ILLINDIS POWER COMPANY



U- 601652 L45-90(04-23)-LP 2C.220

¥.,

ar Se

CLINTON POWER STATION, P.O. BOX 678, CLINTON, ILLINDIS 61727

s

April 23, 1990

10CFR50.73

Docket No. 50-461

. .

* *

5

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

Subject: Clinton Power Station - Unit 1 Licensee Event Report No. 90-006-00

Dear Sir:

Please find enclosed Licensee Event Report No. 90-006-00: Inadequately Specified Job Steps for a Plant Modification Results in Placing a Process Radiation Monitor In Service Without It's Required Filter. This report is being submitted in accordance with the requirements of 10CFR50.73.

Sincerely yours, F. A. Spangenberg, III Manager - Licensing and Safety

JAB/rgw

Enclosure

cc: NRC Resident Office NRC Region III, Regional Administrator INPO Records Center Illinois Department of Nuclear Safety NRC Clinton Licensing Project Manager

9004300131 900423 PDR ADDCK 05000461 S PDC

NRC	Form 366	
19-63		۰.

NRC Form 366

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

APPROVED OMB NO. 3150-0104 EXPIRES: 8/31/88

		_		
(19 44)			Sec. 7	-
	 20:	•	31/	
	 -	-	-	-

									1000							
FACILIT	Y NAME I	1) 7. Le										DOCKET NUMBER	(2)		PA	GE (3)
TITLE I	I Ine	deau	atel	v S.	ion	d Job St	000 1	0r 1	Dient	Mode	Flootion	0 15 10 10	101410	6 1 1	1 0	F 0 4
ωY.	Pro	cess	Rad	liati	on Mon	itor In	Servi	ce Wi	thout	Its H	Required H	Results in Filter	n Placi	ng	a	
EV	ENT DAT	E (5)	T		LER NUMBER	(6)	RE	PORT DA	TE (7)		OTHER	FACILITIES INVO	LVED (8)			
MONTH	DAY	YEAF	YEA	IR	SEQUENTIA	L REVISION	MONTH	DAY	YEAR		FACILITY NA	MES	DOCKET N	UMBER	(5)	
											NONE		0 15 10	10	101	11
0 3	2 1	9 (9	0 -	000	- 010	04	2 3	9 0				0 15 10	10	101	11
OPE	RATING	14	THIS	REPOR	T IS SUBMITT	ED PURSUANT	TO THE R	EQUIREM	ENTS OF 1	0 CFR 8: /	Check one or more	of the following) (1)	1)			
POWE	. 1		+	20.402(-	20.405	c)			60.73(e)(2)(iv)		73.71	(5)		
LEVE (10)	0 1	0,0	-	20.405	1(1)(0)		60.36 ie	(1)		-	60,73(a)(2)(v)		73.71	(c)		
		••••••		20.405	1(1)(#)	X	60.734	(2)(1)		-	50.73(a)(2)(viii)(AJ	00/0W	and in	Text, NR	C Form
				20.4066)(1)(iv)		60.73/4	(2)(8)			60.73(a)(2)(vili)(8)				
				20.406)(1)(v)		50.734	(2)(#)			60.73(e)(2)(x)					
NAME						1	ICENSEE	CONTACT	FOR THIS	LER (12)						
S E	Pac		Die									APEA CODE	TELEPHONE	NUMB	ER	
D. L	. nas	or,	Dire	ctor	- Pla	nt Maint	enanc	e, ex	tensi	on 320	04	0. 1. 7	0. 2. 5		0.0	
					COMPLETE	ONE LINE FOR	EACH CO	MPONENT	FAILURE	DESCRIBE	D IN THIS REPOR	1211/	91315	1-	818	1811
CAUSE	SYSTEM	COM	PONENT		ANUFAC-	REPORTABLE TO NPRDS			CAUSE	SYSTEM	COMPONENT	MANUFAC	REPORTAL	BLE		
														-		
A	IL	M10	1 ^N 1	E	0 7 0	N										
	1	1	1.1	1							1.1.1					
			-taraka		EUPPLEM	INTAL REPORT	EXPECTE	D (14)				f••	1	THI	DAV	VEAD
												EXPECTE SUBMISSIC	N		DAT	TEAN
YES	(11 901. 00	mpiere i	XPECTE	O SUBA	ISSION DATE	7)	X	NO				DATE (15	'	1	1	1
		On M main Stac serv acti moni a No reve of a inst ORIX the prov caus of t main main reve caus	farch iten	h 21 ance isch aft y a l sta echn d th lter ed in 002 to c doo spec f th ince ince ince	, 1990, outage arge Pr er inst Radiati tus boa ical Sp at ther . A Ch n ORIX- was res cument cific j is even tenance activi planni	with the e, the He cocess Ra- callation on Protect and did mo- cecifican rewas no emistry PR002. ctored to for the ob steps at is att plannen ty. Con ng proce a filter	he pla eating adiat h of a ection hot id tion of tion of tiono	ant i g, Ve ion M a mod n Tech denti channe cker nicia lter trable ficat to rovie to rovie to rovie to rovie to rovie	n COLL ntilat oniton ificat hnicia fy the el of on ORI n veri was it statu ion pers de spe ctions ing pr moval	O SHUT ting a r ORIX tion. an not work the m IX-PRO lfied hstall us. I erform t the sonnel ecific s incl cocedu	DOWN for and Air Co Subseque ed that to conitor. DO2 indica that the ed on Man investigat ed on ORI filter wa error du job step ude revie	a planned onditionin as placed ant to the the radiant issued of investiga- ting inst filter wa the radiant filter wa the radiant fil	d ing (HV/ is tion to corr ation tallat: as not 090, an aled th did not led. 1 failur	AC) rect ion nd hat t The re and		

