



**Nebraska Public Power District**

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NLS2018067  
December 10, 2018

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

Subject: Licensee Event Report No. 2018-003-00  
Cooper Nuclear Station, Docket No. 50-298, DPR-46

Dear Sir or Madam:

The purpose of this correspondence is to forward Licensee Event Report 2018-003-00.

There are no new commitments contained in this letter.

Sincerely,

John Dent, Jr.  
Vice President Nuclear-  
Chief Nuclear Officer

/jo

Attachment: Licensee Event Report 2018-003-00

cc: Regional Administrator w/attachment  
USNRC - Region IV

NPG Distribution w/attachment

Cooper Project Manager w/attachment  
USNRC - NRR Plant Licensing Branch IV

INPO Records Center w/attachment  
via ICES entry

Senior Resident Inspector w/attachment  
USNRC - CNS

SORC Chairman w/attachment

SRAB Administrator w/attachment

CNS Records w/attachment

IEZZ  
NRR



**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](mailto: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.

<b>1. Facility Name</b> Cooper Nuclear Station	<b>2. Docket Number</b> 05000298	<b>3. Page</b> 1 of 3
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**4. Title**  
Safety Valve Failure Results in Loss of Safety Function

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	10	2018	2018	- 003	- 00	12	10	2018		05000
									Facility Name	Docket Number
										05000

<b>9. Operating Mode</b>  5	<b>11. This Report is Submitted Pursuant to the Requirements of 10 CFR §: (Check all that apply)</b>											
	<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)		
<b>10. Power Level</b>  000	<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)		
	<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)		
	<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 checked="" 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 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"/> Other (Specify in Abstract below or in NRC Form 366A)		

**12. Licensee Contact for this LER**

Licensee Contact <b>Jim Shaw, Licensing Manager</b>	Telephone Number (Include Area Code) <b>(402) 825-2788</b>
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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

<b>14. Supplemental Report Expected</b>  <input checked="" type="checkbox"/> Yes (If yes, complete 15. Expected Submission Date) <input type="checkbox"/> No	<b>15. Expected Submission Date</b>		
	Month 05	Day 31	Year 2019

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

On September 29, 2018, at 20:53, Cooper Nuclear Station (CNS) commenced Refueling Outage 30 (RE30) and subsequently entered Mode 5 on October 2, 2018, at 02:41.

During RE30 activities, MS-RV-70ARV (Serial Number BL-2463) was removed from service and sent off-site for as-found setpoint pressure testing per station procedure. On October 10, 2018, the as-found testing was performed at National Technical Systems Laboratories (formerly Wyle Laboratories). The valve was tested three times. Per procedure, the acceptance criterion is 1202.8 psig – 1277.2 psig. The as-found testing result for the first test was 1278.6 psig. The second and third tests were performed with the results being 1260.0 psig and 1263.2 psig, respectively. Technical Specifications Surveillance Requirement setpoint criteria for the safety valves are 1240 +/-37.2 psig.

The safety valve is currently at the testing facility awaiting completion of inspection and repair activities. CNS will provide additional event details, the safety significance, cause(s), and corrective action(s) in a supplement to this Licensee Event Report.



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

(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](mailto: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	2. DOCKET NUMBER	3. LER NUMBER		
		YEAR	SEQUENTIAL NUMBER	REV NO.
Cooper Nuclear Station	05000-298	2018	- 003	- 00

**NARRATIVE**

**PLANT STATUS**

Cooper Nuclear Station (CNS) was in Mode 5, Refueling, at 0 percent power, at the time of the event.

**BACKGROUND**

The pressure relief system includes three American Society of Mechanical Engineers code safety valves (SV) [EIS:SB] which are located on the main steam lines [EIS:SB] within the drywell [EIS:NH], between the reactor vessel [EIS:RPV] and the first main steam isolation valve [EIS:ISV]. The SVs provide protection against over pressurization of the nuclear system and discharge directly into the interior space of the drywell.

Technical Specification (TS) Limiting Condition for Operation 3.4.3 requires the safety function of three SVs to be operable. The nominal set pressure and tolerances for these valves are established in CNS TS Surveillance Requirement (SR) 3.4.3.1.

**EVENT DESCRIPTION**

On September 29, 2018, at 20:53, CNS commenced Refueling Outage 30 (RE30) and subsequently entered Mode 5 on October 2, 2018, at 02:41.

During RE30 activities, MS-RV-70ARV (Serial Number BL-2463) was removed from service and sent off-site for as-found setpoint pressure testing per station procedure. On October 10, 2018, the as-found testing was performed at National Technical Systems (NTS) Laboratories (formerly Wyle Laboratories).

The valve was tested three times. Per procedure, the acceptance criterion is 1202.8 psig – 1277.2 psig. The as-found testing result for the first test was 1278.6 psig. The second and third tests were performed with the results being 1260.0 psig and 1263.2 psig, respectively.

TS Surveillance Requirement setpoint criteria for the safety valves are 1240 +/-37.2 psig.

One SV is tested every outage and all three SVs are tested every six years. In addition, TS specify that all three SVs shall be operable. The last time MS-RV-70ARV was tested was in 2012 during RE27. The result of that test was within acceptance criteria at 1255 psig.

The remaining two valves, MS-RV-70BRV and MS-RV-70CRV were also tested for as-found setpoint pressure at NTS on November 1, 2018 and October 30, 2018, respectively. Both of these valves passed the acceptance criteria.

The safety valve is currently at the testing facility awaiting completion of inspection and repair activities. CNS will provide additional event details, the safety significance, cause(s), and corrective action(s) in a supplement to this Licensee Event Report.



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Cooper Nuclear Station	05000-298	YEAR 2018	SEQUENTIAL NUMBER - 003	REV NO. - 00

**BASIS FOR REPORT**

This event is being reported per 10 CFR 50.73(a)(2)(v)(D) as any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident.