

NRC (C)

9-150

## Point Beach Nuclear Plant

## PBNP SHUTDOWN SAFETY ASSESSMENT AND FIRE CONDITION CHECKLIST

Date: May 1, 2004 Time: 0230 Preparer: Michael R Meyer U 1 R 28

NOTE: Refer to base procedure NP 10.3.6 for safety assessment checklist KSF definitions.

NOTE: Whenever fuel has been removed from the reactor vessel and refueling cavity, all key safety functions are GREEN except spent fuel pool cooling.

KEY SAFETY FUNCTION CRITERIA: No/False = 0, Yes/True = 1 through 4

REACTIVITY				Subtotal	Condition
1.	RCS Boron concentration = 3003 ppm				
a.)	For RSD, RCS boron > Refueling boron concentration specified in unit-specific COLR (TRM 2.1) > 2200 ppm				
b.)	For CSD and prior to RSD no fuel motion, RCS boron > boron concentration required by OP 3C	(0-1)	<u>1</u>	0-1	RED
2.	Number of boration paths	(0-2)	<u>1</u>	2	ORANGE
3.	No fuel motion	(0-1)	<u>0</u>	3-4	YELLOW
4.	SR instrumentation operable	(0-1)	<u>1</u>	5	GREEN
	Cavity Boron concentration = 3013 ppm				
	SFP Boron concentration = 3027 ppm				
	Subtotal =		<u>3</u>		

CORE COOLING				Subtotal	Condition
1.	Number of SG available for DHR	(0-2)	<u>0</u>	0-1	RED
2.	Refueling cavity filled	(0-1)	<u>1</u>	2	ORANGE
3.	Number of trains RHR available	(0-2)	<u>1</u>	3	YELLOW
4.	RCS level above REDUCED INVENTORY	(0-1)	<u>1</u>	4-5	GREEN

RCS TEMP = 78°F; 28 days shutdown,  
 RCS Level = Refueling Height  
 RCS Time to Boil 26.5 hrs (Applicable at Cold or Refueling Shutdown)

Subtotal = 3

POWER AVAILABILITY				Subtotal	Condition
1.	Independent off-site power sources available to A-05 and A-06 (totally independent at the 4160 V, 13.8 kV, and 345 kV levels)			1	RED
				2	ORANGE
				3	YELLOW
		(0-2)	<u>2</u>	4-5	GREEN
2.	G-01 or G-02/A-05/B-03 available	(0-1)	<u>1</u>		
	G-03 or G-04/A-06/B-04 available	(0-1)	<u>1</u>		
3.	G-05 available, Reactor Cavity filled to ≥ 23 ft above the top of the reactor vessel flange, upper internals removed and RCS time to boil ≥ 12 hours.	(0-1)	<u>1</u>		
	Subtotal =		<u>5</u>		

INVENTORY				Subtotal	Condition
1.	Pressurizer level ≥ 20 percent w/head on			0-1	RED
		(0-1)	<u>0</u>	2	ORANGE
2.	Refueling Cavity filled (see definition)	(0-3)	<u>3</u>	3	YELLOW
3.	RCS level above REDUCED INVENTORY	(0-1)	<u>1</u>	4	GREEN
4.	Makeup from VCT/BLENDER and/or RWST available	(0-2)	<u>0</u>		
	Subtotal =		<u>4</u>		

Information in this record was deleted  
 in accordance with the Freedom of Information  
 Act, exemptions 4  
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References: NP 10.3.6  
NP 10.2.1

**PBNP SHUTDOWN SAFETY ASSESSMENT AND FIRE CONDITION CHECKLIST**

<b>CONTAINMENT</b>			Subtotal	Condition
1.	Containment integrity (TS 15.1.D) {Containment Operable} {ITS TS 3.6.1} set	(0 or 4) <u>0</u>	0	RED
2.	Containment Closure CL-1E maintained and closure < time to boil	(0 or 2) <u>2</u>	1	ORANGE
3.	No fuel motion	(0-1) <u>0</u>	2-3	YELLOW
4.	DHR Capability:		4-5-6	GREEN
	- cavity flooded and internals out <=			
	<u>OR</u>			
	- at least one SG available			
	<u>OR</u>			
	- one fan cooler with Equip hatch installed and personnel hatches capable of being shut	(0-1) <u>1</u>		
Subtotal = <u>3</u>				

**SPENT FUEL POOL COOLING**  
(ONLY APPLICABLE when starting AND during FULL CORE OFFLOADS)

**NOTE:** Take credit for only one P-12 independent offsite power source during periods of single X-03 or X-04 availability (\*).

			Subtotal	Condition
1.	"A" SFP cooling pump available with power available from:		0-1	RED
	- G-02 or G-01 via 2B-32	(0-1) <u>1</u>	2	ORANGE
	-(*) an independent off-site power source different than that for Train B below	(0-1) <u>1</u>	3	YELLOW
2.	"B" SFP cooling pump available with power available from:		4-5	GREEN
	- G-03 or G-04 via 1B-42	(0-1) <u>1</u>		
	-(*) an independent off-site power source different than that for Train A above	(0-1) <u>1</u>		
3.	Temporary power available to one SFP cooling pump, G-05 available, and SFP time to boil ≥ 12 hours.	(0-1) <u>0</u>		
Subtotal = <u>4</u>				

## SFP Temperatures:

NW 86 °FSE 82 °FSFP Average Temp 84 °FSFP Time to Boil 20.0 hrs

**GIVE A BRIEF EXPLANATION OF ANY CHANGE IN SAFETY ASSESSMENT THAT TOOK PLACE:** None

**LOOK AHEAD:**

- 1X04 work to be removed outage scope per OCC.
2. Sump 'B' Screen scheduled to be removed on or after 5/1/04. This is not likely to occur on day shift. INVENTORY will become YELLOW.

Point Beach Nuclear Plant  
**PBNP SHUTDOWN SAFETY ASSESSMENT AND FIRE CONDITION CHECKLIST**  
**OUTAGE SAFETY ASSESSMENT**

UNIT: 1

DATE: May 1, 2004

TIME: 0230

**KEY SAFETY FUNCTIONS:**

REACTIVITY: YELLOW

CORE COOLING: YELLOW

POWER AVAILABLE: GREEN

INVENTORY: GREEN

CONTAINMENT: YELLOW

SFP COOLING: GREEN

**PROTECTED EQUIPMENT:**

**COMMENTS:**

RCS Time to Boil is 26.5 hours

SFP Time to Boil is 20.0 hours (full core off-load is assumed)

Fire Protection Condition IV: Credit is taken for fire rounds as fire prevention contingency