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the southern electric system

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

PLANT HATCH - UNIT 2
NRC DOCKET 50-366
OPERATING LICENSE NPF-5
LICENSEE EVENT REPORT
PERSONNEL ERROR RESULTS IN NONCOMPLIANCE WITH
TECHNICAL SPECIFICATIONS ACTION STATEMENT

Gentlemen:

In accordance with the requirements of 10 CFR 50.73(a)(2)(i), Georgia Power Company is submitting the enclosed Licensee Event Report (LER) concerning a personnel error resulting in noncompliance with a Technical Specification action statement.

Sincerely,

R. P. McDonald

OCV/cr

Enclosure: LER 50-366/1992-004

cc: Georgia Power Company
Mr. H. L. Sumner, General Manager - Nuclear Plant
NORMS

U.S. Nuclear Regulatory Commission, Washington, D.C.
Mr. K. Jabbour, Licensing Project Manager - Hatch

U.S. Nuclear Regulatory Commission, Region II
Mr. S. D. Ebneter, Regional Administrator
Mr. L. D. Wert, Senior Resident Inspector - Hatch

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NRC Form 366 (6-89) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES: 4/30/92

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
PLANT HATCH, UNIT 2	0 5 0 0 0 3 6 6	1 OF 5

TITLE (4)
PERSONNEL ERROR RESULTS IN NONCOMPLIANCE WITH TECHNICAL SPECIFICATIONS ACTION STATEMENT

EVENT DATE (5)			LER NUMBER (6)					REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR		SEQ NUM		REV	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
												0 5 0 0 0
0 3	1 6	9 2	9 2		0 0 4		0 0	0 4	3 0	9 2		0 5 0 0 0

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR (11)			
POWER LEVEL	1 0 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below)
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER	
	AREA CODE	
STEVEN B. TIPPS, MANAGER NUCLEAR SAFETY AND COMPLIANCE, HATCH	912	367-7851

COMPLETE ONE LINE FOR EACH FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORT TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORT TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)

		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES(If yes, complete EXPECTED SUBMISSION DATE)	X NO				

ABSTRACT (16)

On 3/16/92, at 1000 CST, Unit 2 was in the Run mode at a power level of 2436 CMWT (100% rated thermal power). At that time, plant maintenance personnel who were to overhaul fuel oil transfer pump 2Y52-C001C inadvertently removed the redundant pump, 2Y52-C101C. Since clearances had been previously implemented for 2Y52-C001C, it was inoperable. Therefore, when pump C001C was removed, Emergency Diesel Generator (EDG) 2R43-S001C was left with no operable fuel oil transfer pump. Therefore, the EDG was inoperable also. This condition was not recognized until 0400 CST on 3/17/92 when a different maintenance crew was preparing to reinstall the rebuilt pump. While verifying their clearance, they discovered that the wrong pump had been removed the previous day. They notified the Unit 2 Shift Supervisor, and pump 2Y52-C001C was returned to service by 0410 CST on 3/17/92. At the time of discovery, the EDG was restored to operable status prior to the 1 hour time allotted to complete the Technical Specification required circuit breaker alignment verification for the other EDGs.

The cause of this event was a personnel error which occurred due to inadequate self verification. The maintenance personnel mistakenly removed pump 2Y52-C101C instead of 2Y52-C001C. This left EDG 2R43-S001C with no operable fuel oil transfer pump. The cause for the report date being 30 days from the reportability date rather than the event date was a personnel error by the shift supervisor.

Corrective actions for this event include counseling the involved maintenance personnel, counseling the involved shift supervisor, and training appropriate plant personnel on the proper use of self verification techniques.

PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor
Energy Industry Identification System codes are identified in the text as (EIIS Code XX).

DESCRIPTION OF EVENT

On 3/16/92 Unit 2 was in the Run mode at a power level of 2436 CMWT (100% rated thermal power). At that time, non-licensed plant maintenance personnel were preparing to overhaul fuel oil transfer pump 2Y52-C001C to correct a problem with high vibration. This fuel oil transfer pump is one of two redundant pumps supplying fuel oil from a main storage tank to 900-gallon tank (or, "day" tank), 2Y52-A101C, which feeds Emergency Diesel Generator (EDG, EIIS Code EK) 2R43-S001C. Equipment clearance number 2-92-0232 had been issued on the previous day (3/15/92) directing that equipment associated with the pump be disconnected in order to facilitate the pump overhaul. This clearance required the redundant pump, 2Y52-C101C, which supplies the same day tank, to be operable. Thus on 3/15/92, operations personnel positioned and tagged various valves and switches as required to implement the clearance. This rendered pump 2Y52-C001C inoperable and left the redundant pump 2Y52-C101C in service.

On 3/16/92, at approximately 1000 CST, two maintenance personnel went to the underground area where the pumps are located and began to electrically disconnect a pump motor. Two identical pump and motor assemblies are located in this area, and they inadvertently selected the wrong assembly. The motor they disconnected was clearly identified as 2Y52-C101C, the redundant pump for the day tank. Since pump 2Y52-C001C had already been properly disabled per the clearance, and the redundant pump 2Y52-C101C was disabled due to the error of the maintenance personnel, both pumps were inoperable at the same time.

After the motor was electrically disconnected, a second set of maintenance personnel removed the pump and motor assembly to the maintenance shop for overhaul.

On 3/17/92 at 0400 CST, a third crew of maintenance personnel was preparing to reinstall the rebuilt pump and motor assembly. While verifying clearance 2-92-0232 in preparation for the work (a routine safety practice), they discovered that the wrong pump had been removed the previous day. They reported this immediately to the Shift Supervisor on Deficiency Card 2-92-1040 per plant administrative control procedures. Recognizing that the EDG was inoperable as no fuel oil transfer pump was available, the Shift Supervisor initiated Limiting Condition for Operation (LCO) 2-92-186 declaring EDG 2R43-S001C inoperable and entered the required action statement per Technical Specifications section 3.8.1.1. Operations personnel immediately restored pump 2Y52-C001C to operable status by reclosing its circuit breaker and control switch and opening a manual isolation valve. With the transfer pump back in service, EDG 2R43-S001C was declared operable, and the LCO was cleared.

On 3/18/92, supervisory personnel from the Nuclear Safety and Compliance (NSAC) department conducted a review of Deficiency Card 2-92-1040. The deficiency card identified that redundant pump 2Y52-C101C was incorrectly removed and noted that the pump was removed on 3/16/92. By 4/2/92, an investigation determined that the EDG had actually been inoperable for a period of approximately 18 hours. Therefore, the requirement of Technical Specifications section 3.8.1.1.b.3 was not met. In this condition, the applicable action statement requires the circuit breaker alignment for the other EDGs to be verified within one hour of the EDG being inoperable, and every eight hours thereafter. However, since the condition was not recognized until approximately 18 hours after the EDG was inoperable, the breaker alignment verifications were not performed as required. Consequently, a reportable condition existed.

CAUSE OF EVENT

The cause of this event is a cognitive personnel error by nonlicensed maintenance personnel. The responsible individuals did not use self verification techniques to ensure they were working on the right piece of equipment. One pump had been properly removed from service via an equipment clearance. Then, when maintenance personnel incorrectly disconnected the redundant pump, day tank 2Y52-A101C supplying EDG 2R43-S001C was left with no operable fuel oil transfer pump. Because this was not recognized by involved personnel, the circuit breaker verifications required by the Technical Specifications action statement were not performed.

The cause for the report date being 30 days from the discovery or reportability date rather than from the event date is personnel error by the involved shift supervisor. The shift supervisor did not recognize that the applicable Technical Specification action statements were not met and, consequently, did not initiate a deficiency card.

REPORTABILITY ANALYSIS AND SAFETY ASSESSMENT

This event is reportable per 10 CFR 50.73 (a)(2)(i) because the plant entered a condition which is prohibited by the Technical Specifications. Specifically, action statement 3.8.1.1.b was missed when Emergency Diesel Generator 2R43-S001C had no fuel oil transfer pump available for a period of approximately 18 hours.

