

Entergy Nuclear Operations, Inc. Palisades Nuclear Plant 27780 Blue Star Memorial Highway Covert, MI 49043 Tel 269 764 2000

Jeffery A. Hardy Regulatory Assurance Manager

PNP 2020-030

September 25, 2020

10 CFR 50.73

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

SUBJECT: LER 2020-001-00 – Service Water System Inoperable for Longer than Allowed by Technical Specifications

> Palisades Nuclear Plant Docket 50-255 License No. DPR-20

Dear Sir or Madam:

Entergy Nuclear Operations, Inc., hereby submits the enclosed Licensee Event Report (LER), 2020-001-00, for the Palisades Nuclear Plant. The event is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B) as an operation or condition prohibited by **Technical Specifications.** 

This letter contains no new commitments and no revisions to existing commitments.

Should you have any questions concerning this report, please contact Mr. Jeff Hardy, Regulatory Assurance Manager, at (269) 764-2011.

Sincerely,

JAH/mrp

Attachment: LER 2020-001-00, Service Water System Inoperable for Longer than Allowed by Technical Specifications

CC Administrator, Region III, USNRC Project Manager, Palisades, USNRC **Resident Inspector, Palisades, USNRC** 

## ATTACHMENT

## LER 2020-001-00

## SERVICE WATER SYSTEM INOPERABLE FOR LONGER THAN ALLOWED BY TECHNICAL SPECIFICATIONS

**3 Pages Follow** 

NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSI									ISSION	APPROVED BY OMB: NO. 3150-0104 EXPIRES: 08/31/2023									
(08-2020) LICENSEE EVENT REPORT (LER) (See Page 3 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 FOIA, Library, and Information Collections Branch (T-6 A10M), U.S. Nuclear Regulatory Commission, Washington, DC 2055-0001, or by e-mail to Information and Regulatory Affairs, (3150-0104), Atm: Desk ait <u>oira submission@omb.eop.gov</u> . The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the document requesting or requiring the collection displays a currently valid OMB control number.																			
1. Facility Na	1. Facility Name										2. Docket Number						3. Pa	ige	
PALISADES NUCLEAR PLANT											<b>05000</b> 255 1							OF	3
4. Title SERVICE WATER SYSTEM INOPERABLE FOR LONGER THAN ALLOWED BY TECHNICAL SPECIFICATONS																			
5. Event Date 6. LER Number 7. Report Da							rt Date	8. Other Facilities Involved											
Month	Month Day		Year Sequential		Sequential Number	Revision		Month	Da	Day Yea		T	Facility Name			Docket N			ket Number
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07	27	2020	202	20  -	001 -	0	0	09	25	5   20	)20		Facility Name		Docket Number				
9. Operating Mode 10. Power Level													0.	0000					
1 100%																			
11. This Report is Submitted Pursuant to the Requirements of 10 CFR §: (Check all that apply)																			
10 CFI	10 CFR Part 20 20.2203(a)(2)(vi) 50.36(c)(2)										] 50.73(a)(2)(iv)(A) 50.73(a)(2)(x)								
20.220	20.2203(a)(3)(i)			50.46(a)(3)(ii)						] 50.73(a)(2)(v)(A)			10 CFR Part 73						
20.2201(d)			20.2203(a)(3)(ii)			50.69(g)					50.73(a)(2)(v)(B)			73.71(a)(4)					
20.220	20.2203(a)(4)			50.73(a)(2)(i)(A)			( <b>A</b> )			50.73(a)(2)(v)(C)			73.71(a)(5)						
20.220	10 CFR Part 21			$\overline{\mathbf{V}}$	50.73(a)(2)(i)(B)					50.73(a)(2)(v)(D)			73.77(a)(1)(i)						
20.2203(a)(2)(ii)			21.2(c)				50.73(a)(2)(i)(C)					50.73(a)(2)(vii)			73.77(a)(2)(i)				
20.2203(a)(2)(iii)			10 CFR Part 50				50.73(a)(2)(ii)(A)					50.73(a)(2)(viii)(A)			73.77(a)(2)(ii)				
20.2203(a)(2)(iv)			50.36(c)(1)(i)(A)					50.73(a)	(B)			50.73(a)(2)(viii)(B)							
20.2203(a)(2)(v) 50.36(c)					c)(1)(ii)(A)			50.73(a)	(2)(iii	)			50.73(a)(2)(ix)(A)						
OTHE	R (Spe	cify here,	in abs	stract, or	NRC 366A)	).													
							12	. Licensee	Con	tact for	his l	LE	R						
Licensee Con Jeffery Ha	Licensee Contact   Phone Number (include area code)     Jeffery Hardy, Regulatory Assurance Manager   269-764-2011																		
13. Complete One Line for each Component Failure Described in this Report																			
Cause System		iystem	Component Manufacturer		urer	Reportable to IRIS		IS	Cau	Cause		System Compo		nent Manufactu		urer	irer Reportable to IRIS		
A		Bl	F	-CV	P09	P095 Y													
14. Supplemental Report Expected										vnocted Submiss	tion Data		Month		Day	Year			
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16. Abstract	16. Abstract (Limit to 1560 spaces, i.e., approximately 15 single-spaced typewritten lines)																		

