NRC 9-288

Point Beach Nuclear Plant

PBNP SHUTDOWN SAFETY ASSESSMENT AND FIRE CONDITION CHECKLIST

Date: May 27, 2004 Time: 0200 Preparer: Mike 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 = 3018 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)	1	0-1	RED
2.	Number of boration paths	(0-2)	2	2	ORANGE
3.	No fuel motion	(0-1)	1	3-4	YELLOW
4.	SR instrumentation operable	(0-1)	1	5	GREEN
		Subtotal =	5		

	CORE COOLING			Subtotal	Condition
1.	Number of SG available for DHR	(0-2)	0	0-1	RED
2.	Refueling cavity filled	(0-1)	0	2	ORANGE
3.	Number of trains RHR available	(0-2)	2	3	YELLOW
4.	RCS level above REDUCED INVENTORY	(0-1)	1	4-5	GREEN
	RCS Temperature = 92°F; 54 days shutdown RCS Level = 70%	Subtotal =	3		

RCS Time to Boil 98 min. (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)	2	1 2 3 4-5	RED ORANGE YELLOW GREEN
2.	G-01 or G-02/A-05/B-03 available	(0-1)	1		
	G-03 or G-04/A-06/B-04 available	(0-1)	1		
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)	0		
		Subtotal =	4		

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

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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)	0	0	RED
2.	Containment Closure CL-1E maintained and closure < time to boil	(0 or 2)	2	1	ORANGE
3.	No fuel motion	(0-1)	1	2-3	~~YELLOW~~
4.	DHR Capability:			4-5-6	GREEN
	- cavity flooded and internals out				
	OR				
	- at least one SG available				
	OR				
	- one fan cooler with Equip hatch installed and personnel hatches capable of being shut	(0-1)	1		
		Subtotal =	4		

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)	NA	2	ORANGE
	-(*) an independent off-site power source different than that for Train B below	(0-1)	NA	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)	NA		
	-(*) an independent off-site power source different than that for Train A above	(0-1)	NA		
3.	Temporary power available to one SFP cooling pump, G-05 available, and SFP time to boil ≥ 12 hours.	(0-1)	NA		
		Subtotal =	NA		

SFP Temperatures:
NW NA °F
SE NA °F
SFP Average Temp NA °F
SFP Time to Boil NA

GIVE A BRIEF EXPLANATION OF ANY CHANGE IN SAFETY ASSESSMENT THAT TOOK PLACE:

- TTB was calculated from SEP-1 with vessel level at ¾ pipe and the 1.3 multiplier for being refueled. Note that TTB curve based on 50 days post shutdown was conservatively used (CAP056964).

OUTAGE SAFETY ASSESSMENT

UNIT: 1 DATE: May 27, 2004 TIME: 0200

KEY SAFETY FUNCTIONS:

REACTIVITY:	GREEN
CORE COOLING:	YELLOW
POWER AVAILABLE:	GREEN
INVENTORY:	YELLOW
CONTAINMENT:	GREEN
SFP COOLING:	NA

PROTECTED EQUIPMENT:

COMMENTS:

- RCS Time to Boil is 98 minutes
- Fire Protection Condition III: Credit is taken for fire rounds as fire prevention contingency

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