



Duke Energy Corporation

McGuire Nuclear Station  
12700 Hagers Ferry Road  
Huntersville, NC 28078-9340

(704) 875-4800 OFFICE  
(704) 875-4809 FAX

H. B. Barron  
Vice President

December 12, 2000

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

Subject: McGuire Nuclear Station, Unit 2  
Docket No. 50-370  
Licensee Event Report Number 370/00-02, Revision 0  
Problem Investigation Process No. M-00-4645

Pursuant to 10 CFR 50.73 Sections (a) (2) (iv), attached is an abstract for Licensee Event Report 370/00-02 concerning a McGuire Unit 2 event that resulted in an unplanned valid actuation of the Reactor Protection System (RPS) and an Engineered Safety Feature (ESF). This event was initially reported on November 15, 2000 as per the requirements of 10 CFR 50.72 (b) (2) (ii). Additional information was reported on November 16, 2000 as per the requirements of 10 CFR 50.72 (c) (2).

On November 15, 2000, McGuire Unit 2 experienced a turbine runback which resulted in plant operators manually tripping the reactor (RPS Actuation). The turbine runback was initiated by the opening of a circuit breaker that supplies power to non-safety related turbine runback logic circuitry. Following the reactor trip, the Unit 2 Auxiliary Feedwater Pumps started due to lo-lo steam generator levels (ESF Actuation). The investigation into the cause of the open breaker which initiated this event is not complete. Upon completion of the cause investigation, Revision 1 to Licensee Event Report 370/00-02 will be submitted providing the event cause and corrective actions as needed. The expected submittal date of Revision 1 is February 1, 2001.

Reactor trips are analyzed in Chapter 15 of the McGuire Nuclear Station Final Safety Analysis Report. Those analyses demonstrate that, given the plant conditions and sequence of events associated with this event, the plant design and response was adequate. Therefore, this event is considered to be of no significance with respect to the health and safety of the public.

H. B. Barron, Jr.  
McGuire Site Vice President  
Duke Energy Corporation

Attachment

IE22

U. S. Nuclear Regulatory Commission

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Page 2 of 2

cc: Mr. L. A. Reyes  
U.S. Nuclear Regulatory Commission  
Region II  
Atlanta Federal Center  
61 Forsyth St., SW, Suite 23T85  
Atlanta, GA 30323

F. Rinaldi  
U.S. Nuclear Regulatory Commission  
Office of Nuclear Reactor Regulation  
Washington, D.C. 20555

INPO Records Center  
700 Galleria Parkway  
Atlanta, GA 30339

Mr. Scott Shaeffer  
NRC Resident Inspector  
McGuire Nuclear Station

bxc: Dhiaa M. Jamil (MG01VP)  
Barbara L. Walsh (EC11C)  
Braxton L. Peele (MG01VP)  
Scotty L. Bradshaw (MG01OP)  
Gwynn H. Savage (EC06G)  
Gregg B. Swindlehurst (EC11-0842)  
R. Bruce Travis (MG05SE)  
Thomas C. Geer (MG05EE)  
Michael S. Kitlan (EC08I)  
Ronald F. Cole (EC05N)  
H. Duncan Brewer (EC08I)  
Ronnie B. White (MG01VP)  
Richard T. Bond (ON03SR)  
Kay L. Crane (MG01RC)  
Gary D. Gilbert (CN01RC)  
L. E. Nicholson (ON03RC)  
Vickie McGinnis (MG05SE)  
Mary J. Brown (PB02L)  
Alan L. Hincer (MG01B1)  
Mike Rains (MG01SR)  
Lisa Vaughn (PB05E)  
Charles J. Thomas (EC050)  
Patrica H. Cox (NSRB Support Staff) (EC05N)

INPO

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# LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION COLLECTION REQUEST: 50.0 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.

FACILITY NAME (1) <b>McGuire Nuclear Station, Unit 2</b>	DOCKET NUMBER (2) <b>05000370</b>	PAGE (3) <b>1 of 1</b>
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TITLE (4) **McGuire Unit 2 Manual Reactor Trip Following an Invalid Main Turbine Runback.**

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER(S)
11	15	00	00	- 02	- 0	12	11	00	None	N/A

OPERATING MODE (9) <b>1</b>	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR (Check one or more of the following) (11)									
POWER LEVEL (10) <b>100%</b>	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input checked="" type="checkbox"/> X	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)					
	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/>	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)					
	<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/>	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> OTHER (Specify in					
	<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/>	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	<input type="checkbox"/> Abstract below and					
	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/>	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	<input type="checkbox"/> in Text, NRC Form					
<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/>	<input type="checkbox"/> 50.73(a)(2)(x)	<input type="checkbox"/> 366A)						

LICENSEE CONTACT FOR THIS LER (12)				TELEPHONE NUMBER			
NAME <b>Julius W. Bryant</b>				AREA CODE <b>(704)</b>			
				73.71(b) <b>875-4162</b>			

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS *
X6	EF	52	I005	Y					

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR
<input checked="" type="checkbox"/> YES (if yes, complete EXPECTED SUBMISSION DATE)				<input type="checkbox"/> NO		02	01	2001

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

**Unit Status:** At the time of the RPS and ESF actuation, both Unit 1 and Unit 2 were in Mode 1 at 100% Power.

**Event Description:** On November 15, 2000, McGuire Unit 2 experienced a main turbine runback caused by actuation of over-power-delta-temperature (OPDT) and over-temperature-delta-temperature (OTDT) runback logic. The OPDT and OTDT channels actuated following the opening of electrical circuit breaker KXB-37 which supplies power to the logic circuitry. The channels were not actuated by a valid OPDT or OTDT condition. Subsequent to the runback, the Unit 2 reactor was manually tripped when the OPDT and OTDT runback signals did not clear. The manual trip of the Unit 2 reactor represented an actuation of the Reactor Protection System (RPS). Following the Unit 2 reactor trip, an Engineered Safety Feature (ESF) actuated when the 2A and 2B Motor Driven Auxiliary Feedwater (CA) Pumps and the Unit 2 Turbine Driven CA Pump auto-started due to Lo-Lo Steam Generator (SG) levels. Plant equipment necessary to safely shutdown the unit operated correctly.

**Event Cause:** Cause investigation is still in progress. Upon completion, Revision 1 to this LER will be submitted providing the event cause.

**Corrective Action:** Cause investigation is still in progress. Upon completion, Revision 1 to this LER will be submitted providing the corrective actions as needed.