LICENSEE EV	ENT REPORT (LER) TEXT CONTIN	UATIO	N	U.S	APPROI EXPIRES	R REC VED O 5: 8/31	TEGULATORY COMMISSION D OMB NO. 3150-0104 /31/86						
FACILITY NAME (1)	DOCKET NUMBER (2)	T	LER NUMBER (6) PAGE (
Clinton Power Station		YEAR		SEQUENTIAL	REV	BION		T					
	0 5 0 0 0 4 6 1	910	-	01016	-0	10	0120	F014					
TEXT IN more space is required, use additional NRC Form 3864's)	(17)		******	**************************************		1 1		-					

DESCRIPTION OF EVENT

On March 7, 1990, the plant was in Mode 4 (COLD SHUTDOWN), and the reactor [RCT] was at atmospheric pressure and approximately 130 degrees Fahrenheit. The third planned maintenance outage was in progress. The Heating, Ventilating and Air Conditioning (HVAC) Stack Discharge [IL] Process Radiation (PR) Monitor [MON] ORIX-FR002 was removed from service and declared inoperable to allow installation of modification PR-028. Modification PR-028 specifies installation of a mass flow meter [MTR] on ORIX-PR002 and was completed through post maintenance testing (PMT) on March 9, 1990.

On March 21, 1990, at 0900 hours, Operations requested that ORIX-PR002 be placed in operation. At 0915 hours, ORIX-PR002 was made operable and placed in service in accordance with Clinton Power Station (CPS) procedure 7410.75, "Operation of Digital AR/PR Monitors." The redundant monitor ORIX-PR001 was then placed in standby. When ORIX-PR002 was placed in service, the Radiation Protection (RP) Office Central Control Terminal indicated that the monitor was functioning properly, in accordance with CPS procedure 9911.24, "AR/PR Shiftly/Daily Surveillances."

On March 22, 1990, during performance of CPS 9911.24, a Radiation Protection Technician (RPT) noted a discrepancy on the radiation monitor status board. The discrepancy was that a non-Technical Specification "alpha" channel of monitor ORIX-PR002 had been declared inoperable and no corresponding work document was shown on the status board. The "alpha" channel provides gross alpha-activity indication of any sample collected on the filter within the sampler portion of the monitor Operability of the "alpha" channel is not specifically required by the Technical Specifications. The RPT went to the monitor to obtain the work document number from the corresponding deficiency tag and noticed that there was no sticker indicating date and time of installation of the filter in the monitor. The filter is required to support iodine/particulate sampling capability in accordance with the Technical Specifications.

On March 22, 1990, at 2220 hours, RF requested that a Chemistry Technician(CT) verify the suspected absence of the filter. The CT confirmed the absence of the filter and then installed a filter restoring ORIX-PR002 to an operable status at 2245 hours.

No automatic or manually initiated safety system responses were necessary to place the plant in a safe and stable condition. No other equipment or components were inoperable at the start of this event such that their inoperable condition contributed to this event.

LICENSEE EVENT REPO	ORT (LER) TEXT	CONTINUATION	
---------------------	----------------	--------------	--

U.S. NUCLEAR REGULATORY COMMISSION

EX.PIRES: 8/31/89

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)						PAGE (3)			
Clinton Power Station		YEAR		SEQUENTIAL NUMBER	REVE	ION		T			
	0 15 10 10 10 14 16 11	910	-	01016	-01	0	013	OF	01	4	
TEXT // move state is manifed the statistical time to	and the second s	111	1	101010	1-1	~		1	-	l	

CAUSE OF EVENT

orm 3664

The cause of this event is attributed to personnel error. The maintenance planner who prepared the work document for installation of modification PR-028 failed to provide the specific steps necessary to test the modification. The step provided for testing specified partial performance of CPS surveillance procedure 9437.40, "HVAC Exhaust PRM ORIX-PR001/2 FUNC/CAL Test." Specifically, the step required performance of the channel functional tests section of 9437.40. The channel functional test sections required Control and Instrument (C&I) technicians to remove the installed filter [FLT], however, the sections did not require reinstallation of the filter. The requirement to reinstall the filter is in a separate section of the procedure for calibration of the "alpha" channel of ORIX-PR002. Since the work document did not include the requirement to calibrate the "alpha" channel, this section was incorrectly marked not applicable.

Inadequacy of CPS procedure 9437.40 contributed to this event. Reinstallation of the filter is only specified when the "alpha" channel is calibrated. The "alpha" channel calibration was not required for testing the modification.

CORRECTIVE ACTION

Maintenance has reviewed the maintenance planning process and determined that the use of partial procedures does not receive adequate review. Maintenance is revising CPS procedure 1502.01, "Conduct of Maintenance" to provide guidance for specifying the use of partial procedures for maintenance activities. This revision is scheduled to be completed by September 30, 1990. Training on this revision is scheduled to be completed by October 31, 1990.

Maintenance planners will be trained on using partial procedures. This training will emphasize that a general job step such as "use CPS XXXX.XX as appropriate" is not acceptable, however, a specific job step such as "use CPS XXXX.XX steps 8.5.4 through 8.6.8" is acceptable. This training is scheduled to be completed by May 30, 1990.

C&I will revise CPS 9437.40 to appropriately place the C&I technician verification of filter reinstallation in the procedure. Additional procedures that address filter installation will be reviewed and revised as necessary to ensure that the filter reinstallation steps are in the appropriate places. These revisions are scheduled to be completed by December 31, 1990.

HRC Form BORA	U.S.	U.S. NUCLEAR REGULATORY COMMISSION APPROVED CIMB NO. 3150-0104 EXPIRES: 6/31/68						
FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6) PAGE (3)
Clipton Power Station		YEAR		SEQUENTIAL	REVISION		T	
Clinton Power Station	0 5 0 0 0 4 6 1	910	-	0 0 0 6	-010	014	OF	0 4

In addition to the above action, RP will revise CPS procedure 7410.75 to require a signature indicating verification of filter installation. This revision is scheduled for completion by May 30, 1990.

ANALYSIS OF EVENT

This event is reportable under the provisions of 10CFR50.73(a)(2)(1)(B) due to operation prohibited by the plant's Technical Specifications. Technical Specification 3.3.7.12 requires at least one HVAC Stack Discharge PR monitor to be operable and in-service at all times. A review of the event indicates that the Technical Specification requirements for monitoring iodine and particulates was not met from 0915 hours on March 21, 1990 when ORIX-PR002 was incorrectly declared operable until March 22, 1990 at 2245 hours when the filter was installed. During this time the plant was in Mode 4 and the redundant HVAC PR monitor ORIX-PR001 was operable but not in-service.

Assessment of the safety consequences and implications of this event indicates that the event was not safety significant for existing plant conditions or other plant modes. At no time during the period of inoperability was the plant in a condition which required the monitor to perform its intended function. Not being cognizant of the missing filter would not adversely impact Illinois Power Company's capability for offsite dose assessment to the public under design basis conditions since the monitors, which monitor releases under design basis conditions were operable.

ADDITIONAL INFORMATION

LER 87-040-00 discussed a violation of the plant's Technical Specifications due to collection media missing from the particulate/iodine sampler of the HVAC Common Stack high range radioactivity monitor.

LER 88-023-00 discussed a violation of the plant's Technical Specifications due to a flush valve being mispositioned on an Accident Range Gaseous Effluent Monitor.

For further information regarding this event, contact S. E. Rasor, Director-Plant Maintenance at (217) 935-8881, extension 3204.

ORIX-PRO02 is an HVAC PRM monitor manufactured by Eberline Instrument corporation.