

Power Reactor

Event # 44732

Site: MCGUIRE		Notification Date / Time: 12/18/2008 15:54 (EST)	
Unit: 1 2	Region: 2	State : NC	Event Date / Time: 12/18/2008 (EST)
Reactor Type: [1] W-4-LP,[2] W-4-LP		Last Modification: 12/18/2008	
Containment Type: ICE COND ICE COND			
NRC Notified by: JIM EFFINGER		Notifications: JAY HENSON R2	
HQ Ops Officer: MARK ABRAMOVITZ		WILLIAM RULAND NRR	
Emergency Class: NON EMERGENCY		PART 21 GROUP	
10 CFR Section:			
21.21	UNSPECIFIED PARAGRAPH		

Unit	Scram Code	RX Crit	Init Power	Initial RX Mode	Curr Power	Current RX Mode
1	N	Yes	100	Power Operation	100	Power Operation
2	N	Yes	100	Power Operation	100	Power Operation

DEFECTIVE OPTICAL ISOLATORS

"Duke Energy Carolinas, LLC (Duke) herein makes the following notification under 10CFR21.21(d)(3)(i) of defective digital optical isolators. The isolators are Commercial Grade Items dedicated by Duke. Failure analysis, conducted by the manufacturer, determined that a manufacturing defect with the isolator capacitor will cause the output voltage to drop when the isolator is not energized and there is a very light load on the output. The subject digital optical isolators are Model 175C180, manufactured by E-max Instruments (also known as Electro-Max) 13 Inverness Way, South Englewood, CO 80112. These digital optical isolators could be utilized in a variety of applications at Duke's McGuire and Catawba nuclear stations. There are no known applications for these digital optical isolators at Oconee.

Initial Safety Significance: None. Defective digital optical isolators were never installed. Duke protocols require the conduct of a pre-installation bench test and a post installation test to assure these isolators perform satisfactorily in service. E-max Instruments has issued a Model 175C180 recall for all uninstalled isolators. Duke has returned all uninstalled digital optical isolators to the supplier. Duke is the only known nuclear utility purchasing E-max Instruments Model 175C180 digital optical isolators.

"The McGuire and Catawba Senior NRC Resident Inspectors were notified of this Part 21 notification on Dec 18, 2008."

IE19
NRR

Enclosure 4.2
NRC Event Notification Worksheet

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STATE: "THIS IS THE MCGUIRE NUCLEAR SITE IN NRC REGION 2 MAKING AN EVENT NOTIFICATION REPORT"				
NOTIFICATION TIME/DATE	UNIT	CALLER'S NAME	CALLBACK TELEPHONE #:	NRC OPERATIONS OFFICER CONTACTED
	N/A	Jim Effinger	ENS 1-888-270-0173 or (704) - 875-6044	
EVENT TIME & ZONE	Region II	EVENT DATE	POWER/MODE BEFORE	POWER/MODE AFTER
N/A (time)		12-18-08	N/A	N/A

EVENT CLASSIFICATIONS	
<input type="checkbox"/>	GENERAL EMERGENCY
<input type="checkbox"/>	SITE AREA EMERGENCY
<input type="checkbox"/>	ALERT
<input type="checkbox"/>	UNUSUAL EVENT
<input type="checkbox"/>	TRANSPORTATION (10 CFR 20)
<input type="checkbox"/>	MATERIAL/EXPOSURE (10 CFR 20)
<input checked="" type="checkbox"/>	OTHER (10 CFR 21, 21(c)(1)(3)(i))

1-Hr Non-Emergency	
<input type="checkbox"/>	(50.72 b1(a)) TS Deviation
<input type="checkbox"/>	(70.52) (a) and (b) Accidental Criticality OR
<input type="checkbox"/>	(72.74) (a) Loss or theft of SNM

4-Hr Non-Emergency	
<input type="checkbox"/>	(50.72 b2 (I)) TS Required S/D
<input type="checkbox"/>	(50.72 b2 (IV)(A)) ECCS Discharge to RCS
<input type="checkbox"/>	(50.72 b2 (IV)(B)) RPS Actuation - critical scram
<input type="checkbox"/>	(50.72 b2 (XI)) Offsite Notification
<input type="checkbox"/>	(72.75)(b1) Deviation from ISFSI T.S.
<input type="checkbox"/>	(70.50(a)) SNM Protective action(s)
<input type="checkbox"/>	PHYSICAL SECURITY (73.71)

8-Hr Non-Emergency 10CFR 50.72(b)3	
<input type="checkbox"/>	(72.75)(c1) Spent Fuel Storage SSC defect.
<input type="checkbox"/>	(72.75)(c2) Spent Fuel Storage degradation.
<input type="checkbox"/>	(72.75)(c3) Fuel Storage related offsite medical.
<input type="checkbox"/>	(50.72 b3 (XII)) Offsite Medical
<input type="checkbox"/>	(50.72 b3 (II)(A)) Degraded Condition
<input type="checkbox"/>	(50.72 b3 (II)(B)) Unanalyzed Condition
<input type="checkbox"/>	(50.72 b3 (IV)(A)) Valid Actuation of System listed in Encl. 4.3.
<input type="checkbox"/>	(50.72 b3 (V)(A)) Safe S/D Capability
<input type="checkbox"/>	(50.72 b3 (V)(B)) RHR Capability
<input type="checkbox"/>	(50.72 b3 (V)(C)) Control of Rad Release
<input type="checkbox"/>	(50.72 b3 (V)(D)) Accident Mitigation
<input type="checkbox"/>	(50.72 b3 (X)(III)) Lost ENS
<input type="checkbox"/>	(50.72 b3 (X)(III)) Lost Other Assess./Comms
<input type="checkbox"/>	(50.72 b3 (X)(III)) Emergency Siren INOP

24-Hr. Non-Emergency	
<input type="checkbox"/>	Material/Exposure (10CFR20)
<input type="checkbox"/>	(72.75)(d1) Fuel Storage equipment failure.
<input type="checkbox"/>	(73 App G) safeguards vulnerabilities
<input type="checkbox"/>	26.73 Significant events involving fitness for duty.
<input type="checkbox"/>	(70.50(b1)) Contamination event restrictions.
<input type="checkbox"/>	(70.50(b2)) Equipment failure
<input type="checkbox"/>	(70.50(b3)) Unplanned medical treatment
<input type="checkbox"/>	(70.50(b4)) Fire/explosion damage to licensed material
<input type="checkbox"/>	ISFI Certificate of Compliance

EVENT DESCRIPTION

Include: Systems affected, actuation's & their initiating signals, causes, effect of event on plant, actions taken or planned, etc.

ATTACHED

Continue on Enclosure 4.2 page 2 of 2 if necessary.

NOTIFICATIONS	YES	NO	WILL BE	ANYTHING UNUSUAL OR NOT UNDERSTOOD? <input type="checkbox"/> YES <input type="checkbox"/> NO
NRC RESIDENT	<input checked="" type="checkbox"/>			(Explain above)
STATE(s)		<input checked="" type="checkbox"/>		DID ALL SYSTEMS FUNCTION AS REQUIRED YES <input type="checkbox"/> NO <input type="checkbox"/>
LOCAL		<input checked="" type="checkbox"/>		(Explain above)
OTHER GOV AGENCIES		<input checked="" type="checkbox"/>		MODE OF OPERATION EST. RESTART ADDITIONAL INFOR ON BACK
MEDIA/PRESS RELEASE		<input checked="" type="checkbox"/>		UNTIL CORRECTED DATE: <input type="checkbox"/> YES <input type="checkbox"/> NO

APPROVED BY: Thad Rame TIME/DATE: 1544 12/18/08
Operations Shift Manager/Emergency Coordinator (eastern) mm dd yy

Enclosure 4.2
NRC Event Notification Worksheet

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RADIOLOGICAL RELEASES: CHECK OR FILL IN APPLICABLE ITEMS (specific details/explanations should be covered in event description)						
LIQUID RELEASE	GASEOUS RELEASE	UNPLANNED RELEASE	PLANNED RELEASE	ONGOING	TERMINATED	
MONITORED	UNMONITORED	OFFSITE RELEASE	T.S. EXCEEDED	RM ALARMS	AREAS EVACUATED	
PERSONNEL EXPOSED OR CONTAMINATED		OFFSITE PROTECTIVE ACTIONS RECOMMENDED		State release path in description		

NOTE: Contact Radiation Protection Shift to obtain the following information.

IF the notification is due and the information is not available,
THEN mark "Not Available" and complete the notification.

	Release Rate (Ci/sec)	% T.S. LIMIT	HOO GUIDE	Total Activity (Ci)	% T.S. LIMIT	HOO GUIDE
Noble Gas			0.1 Ci/sec			1000 Ci
Iodine			10 uCi/sec			0.01 Ci
Particulate			1 uCi/sec			1 mCi
Liquid (excluding tritium & dissolved noble gases)			10 uCi/min			0.1 Ci
Liquid (tritium)			0.2 Ci/min			5 Ci
Total Activity						

RECORD MONITORS IN ALARM	PLANT STACK (EMF 35, 36, 37)	CONDENSER/AIR EJECTOR (EMF 33)	MAIN STEAM LINE (UNIT 1-EMF 24,25,26,27 UNIT 2-EMF 10, 11, 12,13)	SG BLOWDOWN (EMF 34)	OTHER
RAD MONITOR READINGS:					
ALARM SETPOINTS: TRIP II					
% T.S. LIMIT (if applicable)		NOT APPLICABLE		NOT APPLICABLE	

RCS OR SG TUBE LEAKS: CHECK OR FILL IN APPLICABLE ITEMS (specific details/explanations should be covered in event description)

LOCATION OF THE LEAK (e.g. SG#, valve, pipe, etc.):

LEAK RATE: gpm/gpd	T.S. LIMITS EXCEEDED:	SUDDEN OR LONG TERM DEVELOPMENT:	
LEAK START DATE: TIME:	COOLANT ACTIVITY: (Last Sample)	PRIMARY Xe eq. _____ mCi/ml	SECONDARY Xe eq. _____ mCi/ml
		Iodine eq. _____ mCi/ml	Iodine eq. _____ mCi/ml

LIST OF SAFETY RELATED EQUIPMENT NOT OPERATIONAL:

EVENT DESCRIPTION (Continued from Enclosure 4.2 page 1 of 2)

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