

March 8, 2002

Mr. John L. Skolds, President  
Exelon Nuclear  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: DRESDEN NUCLEAR POWER STATION  
NRC INSPECTION REPORT 50-237/02-03(DRP); 50-249/02-03(DRP)

Dear Mr. Skolds:

On February 7, 2002, the NRC completed an inspection at your Dresden Nuclear Power Station, Units 2 and 3. The enclosed report presents the inspection findings which were discussed with Mr. P. Swafford and other members of your staff on February 7, 2002.

The inspection examined activities conducted under your license as they relate to safety and to compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel. The inspection also included a review of hydrogen storage locations in accordance with Temporary Instruction (TI) 2515/146.

Based on the results of this inspection, the inspectors identified four issues of very low safety significance (Green). These issues were determined to involve violations of NRC requirements. However, because of their very low safety significance and because they have been entered into your corrective action program, the NRC is treating these issues as Non-Cited Violations, in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny these Non-Cited Violations, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001; with copies to the Regional Administrator, Region III; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, D.C. 20555-0001; and the NRC Resident Inspectors at the Dresden Nuclear Power Station.

Immediately following the terrorist attacks on the World Trade Center and the Pentagon, the NRC issued an advisory recommending that nuclear power plant licensees go to the highest level of security, and all promptly did so. With continued uncertainty about the possibility of additional terrorist activities, the Nation's nuclear power plants remain at the highest level of security and the NRC continues to monitor the situation. This advisory was followed by additional advisories, and although the specific actions are not releasable to the public, they generally include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with law enforcement and military authorities, and more

limited access of personnel and vehicles to the sites. The NRC has conducted various audits of the licensees' response to these advisories and their ability to respond to terrorist attacks with the capabilities of the current design basis threat (DBT). From these audits, the NRC has concluded that the licensees' security programs are adequate at this time.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Sincerely,

**/RA/**

Mark Ring, Chief  
Branch 1  
Division of Reactor Projects

Docket Nos. 50-237; 50-249  
License Nos. DPR-19; DPR-25

Enclosure: Inspection Report 50-237/02-03(DRP);  
50-249/02-03(DRP)

cc w/encl: Site Vice President - Dresden Nuclear Power Station  
Dresden Nuclear Power Station Plant Manager  
Regulatory Assurance Manager - Dresden  
Chief Operating Officer  
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Vice President - Mid-West Operations Support  
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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: 50-237; 50-249  
License Nos: DPR-19; DPR-25

Report No: 50-237/02-03(DRP); 50-249/02-03(DRP)

Licensee: Exelon Generation Company

Facility: Dresden Nuclear Power Station, Units 2 and 3

Location: 6500 North Dresden Road  
Morris, IL 60450

Dates: December 30, 2001 through February 7, 2002

Inspectors: D. Smith, Senior Resident Inspector  
B. Dickson, Resident Inspector  
P. Pelke, Reactor Engineer  
W. Slawinski, Senior Radiation Specialist  
S. Orth, Senior Radiation Specialist  
T. Ploski, Senior Emergency Preparedness Inspector  
R. Zuffa, Illinois Department of Nuclear Safety

Approved by: Mark Ring, Chief  
Branch 1  
Division of Reactor Projects

## SUMMARY OF FINDINGS

IR 05000237-02-03(DRP), IR 05000249-02-03(DRP), on 02/07/2002, Exelon Generation Company, Dresden Nuclear Power Station, Units 2 and 3. Event Follow-Up, Surveillance Testing, Access Control to Radiologically Significant Areas, As-Low-As-Is-Reasonably-Achievable (ALARA) Planning and Controls.

The inspection was conducted by resident inspectors, two senior radiation specialists, a senior emergency preparedness inspector, and a reactor engineer. The inspection identified four Green findings which were all considered Non-Cited Violations. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violation. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at <http://www.nrc.gov/NRR/OVERSIGHT/index.html>.

### A. Inspector Identified Findings

#### **Cornerstone: Initiating Events**

- Green. The inspectors identified a Non-Cited Violation for inadequate post-maintenance testing on the 3B reactor recirculation pump motor generator set which resulted in an operator being unable to trip the pump following a pump run-up event and a subsequent reactor scram (NCV 50-249/02-03-05).

This finding was considered more than minor because it had an actual impact on reactor safety. The inability to trip the reactor recirculation pump from the control room resulted in the pump tripping without normal coastdown and an abrupt change in core flow, reactor vessel level and feedwater flow. These conditions resulted in a scram (or initiating event). However, because all other mitigating equipment was available and operated normally, this finding was considered to be of very low safety significance (4AO3.2).

#### **Cornerstone: Mitigating Systems**

- Green. The inspectors identified a Non-Cited Violation for an inadequate surveillance procedure for calibrating the reactor high pressure initiation time delay relays for the Isolation Condenser which left the relays without any margin for drift. This resulted in three out of the four time delay relay settings being found out-of-tolerance and in noncompliance with the Technical Specification requirements. This out-of-tolerance condition could have prevented the Isolation Condenser from receiving an initiation signal within the 15-second Technical Specification time limit (NCV 50-249/02-03-02).

This finding was considered more than minor because it could be reasonably viewed as a precursor to a significant event. Failure to consider instrument drift while performing instrument calibrations can result in equipment being outside of allowable limits over the surveillance period. However, because the isolation condenser system did not lose the ability to perform its safety function and all other mitigating systems were available this finding was considered to be of very low safety significance (1R22).

## **Cornerstone: Occupational Radiation Safety**

- Green. The inspector identified a Non-Cited Violation of Technical Specification 5.4.1 concerning the failure of the licensee to conduct required, routine radiological surveys in accordance with the frequencies specified in radiation protection procedures and instructions (NCV 50-237/02-03-03 and 50-249/02-03-03).

The finding was of very low significance because the late and missed surveys did not result in an unidentified radiological hazard and did not result in a substantial potential for an overexposure of an individual (Section 2OS1.1).

- Green. During the Fall 2001 refueling outage, the licensee failed to perform post-dive surveys of divers in accordance with the applicable radiation protection procedure. Specifically, the licensee performed the surveys following a rinse of the divers which had the potential to remove radioactive material that may have been used for future characterization and dose assessment. The inspector identified a Non-Cited Violation of Technical Specification 5.4.1 associated with that failure (NCV 50-237/02-03-04 and 50-249/02-03-04).

The finding was of very low safety significance because underwater surveys of the divers did not identify abnormally high dose rates on the divers' equipment which resulted in a low potential for the licensee incorrectly assessing the divers' doses (Section 2OS2.1).

### **B. Licensee Identified Findings**

Violations of very low significance which were identified by the licensee have been reviewed by the inspector. Corrective actions taken or planned by the licensee appear reasonable. These violations are listed in Section 4OA7 of this report.

## Report Details

### Summary of Plant Status

Unit 2 began the inspection period at 912 MWe (95 percent thermal power and 100 percent of rated electrical capacity). Except for very small derates due to surveillance activities, the unit remained at approximately 912 MWe throughout the inspection period.

Unit 3 began the inspection period at full power (822 MWe). On January 6, 2002, operators reduced unit load to approximately 700 MWe for a planned control rod pattern adjustment. The operators returned the unit to full power operations on the same day. On January 17, 2002, operators reduced unit load to approximately 540 MWe to perform a post-maintenance performance test on the Unit 3 isolation condenser following the repair of damaged internals. The isolation condenser internals were damaged due to suspected water hammer events that occurred on the system during restoration of the system after surveillance testing. The operators returned the unit to full power operations immediately following post-maintenance testing. On January 23, 2002, the operators reduced unit load to approximately 660 MWe following a load dispatch request due to an offsite power line outage. The operators returned the unit to full power operation the same day. The unit was at full power operation at the end of the inspection period.

### **1. REACTOR SAFETY**

#### **Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity**

#### **1R04 Equipment Alignments (71111.04S)**

##### **a. Inspection Scope**

The inspectors selected a redundant or backup system to an out-of-service or degraded train, reviewed documents to determine correct system lineup, and verified critical portions of the system configuration. Instrumentation valve configurations and appropriate meter indications were also observed. The inspectors observed various support system parameters to determine the operational status. Control room switch positions for the systems were observed. Other conditions, such as adequacy of housekeeping, the absence of ignition sources, and proper labeling were also evaluated.

The inspectors performed a semi-annual equipment alignment walk-down of the Unit 3 High Pressure Coolant Injection System.

##### **b. Findings**

No findings of significance were identified.



1R05 Fire Protection (71111.05)

a. Inspection Scope

The inspectors toured plant areas important to safety to assess the material condition, operating lineup, and operational effectiveness of the fire protection system and features. The review included control of transient combustibles and ignition sources, fire suppression systems, manual fire fighting equipment and capability, passive fire protection features, including fire doors, and compensatory measures. The following areas were walked down:

Unit 2 Turbine Building Trackway (Fire Zone 8.2.5.A)  
Unit 2 Torus Basement/Catwalk (Fire Zone 1.1.2.1)  
Unit 3 Torus Basement/Catwalk (Fire Zone 8.5.3.A)

Additionally, the inspectors reviewed Temporary Instruction (TI) 2515/146: Hydrogen Storage Locations. The inspectors toured the hydrogen storage area and determined that it is located greater than 50 feet from ventilation intakes, safety related water tanks, and safety related or risk significant structures, systems or components.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation (71111.12)

a. Inspection Scope

The inspectors assessed the licensee's implementation of the maintenance rule by determining if systems were properly scoped within the maintenance rule. The inspectors also assessed the licensee's characterization of failed structures, systems, and components, and determined whether goal setting and performance monitoring were adequate for the Units 2 and 3 Average Power Range System and the Unit 3 Emergency Diesel Generator.

b. Findings

No findings of significance were identified.

1R14 Personnel Performance Related to Non-routine Evolutions and Events (71111.14)

a. Inspection Scope

The inspectors reviewed operator logs, condition reports, and alarm printer outputs associated with two non-routine events. The first event was a partial Group II isolation on Unit 2 which occurred on January 4, 2002. The isolation was caused by a shorted wire connection on a Unit 2 Drywell Air Sample Valve. The operators responded appropriately to the event.

The second event was the occurrence of a water hammer in the Unit 3 Isolation Condenser System. The water hammer occurred during the restoration of the system from a planned surveillance test on January 8, 2002. The inspectors did not identify any problems with operator performance in responding to this event. However, due to the suspected repeat occurrence of a water hammer in this system following surveillance testing, this issue is considered an **Unresolved Item URI 50-249/02-03-01** pending the inspectors' review of the licensee's completed root cause report.

The inspectors also interviewed operations, maintenance, and engineering personnel concerning the cause of both events.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed operability evaluations to ensure that operability was properly justified and the component or system remained available, such that no unrecognized increase in risk occurred. The review included an issue involving the incorrect spring material being installed in check valve (2301-45) for both the Unit 2 and Unit 3 High Pressure Coolant Injection Systems. Additionally, the inspectors reviewed an issue where the Unit 2 High Pressure Coolant Injection System's turbine control box was not fully latched.

b. Findings

No findings of significance were identified.

1R16 Operator Work-Arounds (71111.16)

a. Inspection Scope

The inspectors reviewed the operator work-arounds to assess any potential effect on the functionality of mitigating systems. During this review, the inspectors determined if the operators' ability to implement abnormal or emergency operating procedures was impacted.

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors reviewed post-maintenance test results to confirm that the tests were adequate for the scope of the maintenance being performed and that the test data met the acceptance criteria. The inspectors also determined that the test restored the systems to the operational readiness status consistent with the design and licensing basis documents. The inspectors reviewed work activities associated with the Unit 3 'A' Core Spray Pump and the Unit 3 Isolation Condenser System.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors observed surveillance testing on risk-significant equipment. The inspectors assessed whether the selected plant equipment could perform its intended safety function and satisfy the requirements contained in Technical Specifications. Following the completion of the test, the inspectors determined that the test equipment was removed and the equipment returned to a condition in which it could perform its intended safety function. The review included surveillance testing activities for the Unit 2 Reactor Protection System and the Unit 3 Isolation Condenser System.

b. Findings

One Green finding involving a Non-Cited Violation was identified for an inadequate surveillance procedure for calibrating the Reactor High Pressure Isolation Condenser initiation time delay relays

On January 18, 2002, during performance of Dresden Instrument Surveillance (DIS) 1300-01, "Sustained High Reactor Pressure Calibration," Revision 14, three of the four reactor high pressure isolation condenser initiation time delay relay settings were found out-of-tolerance and in noncompliance with Technical Specification requirements. The maximum time delay allowed per Technical Specification Surveillance Requirement 3.3.5.2.3 was 15 seconds with a tolerance band of 11-15 seconds. The as-found time delay relay settings for high pressure switches 2-263-53A, 53B and 53C were 15.6, 15.4 and 15.4 respectively. The licensee determined that these three time delay relays could have prevented the isolation condenser from receiving an initiation signal within the 15 second Technical Specification required time limit. Condition Report (CR) #00091401 was issued on January 18, 2002, to document this issue.

