Clinton Power Station
8401 Power Road
Clinton, IL 61727

U-604364
August 1, 2017

10CFR 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
Licensee Event Report 2017-006-00

Subject: LER 2017-006-00

Enclosed is Licensee Event Report (LER) 2017-006-00: Secondary Containment Inoperable During Mode Change Due to Doors Propped Open. 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. Dale Shelton, Regulatory Assurance Manager, at (217) 937-2800.

Respectfully,

Theodore R. Stoner
Site Vice President
Clinton Power Station

KP/bsz

Attachment: Licensee Event Report 2017-006-00

cc:
Regional Administrator- NRC Region III
NRC Senior Resident Inspector - Clinton Power Station
Office of Nuclear Facility Safety - Illinois Emergency Management Agency

IE22
NRR

NRC FORM 366 (04-2017) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 03/31/2020

# LICENSEE EVENT REPORT (LER)

(See Page 2 for required number of digits/characters for each block)

(See NUREG-1022, R.3 for instruction and guidance for completing this form http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/)



| 1. FACILITY NAME | 2. DOCKET NUMBER | 3. PAGE |
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| Clinton Power Station, Unit 1 | 05000461 | 1 OF 3 |

4. TITLE

Secondary Containment Inoperable During Mode Change Due to Doors Propped Open

| 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 |
| 06 | 02 | 2017 | 2017 | - 006 | - 00 | 08 | 01 | 2017 | | 05000 |
| | | | | | | | | | FACILITY NAME | DOCKET NUMBER |
| | | | | | | | | | | 05000 |

| 9. OPERATING MODE | 11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: *(Check all that apply)* | | | |
|---|---|---|---|---|
| 2 | ☐ 20.2201(b) | ☐ 20.2203(a)(3)(i) | ☐ 50.73(a)(2)(ii)(A) | ☐ 50.73(a)(2)(viii)(A) |
| | ☐ 20.2201(d) | ☐ 20.2203(a)(3)(ii) | ☐ 50.73(a)(2)(ii)(B) | ☐ 50.73(a)(2)(viii)(B) |
| | ☐ 20.2203(a)(1) | ☐ 20.2203(a)(4) | ☐ 50.73(a)(2)(iii) | ☐ 50.73(a)(2)(ix)(A) |
| | ☐ 20.2203(a)(2)(i) | ☐ 50.36(c)(1)(i)(A) | ☐ 50.73(a)(2)(iv)(A) | ☐ 50.73(a)(2)(x) |
| 10. POWER LEVEL | ☐ 20.2203(a)(2)(ii) | ☐ 50.36(c)(1)(ii)(A) | ☐ 50.73(a)(2)(v)(A) | ☐ 73.71(a)(4) |
| | ☐ 20.2203(a)(2)(iii) | ☐ 50.36(c)(2) | ☐ 50.73(a)(2)(v)(B) | ☐ 73.71(a)(5) |
| | ☐ 20.2203(a)(2)(iv) | ☐ 50.46(a)(3)(ii) | ☐ 50.73(a)(2)(v)(C) | ☐ 73.77(a)(1) |
| 000 | ☐ 20.2203(a)(2)(v) | ☐ 50.73(a)(2)(i)(A) | ☐ 50.73(a)(2)(v)(D) | ☐ 73.77(a)(2)(i) |
| | ☐ 20.2203(a)(2)(vi) | ☒ 50.73(a)(2)(i)(B) | ☐ 50.73(a)(2)(vii) | ☐ 73.77(a)(2)(ii) |
| | | ☐ 50.73(a)(2)(i)(C) | ☐ OTHER Specify in Abstract below or in NRC Form 366A | |

12. LICENSEE CONTACT FOR THIS LER

| LICENSEE CONTACT | TELEPHONE NUMBER *(Include Area Code)* |
|---|---|
| Dale A. Shelton, Regulatory Assurance Manager | (217) 937-2800 |

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 | 15. EXPECTED SUBMISSION DATE | MONTH | DAY | YEAR |
|---|---|---|---|---|
| ☐ YES *(If yes, complete 15. EXPECTED SUBMISSION DATE)* ☒ NO | | | | |

