

Oyster Creek Route 9 South P.O. Box 388 Forked River, NJ 08731

10 CFR 50.73

RA-16-094

November 16, 2016

U.S. Nuclear Regulatory Commission Attn: Document Control Desk or O-8B1 One White Flint North 11555 Rockville Pike Rockville, MD 20852

> Oyster Creek Nuclear Generating Station Renewed Facility Operating License No. DPR-16 NRC Docket No. 50-219

Subject: Licensee Event Report (LER) 2016-004-00, "Technical Specification Violation Due to Main Steam Safety Valve Setpoint Discovered Out of Tolerance".

Enclosed is LER 2016-004-00 reporting the Technical Specification violation due to a main steam safety valve setpoint discovered out of tolerance during as-found testing, which occurred on September 29, 2016.

This event did not affect the health and safety of the public or plant personnel. This event did not result in a safety system functional failure. There are no regulatory commitments made in this LER submittal.

Should you have any questions concerning this report, please contact Mike McKenna, Regulatory Assurance Manager, at (609) 971-4389.

Respectfully,

Michael Mallow

Michael Gillin Plant Manager Oyster Creek Nuclear Generating Station

Enclosure: NRC Form 366, LER 2016-004-00

cc: Administrator, NRC Region I NRC Senior Resident Inspector - Oyster Creek Nuclear Generating Station NRC Project Manager - Oyster Creek Nuclear Generating Station

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NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION							APPROVED BY OMB: NO. 3150-0104 EXPIRES: 10/31/2018											
(06-2016) 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								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 and Information Collections Branch (T-5 F53), 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										
httr	http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/) num									number, informati	number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.							
1. FACI	1. FACILITY NAME										CK	KET NUMBER	3. P	PAGE				
Oyster Creek 05000219										1	OF	4						
4. TITLE Technical Specification Violation Due to Main Steam Safety Valve Setpoint Discovered Out of Tolerance																		
5. EVENT DATE 6. LER NUMBER 7. REPORT DA							ATE 8. OTHER FACILITIES INVOLVED											
MONTH	DÂY	YEAR	YEAR	SEQL NU	JENTIAL MBER	REV NO.	MONTH	DAY	(	YEAR	1	FACILITY NAME		DOCKET NUMBE			TNUMBER	
09	29	2016	2016	- 004	4 -	00	11	15	;	2016	2016					050	DOCKET NUMBER	
9. OPE	9. OPERATING MODE 11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)												oply)					
			20	20.2201(b)			20.2203(a)(3)(i)			(i)	50.73(a)(2)(ii)(A)			50.73			3(a)(2)(viii)(A)	
	NI		20	.2201(d		20.2203(a)(3)(ii			(ii)		50.73(a)(2)(ii)(B)			50.73(a)(2)(viii)(B)			/iii)(B)	
	14		20.2203(a)(1)				20.2203(a)(4)					50.73(a)(2)(iii)			50.73(a)(2)(ix)(A)			x)(A)
			20.2203(a)(2)(i)				50.36(c)(1)(i)(A)			A)	50.73(a)(2)(iv)(A)			Τ	50.73(a)(2)(x)			
10. PÓ\	NER LE'	VEL	20.2203(a)(2)(ii)				50.36(c)(1)(ii)(A)			(A)	50.73(a)(2)(v)(A)			Ι	73.71(a)(4)			
			20.2203(a)(2)(iii)				50.36(c)(2)				50.73(a)(2)(v)(B)			Τ	73.71(a)(5)			
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14. SUP	PLEMEN	ITAL RE	PORT EX	PECTE	o				<u> </u>		_	15. EXP	ECTED		MONTH	DAY		YEAR
YES (If yes, complete 15. EXPECTED SUBMISSION DATE) XNO										50Bi D	MISSION DATE							
ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)																		
Oyster Creek Nuclear Generating Station was in Cold Shutdown on 09/29/16 for Refueling Outage 1R26 when a condition was discovered during routine laboratory as-found testing that a Safety Valve (SV) (EIIC:RV) removed on 09/27/16 as part of refueling outage maintenance activities did not meet required setpoint tolerances. There were no structures, systems or components out of service that contributed to this event. In accordance with American Society of Mechanical Engineers (ASME) Operation and Maintenance (O&M) Code requirements, two (2) of the nine (9) SVs installed in the plant were scheduled for removal during the refueling outage (1R26) and sent for as-found laboratory testing. Based on information received from the laboratory performing SV as-found testing, Site Engineering personnel determined that SV setpoint deficiencies existed with one (1) of the two (2) SVs removed and sent for testing. Per ASME O&M Code Mandatory Appendix I Section I-1320, two additional SVs were removed from the plant and sent for as-found testing and both met the required setpoint acceptance criteria. One (1) of the four (4) SVs tested exceeded the setpoint tolerance of +/-3% (+/-36 psig) as expecisied in the Technical Specifications (TS). Paragraph 2.3 E																		
as specified in the Technical Specifications (15), Paragraph 2.3.F. This resulted in a condition prohibited by TS and is considered reportable pursuant to 10 CFR 50.73(a)(2)(i)(B).																		

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NRC FORM 366A U.S. NUCLEAR REGULAT	ORY COMMISSION	APPROVED BY OMB: NO. 315	50-0104	EXPIRE	S: 10/31/2018			
	YORT (LER) SHEET	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 and Information Collections Branch (T-5 F53), 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 2050-0104).						
(See NUREG-1022, R.3 for instruction and guidance for http://www.nrc.gov/reading-rm/doc-collections/nuregs	completing this form /staff/sr1022/r3/)	used to impose an information collection NRC may not conduct or sponsor, as collection.	n does not dis nd a person is	play a currently valid OMB not required to respond	control number, the to, the information			
1. FACILITY NAME	2. DOC		3. LER NUMBER					
Oyster Creek, Unit 1	05000-219		YEAR		REV NO.			
	L		2010	- 004	- 00			
<ul> <li>Unit Condition Prior to Discovery of Oyster Creek Nuclear Generating Station 1R26 when a condition was discovered duremoved on 09/27/16 as part refueling out There were no structures, systems or contract of the event of the ev</li></ul>	f the Event (OCNGS) was in uring routine labo tage maintenance aponents out of s Alechanical Engine installed in the pla ratory testing. Ba neering personne ved and sent for SVs were remove tance criteria. On ed in the Technica etermined to have	a Cold Shutdown on 09/2 ratory as-found testing t e activities did not meet ervice that contributed to ant were scheduled for r sed on information recei el determined that SV se testing. Pursuant to ASM d from the plant and sen e (1) of the four (4) SVs al Specifications (TS), Pa e an as-found setpoint v	29/16 for hat a Sa required o this eve this eve and Mair emoval o ived from topoint de AE O&M at for as-f tested ez aragraph alue of -:	Refueling Outag fety Valve (SV) setpoint toleran ent. tenance (O&M) during the refuel the laboratory ficiencies existe Code Mandator ound laboratory xceeded the set 2.3F. One (1) v 3.3% (-40 psig).	ge ces. Code ling ed with y testing point valve, The			
found setpoint tolerance of +/- 3%. This report is being submitted pursuant to Specifications (TS), since one (1) of the S of +/- 36 psi (+/- 3%). The setpoint for the The safety limit was not exceeded. The a and, therefore, the safety limit would not h	10 CFR 50.73(a) Vs removed and one (1) SV was pplicable transien ave been exceed	)(2)(i)(B) for a condition tested exceeded its allo found out-of- tolerance a nt analysis was bounded ded.	prohibite wable TS after rem I by prev	d by Technical S setpoint tolera loval from opera ious analysis re	nce Ition. sults			
Equipment Description								
There are a total of nine (9) SVs installed pressurization event (Code-required – refe pressure to 1375 psig (110%) with a Main the conditions where the:	to prevent failure er to ASME B&P\ Steam Isolation	of the Reactor Pressure / Code). Each valve is d Valve closure while ope	e Vessel lesigned rating at	(RPV) on an ov to limit RPV 1930 MWt, und	er- er			
<ul> <li>Drywell Recirculation Pumps fail</li> <li>Turbine Bypass valves fail to ope</li> <li>Isolation Condensers fail to initial</li> <li>Electromatic Relief Valves fail to</li> </ul>	to trip en te open			-				
These conditions assume a reactor SCRA		where all nine (9) SVs ar	e require	ed to turn the				

These conditions assume a reactor SCRAM on High Flux where all nine (9) SVs are required to turn the pressure transient. The ASME B&PV Code allows an as-found +/- 3% of setpoint pressure variation in the lift point of the valves. Four (4) out of nine (9) SVs have a setpoint of 1212 psig, and the remaining five (5) out of nine (9) valves have a setpoint of 1221 psig.

## **Analysis of Event**

NRC FORM 366A U.S. NUCLEAR REGULAT	ORY COMMISSION	APPROVED BY OMB: NO. 3150	0-0104	EXPIRE	S: 10/31/2018			
(06-2016)) LICENSEE EVENT REP CONTINUATION S (See NUREG-1022, R.3 for instruction and guidance for cr http://www.nrc.gov/reading-rm/doc-collections/nuregs/s	ORT (LER) HEET ompleting this form staff/sr1022/r3/)	Estimated burden per response to comply with this mandatory collection request: 80 hours. Reporter lessons learned are incorporated into the licensing process and fed back to industry. Sent comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-F53), 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 mean- 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 informatio						
1. FACILITY NAME	2. DO(	CKET NUMBER	3. LER NUMBER					
Oyster Creek, Unit 1	05000-219		year 2016	SEQUENTIAL NUMBER	rev no. - 00			
NARRATIVE		4						
There was no actual safety consequences The ASME B&PV Code requires that the F conditions by self-actuated relief valves. A SVs are selected such that the peak press Reactor Coolant Pressure Boundary. The SVs are located on the two main steam lin valves.	associated with RPV (EIIS: RCT) As part of the nucleater sure in the nucleater nine (9) installed nes (EIIS: SB) with	this event. be protected from overp clear pressure relief syste ar system will not exceed d SVs discharge steam d thin the Drywell. The SV	ressure em, the s the ASI lirectly to s are sp	during upset size and number ME Code limits f o the Drywell. T ring-actuated sa	r of for he tfety			
During Cycle 25 operations, there were no for the one (1) SV that tested outside its TS below the - 36 psi (- 3%) TS limit, the value An evaluation of the condition with regard	<ul> <li>plant transients</li> <li>S allowable rang</li> <li>e would have fun</li> </ul>	that required SV operation e was low. Even though actioned properly to provi	on. The the value de press	as-found setpoint ve had setpoint sure relief capab	int bility.			
performed since the nine (9) valves would pressure (1250 psig). The Bases of TS 4.3 limit of 1375 psig is not exceeded."	have limited ove 3E states that: ".	rpressure to below 1109 with all safety valves se	6 (1375 et 36 psi	psig) of design g higher the safe	ety			
This event is not considered risk significan therefore the safety limit would not have be	it. The applicable een exceeded.	e transient was bounded	by previ	ous analysis res	ults			
This event is reportable under 10 CFR 50.	73(a)(2)(i)(B)							
Cause of Event								
The cause of SV being outside of its allowa acknowledges setpoint drift by requiring th be +/- 3%. [The TS specify that the testing	able as-found se e as-left setpoint is done per TS 4	tpoint is attibuted to setp to be +/- 1% and allowir 4.3C.]	oint drift	t. The ASME Co s-found setpoint	ode to			
Corrective Actions								
In accordance with ASME O&M Code Man from the plant and sent for as-found labora that were removed during 1R26 refuel outa Specification 4.3E requirement of an as-lef	idatory Appendix atory testing. Purage were replace ft setpoint tolerar	t I Section I-1320, two (2 rsuant to ASME Code re ad with refurbished SVs t nce of +/- 1%.	) more S quireme hat met	SVs were removents all four (4) S the Technical	ed Vs			
Assessment of Safety Consequence	<del>)</del> S							
The SV being outside of the allowable as-f RPV pressure below the 1375 psig limit. Th ASME Code setpoint, and is no longer inst was performed which shows that with all n exceeded.	ound setpoint did he valve lifted at talled in the plant ine (9) safety val	d not directly impact the 1181 psig during testing t. In accordance with the ves set 36 psig higher, th	valve's a , or 40 p plant's he safety	bility to maintain sig lower than th TS, an analysis y limit is not	n he			

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NRC FORM 366A U.S. NUCLEAR REGU	JLATORY COMMISSION	APPROVED BY OMB: NO. 3150-0104 EXPIRES: 10/31/2018								
(06-2016)) LICENSEE EVENT F CONTINUATIO (See NUREG-1022, R.3 for instruction and guidance	REPORT (LER)	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 and Information Collections Branch (T-5 F53), 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 NBC may not conduct or sponsor, and a preson is not required to respond to the information.								
http://www.nrc.gov/reading-rm/doc-collections/nu	<u> </u>	collection.								
1. FACILITY NAME	2. DOC	KET NUMBER	3. LER NUMBER							
Oyster Creek, Unit 1	05000-219	05000-219			REV NO. - 00					
NARRATIVE Updated Final Safety Analysis Report and the results reported in the supple concerns than those related to the rel	(UFSAR) Section 5.2 mental reload licensir ief valves, the plant's	2 states this analysis is p ng report. As the SVs p TS separately discuss t	performe resent d he actio	ed each fuel cyclo istinctly different ns to be taken up	e oon					
inoperability. The actuation of an SV will be immediately detectable by an observed increase in drywell pressure. Further confirmation can be gained by observing reactor pressure and water level. Operator action in response to these symptoms would be taken regardless of the acoustic monitoring system status, used to alert control room operators of a SV which is stuck open.										
A review of Bases for TS Section 3.13 was performed to ensure that the issue was not indicative of a common mode failure. After receiving the results of the SV as-found testing, two (2) additional valves were removed for laboratory testing, one (1) with a setpoint 1221 psig setpoint, and one (1) with a setpoint of 1212 psig. Both valves were confirmed to meet the required as-found setpoint tolerances.										
Additional Information:										
A. Failed Components:										
One Main Steam Line SV determ	One Main Steam Line SV determined to have setpoint out-of-tolerance.									
B. Previous Similar Events:	B. Previous Similar Events:									
A similar event was identified in October 2005 and reported under LER 2005-005-00. In that specific event, three (3) SVs failed to meet as-found testing. At that time, the plant's TS required SVs setpoint to have a tolerance of +/- 1%. In 2006 OCNGS TS were revised (reference License Amendment No. 261) to align with ASME Code requirements and the lift setpoint tolerances were changed to reflect a +/- 3% variation (+/- 36 psi) for each valve.										
C. Identification of Components refer	red to in this Report:									
Components	EEE 805 System ID	IEEE 803A Function								
Safety Valves E	Elis-SB	EIIC-RV								
Reactor Pressure Vessel E	IIS-RCT	EIIC-RPV								
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