

February 14, 2011

NRC 2011-0019 10 CFR 50.73

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

Point Beach Nuclear Plant, Unit 2 Docket 50-301 Renewed License No. DPR-27

Licensee Event Report 301/2010-004-00 Manual Reactor Trip During Startup

Enclosed is Licensee Event Report (LER) 301/2010-004-00 for Point Beach Nuclear Plant (PBNP), Unit 2. This LER documents the completion of a manual reactor trip during startup. Pursuant to 10 CFR 50.73(a)(2)(iv)(A), the event is reportable as any event or condition that resulted in manual or automatic actuation of the reactor protection system.

This submittal contains no new or revised regulatory commitments.

If you have questions or require additional information, please contact Mr. James Costedio at 920/755-7427.

Very truly yours,

NextEra Energy Point Beach, LLC

Larry Meyer Site Vice President

Enclosure

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

NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION					APPR	OVED BY OMB	: NO. 3150-01	04	EXPIRES: 1	0/31/2013				
(10-2010) LICENSEE EVENT 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 Section (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 2055-0001, or by internet e-							
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1. FACILITY NAME Point Beach Nuclear Plant – Unit 2						2. DUU	2. DOCKET NUMBER 3. PAGE 1 of 3							
4. TITLE														
Manual Reactor Trip During Startup														
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ABSTRA	CT (Limi	t to 1400	spaces, i	i.e., approxi	nately 1	5 single-sp	aced type	written l	ines)					
O	n Dece	mber 1	5, 201	10, at 014	48 CS	T, contro	ol room	perso	onnel	initiated a	manual	reactor trip	p of the	
Ur Ur	nit 2 re	actor to	o abort	t a startu	o that	was in p	progress	s. At	the tir	ne of the	event, the	e reactor v	vas	-
ha ba	id beei	al. The 1 receiv	ed wit	th multin	e cont	rol rods	insertir	na fre	elv, as	s indicated	d by indiv	idual rod i	naiann	5
in	indicators and rod bottom lights. All systems functioned as expected following the trip. with all													
. cc	control rods fully inserting into the core.													
Troubleshooting determined that a degraded field connection for the D-10 control rod was the cause														
of the event. The degraded connection was repaired. Unit 2 was returned to service on December 21, 2010, at 0824 CST with no anomalies occurring during startup.														
Additional corrective actions include inspections of the connections during each unit's 2011 refueling outage. These actions are being tracked in the site's corrective action program.														
This 60-day licensee event report is being submitted in accordance with the requirements of 10 CFR 50.73(a)(2)(iv)(A), any event or condition that resulted in manual or automatic actuation of the resolution protoction events of (RRS).														
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IRC FORM 366A U.S. NUCLEAR REGULATORY COMMISSION 10-2010)							
LICENSEE EVENT REPORT (LER) CONTINUATION SHEET							
1. FACILITY NAME	2. DOCKET	6. LER NUMBER	3. PAGE				
Point Beach Nuclear Plant – Unit 2	05000301	YEAR SEQUENTIAL REVISION NUMBER 2010 - 004 - 00	Page 2 of 3				
NARRATIVE		J					
Event Description:							
On December 15, 2010, at 0148 CST, control room personnel initiated a manual reactor trip to abort a startup in progress with the Unit 2 reactor [AC] subcritical.							
During the performance of the Unit 2 reactor startup, both rod control urgent and non-urgent alarms were received. Shortly after receiving the alarms, multiple groups of control rods [AA] inserted freely into the reactor core as indicated by individual rod position indicators and rod bottom lights. Based on these indications, a manual reactor trip of Unit 2 was initiated. All systems functioned as expected following the trip, with all control rods fully inserting into the core.							
This 60-day licensee event report is being submitted in accordance with the requirements of 10 CFR 50.73(a)(2)(iv)(A), any event or condition that resulted in manual or automatic actuation of the reactor protection system (RPS).							
Event Analysis:							
Unit 2 reactor startup was commenced on December 15, 2010, at 0015 CST. While moving Control Bank D from 25 to 52 steps, panel rod control urgent and non-urgent alarms were received. Operators observed multiple rod bottom lights lit and individual rod position indications lowering. The control room alarm system recorder indicated that the control rods freely inserted into the core within 2 seconds. A manual reactor trip was initiated December 15, 2010, at 0148 CST. Both the A and B reactor trip breakers opened as designed and the remaining control rods fully inserted into the core.							
In response to the event, troubleshooting included inspection or testing of rod drive control (RDC) logic cabinet cards; RDC power cabinet cards; Control rod drive mechanism (CRDM) cables and connectors; CRDM power supplies; CRDM coil and insulation resistances; RDC components such as resistors, diodes, and fuses; motor generator output voltage; and neutral bus to ground isolation.							
Components that were repaired or replaced as a result of the troubleshooting included: numerous power supplies in the power cabinets; numerous logic cabinet and power cabinet cards; and the connections from the reactor vessel head to control rod D-10.							
Following completion of the repairs, post-maintena cycling each rod bank, analysis of coil current trac rod selector switch positioned in manual.	Following completion of the repairs, post-maintenance testing was completed satisfactorily, which included cycling each rod bank, analysis of coil current traces and withdrawal of all rods in a simulated startup with the rod selector switch positioned in manual.						
Safety Significance:							
The reactor was subcritical when the rods inserted into the core. The reactivity transient was small and the potential for core damage was minimal. Thus, the safety significance of the event was low. There was no impact on the health and safety of the public because of this event. This is not a safety system functional failure.							

NRC	FORM	366A					
(10-2010)							

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER) CONTINUATION SHEET

	1. FACILITY NAME	2. DOCKET	6. LER NUMBER	3. PAGE	
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	Point Beach Nuclear Plant – Unit 2	05000301	2010 - 004 - 00	Page 3 of 3	

NARRATIVE

Cause:

The cause of the event was a short in the connection for the D-10 control rod between the rod and the reactor vessel head upgrade package patch panel. Both lift coil leads were found damaged with exposed conductors.

Corrective Actions:

As described above, corrective actions included repair or replacement of numerous power supplies in the power cabinets, numerous logic cabinet and power cabinet cards, and the connections from the reactor vessel head upgrade package patch panel to control rod D-10.

In addition to the above, the following actions will be taken and are being tracked in the site's corrective action program:

- Unit 1 and Unit 2 control rod drive mechanism (CRDM) head and patch panel connections will be inspected during each unit's respective 2011 refueling outage.
 - Meggar/ECAD testing will be added to the CRDM PM schedule.
 - Unit 1 24 V DC power supplies will be replaced during that unit's upcoming fall 2011 refueling outage.

Previous Occurrences:

None

Failed Components Identified:

None