

Clinton Power Station
8401 Power Road
Clinton, IL 61727

U-604050
January 24, 2012

10 CFR 50.73
SRRS 5A.108

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Clinton Power Station, Unit 1
Facility Operating License No. NPF-62
NRC Docket No. 50-461

Subject: Licensee Event Report 2011-005-00

Enclosed is Licensee Event Report (LER) No. 2011-005-00: Missed Surveillance Due To Preconditioning Valve Prior To Leak Rate. This report is being submitted in accordance with the requirements of 10 CFR 50.73.

There are no regulatory commitments contained in this report.

Should you have any questions concerning this report, please contact A. Khanifar, at (217) 937-3800.

Respectfully,



William G. Noll
Site Vice President
Clinton Power Station

RSF/blf

Enclosure: Licensee Event Report 2011-005-00

cc: Regional Administrator – NRC Region III
NRC Senior Resident Inspector – Clinton Power Station
Office of Nuclear Facility Safety – IEMA Division of Nuclear Safety

IE22
NRK

LICENSEE EVENT REPORT (LER)(See reverse for required number of
digits/characters for each block)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA/Privacy Section (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

1. FACILITY NAME

Clinton Power Station, Unit 1

2. DOCKET NUMBER

05000461

3. PAGE

1 OF 3

4. TITLE

Missed Surveillance Due To Preconditioning Valve Prior To Leak Rate Test

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
12	01	2011	2011	- 005 -	00	01	24	2012	N/A	N/A
9. OPERATING MODE 5			11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)							
10. POWER LEVEL 000			<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)				
			<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)				
			<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)				
			<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)				
			<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)				
			<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)				
			<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)				
			<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER				
			<input type="checkbox"/> 20.2203(a)(2)(vi)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A				

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME

A. Khanifar, Site Engineering Director

TELEPHONE NUMBER (Include Area Code)

(217) 937-3800

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

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED☐ YES (If yes, complete 15. EXPECTED SUBMISSION DATE)☒ NO**15. EXPECTED SUBMISSION DATE**

MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On December 1, 2011, with the reactor shut down for refueling, an as-found Local Leak Rate Test (LLRT) was performed for Reactor Core Isolation Cooling turbine exhaust check valve 1E51-F040. The station primary containment leakage rate testing program which implements the requirements of 10 CFR 50, Appendix J, requires an as-found test to be performed prior to a scheduled maintenance activity to open and inspect the valve. The recorded leakage for the as-found LLRT was within acceptable limits. A step in the test procedure establishing the test lineup required the valve to be stroked open and shut by normal means. A subsequent evaluation concluded that the pre-test stroking was unacceptable preconditioning; therefore, the as-found LLRT was invalid and considered to be a missed surveillance and a condition prohibited by Technical Specification 3.6.1.3. The test procedure incorrectly required the preconditioning and caused this event. Corrective actions include revising the test procedure and reviewing other similar check valve test procedures to determine the extent of this condition. An analysis to determine the actual impact of the valve stroke concluded that the preconditioning, although unnecessary to establish the test conditions, would have had little actual influence on the as-found test results.

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NARRATIVE

PLANT AND SYSTEM IDENTIFICATION

General Electric – Boiling Water Reactor, 3473 Megawatts Thermal Rated Core Power
Energy Industry Identification System (EIS) codes are identified in the text as [XX].

EVENT IDENTIFICATION

Missed Surveillance Due To Preconditioning Valve Prior To Leak Rate Test

A. Plant Operating Conditions Before the Event

Unit: 1

Event Date: 12/1/11

Event Time: 1031 hours CST

Mode: 5

Mode Name: Refueling

Reactor Power: 0 percent

B. DESCRIPTION OF EVENT

On December 1, 2011, at approximately 1031 hours, with the reactor in Mode 5 (Refueling) for refueling outage C1R13, an as-found Local Leak Rate Test (LLRT) was performed for Reactor Core Isolation Cooling [BN] turbine [TRB] exhaust check valve [ISV] 1E51-F040, a containment isolation valve. In accordance with the station primary containment leakage rate testing program (Procedure CPS 1305.01) which implements the requirements of 10 CFR 50, Appendix J, this as-found test was required to be performed prior to a scheduled preventive maintenance (PM) activity to open and inspect the valve. The LLRT was performed in accordance with procedure CPS 9861.05D010, RCIC Turbine Exhaust Water Leak Rate Test Data Sheet. The recorded leakage for the as-found LLRT was within acceptable limits at 0.078 gallons per minute (minimum gauge reading).

The open and inspect PM activity found the valve internals to be in proper operating condition with no deficiencies identified and proper freedom of motion.

A post-maintenance, as-left, LLRT was completed following the PM activity with satisfactory results.

Following completion of the LLRT on the check valve, questions arose as to the acceptability of stroking the check valve prior to performing the test. A step in the procedure establishing the test lineup required valve 1E51-F040 to be stroked open with its lever arm and then the valve disk was allowed to drop closed, shut by normal means. A subsequent evaluation of this activity concluded that the pre-test stroking of the valve was unacceptable preconditioning; therefore, the as-found LLRT was invalid. Because the existing as-found conditions no longer existed, the as-found leakage rate for the valve could no longer be quantified. The invalid surveillance test is considered to be a missed surveillance under Technical Specification 3.6.1.3, Primary Containment Isolation Valves, and is reportable under the provisions of 10 CFR 50.73 (a)(2)(i)(B) as a condition prohibited by the plant's Technical Specifications.

An analysis was performed to determine actual impact of the preconditioning activity on the test results. The preconditioning activity prior to the as-found LLRT did not unduly influence the as-found test results because the activity did approximate normal valve operation and the subsequent inspection of the valve found no evidence to suggest the valve may have been degraded prior to testing, such that the degradation was masked by the stroking of the valve.

There were no structures, systems, or components that were inoperable at the start of the event that contributed to this event and this event had no impact on reactor coolant temperature and pressure.

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NARRATIVE

Issue Reports 1300655 and 1310612 were initiated to investigate this event.

C. CAUSE OF EVENT

Test procedure CPS 9861.05D010 was inadequate and incorrectly required valve 1E51-F040 to be manually stroked prior to performing the LLRT as a step in establishing the test lineup.

D. SAFETY CONSEQUENCES

There were no actual consequences for this event. An analysis concluded that there was reasonable assurance check valve 1E51-F040 would have performed its design function to isolate the primary containment penetration. Additionally, the as-found LLRT for the redundant motor-operated valve (MOV) for this containment penetration was completed with satisfactory results and thus the MOV was capable of completing the safety function to isolate the primary containment penetration.

No loss of safety function occurred during this event.

E. CORRECTIVE ACTIONS

Procedure CPS 9861.05D010 is being revised to clarify stroking requirements for valve 1E51-F040.

Other similar Appendix J check valve test procedures are being reviewed to determine the extent of this condition.

F. PREVIOUS OCCURRENCES

A search of Issue Reports for the last five years did not identify previous similar events of unacceptable preconditioning for LLRTs.

G. COMPONENT FAILURE DATA

None