On July 27, 2020, at 22:45 ET, while operating in Mode 1 at 100% power, Palisades Nuclear Plant (PNP) Operators identified that the Bettis operator pin on valve CV-0826, "Component Cooling Water Heat Exchanger E-54B Service Water Outlet," was incorrectly installed. This caused a failure of CV-0826 to open when demanded from the Control Room, rendering the left train of service water inoperable. The condition was corrected, and the Service Water System (SWS) was declared operable on July 28, 2020, at 00:49. Investigation into the cause of the failure concluded that the valve was inoperable since its last satisfactory surveillance test completed on May 27, 2020, until restoration on July 28, 2020. Consequently, the required actions and associated completion time of Technical Specification 3.7.8 (A) were not met.

This condition is reportable in accordance with 10 CFR 50.73 (a)(2)(i)(B) as a Condition Prohibited by Technical Specifications. During the time of left train inoperability, the right train remained operable. Therefore, there were no actual consequences to the general safety of the public, nuclear safety, industrial safety or radiological safety for this event.

NRC FORM 366A U.S. NUCLEAR REGULA	TORY COM	APPROVED BY OMB: NO. 3150-0104 EXPIRES: 08/31/2023										
(08-2020) LICENSEE EVENT REP CONTINUATION S (See NUREG-1022, R.3 for instruction and guidance for http://www.nrc.gov/reading-rm/doc-collections/nured	CORT (LE CHEET	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, Library, and Information Collections Branch (T-6 A10M), U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and the OMB reviewer at: OMB Office of Information and Regulatory Affairs, (3150-0104), Attn: Desk Officer for the Nuclear Regulatory Commission, 725 17th Street NW, Washington, DC 20503, e-mail: <u>gira submission@omb.eop.gov</u> . The NRC may not conduct on sponsor, and a person is not required to respond to, a collection of information unless the document										
		requesting or requiring the collection displays a currently valid OMB control number.										
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NARRATIVE	•			·								
EVENT DESCRIPTION   On July 27, 2020, at 16:26 ET, while operating in Mode 1 at 100% power, operators attempted to throttle open CV-0826   [FCV], "Component Cooling Water Heat Exchanger E-54B Service Water Outlet." During this evolution, the control room position indication for the CV-0826 actuator indicated fully open, however there was a minimal change in service water [BI] pressure indicating the valve itself was not operating as expected.   The Control Room cycled the valve with operators locally observing the valve operation. During this additional valve operation, it was discovered that the Bettis operating pin was incorrectly installed allowing the valve actuator coupling												
The Nuclear Plant Operator (NPO) restored CV-0826 operability by placing the pin in the correct position and reengaging the actuator coupling. The left train SWS was declared operable following satisfactory completion of surveillance testing and the LCO was exited.												
Maintenance was last performed during the previous refueling outage on November 9, 2018. During the period from November 9, 2018, to May 27, 2020, successful surveillance testing indicated that the Bettis actuator was coupled. At the time of discovery, CV-0826 Bettis actuator coupling was disengaged from the valve stem. Investigation into the cause of the failure concluded that the valve was inoperable since its last satisfactory surveillance test completed on May 27, 2020, until restoration on July 28, 2020.												
CAUSE OF THE EVENT The direct cause of the event was determined to be an incorrectly pinned Bettis actuator coupling by a non-licensed operator.												
ASSESSMENT OF SAFETY CONSEQUENCES Based on the actual and potential consequences of the event, the failure of CV-0826 to actuate is of low safety significance.												
The opposite train component to CV-0826 is valve CV-0823, "Component Cooling Water Heat Exchanger E-54A SW Outlet." Although the design basis requires both CV-0826 and CV-0823 to open following a Recirculation Actuation Signal (RAS), an existing engineering analysis demonstrates that a single component cooling water heat exchanger is adequate for heat removal following RAS. Existing procedures provide steps for operators to manually recover the valve operator with adequate time available to restore cooling.												
A review of the narrative logs since May 27, 2020, determined that CV-0823 was operable during the period that CV-0826 was inoperable. Additionally, after discovery of the pin misalignment on CV-0826, the pin was verified to be installed correctly on CV-0823. The opposite train equipment in the SWS was operable and this condition was not a condition that would have prevented the fulfillment of a safety function of structures or systems.												
CORRECTIVE ACTIONS CV-0826 was returned to its intended configuration, testing was performed, and operability was restored.												
Revise procedure SOP-15, Service Water System, Attachment 1, to include steps for proper installation verification.												
NPC FORM 3664 (08-2020)												
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NRC FORM 366A U.S. NUCLEAR REGULA	TORY COM	MISSION	APPROVED BY OMB: NO	. 3150-0104	ŧ.	EXPIRE	S: 08/3	31/2023			
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