

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Clinton Power Station	DOCKET NUMBER (2) 050004611	PAGE (3) 1 OF 04
--	--------------------------------	---------------------

TITLE (4) Failure to Adequately Control the Equipment Qualification Program Results in Inoperable Standby Gas Treatment System and Plant Shutdown

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES			DOCKET NUMBER(S)
04	29	88	012	00	05	27	88	None			050000

OPERATING MODE (9) 2	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)																	
	POWER LEVEL (10) 01010	20.402(b)	20.405(a)(1)(i)	20.405(a)(1)(ii)	20.405(a)(1)(iii)	20.405(a)(1)(iv)	20.405(a)(1)(v)	20.405(a)(1)(vi)	20.405(a)(1)(vii)	20.405(a)(2)(i)	20.405(a)(2)(ii)	20.405(a)(2)(iii)	20.405(a)(2)(iv)	20.405(a)(2)(v)	20.405(a)(2)(vi)	20.405(a)(2)(vii)	73.71(b)	73.71(e)

LICENSEE CONTACT FOR THIS LER (12)

NAME R. T. Kerestes, Director - Engineering Projects, Nuclear Station Engineering Department x3982	TELEPHONE NUMBER AREA CODE 217935-8881
--	--

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC
X	BHM	O ₁	I206	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

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

ABSTRACT

On April 29, 1988, with the plant in Mode 2 (STARTUP), the plant manager directed operators to place the plant in Mode 4 (COLD SHUTDOWN) because the Standby Gas Treatment System was considered to be inoperable as a result of indeterminate Equipment Qualification (EQ) of damper actuators. The EQ Manual requires the actuators to be cycled ten times every ninety days to ensure that all sliding seals are kept lubricated. Clinton Power Station was cycling these actuators only once per month as required by Technical Specifications. The actuators were subsequently cycled as required by the EQ Manual and no deficiencies were identified. The cause of the event was attributed to the failure of the engineering department to exercise adequate programmatic control of the maintenance of the EQ Program. Corrective actions include review of all EQ Manual requirements to ensure that a preventative maintenance (PM) task has been assigned for each requirement and to ensure that all affected equipment has an associated PM task assigned. Additionally, a program has been implemented which ensures the engineering department has an in-line review function for all EQ actions. An additional action requires the Quality Assurance department to perform an audit of the EQ Program.

IE2211

8806070150 880527
PDR ADOCK 05000461
S DCD

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Clinton Power Station	DOCKET NUMBER (2) 0 5 0 0 0 4 6 1 8 8	LER NUMBER (3)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		8	0 1 2	0 0	0 2	OF 0 4

TEXT (if more space is required, use additional NRC Form 366A's) (17)

DESCRIPTION OF EVENT

On March 31, 1988, utility maintenance personnel identified water in the limit switch [33] compartment of a motor-operated [MO] valve [V] located in the main steam tunnel. Utility personnel then conducted an inspection of other valves in the same area to determine the extent of equipment qualification concerns. As a result of this inspection, on April 29, 1988, utility engineering personnel performed an audit of Equipment Qualification (EQ) requirements having a periodicity of three years or less. At approximately 1600 hours on April 29, this audit identified that sixteen Standby Gas Treatment [BH] System (SGTS) damper [DMP] actuators [MO] were not cycled as required by the EQ Manual. The EQ Manual requirement is based on the actuator manufacturer's recommendation. The actuator manufacturer, ITT General Controls, specified that the NH-90 series actuators must be cycled ten full stroke cycles every ninety days to ensure that all sliding seals [SEAL] are kept lubricated.

Both trains of the SGTS were considered to be inoperable because EQ of the damper actuators was indeterminate. On April 29, 1988, at approximately 2050 hours, with the plant in Mode 2 (STARTUP) at approximately 175 degrees Fahrenheit and atmospheric pressure, the Manager - Clinton Power Station (CPS) directed operators to place the plant in Mode 4 (COLD SHUTDOWN).

The conditions described above involving water intrusion of valves and other components have been corrected and determined not to be reportable under the provisions of 10CFR50.73.

No other 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.

CAUSE OF EVENT

The cause of this event is attributed to the failure of the Nuclear Station Engineering Department (NSED) to exercise adequate programmatic control for the maintenance of the EQ Program. NSED did not adequately review the Special Operations/Maintenance Requirements section of the EQ Manual to ensure that preventative maintenance tasks were initiated in accordance with their corresponding requirements.

