

December 29, 2000

PSLTR: #00-0180

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

Dresden Nuclear Power Station, Unit 2  
Facility Operating License No. DPR-19  
NRC Docket No. 50-237

Subject: Licensee Event Report 2000-004-00, "Reactor Scram Due to a Failure to Close Current Transformer Knife Switches Following Maintenance"

Enclosed is Licensee Event Report 2000-004-00, "Reactor Scram due to a failure to close Current Transformer knife switches following maintenance," for the Dresden Nuclear Power Station (DNPS). This condition is being reported pursuant to 10 CFR 50.73 (a)(2)(iv), which requires the reporting of any event or condition that resulted in a manual or automatic actuation of any engineered safety feature (ESF), including the reactor protection system (RPS).

The following actions were taken:

Nuclear Operations Analysis Department Manager (NOAD) and Dresden NOAD First Line Supervisors were held accountable and disciplinary actions were taken in accordance with station policy.

Until corrective actions can be finalized, all critical switchyard work requires 100 percent superintendent level overview.

This correspondence contains the following new commitment:

Determination of the root cause for this event is in progress to establish appropriate corrective actions to prevent recurrence. A supplemental report will be submitted upon completion of the root cause determination.

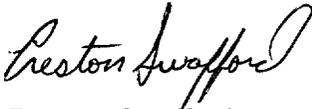
IE22

December 29, 2000  
U.S. Nuclear Regulatory Commission  
Page 2

Any other actions described in the submittal represent intended or planned actions by DNPS. They are described for the NRC's information and are not regulatory commitments.

If you have any questions, please contact Dale Ambler, Dresden Regulatory Assurance Manager at (815) 942-2920 extension, 3800.

Respectfully,



Preston Swafford  
Site Vice President  
Dresden Nuclear Power Station

Enclosure

cc: Regional Administrator – NRC Region III  
NRC Senior Resident Inspector – Dresden Nuclear Power Station

**LICENSEE EVENT REPORT (LER)**

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the information and Records Management Branch (t-6 f33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0104), Office Of Management And Budget, Washington, DC 20503. If an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

<b>FACILITY NAME (1)</b> Dresden Nuclear Power Station, Unit 2	<b>DOCKET NUMBER (2)</b> 05000237	<b>PAGE (3)</b> 1 of 4
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**TITLE (4)**  
Reactor Scram due to a Failure to Close Current Transformer Knife Switches Following Maintenance

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MON TH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
11	30	2000	2000	004	00	12	29	2000	N/A	N/A
									N/A	N/A

<b>OPERATING MODE (9)</b> 1	<b>THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more) (11)</b>									
	20.2201(b)		20.2203(a)(2)(v)		50.73(a)(2)(i)		50.73(a)(2)(viii)			
<b>POWER LEVEL (10)</b> 100	20.2203(a)(I)		20.2203(a)(3)(I)		50.73(a)(2)(ii)		50.73(a)(2)(x)			
	20.2203(a)(2)(I))		20.2203(a)(3)(ii)		50.73(a)(2)(iii)		73.71			
	20.2203(a)(2)(ii)		20.2203(a)(4)	X	50.73(a)(2)(iv)		OTHER			
	20.2203(a)(2)(iii)		50.36(c)(1)		50.73(a)(2)(v)		Specify in Abstract below or in NRC Form 366A			
	20.2203(a)(2)(iv)		50.36(c)(2)		50.73(a)(2)(vii)					

**LICENSEE CONTACT FOR THIS LER (12)**

<b>NAME</b> Timothy P. Heisterman, Regulatory Assurance	<b>TELEPHONE NUMBER (include Area Code)</b> (815) 942-2920 Ext. 3324
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**COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)**

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EIPX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EIPX

<b>SUPPLEMENTAL REPORT EXPECTED (14)</b>				<b>EXPECTED SUBMISSION DATE (15)</b>		
X	YES		NO	MONTH	DAY	YEAR
	(If yes, complete EXPECTED SUBMISSION DATE.)			02	16	2000

**ABSTRACT (Limit to 1400 spaces, i. e., approximately 15 single-spaced typewritten lines) (16)**

On November 30, 2000, with Unit 2 in Mode 1 at 100% reactor power, Nuclear Operational Analysis Department (NOAD) and Sub Station Construction (SSC) personnel entered the 345Kv yard to perform work on the Oil Circuit Breaker (OCB) 2-7 circuit breaker, which was Out Of Service (OOS). To start the evolution, SSC personnel opened OCB control circuit knife switches located in the upper portion of the OCB cabinet, per their approved procedure. Shortly thereafter, NOAD personnel opened 12 current transformer cutout knife switches. This was performed without procedure and resulted in a lack of configuration control to assure recovery of the switches following maintenance. SSC personnel remained unaware that this was performed for the duration of the event. At the conclusion of work for the shift, NOAD utilized inappropriate nomenclature when asking SSC personnel whether the knife switches had been re-closed. This resulted in the OCB being returned to service with the knife switches inappropriately positioned (open) causing a Unit 2 reactor scram from full power when the Operators attempted to close the OCB.

The preliminary root cause, specific to the tripping of the 345Kv OCBs and reactor scram, was determined to be insufficient adherence to management standards, policies, and administrative controls by NOAD personnel.

This condition is being reported pursuant to 10 CFR 50.73 (a)(2)(iv), which requires the reporting of any event or condition that resulted in a manual or automatic actuation of any engineered safety feature (ESF), including the reactor protection system (RPS).