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

On June 2, 2017, plant personnel were performing welding activities on the 'B' Reactor Water Cleanup System (RT) pump while the plant was in operating Mode 4. The Operations Work Control Supervisor (WCS) had given maintenance personnel authorization to prop both 'B' RT pump room doors open so that welding cables could extend through both doors in support of maintenance activities. The doors are part of the plant secondary containment boundary. Authorization granted by the WCS was executed without utilizing the plant barrier impairment process (PBI) per plant procedures. Prior to the plant's transition to operating Mode 2, Operations personnel made a plant announcement requiring the establishment of primary and secondary containment. The plant then transitioned to operating Mode 2 at 0241. However, both RT Pump 'B' doors remained propped open during the plant mode change. This condition was discovered by shift personnel at 0300 (CDT) and secondary containment was declared inoperable. The loss of secondary containment was caused by personnel not following the PBI per plant procedure. Secondary containment was subsequently restored twenty four minutes after discovery of the open 'B' RT doors. Corrective actions taken and planned include implementing management action response checklist (MARC) principles for the responsible supervisor and completing a read and sign for planners and schedulers associated with the PBI process.

| 1. FACILITY NAME | 2. DOCKET NUMBER | 3. LER NUMBER | | |
|---|---|---|---|---|
| | | YEAR | SEQUENTIAL NUMBER | REV NO. |
| Clinton Power Station, Unit 1 | 05000461 | 2017 | - 006 | - 00 |

NARRATIVE

## PLANT AND SYSTEM IDENTIFICATION

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

## EVENT IDENTIFICATION

Secondary Containment Inoperable During Mode Change

## A. Plant Operating Conditions before the Event

Unit: 1 Event Date: June 2, 2017 Event Time: 0241
Mode: 2 Mode Name: Power Operation Reactor Power: 000 percent

## B. DESCRIPTION OF EVENT

On June 2, 2017, while the plant was in Mode 4, maintenance personnel were performing welding activities associated with the 'B' Reactor Water Cleanup System (RT) [CE] pump. In support of these activities, an Operations Work Control Supervisor (WCS) provided authorization to prop open both RT 'B' pump room doors (a Secondary Containment (SC) boundary) to allow welding cables to extend through the doors. The authorization was granted, however, without utilizing the plant barrier impairment process (PBI) per plant procedures. This process provides guidance on actions necessary to evaluate and compensate for an impaired barrier. As the plant prepared for startup and the transition to operating Mode 2 commenced, Operations personnel made a plant announcement requiring that primary and secondary containment be established. The announcement was not heard by personnel working on the 'B' RT pump. The plant entered Mode 2 at 0241. The doors were found propped open at 0300 shortly after the plant entered Mode 2 by Operations shift personnel. Technical Specification (TS) 3.6.4.1, Secondary Containment, actions were then entered to restore SC. Both 'B' RT doors were later closed and SC was restored twenty four minutes following discovery of the open RT doors.

NARRATIVE

C. CAUSE OF EVENT

The cause of the event was that the PBI process was not followed per plant procedures. Maintenance personnel did not follow the PBI process by asking the WCS if a PBI was needed and the WCS was focused on restoration of RT Pump 'B' and failed to consider the need to review the PBI procedure and allowed the work to be performed without a PBI.

D. SAFETY ANALYSIS

There were no safety consequences associated with inoperability of SC as described in this report. Secondary Containment differential pressure remained negative throughout this event.

The SC vacuum is kept slightly negative relative to the atmospheric pressure to prevent leakage to the atmosphere. The Standby Gas Treatment (VG) [BH] is the safety-related system which is relied upon to perform this function following an accident. During the event the VG system was available during this event. The open RT 'B' doors were later closed and TS actions were subsequently exited. Therefore, the ability of the station to maintain secondary containment in an accident scenario was never jeopardized or challenged by the loss of secondary containment.

This event is reportable under the provisions of 10 CFR 50.73(a)(2)(i)(B) as operation prohibited by Technical Specifications.

This event report does not identify any safety system functional failures.

E. CORRECTIVE ACTIONS

Corrective actions planned or taken following the event included implementing the management action response checklist (MARC) principles for the responsible supervisor and conducting a read and sign of the PBI procedure and its interaction with the work process for schedulers and planners.

F. PREVIOUS SIMILAR OCCURENCES

This are no previous similar occurrences involving a mode change with an inoperable secondary containment.

G. COMPONENT FAILURE DATA

There was no component failure data associated with this event.