Five Emergency Diesel Generators form an on-site standby power supply which can drive essential equipment in the event that off-site power is unavailable. The EDGs automatically start when any of the following conditions exist: Reactor low water level signal (Level 1; -113 inches), high drywell pressure (1.92 psig), and undervoltage on their respective buses. Technical Specifications section 3.8.1.1 requires that in order for an EDG to be considered operable, it must have a separate day tank containing at least 900 gallons of fuel, a separate fuel storage tank containing at least 32,000 gallons of fuel, and a separate fuel oil transfer pump.

TEXT

In this event, the requirement to have a separate fuel oil transfer pump for one day tank was not satisfied for a period of approximately 18 hours. However, in the event that the EDGs had been required to power the essential buses, the lack of an operable fuel oil transfer pump would not have prevented the affected EDG from starting and supplying its load as designed. The fuel in a day tank is maintained at a level of approximately 935 gallons, which can supply an EDG for approximately four hours at the normal full load fuel consumption rate of 235 gallons per hour. An annunciator in the Main Control Room alarms when the fuel quantity in the day tank falls below 884 gallons. Additionally, the fuel level in the tank is displayed in gallons on digital instrument 2R43-R607C in the Main Control Room. Thus, plant operators would have received an alarm on decreasing day tank level within about 15 minutes of starting an EDG, and they could have read the day tank level on the instrument. This would have given operations personnel approximately 3 hours and 45 minutes to return one pump to service. Should difficulty have been encountered in returning one of the two inoperable pumps to service, fuel could have been pumped into the affected day tank from any of the other EDG fuel oil storage tanks. The annunciator response procedure for low day tank level directs operators to a procedure containing the valve alignments necessary to do this. This measure would have supplied the EDG until the inoperable transfer pump could be returned to service.

Based on the above analysis, it is concluded that this event had no adverse impact on nuclear safety. This analysis is applicable to all power levels.

CORRECTIVE ACTIONS

The involved maintenance personnel were counseled on their mistake and on proper identification of the pumps and motors involved in this event. They were also retrained on verifying pieces of equipment by their Master Parts List (MPL) tags.

Due to previous similar events in the area of inadequate self verification, training will be given to the appropriate personnel in the Maintenance, Operations, Health Physics/Chemistry, and Engineering Support departments. Operations personnel are receiving the training during the current segment of regularly scheduled continuing training. Training for the remaining departments will be completed by the end of 1992 as part of their respective continuing training schedules.

The involved shift supervisor will be counseled relative to prompt recognition of the potential for non-compliance with Technical Specification action statements. Appropriate personnel in the Operation's department will be informed of this event and of the need to initiate a deficiency card when the potential for noncompliance with Technical Specifications action statements exist.

ADDITIONAL INFORMATION

1. Other Systems Affected: No systems were affected other than those mentioned in this report.

2. Previous Similar Events: Events reported in the past two years in which inadequate self verification resulted in personnel working on wrong pieces of equipment were described in the following LERs:

   50-321/1990-006, dated 05/14/90,
   50-321/1991-018, dated 10/14/91,
   50-321/1991/028, dated 12/16/91,
   50-321/1992-009, dated 04/27/92,
   50-366/1990-011, dated 11/29/90.

   Corrective actions for these events included correcting a wiring error, counseling personnel, issuing a departmental memorandum on adequate post-maintenance functional testing, performing a functional test of affected instrumentation, and revising procedures. Correcting a wiring error would not have prevented this event because a wiring error was not involved. Counseling personnel would not have prevented this event because it is a disciplinary action which is not designed to preclude other events from occurring. The departmental memorandum would not have prevented this event because the subject of the memorandum was post-maintenance functional testing and not self-verification during the performance of operational activities. Functionally testing instrumentation and revising procedures would not have prevented this event because the instrumentation and procedures involved were peculiar to those events and did not address the potential for personnel error.

   A review of these past events indicates an adverse trend exists in the area of self verification. Since the corrective actions listed above did not address self verification, the training mentioned in the Corrective Actions section of this report has been instituted to improve performance in this area.

3. Failed Components Identification: No failed components contributed to or resulted from this event.