**LICENSEE EVENT REPORT (LER)**

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Dresden Nuclear Power Station, Unit 3	05000249	2000	004	00	2 OF 4

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

**PLANT AND SYSTEM IDENTIFICATION:**

General Electric – Boiling Water Reactor – 2527 MWt rated core thermal power  
 Energy Industry Identification System (EIIIS) Codes are identified in the text as [XX] and are obtained from IEEE Standard 805-1984, IEEE Recommended Practice for System Identification in Nuclear Power Plants and Related Facilities.

**EVENT IDENTIFICATION:**

Reactor Scram due to a failure to close Current Transformer knife switches following maintenance

**A. PLANT CONDITIONS PRIOR TO EVENT:**

Unit: 2	Event Date: 11-30-2000	Event Time: 1550
Reactor Mode: 1	Mode Name: Power Operation	Power Level: 100%
Reactor Coolant System Pressure: 1000 psig		

**B. DESCRIPTION OF EVENT:**

This condition is being reported pursuant to 10 CFR 50.73 (a)(2)(iv), which requires the reporting of any event or condition that resulted in a manual or automatic actuation of any engineered safety feature (ESF), including the reactor protection system (RPS).

At 0710 hours, one of the SSC crews was assigned the task of performing a lubrication and preventative maintenance inspection of the 345Kv 2-7 OCB. Additionally, they were told that NOAD would be doing testing of the bushings on the circuit breaker, looking for the location of hot spots, after which SSC would be performing cleaning of the bushing to correct the problem.

At approximately 0730 hours, the SSC Crew Leader told the SSC crew that he would be leaving to sign out the key to the 345Kv yard and obtaining approval to start work from the Operations department. He further stated that the crew should collect the supplies needed to perform the tasks at the OCB.

At approximately 0800 hours, the SSC Crew Leader returned from the station and unlocked the 345Kv yard for access. Arriving at the 345Kv OCB 2-7, the Crew Leader performed a walkdown of the OOS that was previously hung by Operations. A briefing had been held with the SSC crew, which was predominantly focused on personnel safety around energized equipment. Based on the interviews performed, no formal Heightened Level of Awareness (HLA) briefing or risk assessment had been performed regarding the scope of work being performed.

A SSC mechanic began the lube and preventative maintenance activity by opening the knife switches associated with supplying AC and DC power to various components within the OCB cabinet. (These switches were in the upper left portion of the cabinet.) Once the knife switches were opened, SSC personnel stepped away and NOAD personnel approached the cabinet, referenced electrical drawings, and proceeded to open 12 current transformer knife switches located in the lower left side of the cabinet to allow hot spot testing of the OCB. SSC personnel did not observe the opening of these switches and remained unaware of this action for the duration of the event sequence.

With the knife switches aligned to support performance of testing of the OCB bushings, testing began on the first of six OCB bushings.

At approximately 1430 hours, with all bushings in an assembled state, the SSC closed in the knife switches they had previously opened, collected all tools, dismantled the testing equipment, and loaded up their truck. As they walked

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Dresden Nuclear Power Station, Unit 3	05000249	2000	004	00	3 OF 4

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

away from the OCB, one of the SSC workers asked his Crew Leader if the knife switches had been re-closed. The Crew Leader stated that he personally closed the switches. The SSC worker returned to the OCB 2-7 cabinet, opened the door and verified that the knife switches in the upper left portion of the panel were closed. The SSC crew returned to the SSC building at 1445 hours. One of the NOAD personnel, who was performing labeling in the 345Kv relay house, was called because his vehicle was within the fenced area. He was told that he needed to remove his vehicle because the SSC personnel were leaving for the day and the yard was going to be locked up. The NOAD individual asked whether all the knife switches had been re-closed. The SSC Crew Leader responded that they were closed.

SSC contacted Operations and Bulk Power Operations, stating that they were off the equipment and that it was ready to have the OOS cleared and OCB closed in. Operations dispatched a High Voltage Operator and Operations Supervisor, who cleared the OOS. With that completed, Bulk Power Operations contacted the Control Room Nuclear Station Operator (NSO) and directed him to close in the 345Kv 2-7 OCB. At 1550 hours, Operations closed in the 345Kv OCB 2-7 circuit breaker from the 902-8 panel, at which time Unit 2 concurrently scrambled on load reject.

#### C. CAUSE OF EVENT:

The preliminary root cause, specific to the tripping of the 345Kv OCBs and reactor scram, was determined to be the failure of NOAD personnel to maintain proper Configuration Control to approved NGG and station methodologies due to improper verification practices. Determination of the root cause for this event is in progress to establish appropriate corrective actions. A supplemental report will be submitted upon completion of the root cause determination

#### D. SAFETY ANALYSIS

The safety significance of this event was limited to the fact that it was a challenge to Operations, as is every situation involving a need for prompt diagnosis and decision during a trip of the reactor. Plant equipment response was per design and required no operator action. All Emergency Core Cooling Systems and required plant systems were available and responded correctly.

Based upon this evaluation, the safety significance of this event has been determined to be minimal.

#### E. CORRECTIVE ACTIONS:

The Nuclear Operations Analysis Department Manager and Dresden NOAD First Line Supervisors were held accountable and disciplinary actions were taken in accordance with station policy. (Complete)

NOAD will reinforce management expectations as delineated in MM-AA-7001. (ATI # 39928)

Until corrective actions can be finalized, all critical switchyard work requires 100 percent superintendent level overview.

Determination of the root cause for this event is in progress to establish appropriate corrective actions. A supplemental report will be submitted upon completion of the root cause determination. (ATI # 39928)

#### F. PREVIOUS OCCURRENCES:

Condition Report D2000-04772 "Adverse Trend in NOAD Performance"

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Dresden Nuclear Power Station, Unit 3	05000249	2000	004	00	4 OF 4

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

G. COMPONENT FAILURE DATA:

None