Facility : **PBNP** Scenario No.: **1** OP-Test No.: **2000-1**

Examiners: _____ Operators: _____

Initial Conditions: Unit 1 @ 100% Power, MOL, Equilibrium Xe. Unit 2 @ 100% Power, BOL. Today is Sunday (present clock time is real time). Normal shift complement with exception of 3rd SRO.

Turnover: G-01 is out of service for annual maintenance. It was taken OOS 2 days ago, and is expected to be returned to service in 3 days.
G-02 is aligned to 1AO5 and 2AO5 IAW OI-35A.
A Severe Thunderstorm Watch is in effect over the next 4 hours.

Event No.	Malf. No.	Event Type*	Event Description
1		I/ (RO)	Controlling Pressurizer Pressure Channel Fails High.
2		M/ (ALL)	Steam Generator Tube Leak ("B" S/G) Develops.
3		R/(RO) N/ (ALL)	Perform Technical Specification required down-power.
4		I/ (BOP)	Steam Flow Transmitter Fails High ("B" S/G).
5		M/ (ALL)	Steam Line Break outside Containment upstream of "B" S/G MSIV.
6		M/ (ALL)	Steam Generator Tube Leak increases into Design Basis Tube Rupture post trip ("B" S/G)
7		C/ (RO)	Failure of Train "A" SI to AUTO actuate requiring manual actuation.
8		C/ (RO)	"B" RHR Pump (1P-10B) Fails to Auto Start.
9		C/ (BOP)	P-32B, Service Water Pump Fails to AUTO Start

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

Facility : **PBNP** Scenario No.: **2** OP-Test No.: **2000-1**

Examiners: _____ Operators: _____

Initial Conditions: Unit 1 @ 28% Power, BOL, Equilibrium Xe. Unit 2 @ 100% Power, BOL. Today is Sunday (present clock time is real time). Normal shift complement with exception of 3rd SRO.

Turnover: OP-1C, "Low Power to Normal Power Operation" completed through step 4.117. Chemistry has just reported Secondary Chemistry Requirements are met. The DSS directs reactor power raised to 47% upon turnover. I & C has VCT Level Transmitter (LT-141) de-energized for repairs. G-01 is out of service for annual maintenance. It was taken OOS 2 days ago, and is expected to be returned to service in 3 days. G-02 is aligned to 1AO5 and 2AO5 IAW OI-35A. A Severe Thunderstorm Watch is in effect for the next 4 hours.

Event No.	Malf. No.	Event Type*	Event Description
1		R/(RO) N/ (ALL)	Perform a normal up-power IAW OP-1C.
2		I/ (RO)	Thot Instrument fails High.
3		I/ (BOP)	Controlling Steam Generator Pressure Transmitter Fails High.
4		C/ (RO)	Drop two control rods (not simultaneously).
5		M/ (ALL)	Anticipated Transient Without Scram (ATWS).
6		C/ (RO)	PORV opens and Fails to Reseat (can be manually isolated).
7		C/(RO/ BOP)	1SI-852A Fails to Open ("A" Train RHR).
8		C/(RO/ BOP)	1CV-313 Fails to Shut (CI Valve).
9		M/ (ALL)	LOCA develops ~~outside~~ inside Containment.

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

Facility : **PBNP** Scenario No.: **3** OP-Test No.: **2000-1**

Examiners: _____ Operators: _____

_____ _____

_____ _____

Initial Conditions: Unit 1 @ 100% Power, MOL, Equilibrium Xe. Unit 2 @ 100% Power, BOL. Today is Sunday (present clock time is real time). Normal shift complement with exception of 3rd SRO.

Turnover: G-01 is out of service for annual maintenance. It was taken OOS 2 days ago, and is expected to be returned to service in 3 days. G-02 is aligned to 1AO5 and 2AO5 IAW OI-35A. A Severe Thunderstorm Watch is in effect for the next 4 hours.
The off-going DSS received a request from the System Dispatcher to reduce power to 60 % over the next hour due to grid instabilities.

Event No.	Malf. No.	Event Type*	Event Description
1		R(RO) N/ (ALL)	Perform a down-power IAW AOP-17A.
2		I/(RO/ BOP)	First Stage Turbine Impulse Pressure Fails High.
3		C/I/ (BOP)	Running CCW Pump Shaft seizure with failure of standby pump to auto start.
4		C/ (ALL)	"1A" MFP Oil Leak(1P-28A) develops and worsens.
5		C/ (BOP)	"1B" MFP trips on Overload which results in a reactor trip.
6		M/ (ALL)	Upon fast bus transfer, a Loss of Off-Site Power and On-Site Power occurs.

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

Facility : **PBNP** Scenario No.: **4** OP-Test No.: **2000-1**

Examiners: _____ Operators: _____

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Initial Conditions: Unit 1 @ 75 % Power, MOL, Xenon has peaked following downpower. Unit 2 @ 100% Power, BOL. Today is Sunday (present clock time is real time). Normal shift complement with exception of 3rd SRO.

Turnover: Unit 1 was reduced to 75% 5 hours ago for a maintenance evaluation of a lube oil leak on 1P-28A, