



Clinton Power Station
8401 Power Road
Clinton, IL 61727

U-604151
December 27, 2013

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 2013-007-00

Enclosed is Licensee Event Report (LER) No. 2013-007-00: Failed to Enter Tech Spec Action for Exceeding Reactor Coolant Heatup 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 Mr. Jeffrey E. Cunningham, Acting Regulatory Assurance Manager, at (217)-937-3160.

Respectfully,


For Keith Taber
B. Keith Taber
Site Vice President
Clinton Power Station

RSF/blf

Enclosure: Licensee Event Report 2013-007-00

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

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NRR*

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.

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4. TITLE
Failed to Enter Tech Spec Action for Exceeding Reactor Coolant Heatup Rate

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
10	28	2013	2013	- 007	- 00	12	27	2013		05000
										05000

9. OPERATING MODE 2	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)			
10. POWER LEVEL 0	<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 Jeffrey E. Cunningham, Regulatory Assurance Manager	TELEPHONE NUMBER (Include Area Code) 217-937-3160
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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 <input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO	15. EXPECTED SUBMISSION DATE MONTH: DAY: YEAR:
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ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On 10/28/13, reactor startup was in progress. At 2100 hours, reactor coolant temperature was 156 degrees Fahrenheit (F) and the reactor was at the point of adding heat. During this startup, the main steam isolation valves (MSIVs) could not be opened, as planned, due to the Main Steam Lines being full of water following the RPV pressure test and RPV temperature and pressure continued to rise. Operators attempted to slow the heatup by inserting a control rod, but were unsuccessful. At 2130 hours, the Shift Manager (SM) was notified of the heatup trend and that the reactor coolant temperature had increased by about 111 degrees F over a one-hour period. The SM determined the reactor pressure vessel (RPV) metal temperatures recorded on the log were still well under a rate of change of 100 degrees F per hour. The SM incorrectly applied the Technical Specification (TS) requirement for RPV coolant heatup as he applied this limit to the rate of change of metal temperatures. As a result, the TS required actions, including a requirement to complete a review for continued operation, were not entered or completed for exceeding the coolant heatup rate of 100 degrees F per hour. This error was identified on 11/1/13 during a review of the heatup logs. The cause of the failure to enter the appropriate TS was the SM did not reference the available guidance for acceptance criteria.

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CONTINUATION SHEET**

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		2013	- 007	- 00		

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 text as [XX].

EVENT IDENTIFICATION

Tech Spec Action Not Met for High Reactor Coolant Heatup Rate

A. Plant Operating Conditions Before the Event

Unit: 1	Event Date: 10/28/2013	Event Time: 2130 hours CDT
Mode: 2	Mode Name: STARTUP	Reactor Power: 0 percent

B. DESCRIPTION OF EVENT

On 11/1/13 while reviewing logs (CPS 9000.06D001, Heatup/Cooldown, Inservice Leak and Hydrostatic Testing 30 Minute Temperature Logs), a Senior Reactor Operator (SRO) identified that a high reactor coolant heatup rate had occurred during the reactor startup following refueling outage C1R14 on 10/28/13. At 1845 hours on 11/1/13, Operations management reviewed this event and concluded that the Actions of Technical Specification (TS) 3.4.11, "Reactor Coolant System Pressure/Temperature Limits" had not been properly applied.

On 10/28/13 a reactor startup was in progress with the plant in Mode 2. The reactor [RCT] achieved criticality at 2028 hours. At 2100 hours, reactor coolant temperature was 156 degrees Fahrenheit (F) and the reactor was at the point of adding heat. As reactor pressure begins to rise, the Main Steam Isolation Valves (MSIVs) [ISV] are normally opened to align the Reactor Pressure Vessel [RPV] to the Main Condenser. At this point, the MSIVs could not be opened due to the Main Steam Lines being full of water following the RPV pressure test and RPV temperature and pressure continued to rise. Operators inserted a control rod to slow the heatup rate. At 2130 hours, the heatup logs showed reactor coolant temperature was about 267.3 degrees F and reactor coolant pressure was about 28 pounds per square inch (psi). This was a reactor coolant heatup rate greater than 100 degrees F per hour. Operators notified the Operations Shift Manager (SM) of the heatup trend and that the reactor coolant temperature had increased by about 111 degrees F over a one-hour period from 2030 to 2130 hours. The SM reviewed the log and noted that the RPV metal temperatures recorded on the log were still well under a rate of change of 100 degrees F per hour.

TS 3.4.11, Figure 3.4.11-3 for RPV heatup/cooldown limits states that the limit for the rate of heatup and cooldown of the reactor coolant limit is less than or equal to 100 degrees F per hour. Further, with the heatup limits not met, TS 3.4.11 Required Action A.1 requires restoration of parameter(s) to within limits within 30 minutes; and Required Action A.2 requires an assessment of the Reactor Coolant System to determine if it is acceptable for continued operation within 72 hours. During this event the reactor coolant heatup limit was exceeded without these TS actions being completed within their required associated Completion Time. The SM incorrectly implemented the TS requirement for RPV heatup by incorrectly applying the limitations for coolant temperature against metal temperature heatup rates and that reactor coolant temperatures are monitored for the purpose of ensuring that the metal temperature limits are not exceeded.

On the basis of exceeding the TS reactor coolant system (RCS) heatup rate and not completing the TS Required Actions within the Required Completion Time, this event is reportable under the provisions of

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NARRATIVE

10 CFR 50.73(a)(2)(i)(B), as a condition that was prohibited by the plant's Technical Specifications. Issue Report No.1580123 was initiated to investigate this event.

C. CAUSE OF EVENT

During this event, the SM made an incorrect TS determination. The SM did not review the surveillance requirements contained within the procedure being performed nor did he reference TS or TS Bases documents as required by process. Additionally, no peer check was sought by an independent SRO as expected by management

D. SAFETY CONSEQUENCES

This event had no actual consequences. The heatup rate was terminated relatively quickly by the insertion of control rods and stabilization of pressure. Exelon Generation Company, LLC Engineering evaluated the recorded heatup rate and concluded it was bounded by pre-analyzed transients; therefore the structural integrity of the RPV was not adversely affected at any point during the RPV heatup.

E. CORRECTIVE ACTIONS

This was a personnel accountability issue where the SM on duty did not adequately review and apply TS. The Operations department performed a stand down to review this event and to reinforce expectations associated with making TS reviews. Performance management of the individuals involved in this event has been completed and the SM has been removed from license duties. Additionally, this event will be presented to the License Operator Requalification Program and Shift Manager / Shift Technical Advisor curriculum review committees for incorporation into future training.

F. PREVIOUS OCCURRENCES

A review for previous occurrences did not identify similar events at Clinton Power Station.

G. COMPONENT FAILURE DATA

None