NRC FORM 366 (12-81)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB 3150-0011 EXPIRES 4-30-82

LICENSEE EVENT REPORT

CONTROL BLOCK: (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1	N C M G S 2 (2)	0 0 - 0 0 0 0 0 - 0 0 (3)	4 1 1 1 1 (4)	(5)				
	LICENSEE CODE	LICENSE NUMBER	LICENSE TYPE	CAT				

CON'T

0 1	REPORT SOURCE: L (6)	0 5 0 0 0 3 7 0 (7)	0 9 1 2 8 3 (8)	1 0 1 2 8 3 (9)
		DOCKET NUMBER	EVENT DATE	REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 While in Mode 1, during removal of the tachometer for calibration, the turbine-
0 3 driven auxiliary feedwater pump (ATWP) started and could not be stopped from either
0 4 the local panel or the control room. The pump was declared inoperable after it was
0 5 secured by closing the turbine stop valve. This constitutes a degradation of the
0 6 auxiliary feedwater system (T.S.3.7.1.2) which is reportable pursuant to T.S.6.9.1.
0 7 11(b). The pump would have been available if needed. Additionally, the redundant
0 8 motor-driven pumps were operable. Health and safety of the public were unaffected.

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
0 9	C H (11)	X (12)	Z (13)	X X X X X X (14)	Z (15)	Z (16)

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	8 3	—	0 4 6	/	0 3	L	—	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER (26)
A (18)	Z (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	N (24)	L (25)	X 9 9 9

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The technician performing the maintenance contacted an incorrectly installed washer
1 1 with his screwdriver as he disconnected an adjacent wire, shorting the auto-start
1 2 circuitry and blowing a fuse. The fuse was replaced, control re-established, and
1 3 the pump declared operable. Washers were permanently removed from the tachometer
1 4 terminal strip to prevent recurrence.

	FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
1 5	B (28)	0 7 5 (29)	NA	A (31)	Personnel Observation

	ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
1 6	Z (33)	Z (34)	NA	NA

PERSONNEL EXPOSURES

	NUMBER	TYPE	DESCRIPTION (39)
1 7	0 0 0 (37)	Z (38)	NA

PERSONNEL INJURIES

	NUMBER	DESCRIPTION (41)
1 8	0 0 0 (40)	NA

LOSS OF OR DAMAGE TO FACILITY (43)

	TYPE	DESCRIPTION
1 9	Z (42)	NA

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PUBLICITY

	ISSUED	DESCRIPTION (45)	NRC USE ONLY
2 0	N (44)	NA	

NAME OF PREPARER Phillip B. Nardoci PHONE (704) 373-7432

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HAL B. TUCKER
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October 12, 1983

Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street NW, Suite 2900
Atlanta, Georgia 30303

Subject: McGuire Nuclear Station Unit 2
Docket No. 50-370
LER/RO-370/83-46

Dear Mr. O'Reilly:

Please find attached Reportable Occurrence Report RO-370/83-46. This report concerns T.S. 3.7.1.2, "At Least Three Independent Steam Generator Auxiliary Feedwater Pumps and Associated Flow Paths Shall Be Operable With:... b. One Steam Turbine-Driven Auxiliary Feedwater Pump Capable of Being Powered From An Operable Steam Supply System". This incident was considered to be of no significance with respect to the health and safety of the public.

Very truly yours,

H.B. Tucker /PBN

Hal B. Tucker

PBN:jfw
Attachment

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

Mr. W. T. Orders
NRC Resident Inspector
McGuire Nuclear Station

Records Center
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, Georgia 30339

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DUKE POWER COMPANY
McGUIRE NUCLEAR STATION
REPORTABLE OCCURRENCE REPORT NO. 370/83-46

REPORT DATE: October 12, 1983

FACILITY: McGuire Unit 2, Cornelius, NC

IDENTIFICATION: Inadvertent Start of the Turbine-Driven Auxiliary Feedwater Pump

DESCRIPTION: On September 12, 1983, the Unit 2 turbine-driven auxiliary feedwater pump (AFWP) started while a technician was removing the tachometer for calibration. The pump could not be stopped from either the local panel or the control room and was secured by closing the turbine stop valve. The turbine-driven AFWP, required to be operable per Technical Specification 3.7.1.2,was declared inoperable until control was re-established. Unit 2 was in Mode 1 at 75% during this time.

This event is attributed to an Installation Deficiency with a contributing Personnel Error. The technician contacted an incorrectly installed washer with his screwdriver as he disconnected an adjacent wire. It should be noted that the position of the tachometer made recognition of the incorrect washer installation difficult.

EVALUATION: The tachometer for the turbine-driven AFWP is a non-safety related component which provides a signal to gauges in the local control panel and the control room. It has no control function and is not necessary for operation of the pump. While disconnecting wires for removal and calibration, the technician shorted the auto-start circuitry, blowing a fuse.

When the fuse blew, control power to the steam isolation valves was lost and the valves failed open, admitting steam to the turbine-driven AFWP. The pump began to inject water from the auxiliary feedwater condensate storage tank to the steam generators.

The technician called the control room to inform the control operator of the pump start. While the control operator observed plant response, an Operations supervisor was dispatched to close the turbine stop valve. The duration of auxiliary feedwater injection was approximately 10 minutes.

CORRECTIVE ACTION: The auto-start circuit fuse was replaced and control re-established. The steam isolation valves were closed, the turbine stop valve opened, and the turbine-driven AFWP declared operable.

The square washers were permanently removed from the tachometer terminal strip in order to prevent recurrence of this event.

SAFETY ANALYSIS: While the turbine stop valve was closed and the turbine-driven AFWP was technically inoperable, the pump would have been available if needed. Control power was available for the regulator valves and manual opening of the stop valve would have started the pump. Additionally, the redundant motor-driven pumps were operable.

During the approximately 10 minutes that the turbine-driven AFWP was injecting water to the steam generators, all major plant parameters remained stable; steam generator level initially increased and then returned to normal, main feedwater flow decreased to offset the auxiliary feedwater flow, and electric power was unchanged.

The health and safety of the public were unaffected by this event.