

NRC (2004)

3-142

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

Date: April 30, 2004 Time: 02:00 Preparer: Randy Hastings 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 = 3011 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 = 3004 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 = 76°F; 27 days shutdown,	Subtotal = <u>3</u>	
	RCS Level = Refueling Height		
	RCS Time to Boil <u>26.0 hrs</u> (Applicable at Cold or Refueling Shutdown)		

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

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CONTAINMENT		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 2-3 4-5-6 ORANGE YELLOW GREEN
3.	No fuel motion	(0-1) <u>0</u>	
4.	DHR Capability:		
	- 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	2	ORANGE
	-(*) an independent off-site power source different than that for Train B below	3	YELLOW
		4-5	GREEN
	(0-1) <u>1</u>		
2.	"B" SFP cooling pump available with power available from:		
	- 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 °F
 SE 83 °F
 SFP Average Temp 84.5 °F
 SFP Time to Boil 19.5 hrs

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

LOOK AHEAD:

1. 1X04 to be removed from service. Currently on hold during verification of jumper points in the procedure. POWER AVAILABILITY will remain GREEN. SFP COOLING will become YELLOW.
2. Sump 'B' Screen scheduled to be removed on or after 4/30/04. INVENTORY will become YELLOW.

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OUTAGE SAFETY ASSESSMENT

UNIT: 1

DATE: April 30, 2004

TIME: 0200

KEY SAFETY FUNCTIONS:

REACTIVITY: YELLOW

CORE COOLING: YELLOW

POWER AVAILABLE: GREEN

INVENTORY: GREEN

CONTAINMENT: YELLOW

SFP COOLING: GREEN

COMMENTS:

RCS Time to Boil is 26.0 hours

SFP Time to Boil is 19.5 hours (full core off-load is assumed)

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

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