New time delay relays for the pressure switches had been previously installed and tested using DIS 1300-01, Revision 13 and Work Request 99248710-06. Data Sheet 1 of procedure DIS 1300-01 indicated the as-found and as-left drop out time for time delay relays 2 (3)-595-117A and C as 15 seconds and for time delay relays 2(3)-595-117B and

D as 14 seconds. The Technical Specification allowable value was  $\leq 15$  seconds and the nominal setting was  $13 \pm 2$  seconds. The inspectors noted that DIS 1300-01 was inadequate in that the procedure allowed the time delay relays to be set at the maximum Technical Specification limit of 15 seconds and thus did not leave any margin for uncertainties, including drift.

The inspectors reviewed portions of Design Change Package 9900730, Revisions 0 and 1, "Isolation Condenser Time Delay Modification," for the new time delay relays (2-0595-117A-D) which implemented a setpoint change for maximum initiation of the isolation condenser of 15 seconds. The inspectors noted that Calculation NED-EIC-0098, Revision 4, "Reactor High Pressure Scram and Sustained High Reactor Pressure (Isolation Initiation) Setpoint Error Analysis," calculated the analytical limit to be 15 seconds, which is the same value as the maximum Technical Specification limit.

The inspectors determined that the licensee did not follow Regulatory Guide 1.105, Revision 3, "Setpoints for Safety-Related Instruments," which endorses Instrument Society of America ISA-S67.04, 1994, "Setpoints for Nuclear Safety-Related Instrumentation." As a result, the licensee established the procedure's setpoint/tolerance range (13 seconds/11 to 15 seconds) such that the maximum tolerance range value (15 seconds) was equivalent to the Technical Specification value. Also, ISA-S67.04, 1994, states that the single most prevalent reason for the drift of a setpoint out of compliance with Technical Specifications has been the selection of a setpoint that does not allow a sufficient margin between the setpoint and the Technical Specification limit to account for instrument accuracy, the expected environment, and minor calibration variations. In this case, the as-left setpoint was numerically equal to the Technical Specification limit, thus leaving no margin for uncertainties.

This issue was considered more than minor because it could be reasonably viewed as a precursor to a significant event. Failure to consider instrument drift while performing instrument calibrations can result in equipment being outside of allowable limits over the surveillance period.

However, because the isolation condenser system did not lose the ability to perform its safety function and all other mitigating systems were available this finding was considered to be of very low safety significance (Green).

This out-of-tolerance condition could have prevented the Isolation Condenser from receiving an initiation signal within the 15 second Technical Specification time limit. Contrary to 10 CFR 50, Appendix B, Criterion V, DIS 1300-1 was inadequate in that it allowed the time delay relays to be set at the maximum Technical Specification limit of 15 seconds and thus did not leave any margin for uncertainties including drift. Because of the very low safety significance, this violation is being treated as a Non-Cited Violation **(NCV 50-249/02-03-02)** consistent with Section VI.A.1 of the NRC Enforcement Policy. This issue was entered into the licensee's corrective action program as CR #00093960.

1R23 Temporary Modification (71111.23)

a. Inspection Scope

The inspectors screened active temporary modifications on systems ranked high in risk and assessed the effect of the temporary modifications on safety-related systems. The inspectors also determined if the installations were consistent with system design. The inspectors reviewed temporary modifications for a leaking room cooler for the Unit 2 'A' Containment Cooling Service Water Pump, a gagged discharge valve for the Unit 3 Circulating Water Pump, and alternate ventilation for the Unit 2 Reactor Recirculation Motor Generator Set.

b. Findings

No findings of significance were identified.

**Cornerstone: Emergency Preparedness**

1EP2 Alert and Notification System (ANS) Testing (71114.02)

a. Inspection Scope

The inspectors discussed with corporate Emergency Preparedness (EP) staff the design, equipment, and periodic testing of the public ANS for the Dresden Station's emergency planning zone to verify whether the system was maintained and tested during 2001 in accordance with relevant documents. The inspectors reviewed records for a 12-month period ending December 2001, which were related to ANS testing, annual preventive maintenance, and non-scheduled maintenance to verify that corrective actions were taken for test failures and system anomalies. The inspectors also reviewed the licensee's test acceptance criteria for determining whether each model of siren installed in the emergency planning zone would perform as expected if fully activated. Records used to document and trend component failures for each model of installed siren were also reviewed.

b. Findings

No findings of significance were identified.

1EP3 Emergency Response Organization (ERO) Augmentation Testing (71114.03)

a. Inspection Scope

The inspectors reviewed the ERO augmentation procedure and off-hours augmentation drill procedure to verify that the licensee maintained and tested its ability to activate its ERO during an emergency in a timely manner in accordance with emergency plan commitments. The inspectors also reviewed the 2001 semi-annual, off-hours staff augmentation drill records for the Dresden Station's ERO and reviewed a sample of augmentation drill records for Emergency Operations Facility responders. The inspectors reviewed the revised primary and backup provisions for off-hours notification

of the Dresden Station's emergency responders. The inspectors reviewed the current roster of the Dresden Station's ERO to verify that adequate numbers of personnel were assigned to key and support positions. The inspectors also reviewed and discussed with the EP staff the provisions for maintaining the ERO call out roster. The inspectors reviewed a sample of the Dresden Station's ERO training records to determine whether personnel listed on the current revision of the call out roster had completed EP training requirements within the relevant time period.

b. Findings

No findings of significance were identified.

1EP4 Emergency Action Level and Emergency Plan Changes (71114.04)

a. Inspection Scope

The inspectors reviewed Revision 12 to the Dresden Station's Annex to the Exelon Emergency Plan to determine whether the changes identified in Revision 12 reduced the effectiveness of the licensee's emergency planning, pending onsite inspection of the implementation of these revisions. The inspectors also reviewed the licensee's self-assessment of several changes to the emergency action levels.

b. Findings

No findings of significance were identified.

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies (71114.05)

a. Inspection Scope

The inspectors reviewed the Nuclear Oversight staff's 2001 Field Observations of the Dresden Station's EP program to ensure that these assessments complied with the requirements of 10 CFR 50.54(t) and that the licensee adequately identified and corrected deficiencies. The inspectors also reviewed the EP staff's self-assessments and critiques to evaluate the EP staff's efforts to identify and correct concerns identified during the 2001 exercise, EP drills, and the only 2001 actual emergency event. Additionally, the inspectors reviewed a sample of action requests related to the Dresden Station's EP program to determine whether adequate corrective actions were completed.

b. Findings

No findings of significance were identified.

## 2. RADIATION SAFETY

### Cornerstone: Occupational Radiation Safety

#### 20S1 Access Control to Radiologically Significant Areas (71121.01)

##### .1 Radiological Surveys

###### a. Inspection Scope

The inspector reviewed the licensee's evaluation of its routine radiological survey program which was performed at the request of the NRC. Specifically, the inspector reviewed the results of the licensee's evaluation and the corrective actions implemented and planned. In addition, the inspector reviewed a sample of routine radiological surveys performed in calendar year 2001 (April, June, August, and December) to verify the licensee's results and to ensure that surveys were performed in accordance with licensee procedures to evaluate radiological hazards and to ensure worker protection.

###### b. Findings

The inspector identified one Green finding involving a Non-Cited Violation for the failure of the licensee to conduct required, routine radiological surveys in accordance with the frequencies specified in procedures and instructions.

The licensee reviewed quarterly radiological surveys conducted during the second and third quarters of calendar year 2001 and identified discrepancies where 9 surveys (out of 60) were not documented as completed within the time period allotted. In these examples, the surveys were completed 1 to 3 days after the conclusion of the quarter in which the survey was required to be conducted. Additionally, the review identified that one of these surveys for the second quarter was not documented as ever having been performed. Reviewing the same documentation, the inspector identified an additional quarterly survey that was not performed within the specified time period, which had been missed in the licensee's review. The inspector also identified that a number of weekly surveys were not performed at the required frequency. Specifically, about 25 surveys (out of about 150) were either late (beyond the due date and "grace period") or missed. In general, the surveys consisted of protective clothing contamination surveys and area surveys of the ALARA decontamination room and the fire brigade area. In each of these cases, the inspector noted that the subsequent surveys did not indicate any abnormal radiation levels and that no unplanned personnel exposures resulted from the late or missed surveys. The licensee documented the problems in a condition report (CR #83043) and included the issue in a planned root cause evaluation (CR #89377).

This finding, if left uncorrected, would become a more significant concern and could result in the licensee failing to identify a change in area radiological conditions. Consequently, the inspector evaluated the finding using the NRC's Significance Determination Process for the occupational radiation safety cornerstone. The failure to perform timely, routine radiological surveys did not involve an ALARA finding or an issue concerning the licensee's ability to assess dose. Since the missed and late surveys appeared to affect areas of lower radiological risk, the inspector concluded that the

finding would not have resulted in the substantial potential for an overexposure and that the finding was of very low risk significance (Green).

Technical Specification 5.4.1 requires, in part, that the licensee establish and implement procedures covering the activities recommended in Regulatory Guide 1.33 (Revision 2), Appendix A, February 1978, which include radiation surveys. Dresden Procedure DRP 6020-03 (Revisions 7 and 8), "Radiological Surveys," requires that radiation protection supervision provide a list of routine surveys and ensure successful completion and documentation of the surveys by the due dates established. Job standard RP-DR-ADM-005 (Revision 2), "Radiation Protection Guidelines for Performance of Radiological Surveys," defines the frequencies for completion of these surveys. The failure to perform routine surveys as designated by licensee management is a violation of Technical Specification 5.4.1. However because of the very low safety significance of the item and because the licensee has included this item in its corrective action program (CR #83043), this violation is being treated as a Non-Cited Violation **(NCV 50-237/02-03-03 and 50-249/02-03-03)**.

.2 Job in Progress Reviews

a. Inspection Scope

The inspector reviewed the conduct of diving evolutions that were completed during the Fall 2001 refueling outage associated with the reactor dryer modification. Specifically, the inspector performed the review to verify that required surveys of the personnel performing the diving were performed at the required frequency to ensure personnel exposures were controlled. In addition, the inspector reviewed the licensee's justification for dosimetry placement in areas of non-uniform radiation fields and results of personnel monitoring (i.e., deep dose equivalent and shallow dose equivalent). The inspector performed these reviews to ensure that personnel radiation exposures were controlled and monitored in accordance with the requirements of 10 CFR Part 20 and the licensee's procedures.

b. Findings

A licensee-identified finding involving a Non-Cited Violation is documented in Section 40A7.

20S2 As-Low-As-Is-Reasonably-Achievable (ALARA) Planning and Controls (71121.02)

.1 Implementation of ALARA Controls

a. Inspection Scope

The inspector reviewed the execution of the ALARA program for the licensee's diving evolutions that were conducted during the Fall 2001 refueling outage associated with the reactor dryer modification. In particular, the inspector reviewed and discussed the ALARA Action Review (AAR) that was developed for the evolution, including the revisions that were implemented. The inspector reviewed engineering controls that were implemented to provide dose rate reductions. The inspector also compared the



licensee's procedures for diving evolutions with the licensee's AAR and radiation work permit (RWP). Work in progress reports and radiological survey data were also reviewed to assess their adequacy. The inspector also conducted interviews with applicable personnel to ensure that required controls were implemented.

b. Findings

The inspector identified a Green finding involving a Non-Cited Violation for the failure to perform post-dive surveys of the divers in accordance with licensee procedures.

During a review of RWP 10000100, "D2R17 Reactor Disassembly/Reassembly and Related Activities," and the associated AAR, the inspector identified a discrepancy between the two documents and the applicable licensee procedure. Specifically, Step C.9 of procedure NSP-RP-6202 (Revision 0), "Radiological Controls for Contaminated Water Diving Operations," states, "rinsing of the diver's suit takes place after the survey because it may be necessary to capture radioactive material (i.e., hot particle) for future characterization and dose assessment." However, the RWP and the AAR instructed the staff to rinse the diver prior to the survey. The inspector's interviews with the personnel involved in the work activity confirmed that the divers were rinsed with demineralized water prior to the survey. As stated in the licensee's procedure, the improper sequence of these actions had the potential to remove radioactive material that may have been used for future characterization and dose assessment.

This finding, if left uncorrected, would become a more significant concern and could result in the licensee failing to adequately assess personnel exposures. Consequently, the inspector evaluated the finding using the NRC's Significance Determination Process for the occupational radiation safety cornerstone. The failure to properly perform surveys of the divers did not involve an ALARA finding or a significant potential for an overexposure. Since the licensee did not observe any indication of abnormal radiation levels on the divers' suits (via underwater monitoring), the inspector concluded that the potential for an unmonitored exposure was low. Therefore, the inspector concluded that the finding did not result in the licensee's inability to assess dose and that the finding was of very low risk significance (Green).

Technical Specification 5.4.1 requires, in part, that the licensee establish and implement procedures covering the activities recommended in Regulatory Guide 1.33 (Revision 2), Appendix A, February 1978, which include radiation surveys. Procedure NSP-RP-6202 contains requirements for conducting radiological surveys of divers performing radiological diving operations, as recommended in Regulatory Guide 1.33. The failure to perform surveys of divers as directed by procedure NSP-RP-6202 is a violation of Technical Specification 5.4.1. However because of the very low safety significance of the item and because the licensee has included this item in its corrective action program (CR #93397), this violation is being treated as a Non-Cited Violation (**NCV 50-237/02-03-04 and 50-249/02-03-04**).

4. **OTHER ACTIVITIES (OA)**

4OA1 Performance Indicator Verification (71151)

.1 Initiating Events

a. Inspection Scope

The inspectors reviewed a sample of plant records and data against the reported performance indicators in order to determine the accuracy of the indicators.

- Unit 2 and Unit 3 Unplanned Scrams (Fourth Quarter 2000 - through Third Quarter 2001)
- Unit 2 and Unit 3 Scrams with Loss of Normal Heat Removal (Fourth Quarter 2000 through Third Quarter 2001)

b. Findings

No findings of significance were identified.

.2 Emergency Preparedness

a. Inspection Scope

The inspectors verified that the licensee had reported these indicators in accordance with relevant procedures and industry guidance endorsed by NRC: ANS, ERO Drill Participation, and Drill and Exercise Performance for the EP cornerstone. Specifically, the inspectors reviewed the licensee's PI records and data reported to the NRC for the period April 2000 through September 2001. Records of relevant Control Room Simulator training sessions, periodic ANS tests, an actual emergency plan activation, and records of drills and the 2001 exercise were also reviewed to identify any significant occurrences that were not identified by the licensee and entered into the station corrective action program.

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up (71153)

.1 Review of Opened Items

a. Inspection Scope

The inspectors reviewed licensee event reports (LERs) to ensure that issues documented in these reports were adequately addressed in the licensee's corrective action program. The inspectors also interviewed plant personnel and reviewed operating and maintenance procedures to ensure that generic issues were captured appropriately.

The inspectors reviewed operator logs, the Updated Final Safety Analysis Report, and other documents to verify the statements contained in the Licensee Event Reports.

Also, the inspectors reviewed an unresolved item to determine if the licensee was in violation of any regulatory requirement.

b. Findings

- .1 (Closed) LER 50-237/1999-006-00: "Recirculation Loop Temperature Thermocouple Failure Causes Shutdown Cooling Inoperability."

On December 22, 1999, the "B" Reactor Recirculation Loop temperature recorder and electronic temperature switch failed upscale due to a degraded connection in the temperature measurement loop. This failure would have resulted in the Shutdown Cooling System isolation valves being interlocked closed following a reactor shutdown. The licensee repaired the connection and performed successful loop logic testing. This LER is closed.

- .2 (Closed) LER 50-237/2000-005-00 and 005-01: "Recirculation Loop Temperature Failure Causes Shutdown Cooling Inoperability."

On December 1, 2000, with Unit 2 in hot shutdown the "B" Reactor Recirculation Loop temperature instrumentation loop failed high. This failure resulted in the Shutdown Cooling System isolation valves being interlocked closed. A licensee root cause investigation determined that the causes of this event were degraded thermocouples, cabling and their respective connections. The licensee corrective actions included replacement of the system's thermocouples, connectors and cabling. No other system failures have occurred since these activities were completed. Both LERs are closed.

- .3 (Closed) URI 50-249/01-011-01: "Cause of Open Contacts in the 3B Reactor Recirculation Pump Motor-Generator Set Breaker's Trip Coil Circuitry"

One Green finding involving a Non-Cited Violation was identified for the failure to have adequate breaker trip logic status verification contained in post-maintenance testing and breaker rack-in procedures.

On April 27, 2001, the operators noted that the 3B reactor recirculation pump sped up unexpectedly from 94 percent to 100 percent. The nuclear station operators responded by locking out the scoop tube which allowed the recirculation flow to stabilize for approximately 30 seconds. Subsequently, small power oscillations (4 percent) occurred, and operators responded by attempting to trip the reactor recirculation pump's motor generator set from the control room. Operator actions were unsuccessful. Subsequently, the field breaker for the pump tripped on high excitation current which resulted in the pump slowing down abruptly. Due to the significant and abrupt reduction in core flow, reactor pressure vessel water level made a significant step change increase due to moderator voiding. As a result, the feedwater level control system made a significant step change decrease in feedwater flow and the reactor scrambled on low reactor pressure vessel water level. Under normal reactor recirculation pump trip conditions (motor generator-set trip), the reactor recirculation pump would coast down resulting in a moderate increase in water level due to a moderate amount of voids and avoid the significant water level change seen during this type of pump trip.

The licensee's preliminary investigation revealed that a rack-mounted controller in the pump's speed control circuitry failed which caused the pump to speed up. Additional investigation by the licensee showed that the contacts were open on the pump's breaker trip coil circuitry because the breaker was not properly aligned following previous maintenance activities or after racking in the breaker. Requirements to verify contact continuity were not contained in the post-maintenance testing work inspections or in the procedure for racking in this type of breaker.

This issue was considered more than minor because it had an actual impact on reactor safety. The inability to trip the reactor recirculation pump from the control room resulted in the pump tripping without normal coastdown and an abrupt change in core flow, reactor vessel level and feedwater flow. These conditions resulted in a scram (or initiating event). However, because all other mitigating equipment was available and operated normally, this finding was considered to be of very low safety significance (Green).

Failure to include proper post-maintenance testing verification in the maintenance procedures or work package was a violation of Dresden Improved Technical Specification Section 5.4, "Procedures." Section 5.4 states in part that written procedures shall be established, implemented, and maintained covering applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Procedures addressing post-maintenance testing are recommended in this regulatory guide. This violation is being treated as a Non-Cited Violation, consistent with Section VI.A.1, of the NRC Enforcement Policy (**NCV 50-249/02-03-05(DRP)**). This issue was entered into the licensee's corrective action program as CR #00094868.

This URI is closed. Additionally, the inspectors reviewed the LER submitted by the licensee for this event (**LER 50-249/01-02-00 Reactor Scram Due to Reactor Recirculation Run-up and Trip**) and concluded that the corrective actions taken for this event were appropriate. This LER is closed.

#### 4OA6 Exit Meetings

The senior emergency preparedness inspector presented the results of the emergency preparedness program and performance indicators inspection to Mr. P. Swafford and other members of licensee management and staff on January 18, 2002. The licensee acknowledged the findings presented. No proprietary information was identified.

The senior radiation specialist presented the results of the special radiation protection inspection to Mr. P. Swafford and other members of licensee management and staff on February 1, 2002. The licensee acknowledged the findings presented. No proprietary information was identified.

The resident inspectors presented their inspection results to Mr. P. Swafford and other members of licensee management at the conclusion of the inspection on February 7, 2002. The licensee acknowledged the findings presented. No proprietary information was identified.

4OA7 Licensee Identified Violations: The following findings of very low significance were identified by the licensee and are violations of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600 for being dispositioned as Non-Cited Violations (NCVs).

NCV Tracking Number	Requirement Licensee Failed to Meet
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50-249/02-03-06	<p>Procedure MM-AA-796-024, Section 3.1.3 states that "Scaffolding shall be installed so the operator access to equipment is not impeded and systems or components are not restricted from performing their designed functions. Also, a Scaffolding Inspection Checklist contained in Attachment 1 of this procedure instructs the evaluator to check for interference with fire suppression equipment. The licensee failed to prevent the scaffold from impeding fire protection equipment. This is a violation of Technical Specification 5.4.1.</p>
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On January 27, 2001, a non-licensed operator discovered that an approved-for-use scaffold was built in the Unit 3 East Corner Room which blocked access to Fire Hose F199 and prevented full movement of the fire hose reel. The inspectors concluded that other equipment was available to combat a fire; therefore, this incident was determined to be of very low safety significance. The licensee reconfigured the scaffold to remove the adverse condition and entered this issue into the station's corrective action program in CR #00092570.

50-237/02-03-07 50-249/02-03-07	<p>Technical Specification 5.4.1 requires, in part, that the licensee establish and implement procedures covering the activities recommended in Regulatory Guide 1.33 (Revision 2), Appendix A, February 1978, which include radiation surveys. Procedure NSP-RP-6202 (Revision 0), "Radiological Controls for Contaminated Water Diving Operations," requires that the licensee perform post-dive surveys of the divers for hot particles and document the surveys on the applicable attachment. On October 23-31, 2001, the licensee did not consistently document the results of surveys for hot particles on the applicable attachment (or an equivalent form) for post-dive surveys of divers (CR #81212). This is being treated as a Non-Cited Violation.</p>
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## KEY POINTS OF CONTACT

### Licensee

R. Bauman, ISI Coordinator  
D. Bost, Station Manager  
K. Bowman, Operations Manager  
H. Bush, Radiation Protection Supervisor  
V. Castle, Training Operations Manager  
J. DeYoung, Corporate EP Specialist  
J. Ellis, Performance Monitoring Group Lead  
T. Fisk, Chemistry Manager  
M. Friedman, Emergency Preparedness Coordinator  
V. Gengler, Security Manager  
R. Geier, RV/ISI NDE Coordinator  
K. Hall, NDE Level III  
S. Hunsader, Corporate Maintenance Rule Owner  
T. Luke, Manager, Engineering  
R. May, NDE Level III  
J. Moser, Radiation Protection Manager  
J. Nalewajka, Acting Nuclear Oversight Manager  
D. Nestle, Radiation Protection  
B. Norris, Radiation Protection Engineering Supervisor  
L. Oshier, Radiation Protection Technical Support Supervisor  
M. Phelan, Assistant Radiation Protection Manager  
R. Ruffin, Regulatory Assurance - NRC Coordinator  
R. Rybak, Acting Regulatory Assurance Manager  
N. Spooner, Site Maintenance Rule Coordinator  
W. Stoffels, Maintenance Manager  
P. Swafford, Site Vice President  
S. Taylor, Radiation Protection Manager  
D. VanAken, Corporate EP Specialist  
R. Whalen, System Engineering Manager

### NRC

G. Grant, Director, Division of Reactor Projects  
M. Ring, Chief, Division of Reactor Projects, Branch 1  
D. Smith, Dresden Senior Resident Inspector  
B. Dickson, Dresden Resident Inspector

### IDNS

R. Zuffa, Illinois Department of Nuclear Safety

## LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

### Opened

50-249/02-03-01	URI	Suspected repeat water hammer occurrences in the isolation condenser system
50-249/02-03-02	NCV	Inadequate surveillance procedure for the isolation condenser initiation time delay relay
50-237/02-03-03 50-249/02-03-03	NCV	Failure to perform routine radiological surveys in accordance with procedures
50-237/02-03-04 50-249/02-03-04	NCV	Failure to perform post-dive surveys of divers in accordance with procedures
50-249/02-03-05	NCV	Failure to include proper post-maintenance verification techniques in the maintenance and operations procedures
50-249/02-03-06	NCV	Failure to ensure erection of scaffold did not adversely affect plant equipment
50-237/02-03-07 50-249/02-03-07	NCV	Failure to record the results of post-dive surveys in accordance with procedures

### Closed

50-249/02-03-02	NCV	Inadequate surveillance procedure for the isolation condenser initiation time delay relay
50-237/02-03-03 50-249/02-03-03	NCV	Failure to perform routine radiological surveys in accordance with procedures
50-237/02-03-04 50-249/02-03-04	NCV	Failure to perform post-dive surveys of divers in accordance with procedures
50-249/02-03-05	NCV	Failure to include proper post-maintenance verification techniques in the maintenance and operations procedures
50-249/02-03-06	NCV	Failure to ensure erection of scaffold did not adversely affect plant equipment
50-237/02-03-07 50-249/02-03-07	NCV	Failure to record the results of post-dive surveys in accordance with procedures
50-249/01-011-01	URI	Cause of open contacts in the 3B reactor recirculation pump motor-generator set breaker's trip coil circuitry

50-237/1999-006-00	LER	Recirculation loop temperature thermocouple failure causes shutdown cooling inoperability
50-237/2000-005-00	LER	Recirculation loop temperature failure causes shutdown cooling inoperability
50-237/2000-005-01	LER	Recirculation loop temperature failure causes shutdown cooling inoperability
50-249/2001-002-00	LER	Reactor scram due to reactor recirculation run-up and trip



## LIST OF ACRONYMS USED

AAR	ALARA Action Review
ANS	Alert and Notification System
ALARA	As Low As Is Reasonably Achievable
AR	Action Request
CR	Condition Report
CFR	Code of Federal Regulations
DBT	Design Basis Threat
DIS	Dresden Instrument Surveillance
DOS	Dresden Operating Surveillance
DRP	Division of Reactor Projects
DRS	Division of Reactor Safety
EP	Emergency Preparedness
ERO	Emergency Response Organization
IDNS	Illinois Department of Nuclear Safety
LER	Licensee Event Report
MWe	megawatts electrical
NCV	Non-Cited Violation
NOSFO	Nuclear Oversight Field Observation
NRC	Nuclear Regulatory Commission
OA	Other Activities
OSC	Operations Support Center
PI	Performance Indicator
RP	Radiation Protection
RWP	Radiation Work Permit
SDP	Significance Determination Process
TI	Temporary Instruction
TSC	Technical Support Center
URI	Unresolved Item
WO	Work Order

## LIST OF DOCUMENTS REVIEWED

### 1R04 Equipment Alignment

CR 0092011	NRC Questions Regarding Plant Conditions	January 24, 2002
CR 0090104	Unexpected High Level Alarms from HPCI Inlet Drain Pot	January 9, 2002
CR 0092212	NRC Identified Posting Improvement Opportunity on Unit 2 HPCI	January 23, 2002

### 1R05 Fire Protection

CR 0093908	Undue Fire Loading	February 5, 2002
CR 0094163	Improperly use of Flammable Cabinet	February 7, 2002
CR 00092570	Access to Fire Hose Reel F119 Blocked by Scaffolding	January 29, 2002
CR 0094078	Nuclear Oversight Concern During Unit 2 Plant Walkdown	February 4, 2002
Fire Protection Reports	Volume 1 "Updated Fire Hazards Analysis"	April 22, 1999

### 1R14 Non-routine Evaluations

CR 00094134	Unit 2 'A' Reactor Water Cleanup Pump Seal Leakage	February 6, 2002
CR 00091906	Unexpected Alarm H-4 on 902-8	January 23, 2002
CR 00092915	East Turbine Building Exhaust Fan Trip	January 29, 2001

### 1R15 Operability Evaluations

Operability Evaluation 02-002	Incorrect Spring Material Installed in the HPCI Check Valve.	January 15, 2002
CR 00086333	Incorrect Spring Material Installed in the HPCI Check Valve.	January 3, 2002
CR 00089090	Junction Box Latching Screws Unable to Latch Properly	January 4, 2002

#### 1R16 Operator Workarounds

Operator Workaround 02-01-01	Jet Riser Brace
Operator Challenge 2-2-13-29	Reactor Building Ventilation Chiller Water System
Operator Challenge 2-02-13-14	Repeated Drywell High Radiation Alarms
Operator Challenge 2-02-13-32	Unit 2 Fuel Pool Cooling System Trips when 2-1901-40 Valve Opens
Operator Workaround 03-02-01	Unit 3 'B' Circulating Water Pump Discharge Valve

#### 1R19 Post Maintenance Testing

CR 00088983	Post Maintenance Test on 2-9208A Results in Partial Group Isolation	January 4, 2002
CR 00089127	Post Maintenance Test Failure	January 5, 2002
DOS 1400-05	Core Spray System Pump Test With Torus Available	Revision 26

#### 1R22 Surveillance Test

WO 00380312	Pump in Alert Range	
DOS 1500-02	Containment Cooling Service Water Pump Test	Revision 40
CR 00089369	Technical Specification Violation on Differential Pressure Indicator Switch 3-1349-B During Surveillance	January 8, 2002
CR 00088770	2-203-3d Emergency Relief Valve Found Out of Tolerance	January 3, 2002
WO 00372215	Unit 2 Quarterly Technical Specification Isolation Condenser Time Delay	January 16, 2002
CR 00091401	Found 3 out of 4 time delay relays out of Technical Specification Limits	January 18, 2002

CR 00093960	Lack of Supervisor's Signature Result in Procedure Noncompliance	February 5, 2002
WO 99248710	Perform Isolation Condenser Time Delay	October 29, 2001

### 1R23 Temporary Modifications

Engineering Change #334930	Isolate Leaking Unit 2 'A' Containment Cooling Service Water Pump Room Cooler
Engineering Change #334611A	Unit 3 'B' Circulating Water Pump Discharge Valve Gagged
Engineering Change #333819	Alternate Ventilation for the Reactor Recirculation Motor Generator Set

### 1EP2 Alert and Notification System (ANS) Testing

	Dresden Off-Site Siren Test Plan	Revision 2
	Exelon Semi-Annual Siren Report - January through June 2001	
	Braidwood/Dresden Warning System Maintenance Report - October 8 through November 8, 2001	
EP-AA-125-1004	Facilities and Equipment - PI Guidance	Revision 0

### 1EP3 Emergency Response Organization (ERO) Augmentation Testing

	Exelon Emergency Plan	Revision 11
EP-AA-112	Emergency Response Organization/Emergency Response Facility Activation and Operation	Revision 4
EP-AA-112-100	Control Room Activation and Operation	Revision 2
EP-AA-122-1001	Drill Development, Conduct, and Evaluation	Revision 0
	Dresden Station ERO Roster - (mid-December 2001 through mid-January 2002)	

Dresden Station Semi-Annual Off-Hours Augmentation Drill	June 27, 2001
Dresden Station Semi-Annual Off-Hours Augmentation Drill	December 20, 2001
Sample of 21 Dresden Station ERO Members' 2001 EP Training Records	
Emergency Operations Facility Off-Hours Augmentation Drills' Summaries	December 11, 13, and 18, 2001

#### 1EP4 Emergency Action Level and Emergency Plan Changes

Dresden Station Annex to the Exelon Emergency Plan	Revision 12
10 CFR 50.54(q) Review Package - Emergency Action Level Changes	March 29, 2001

#### 1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies

Memorandum	Dresden Station July 5, 2001 Alert Event Report	August 3, 2001
AR 00070716	ERO Performance for Dresden Alert	
AR 00070717	ERO Readiness for Dresden Alert	
AR 00070718	Facilities and Equipment in Control Room for Dresden Alert	
AR 00070719	Facilities and Equipment in Technical Support Center for Dresden Alert	
AR 00070722	Procedures Quality Items from Dresden Alert	
NOA-DR-01-3Q	NOS Field Observation (NOSFO) - July 5 Alert	
	NOSFO - Operations Support Center (OSC) Observations - July 5 Alert	

