Facility: CPSES **Date of Examination:** 03/2005
Examination Level (circle one): RO **Operating Test Number:** 1

Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations 2.1.33 RO A1.a	N/S	**(New)** Complete Operability determination of PZR Heaters. Ability to recognize indication for system operating parameters which are entry-level conditions for technical specifications.
Conduct of Operations 2.1.23 RO A1.b	M/P/S	**(Bank NRC 2002 Modified)** Complete RCS Inventory Balance using ABN-103. Ability to perform specific system and integrated plant procedures during all modes of plant operation.
Equipment Control 2.2.12 RO A2	N/S	**(New)** Review Completed OPT for Errors. Knowledge of Surveillance Procedures
Radiation Control 2.3.10 RO A3	N/S	**(New)** Determine the RWP limits and time allowed to complete a task in the RCA. Ability to perform procedures to reduce excessive levels of radiation and guard against personnel exposure.
Emergency Plan		NA

NOTE: All items (5 total) are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when all 5 are required.

* Type Codes & Criteria:
(C)ontrol room
(D)irect from bank (≤ 3 for ROs; ≤ 4 for SROs & RO retakes)
(N)ew or (M)odified from bank (≥ 1)
(P)revious 2 exams (≤ 1; randomly selected)
(S)imulator

Facility: CPSES **Date of Examination:** 03/2005
Examination Level (circle one): SRO **Operating Test Number:** 1

Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations 2.1.33 SRO A1.a	N/S	**(New)** Complete Operability determination of PZR Heaters. Ability to recognize indication for system operating parameters which are entry-level conditions for technical specifications.
Conduct of Operations 2.1.5 SRO A1.b	P/S	**(Bank 2001 NRC)** Determine Staff Working Hours. Ability to locate and use procedures and directives related to staff working hours.
Equipment Control 2.2.23 SRO A2	N/S	**(New)** Complete required Tech Spec paperwork for bypassed inverter in JPM P(1). Ability to track limiting conditions for operations.
Radiation Control 2.3.10 SRO A3	N/S	**(New)** Determine the RWP limits and time allowed to complete a task in the RCA. Ability to perform procedures to reduce excessive levels of radiation and guard against personnel exposure.
Emergency Plan 2.4.41 SRO A4.1 and 4.2	M/S	**(Modified Bank)** After observing an event on the simulator, make the E-plan Classification. Emergency Procedures / Plan: Knowledge of the emergency action level thresholds and classifications.

NOTE: All items (5 total) are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when all 5 are required.

* Type Codes & Criteria:
(C)ontrol room
(D)irect from bank (≤ 3 for ROs; ≤ 4 for SROs & RO retakes)
(N)ew or (M)odified from bank (≥ 1)
(P)revious 2 exams (≤ 1; randomly selected)
(S)imulator

Facility: CPSES **Date of Examination:** 03/2005

Exam Level (circle one) RO **Operating Test No.:** 1

Control Room Systems* (8 for RO; 7 for SRO-I; 2 or 3 for SRO-U)

System / JPM Title	Type Code*	Safety Function
a. (S1) Verify Natural Circulation (RO1111) *EPE.E09.EA1.3*	D/A/L/S	4 (P)
b. (S2) Decrease Pressurizer Press to <P-11 (Mod RO1209) *SF3.010.A1.07*	M/L/S	3
c. (S3) Establish Emergency Boration using CVCS (New) (Att. 2) (No boric acid pumps) *SF1.004.A4.18*	N/L/S	1
d. (S4) Perform Attachment 2 of EOP-0.0A (New) *EPE*.009.*EA1.08*	N/A/S	2
e. (S5) Perform Containment Spray Operability Test (Modified RO 2003) *SF5.026.A4.01*	M/A/S	5
f. (S6) Load/Unload a EDG (Modified RO 4302) *SF6.064.A4.06*	M/A/S	6
g. (S7) Respond to Source Range Instrumentation Malfunction (RO 1818A) *APE.032.AK3.01*	D/S/A	7
h. (S8) Shift CCW Pumps with CCW Pump Trip (NRC 2002) APE.*026.AK3.04*	D/A/S	8
In-Plant Systems @(3 for RO; 3 for SRO-I; 3 or 2 for SRO-U)		
i. (P1) Bypass an Inverter (New) *APE.057.AA1.01*	N	6
j. (P2) Transfer Charging Pump Suction and Isolate Dilution Paths (AO 5412C) *APE.068.AA1.22*	D/R/E	1
k. (P3) Locally Isolate Faulted Steam Generator APE.040.AA1.03	D/R/E	4 (S)

