual to licensed duties improperly, ineffective corrective actions, failure to have an Unit 3 Emergency Diesel Generator operable when in cold shutdown, due to testing (response contained in License Event Report 50-249/96009) and failure to perform an evaluation of radiological hazards. Dresden acknowledges these violations and has taken action to correct the identified deficiencies. These actions are described in the reference inspection report and the attachment to this letter.

All of the above violations were avoidable had individuals demonstrated sufficient attention to detail. As mentioned in the Reference letter, the lack of attention to detail has resulted in a performance decline in some areas. Dresden Station will continue its efforts to improve performance and eliminate cyclical performance.

The returning of an individual to licensed duties without having that license properly reactivated represents a significant concern. The individual in question had completed all of the training required to reactivate the license but failed to request reactivation from the NRC. It is imperative that only individuals with an active license supervise the operations of our station. We have taken actions, as described in the attachment, to ensure this situation does not recur.

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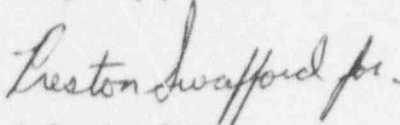
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If there are any questions concerning this letter, please refer them to Frank Spangenberg, Dresden Station Regulatory Assurance Manager, at (815) 942-2920, extension 3800.

Very truly yours,

A handwritten signature in cursive script, appearing to read "J. Stephen Perry".

J. Stephen Perry  
Site Vice President  
Dresden Station

JSP/EC:pt

cc: A. Bill Beach, Regional Administrator, RIII  
P. L. Hiland, Branch Chief, DRPs, RIII  
J. F. Stang, Project Manager, NRR (Unit 2/3)  
C. L. Vanderniet, Senior Resident Inspector, Dresden  
Office of Nuclear Facility Safety - IDNS

## ATTACHMENT

### RESPONSE TO NOTICE OF VIOLATION NRC INSPECTION REPORT 50-237; 249/96009

#### Violation: (50-249/96009-01)

Technical Specification 6.2.A requires, in part, that written procedures be established and implemented covering the activities referenced in Regulatory Guide (RG) 1.33, Appendix A. The activities listed in Regulatory Guide 1.33 include procedure review and approval process.

Dresden Administrative Procedure (DAP) 9T-1, "Review Tables," Revision 5, required an On-Site Review and Investigation Function review of Special Procedures.

Contrary to the above, on July 11, 1996, Special Test Procedure (SPI)-96-07-13 for safety related 4kV switchgear was authorized for use without the required On-Site Review.

#### Reason For Violation:

The Onsite review function was performed on SPI 96-07-13, however, the personnel involved did not document their review on the coversheet. The individual authorizing the procedure was present during the Onsite review and failed to follow procedure by authorizing the procedure without the Onsite review participants signing the Special Procedure (SP) cover sheet for Onsite review.

Additionally, the personnel writing and verifying SPI 96-07-13 failed to follow approved procedures. The SP writer did not include test termination criteria as required by DAP 09-09, "Special Procedures" Revision 11. Also, the procedure verifier incorrectly identified that the SP's cautions, warnings, and notes were free from action statements when one caution and one note statement contained an action statement.

#### Corrective Steps Taken and Results Achieved:

SPI 96-07-13 was revised to include test termination criteria and to clarify the note and caution statements.

The Special Procedure was reviewed by the Onsite review function and documented on the SP cover sheet. The SP was successfully performed.

#### Corrective Steps Taken To Avoid Further Violations:

The Special Procedure Process (DAP 09-09) was revised to include a check list for the originator and verifier to ensure requirements are being met.

An Engineering Support Personnel Training (ESPT) technical seminar was conducted on Special Procedures. Included in the seminar were the SP contents requirements (DAP 09-09, Attachment 09-09A), and the requirements for Onsite review for Type I special procedures. This training was videotaped and will be made available to members of the engineering staff who were unable to attend the training.

The SP writer, verifier, and authorizer were counseled and now understand the importance of following approved procedures.

**Date When Full Compliance will be Achieved:**

Full compliance was achieved with the proper authorization of the revision to SPI 96-07-13 on July 20, 1996.

**Violation:** (50-249/96009-03)

10 CFR 50.54(I) states, in part, that the licensee may not permit the manipulation of the controls of any facility by anyone who is not a licensed operator or senior operator as provided in part 55 of that chapter.

Contrary to the above, from July 19, 1996, through August 2, 1996, a senior reactor operator whose license had been amended to prohibit licensed activities was assigned to regular shift duty in the control room prior to license reactivation.

**Reason for Violation:**

An individual was returned to licensed operator duties, with a restriction on his operating license, based on successful completion of the remedial training program.

In the fall of 1995 the individual in question was given a temporary offsite assignment that did not require an active operating license. As a result, the NRC amended the individual's operating license on December 5, 1995, with the following statement:

"You shall not direct the licensed activities of any licensed operators or manipulate the controls of the Dresden Nuclear Power Station."

However, a copy of the license amendment was not placed in the individual's license file maintained by the training department. As a result, a review of the individual's license file, upon returning from the offsite assignment, did not identify the operating restriction. In addition, the Training Department Instruction that provides guidance for licensed operators on temporary assignment was not clear. Specific guidance for required NRC notifications, correspondence reviews by SQV and Regulatory Assurance Departments, and license verification were inadequate. This inadequate guidance resulted in failure to perform necessary reviews by SQV and Regulatory Assurance Departments.

When the individual returned from the temporary assignment, a remedial training program was implemented to provide training and testing to meet the requirements of the Accredited Licensed Operator Requalification Program in accordance with 10 CFR 55.59(b). The remedial training program consisted of reading packages on the training that was missed that required self study followed by a written examination. A review was also conducted to verify that the individual had completed all required annual manipulations. In addition, the individual successfully completed the annual comprehensive requalification examination.

After completing the remedial training program the individual resumed active operating license activities without obtaining a license amendment permitting normal license activities. It should be noted that during the time that the individual was on shift as the shift manager his license was not required to meet minimum manning of the Technical Specifications. However, this does not excuse the individual from returning to active duty without having the license amended.

### **Corrective Steps Taken and Results Achieved:**

When the license amendment was identified, the individual was immediately removed from licensed operator duties. In addition, a review of the duties performed by the individual, including documents signed by the individual, was performed to identify areas that needed additional licensed operator attention. None were found.

Dresden Station also completed a review of other possible situations that were similar in nature and found that four (4) other SRO licensed individuals had weaknesses and/or deficiencies that were similar in nature. Plans to correct these deficiencies were put in place and these individuals will not be returned to license duties until the deficiencies are corrected.

### **Corrective Steps Taken to Avoid Further Violation:**

Dresden recognizes that our previous actions didn't meet the intent of the regulation. There is now a clear understanding of the requirements for placing licensed individuals in a suspended status and returning them to active duty. A process has been proceduralized and is contained in Training Department Instruction (TDI-527), "Accelerated Training Program for Return to License Duties." The Training Department Instruction includes guidance for NRC approval prior to extended work assignments, required document reviews by Site Quality Verification and Regulatory Assurance Departments, license reviews to identify any current amendments, and NRC notification and license amendment prior to returning to license duties. In addition, Training Department Instruction (TDI-502) "Administrative Process for NRC License" provides guidance on documentation to be included in the training department files.

Responsibility for adhering to the conditions and amendments of the license are clearly recognized by the specific individual.

The Station now conducts periodic reviews of the training requalification status of all licensed personnel to identify that all license holders are current in the License Operator Requalification Training Program.

Station Management has reinforced to all individual license holders of their personal responsibility to meet the conditions and amendments of their NRC license.

### **Date When Full Compliance will be Achieved:**

Full compliance was met when the individual was removed from license duty on August 7, 1996.

### **Violation:** (50-237; 249/96009-05A)

Criterion XVI, "Corrective Action," of 10 CFR Part 50, Appendix B, states, in part, that measures shall be established to assure that conditions adverse to quality are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition.

Contrary to the above, corrective actions for past deficiencies in calculations performed during battery tests were narrow in scope and were not effective in preventing the recurrence of similar deficiencies during a June 1996 Dresden Electrical Surveillance (DES) 8300-19, "Unit 3 125 Volt-DC Main Station Battery Modified Performance Test,"



### **Reason for Violation:**

Previous corrective actions were ineffective for the following reasons:

The first issue involves the fact that EMD Personnel performing the surveillance did not identify several calculation errors during the independent verification process or the surveillance review process. DAP 07-27, "Independent Verifications," does not provide guidance with respect to performing calculation independent verifications. Therefore, when signing off on a step for the performance of an independent verification, EMD Personnel are not clear on what they are signing for. As a result of personnel not demonstrating a questioning attitude as required by DAP 09-13, "Procedure Adherence," actions were not taken to prevent this event from happening. Personnel performance regarding procedure adherence requires that when a step in a procedure is unclear or can not be performed as written, work is to be stopped and placed in a safe condition until the issue can be resolved through clarification or until the procedure in question has been revised.

As noted by the NRC, the second issue involves the fact that the corrective actions to perform a detailed review of previously completed battery surveillance tests and to provide "Attention to Detail" Training to plant engineering personnel was too narrow in scope. The error occurred when EMD personnel performing the test committed a calculation error. The error was then compounded when it was not identified during the calculation independent verification performed by EMD. Since plant engineers reviewing tests are not required to independently verify calculations, as given by DAP 09-11, "Conduct of Surveillance, Special and Complex Procedures," the training referenced was not effective. It should be noted though that plant engineering personnel do perform spot checks on some calculations during this review. Because this training did not address the root cause of EMD personnel not identifying the issue during calculation independent verification, the action was ineffective. The issue of personnel performance within the EM Department was not addressed by either addressing the importance of correctly performing a calculation or how to properly assure that proper independent verification has taken place.

The third issue involves the failure to adhere to the surveillance procedure with respect to checking for voltage stabilization readings. The EMD personnel failed to properly perform the steps outlined in the procedure (Independent Verification) and then compounded it by not initiating a Problem Identification Form (PIF) as required by DAP 02-27, "The Integrated Reporting Process," for inadequate procedure usage when the deficiency was identified.

### **Corrective Steps Taken and Results Achieved:**

Upon notification of the errors, the system engineer initiated a PIF to document the errors and the calculations were re-performed by that engineer. The engineer determined that the values were acceptable and that the battery test met all the requirements.

### **Corrective Steps Taken to Avoid Further Violation:**

As a result of this violation, the following corrective actions have been initiated:

- DAP 07-27, "Independent Verification," will be revised to incorporate guidance on the performance of calculation independent verification and the use of hard copy documentation on the calculations performed. This change will be implemented by January 10, 1997.

- The EM Master will ensure that training is developed and provided to EMD employees in the process of independent verification of calculations, how to correct errors, and the expectation that entries which are sub-parts to a step are to be treated as an independent step that will stand alone if tested by an independent verifier. This training will include a written test for which a passing grade will be required to qualify personnel in the process of calculation independent verification. Employees who fail to achieve a passing grade will not be qualified to perform calculation independent verifications until successful remediation has been achieved. This will be completed by May 15, 1997.
- DAP 02-27, "The Integrated Reporting Process," Revision 06 became effective on October 28, 1996. This revision clarifies the PIF threshold criteria for initiation. Included in this are Personnel Errors/Work Practice Deficiencies and Procedures/ Manuals/ Document Problems. Training will be provided to EMD personnel regarding the requirements and expectations for the initiation of a PIF, including when procedure adherence has not been maintained. This training will provide for feedback processes from the workers to the supervisors that the completed job is reviewed for potential issues requiring the initiation of a PIF. This will be completed by November 29, 1996.

Upon initiation of the PIF by the system engineer, a Level 3 Root Cause (249-200-96-04800) was performed which identified the following corrective actions which are also applicable to this event:

- EMD has added an electric calculator that prints out a paper tape of the values summed. This will be an additional hard copy document of calculations performed and will be used for any calculations requiring independent verification.
- EMD has tailgated the need to single line out and initial and date any entry made in error.
- EMD has tailgated the expectation that entries which are sub-parts to a step are to be treated as an independent step that will stand alone if tested by an independent verifier.

**Date When Full Compliance will be Achieved:**

Full compliance will be met on May 15, 1997, following completion and implementation of the above listed corrective actions.

**Violation:** (237/96009-10)

10CFR20.1501 requires that each licensee make or cause to be made surveys that may be necessary for the licensee to comply with the regulations in Part 20 and that are reasonable under the circumstances to evaluate the extent of radiation levels, concentrations or quantities of radioactive materials, and the potential radiological hazards that could be present.

Pursuant to 10CFR20.1003, survey means an evaluation of the radiological conditions and potential hazards incident to the production, use, transfer, release, disposal, or presence of radioactive material or other sources of radiation.

10CFR20.1701 required to the extent practicable, the use of process or other engineering controls (e.g., containment or ventilation) to control the concentrations of radioactive material in air.

Contrary to the above, as of July 8, 1996, the licensee did not make surveys to assure compliance with 10CFR20.1201(a)(1)(i), which limits radiation exposure Total Effective Dose Equivalent to 5 rems per year. Specifically, the licensee failed to properly evaluate the potential radiological hazards and use process or other engineering controls to control airborne radioactivity concentrations during the removal and transfer of highly contaminated bags of radioactive material in the south stock bay of the radioactive waste storage area.

**Reason for Violation:**

The individuals involved in this event failed to follow approved station procedures. Specifically, the individuals involved in this event worked beyond the scope of the RWP and did not perform required tasks to ensure all radiological control requirements were implemented prior to beginning a job different from the original assignment. A review of the orientation given to contract radiation protection technicians indicates that clear guidance is given on the purpose and application of RWP's, the technician's role in the RWP program and on the scope of work performed in the field under the RWP.

A review of the applicable procedures indicates that personnel expectations are clearly laid out regarding the responsibilities of individuals involved with the RWP program including the Radiation Protection Technician's (RPT) responsibility for job coverage and survey requirements, adherence to the original scope of the RWP and the worker's responsibility to know and understand the requirements of the RWP.

As a result of this event, one individual received external skin contamination (1000 dpm on the neck), two individuals had positive nasal smears of 6000 dpm and 8000 dpm and both individuals also had intakes of radioactive material. The dose equivalents calculated from the intakes of radioactive material resulted in Committed Effective Dose Equivalents of 5 mrem from an intake of 190 nCi and of 2 mrem from an intake of 58 nCi.

**Corrective Steps Taken and Results Achieved:**

Upon the discovery that personnel attempting to leave the radwaste area were contaminated, the following actions were immediately taken:

- All work in the radwaste area was suspended.
- Radiation Protection (RP) personnel were dispatched to perform full radiological surveys in the affected area.
- Station Laborer personnel were dispatched to perform decontamination and recovery actions.
- Radiation Protection placed an administrative hold on the active Radiation Work Permit.
- Individuals involved in the event were decontaminated and given whole body counts.
- A prompt investigation was initiated.
- Personnel involved in the incident were placed on administrative hold until details of the event were revealed through the prompt investigation.

Results of the action steps are:

- Personnel were decontaminated and the intakes were trended and dose calculated.
- Area survey was completed and the contaminated sections were decontaminated.
- The Contract Radiation Protection Technician (CRPT) was terminated.
- The Investigation was completed and approved.



### Corrective Steps Taken to Avoid Further Violation:

The following are the corrective action steps that were taken to prevent further violation:

- DAP 12-09 "Dresden Station ALARA Program" has been revised to specifically require a Radiation Protection Shift Supervisor (RPSS) at prejob briefings for work identified as high risk.
- Expectation were reiterated with Radiation Protection personnel regarding the necessity of the Duty RPSS to be informed of all work activities and job scope changes.
- RP bargaining unit and management personnel, and long-term Contract RPT personnel, attended an 8 hour course entitled "Conservative Decision Making", which also covered this event.
- The CRPT Site Supervisor and the Lead RPS discussed the event in detail with all of the CRPTs, covered expectations for work assignments, following the RWP job scope and performing all RWP survey requirements.

In addition to the above actions, Radiation Protection Technicians and long-term CRPT's received training on Radiation Job Monitoring, as part of the Phase II training, which covered topics such as job coverage requirements, postings, High Radiation Area controls, and surveys.

The result of the additional corrective action steps is that no additional occurrences of Radiation Protection Technicians, or Contract Radiation Protection Technicians operating outside of the RWP requirements have been identified since this event.

### Date When Full Compliance was Achieved:

Full compliance was achieved on July 8, 1996 with the issuance of the stop work order for the job. The job was subsequently performed, without incident, under the proper RWP.