Memorandum	2001 Exercise Findings and Observations Report	July 24, 2001
	NOSFO - Offsite Interface - 100 Day Pre-exercise Meeting	January 25, 2001
	NOSFO - Pre-exercise Drill - OSC and Field Teams	March 22, 2001
	NOSFO - OSC Assignments in Pre-exercise Drill	March 21, 2001
	NOSFO - Control Room Simulator in Pre-exercise Drill	March 21, 2001
	NOSFO - TSC/OSC in Pre-exercise Drill	March 21, 2001
	NOSFO - Simulator, TSC, and OSC in Exercise	May 2, 2001
	NOSFO - TSC in Exercise	May 2, 2001
	NOSFO - Public Address System - Ineffective Corrective Actions	August 28, 2001
	NOSFO - Medical Drill	September 6, 2001
	NOSFO - Emergency Plan Change Management	November 14, 2001
	NOSFO - EP Surveillances and Communications	November 19, 2001
	NOSFO - Offsite Agency Interface	December 20, 2001
	NOSFO - Offsite Agency Interface	December 26, 2001
Memorandum	October 23 Offsite Agency Dinner for the Braidwood, Dresden, and LaSalle County Stations	December 10, 2001
AR 00053773	Offsite Protective Action Recommendation Incorrectly Recorded on Message Form by Dresden Instrument Surveillance Staff During the Exercise	
AR 00053776	Field Survey Team Placement Not Optimized During the Exercise	
AR 00054618	Initial Inaccurate Emergency Classification During the Exercise	

AR 00076299	Procedure Improvements Identified in Medical Drill	
	EP Focus Area Self-Assessment Report	December 12, 2001

20S1 Access Controls For Radiologically Significant Areas

	Quarterly Survey Lists	January 2001 - September 2001
	Routine Survey Logs	March 30, 2001 - April 28, 2001
	Routine Survey Logs	June 4, 2001 - July 1, 2001
	Routine Survey Logs	July 30, 2001 - September 3, 2001
	Routine Survey Logs	December 9, 2001 - December 28, 2001
CR No. 83043	Discrepancy Found in Routine Survey Program	November 15, 2001
CR No. 89377	Deficiencies Identified in ALARA Planning and RWP Processing	January 7, 2002
DRP 6020-03	Radiological Surveys	Revisions 7 and 8
RP-DR-ADM-005	Radiation Protection Guidelines for Performance of Radiological Surveys	Revision 2
Survey File No. 1-43	Random Survey 10 Sets PCs	March 2001 - September 2001
Survey File No. 3-59	EI 517' ALARA Decon Room	January 2001 - November 2001
Survey File No. 4-24	R.U.P.S. Fire Brigade Area	January 2001 - December 2001

## 20S2 As-Low-As-Is-Reasonably-Achievable (ALARA) Planing and Controls

	Memorandum from J. Moser, J. Donovan, and R. Melgoza to Station ALARA Committee, "Work In Progress Review -- 10000100 Refuel Floor Activities"	October 31, 2001
	Addendum No. 1 for RWP 10000100	October 28, 2001
ALARA Action Review	RWP No. 10000100	Revision 1
CR No. 81212	RP Coverage of Dive Activities	October 31, 2001
CR No. 81365	Failure to Follow Dive Procedure NSP-RP-6202	October 30, 2001
CR No. 93397	Review of Outage RFF Diving Activities -- Dive Suit Surveys	January 31, 2002
DRP 5720-02	Identification and Control of Individual Radioactive Particles	Revision 3
DRP 6200-08	Radiation Protection Guidelines for Work in the Reactor Cavity	Revision 4
NSP-RP-6202	Radiological Controls for Contaminated Diving Operations	Revision 0
NSP-RP-6202, Attachment A	Initial Pre-Job Prerequisite Set-up Checklist	October 23, 2001
NSP-RP-6202, Attachment B	Pre-Dive and Post Dive Checklist	October 23 - 30, 2001
NSP-RP-6202, Attachment D	Diver Surveys in and out of Water	October 23 - 30, 2001
NSP-RP-6202, Attachment E	Diver-Performed Survey Verifications	October 23 - 30, 2001
RP-AA-400	ALARA Program	Revision 1
RP-AA-401	Operational ALARA Planning and Controls	Revision 1
RP-AA-401, Attachment 5	ALARA Plan Amendment Form, RWP No. 10000100	October 28, 2001
RSR No. 01-5561	Unit 2 Reactor Building D/S Pit – Dryer Dives	October 23 - 28, 2001



RSR No. 01-5561	Unit 2 Reactor Building D/S Pit – Dryer Dives	October 23 - 29, 2001
RSR No. 01-5561	Unit 2 Reactor Building D/S Pit – Dryer Dives	October 24 - 30, 2001
RSR No. 01-5561	Unit 2 Reactor Building D/S Pit – Dryer Dives	October 24 - 31, 2001
RSR No. 01-5561	Unit 2 Reactor Building D/S Pit – Dryer Dives	October 26 - 30, 2001
RSR No. 01-5561	Unit 2 Reactor Building D/S Pit – Dryer Dives	October 25 - 31, 2001
RWP 10000100	D2R17 Reactor Disassembly/Reassembly and Related Activities	Revision 1

#### 71153 Event Follow Up

CR 00088983	Post-maintenance Test on 2-9208A Results in Partial Group Isolation	January 4, 2002
CR 00093978	Received Unit 2 'A' Recirculation Pump Seal Cooling Water Low Flow Alarm	February 2, 2002

#### 4OA1 Performance Indicator (PI) Verification

RS-AA-122-108	PI - ERO Drill/Exercise Performance	Revision 1
RS-AA-122-109	PI - ERO Drill Participation	Revision 1
RS-AA-122-110	PI - ANS Reliability	Revision 1
LS-AA-2110	Monthly PI Data Elements for ERO Drill Participation	Revision 0
LS-AA-2120	Monthly PI Data Elements for Drill/Exercise Performance	Revision 0
LS-AA-2130	Monthly PI Data Elements for ANS Reliability	Revision 0
CR 00093928	Administration Issues Identified with Operations NRC/NEI Performance Indicators	February 5, 2002
	Daily and Monthly Siren Operability Reports - January through September 2001	