CORRECTIVE ACTION

The sixteen SGTS damper actuators were cycled the ten full strokes specified by the manufacturer and the lubrication was verified to be proper. No deficiencies were identified during this activity.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Clinton Power Station	DOCKET NUMBER (2) 0 5 0 0 0 4 6 1 8 8	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		- 0 1 2	- 0 0	0 3	OF 0 4	

TEXT (if more space is required, use additional NRC Form 366A x) (17)

Illinois Power (IP) reviewed all EQ Manual Requirements having a periodicity of three years or less. This review identified seven requirements, including the SGTS damper actuator cycling requirement, for which a mechanism to implement the requirement did not exist. None of these requirements had an impact on equipment operability. Job steps which implement the EQ Manual requirements were also reviewed for adequacy, and no deficiencies were identified. Based on these reviews and the issues identified, IP has concluded that, within the three year scope of review, no other problem existed with the EQ of installed equipment.

The Illinois Power Quality Assurance Department is in the process of performing an audit of the EQ program. This audit is scheduled to be complete by May 31, 1988.

A program which ensures that NSED has an in-line review function for all EQ actions has since been approved and implemented.

IP will review all EQ manual requirements having a periodicity of greater than three years to ensure that a preventative maintenance (PM) task has been assigned for each requirement and to ensure that all affected equipment has an associated PM task assigned. This activity is expected to be complete by July 30, 1988.

ANALYSIS OF EVENT

This event is reportable under the provisions of 10CFR50.73(a)(2)(i)(A) due to the completion of a nuclear plant shutdown required by the plant's Technical Specifications.

Assessment of the safety consequences and implications of this event indicates that the event was not safety significant. Although the sixteen actuators were not cycled at the EQ Manual required rate and frequency, they were cycled once every month during Technical Specification required surveillance testing. Surveillance Procedure 9067.01, STANDBY GAS TREATMENT SYSTEM TRAIN FLOW/HEATER OPERABILITY requires only thirteen of the sixteen actuators to be cycled. The other three actuators are not cycled because, by design, these actuators are normally open and fail open. Since these three do not perform an active function, IP has determined that they do not require periodic cycling. IP and Sargent and Lundy determined that the once per month cycling of the thirteen actuators was adequate to ensure that all sliding seals were kept lubricated. Based on this determination, the ITT General Control damper actuators in the SGTS system would have performed their safety functions. As a result of these determinations, IP is amending the EQ Manual to require that the SGTS damper actuators be cycled one full stroke every month.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Clinton Power Station	DOCKET NUMBER (2) 0 5 0 0 0 4 6 1 8 8	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		8	0 1 2	0 0	0 4	OF 0 4

TEXT (IF MORE SPACE IS REQUIRED, use additional NRC Form 3054's) (17)

IP has determined that the SGTS damper actuators were not inoperable during this event. All EQ concerns affecting plant operability were resolved by approximately 2320 hours on May 1, 1988 and at approximately 2327 hours, the Manager - CPS gave permission to conduct a reactor startup. The plant entered Mode 2 at 0037 hours on May 2, 1988.

ADDITIONAL INFORMATION

The SGTS damper actuators discussed during this event are model numbers NH-91 and NH-95 and were manufactured by ITT General Controls.

There have been no previous LERs at CPS involving the completion of a nuclear plant shutdown required by Technical Specifications.

There have not been any previous similar LERs at CPS involving the failure to perform periodic EQ Program requirements.

For further information regarding this event, contact R. T. Kerestes, Director - Engineering Projects, Nuclear Station Engineering Department at (217) 935-8881, extension 3982.

U-601202
L45-88(05-27)-LP
2C.220

ILLINOIS POWER COMPANY



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

10CFR50.73
May 27, 1988

Docket No. 50-461

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

Subject: Clinton Power Station - Unit 1
Licensee Event Report No. 88-012-00

Dear Sir:

Please find enclosed Licensee Event Report No. 88-012-00:
Failure to Adequately Control the Equipment Qualification Program
Results in Inoperable Standby Gas Treatment System and Plant Shutdown.
This report is being submitted in accordance with the requirements of
10CFR50.73.

Sincerely yours,

A handwritten signature in cursive script that reads 'F. A. Spangenberg, III'.

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

RSF/krm

Enclosure

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

IER2
1/1