



February 03, 2019

NRC 2019-0004  
10 CFR 50.73

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

Point Beach Nuclear Plant, Unit 1  
Docket 50-266  
Renewed License No. DPR-24

Licensee Event Report 266/2019-001-00

Enclosed is Licensee Event Report (LER) 266/2019-001-00 for Point Beach Nuclear Plant, Unit 1 Reactor Trip.

This letter contains no new regulatory commitments.

If you have any questions please contact Mr. Eric Schultz, Licensing Manager, at (920) 755-7854.

Sincerely,

NextEra Energy Point Beach, LLC

A handwritten signature in blue ink, appearing to read "Robert Craven".

Robert Craven  
Site Director

Enclosure

cc: Administrator, Region III, USNRC  
Project Manager, Point Beach Nuclear Plant, USNRC  
Resident Inspector, Point Beach Nuclear Plant, USNRC



## 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 [Infocollect.Resource@nrc.gov](mailto:Infocollect.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

Point Beach Nuclear Plant Unit 1

## 2. Docket Number

05000266

## 3. Page

1 OF 2

## 4. Title

Loss of Main Condenser Cooling results in Manual Reactor Trip

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
12	05	2018	2019	001	00	02	03	2019	NA	05000NA
									Facility Name	Docket Number
									NA	05000NA

9. Operating Mode	11. This Report is Submitted Pursuant to the Requirements of 10 CFR §: (Check all that apply)			
MODE 1	<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 checked="" type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)
10. Power Level  100%	<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 type="checkbox"/> 50.73(a)(2)(v)(D)	<input type="checkbox"/> 73.77(a)(2)(ii)
	<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)(iii)
		<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

Thomas P. Schneider - Senior Licensing Engineer

## Telephone Number (Include Area Code)

920-755-7797

## 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
E	KE	ISV	A180	Y	NA	NA	NA	NA	NA

## 14. Supplemental Report Expected

☐ Yes (If yes, complete 15. Expected Submission Date) ☒ No

## 15. Expected Submission Date

Month	Day	Year
NA	NA	NA

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

At 1539 on December 5, 2018, with Unit 1 operating in MODE 1 at full power, Operators removed Unit 1 from service by manually tripping the reactor when operators identified decaying main condenser vacuum conditions. All control rods fully inserted in the core due to the manual trip. The auxiliary feedwater system started as expected when a valid system actuation occurred after the reactor trip. There was no emergency core cooling system actuation and offsite power was maintained throughout the event.

This event is being reported pursuant to 10 CFR 50.73(a)(2)(iv)(A) for both the manual RPS actuation and also for the automatic initiation of Auxiliary Feedwater.



**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.
Point Beach Nuclear Plant Unit 1	05000-266	2019	001	00

**NARRATIVE****Description of the Event:**

At 1539 on December 5, 2018, with Unit 1 operating in MODE 1 at full power, Operators removed Unit 1 from service by manually tripping the reactor [JD] when operators identified decaying main condenser vacuum conditions. All control rods fully inserted in the core due to the manual trip. The auxiliary feedwater [BA] system started as expected when a valid system actuation occurred after the reactor trip. There was no emergency core cooling system actuation and offsite power was maintained throughout the event.

This event is being reported pursuant to 10 CFR 50.73(a)(2)(iv)(A) for both the manual RPS actuation and also for the automatic initiation of Auxiliary Feedwater.

**Cause of the Event**

Valve 1CW-3502, 1P-30A Circulating Water Pump Discharge Valve [ISV] drifted closed from unmitigated environmental conditions that accelerated corrosion internal to the motor operated valve torque tube resulting in mechanical failure.

**Analysis of the Event**

The circulating water system contains two full capacity cooling water pumps, 1P-30A and 1P-30B. The 1P-30A pump was the single operating pump when operators identified decaying main condenser vacuum. The isolation valve closure resulted in the loss of cooling water to the main condenser and the decay of main condenser vacuum. The operators tripped the reactor and removed the unit from service as continued degrading main condenser vacuum conditions were presented. After the reactor trip, the auxiliary feedwater pumps started as expected and remained available to remove decay heat. As the main condenser vacuum decayed, the main steam isolation valves were closed and reactor coolant system temperature control was established using the steam generator atmospheric steam dump valves. Additionally, the circulating water pump 1A was tripped locally at the breaker when it was unsuccessfully secured from the control room.

**Corrective Actions:**

Interim gusset plates were installed on the 1CW-3502 torque tube and reinforcement plates were installed on the remaining circulating water pump discharge valve torque tubes.

Engineering controls and Maintenance activities will be developed and implemented on the circulating water pump discharge valve torque tubes that will mitigate the accelerated corrosion from the environmental conditions. These actions will be controlled in the corrective action program.

**Safety Significance**

During the event and subsequent recovery actions, there was no loss of any safety systems, structures or components. All plant systems (except the Circulating Water Pump tripped locally at the breaker) functioned as required following the manual reactor trip. All control rods fully inserted into the core as designed to control reactivity and temperature of the core. The reactivity effects during this particular event had no impact on the safety of the core. The event was determined to be of very low safety significance and there was no impact on the health and safety of the public as a result of this event.

**Similar Events:**

There have not been similar events of manual reactor trips from a similar cause in the past three years.

**Component Failure Data:**

90 inch – Allis Chalmers Streamseal Model 50FR Butterfly Valve