



LaSalle County Station

2601 North 21st Road
Marseilles, IL 61341
815-415-2000 Telephone
www.exeloncorp.com

10 CFR 50.73

RA18-048

June 28, 2018

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

LaSalle County Station, Unit 2
Renewed Facility Operating License No. NPF-18
NRC Docket No. 50-374

Subject: Licensee Event Report 2017-004-02, Two Main Steam Safety Relief
Valves Failed Inservice Lift Inspection Pressure Test

In accordance with 10 CFR 50.73(a)(2)(i)(B), Exelon Generation Company, LLC
(EGC) is submitting Licensee Event Report (LER) Number 2017-004-02 for LaSalle
County Station, Unit 2.

There are no regulatory commitments in this letter. Should you have any questions
concerning this report, please contact Mr. Guy V. Ford, Jr., Regulatory Assurance
Manager, at (815) 415-2800.

Respectfully,

A handwritten signature in black ink, appearing to read "Harold T. Vinyard".

Harold T. Vinyard
Plant Manager
LaSalle County Station

Enclosure: Licensee Event Report

cc: Regional Administrator – NRC Region III
NRC Senior Resident Inspector – LaSalle County Station



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/>)

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 Information Services Branch (T-2 F43), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by 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 LaSalle County Station, Unit 2	2. Docket Number 05000374	3. Page 1 OF 3
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4. Title
Two Main Steam Safety Relief Valves Failed Inservice Lift Inspection Pressure 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
02	17	2017	2017	- 004	- 02	06	28	2018	NA	NA
									Facility Name	Docket Number
									NA	NA

9. Operating Mode	11. This Report is Submitted Pursuant to the Requirements of 10 CFR §: <i>(Check all that apply)</i>			
5	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)
	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)
10. Power Level	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)
000	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> 73.77(a)(1)
	<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)(D)	<input type="checkbox"/> 73.77(a)(2)(i)
	<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)(vii)	<input type="checkbox"/> 73.77(a)(2)(ii)
	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> Other (Specify in Abstract below or in NRC Form 366A)		

12. Licensee Contact for this LER

Licensee Contact John Keenan, Engineering Director	Telephone Number (Include Area Code) (815) 415-3800
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13. Complete One Line for each Component Failure Described in this Report

Cause	System	Component	Manufacturer	Reportable to ICES	Cause	System	Component	Manufacturer	Reportable to ICES
X	AD	RV	C710	Yes	NA	NA	NA	NA	NA

14. Supplemental Report Expected	15. Expected Submission Date						
<input type="checkbox"/> Yes (If yes, complete 15. Expected Submission Date) <input checked="" type="checkbox"/> No	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Month</th> <th>Day</th> <th>Year</th> </tr> <tr> <td>NA</td> <td>NA</td> <td>NA</td> </tr> </table>	Month	Day	Year	NA	NA	NA
Month	Day	Year					
NA	NA	NA					

Abstract (Limit to 1400 spaces, i.e., approximately 14 single-spaced typewritten lines)

During the February 2017 Unit 2 refueling outage, two main steam safety relief valves (SRV) did not pass Technical Specification (TS) Surveillance Requirement 3.4.4.1 and Inservice Testing (IST) Program lift pressure requirements. Both SRVs (2B21-F013C and 2B21-F013L) lifted below their expected lift pressures. On February 16, 2017, SRV 2B21-F013C was required to lift within plus or minus three percent of 1175 psi (i.e., 1175 psi plus or minus 35.2 psi), but actually lifted at 1131 psi. On February 17, 2017 SRV 2B21-F013L was required to lift within plus or minus three percent of 1195 psi (i.e., 1195 psi plus or minus 35.8 psi), but actually lifted at 1130 psi.

Multiple test failures are reportable under 10 CFR 50.73(a)(2)(i)(B) as an operation or condition prohibited by the plant's Technical Specifications. Both SRVs lifted prior to their expected lift pressures, which is conservative in regards to maintaining reactor pressure vessel over-pressure limits. Both SRVs were replaced during the outage. A failure analysis was conducted; however, it did not identify a cause for the valves lifting below their expected lift set-points.



**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

(See NUREG-1022, R.3 for instruction and guidance for completing this form
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1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
		YEAR	SEQUENTIAL NUMBER	REV NO.
LaSalle County Station, Unit 2	05000374	2017	- 004	- 02

NARRATIVE

PLANT AND SYSTEM IDENTIFICATION

LaSalle County Station Unit 2 is a General Electric Boiling Water Reactor with 3546 Megawatts Thermal Rated Core Power.

The main steam safety relief valves (SRVs) are designed to prevent over-pressurization of the reactor pressure vessel (RPV) during transients and abnormal conditions, which protects against a failure of the reactor coolant pressure boundary (RCPB). There are thirteen SRVs installed on the four main steam lines, which discharge near the bottom of the suppression pool to condense the steam through SRV tailpipes that exhaust beneath the suppression pool surface.

CONDITION PRIOR TO EVENT

Unit(s): 2 Event Date: February 17, 2017 Event Time: 0635 CST
 Reactor Mode(s): 5 Mode(s) Name: Refueling Power Level: 0 percent

DESCRIPTION OF EVENT

During the February 2017 Unit 2 refueling outage L2R16, two main steam SRVs did not pass the lift pressure requirements of the Inservice Testing (IST) Program and Technical Specification (TS) Surveillance Requirement 3.4.4.1. Both SRVs lifted outside their tolerance and below their expected lift pressures. On February 16, 2017, SRV 2B21-F013C was removed and set-pressure tested. SRV 2B21-F013C was required to lift within plus or minus three percent of 1175 psi (i.e., 1175 psi plus or minus 35.2 psi), but actually lifted at 1131 psi. On February 17, 2017 SRV 2B21-F013L was removed and set-pressure tested. SRV 2B21-F013L was required to lift within plus or minus three percent of 1195 psi (i.e., 1195 psi plus or minus 35.8 psi), but actually lifted at 1130 psi.

CAUSE OF EVENT

Disassembly and inspection of valves 2B21-F013C and 2B21-F013L were performed at NWS Technologies to determine the cause for the failures. However, the cause for 2B21-F013C and 2B21-F013L to fail their SRV set pressure tests was found to be indeterminate.

REPORTABILITY AND SAFETY ANALYSIS

This condition was discovered while Unit 2 was outside the mode of applicability for TS 3.4.4, Safety/Relief Valves (Modes 1, 2 and 3); however, multiple test failures are reportable under 10 CFR 50.73(a)(2)(i)(B) as an operation or condition prohibited by the plant's Technical Specifications.

The safety significance of this condition was minimal. The out-of-tolerance lift pressures were discovered while the plant was in Mode 5 during a refueling outage and the SRVs were not required to be operable. Both SRVs lifted prior to their expected lift pressures, which is conservative in regards to maintaining reactor pressure vessel overpressure limits.

CORRECTIVE ACTIONS

Both SRVs 2B21-F013C and 2B21-F013L were replaced during the outage. Vendor lab testing was performed that did not identify a cause of the failures.



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LaSalle County Station, Unit 2	05000374	2017	- 004	- 02

NARRATIVE

PREVIOUS OCCURRENCES

A review of past events for both units identified a previous occurrence in 2015 on Unit 2 for multiple SRV test failures as follows.

LER 374-2015-002-01:

During the February 2015 Unit 2 refueling outage L2R15, two main steam safety relief valves (SRV) did not pass TS Surveillance Requirement 3.4.4.1 and Inservice Testing Program lift pressure requirements. Both SRVs lifted below their expected lift pressures. SRV 2B21-F013S was required to lift within plus or minus three percent of 1150 psi (i.e., 1150 psi plus or minus 34.5 psi) and actually lifted at 1099 psi. SRV 2B21-F013M was required to lift within plus or minus three percent of 1195 psi (i.e., 1195 psi plus or minus 35.8 psi) and actually lifted at 1145 psi. A failure analysis was conducted by a vendor testing laboratory, but the cause for the valves lifting below their set-point was indeterminate.

COMPONENT FAILURE DATA

Manufacturer: Crosby
Device: Main Steam Safety Relief Valves, ASME Section III, Class 1
Component ID: Style HB-65-BP, Size 6R10