@ All control room (and in-plant) systems must be different and serve different safety functions; in-plant systems and functions may overlap those tested in the control room.

* Type Codes	Criteria for RO / SRO-I / SRO-U
(A)lternate path	4-6 / 4-6 / 2-3
(C)ontrol room	
(D)irect from bank	$\leq$ 9 / $\leq$ 8/ $\leq$ 4
(E)mergency or abnormal in-plant	$\geq$ 1/ $\geq$ 1/ $\geq$ 1
(L)ow-Power	$\geq$ 1/ $\geq$ 1/ $\geq$ 1
(N)ew or (M)odified from bank including 1(A)	$\geq$ 2/ $\geq$ 2/ $\geq$ 1
(P)revious 2 exams	$\leq$ 3/ $\leq$ 3/ $\leq$ 2 (randomly selected)
(R)CA	$\geq$ 1/ $\geq$ 1 $\geq$ 1
(S)imulator	

Facility: CPSES **Date of Examination:** 03/2005

Exam Level (circle one) SRO-I **Operating Test No.:** 1

Control Room Systems* (8 for RO; 7 for SRO-I; 2 or 3 for SRO-U)

System / JPM Title	Type Code*	Safety Function
a. (S1) Verify Natural Circulation (RO1111) *EPE.E09.EA1.3*	D/A/L/S	4 (P)
b. (S2) Decrease Pressurizer Press to <P-11 (Mod RO1209) *SF3.010.A1.07*	M/L/S	3
c. (S3) Establish Emergency Boration using CVCS (New) (Att. 2) (No boric acid pumps) *SF1.004.A4.18*	N/L/S	1
d. (S4) Perform Attachment 2 of EOP-0.0A (New) *EPE*.009.*EA1.08*	N/A/S	2
e. (S5) Perform Containment Spray Operability Test (Modified RO 2003) *SF5.026.A4.01*	M/A/S	5
f. (S6) Load/Unload a EDG (Modified RO 4302) *SF6.064.A4.06*	M/A/S	6
g. (S7) Respond to Source Range Instrumentation Malfunction (RO 1818A) *APE.032.AK3.01*	D/S/A	7
h.		

In-Plant Systems @(3 for RO; 3 for SRO-I; 3 or 2 for SRO-U)

i. (P1) Bypass an Inverter (New) *APE.057.AA1.01*	N	6
j. (P2) Transfer Charging Pump Suction and Isolate Dilution Paths (AO 5412C) *APE.068.AA1.22*	D/R/E	1
k. (P3) Locally Isolate Faulted Steam Generator APE.040.AA1.03 Direct from Bank, AO*6424B	D/R/E	4 (S)

@ All control room (and in-plant) systems must be different and serve different safety functions; in-plant systems and functions may overlap those tested in the control room.

* Type Codes	Criteria for RO / SRO-I / SRO-U
(A)lternate path	4-6 / 4-6 / 2-3
(C)ontrol room	
(D)irect from bank	≤ 9 / ≤ 8/ ≤ 4
(E)mergency or abnormal in-plant	≥ 1/ ≥ 1/ ≥ 1
(L)ow-Power	≥ 1/ ≥ 1/ ≥ 1
(N)ew or (M)odified from bank including 1(A)	≥ 2/ ≥ 2/ ≥ 1
(P)revious 2 exams	≤ 3/ ≤ 3/ ≤ 2 (randomly selected)
(R)CA	≥ 1/ ≥ 1 ≥ 1
(S)imulator	

Facility: CPSES **Date of Examination:** 03/2005

Exam Level (circle one) SRO-U **Operating Test No.:** 1

Control Room Systems* (8 for RO; 7 for SRO-I; 2 or 3 for SRO-U)

System / JPM Title	Type Code*	Safety Function
a.		
b.		
c. (S3) Establish Emergency Boration using CVCS (New) (Att. 2) (No boric acid pumps) *SF1.004.A4.18*	N/A/L/S	1
d.		
e.		
f. (S6) Load/Unload a EDG (Modified RO 4302) *SF6.064.A4.06*	M/A/S	6
g. (S7) Respond to Source Range Instrumentation Malfunction (RO 1818A) *APE.032.AK3.01*	D/S	7
h.		

In-Plant Systems @(3 for RO; 3 for SRO-I; 3 or 2 for SRO-U)

i. (P1) Bypass an Inverter (New) *APE.057.AA1.01*	N	6
j. (P2) Transfer Charging Pump Suction and Isolate Dilution Paths (AO 5412C) *APE.068.AA1.22*	D/A/R/E	1
k.		

@ All control room (and in-plant) systems must be different and serve different safety functions; in-plant systems and functions may overlap those tested in the control room.

* Type Codes	Criteria for RO / SRO-I / SRO-U
(A)lternate path	4-6 / 4-6 / 2-3
(C)ontrol room	
(D)irect from bank	≤ 9 / ≤ 8/ ≤ 4
(E)mergency or abnormal in-plant	≥ 1/ ≥ 1/ ≥ 1
(L)ow-Power	≥ 1/ ≥ 1/ ≥ 1
(N)ew or (M)odified from bank including 1(A)	≥ 2/ ≥ 2/ ≥ 1
(P)revious 2 exams	≤ 3/ ≤ 3/ ≤ 2 (randomly selected)
(R)CA	≥ 1/ ≥ 1 ≥ 1
(S)imulator	

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Appendix D | Scenario Outline | Form ES-D-1

Facility:	**CPSES**	Scenario No.:	**1**	Op-Test No.:	**1**
Examiners:			Operators:		

Note: (NEW) **Do SRO Admin A.4.1, Emerg. Class. with this Scenario (SAE)**.

Initial Conditions: BOL, 100% power Eq. Xenon. Unit 2 is at 100% power. The A MDAFWP is OOS for oil contamination. (6 hours into LCO)
IC-15, REMF FWR20 in Rackout with H/S in P.O and Red Tagged.

Turnover: Unit 1 and Unit 2 are at 100% power. U1 has been at 100% for the last 15 days following refueling. The "A" MDAFWP is OOS due to contamination in the oil. Maintenance is in the process of changing the oil and the pump should be ready for test in the next 6 hours. The Generation Controller has declared an ALERT due to the loss of several peaking plants and all of the Big Brown units due to a common mode failure. There are no surveillances planned for this shift and the orders are to maintain current load and unit availability.

Event No.	Malf. No.	Event Type*	Event Description
1 T=1	MS13D	I (RO) I (BOP) I (SRO)	SG Pressure channel for ARV #4 fails high. (ARV fails full open)
2 T=7	RX15A @ 100%	C (RO) C (SRO)	PZR Spray valve fails open. (*Set up trigger to remove Malf when the Manual PB is selected*)
3 T=13	ED05F	M (ALL)	Loss of 1EA2 (86-2)
4 T=13	FW09A	C (BOP) C (SRO)	TDAFWP Overspeed. (will not come in until pump starts)
5 T=28		N (BOP) R (RO) N (SRO)	Perform Plant Shutdown due to loss of 2 AFWP's. (Directed by SM)
6 T=43	FW25C @ 4e6	M (ALL)	Feedline Break ORC
7 T=43	ED05I	C (ALL)	Loss of 1EA2 (86-1)
8 T=43	SI04A	C (BOP) C (SRO)	SI pump fails to start on Safety Injection. (*Must be manually started. Set up trigger file to remove Malf when HS is turned*.)

* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor

Facility:	**CPSES**	Scenario No.:	**2**	Op-Test No.:	**1**
Examiners:			Operators:		

Note: (NEW) Do **SRO Admin A.4.2, Emerg. Class. With this Scenario (SAE)**.

Initial Conditions: 42% power, Xenon Equilibrium, plant start-up in progress. Unit 2 is at 100%. *(IC-13. Preload malfunctions RP07A, and RP07B Train A/B Auto SI failure. REMF FWR20 in Rackout with HIS in PO and red tagged)*

Turnover: Unit 1 is at 42% power and increasing per IPO-003A, step 5.4.19. Shift orders are to increase reactor power during the shift. The "A" MDAFWP is OOS due to contamination in the oil. Maintenance is in the process of changing the oil and the pump should be ready for test in the next 6 hours. The Generation Controller has declared an ALERT due to the loss of several peaking plants and all of the Big Brown units due to a common mode failure. The expectation is that the ALERT will last until midnight. There are no surveillance's planned for this shift.

Event No.	Malf. No.	Event Type*	Event Description
1 T=0		N (SRO) R (RO) N (BOP)	Increase Reactor Power
2 T=13	RX04B @ 100%	I (SRO) I (BOP)	SG level transmitter LT-552 fails high.
3 T=23	CV01B	C (RO) C (SRO)	Trip of Running CCP
4 T=33	CV13 @12gpm	C (SRO) C (RO)	Letdown Leak inside containment
5 T=40	RC15A	C (ALL)	RCP Seized Shaft
6 T=45	RC09A2	M (ALL)	LBLOCA
7 T=45	RH01B	C(ALL)	RHRP1-2 Trip

* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor

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Appendix D | Scenario Outline | Form ES-D-1

Facility:	**CPSES**	Scenario No.:	**3**	Op-Test No.:	**1**
Examiners:			Operators:		

Note: (NEW)

Initial Conditions: BOL, 100% power Eq Xenon. The A MDAFWP is OOS for oil change. (6 hours into LCO)
IC-15, REMF FWR20 in Rackout with H/S in P.O and Red Tagged.
Preload RP09 A and B

Turnover: Unit 1 and Unit 2 are at 100% power. U1 has been at 100% for the last 15 days following refueling. The "A" MDAFWP is OOS due to contamination in the oil. Maintenance is in the process of changing the oil and the pump should be ready for test in the next 6 hours. The Generation Controller has declared an ALERT due to the loss of several peaking plants and all of the Big Brown units due to a common mode failure. There are no surveillances planned for this shift and the orders are to maintain current load and unit availability.

Event No.	Malf. No.	Event Type*	Event Description
1 T=0	SG01C @ 8 gpm	C (SRO) C (RO)	SGTL on #3 Steam Generator
2 T=5		N (SRO) R (RO) N (BOP)	Plant Shutdown Required by Steam Generator Tube Leak > 150 gpd. (May be directed by Duty Manager)
3 T= 17	RP06D@ 150%	I (SRO) I (RO)	Loop 4 N-16 Instrument fails high.
4 T=17	RD08	C (SRO) C (RO)	Rods move in the opposite direction (Auto only)
5 T=34	RD13B8 @ 6 RD03F8	C (SRO) C (RO)	Two rods misaligned by more than 12 steps (Manual Rx trip required). CBC Rod B8 slips to 6 steps and CBA rod F-8 drops to the bottom.
6 T=38	SG01C @ 675gpm	M (ALL)	SGTL increases to SGTR at 675 gpm
7 T=38	RP09A & B	C (SRO) C (BOP)	Phase A fails to actuate on SIS
8 T=46*	MS13C @ 100%	I (SRO) I (BOP)	The ARV on the ruptured SG fails open due to Main Steam line pressure xmtr failure. May be manually closed.
			* or after step 3 but prior to Step 6 (Cooldown).

* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor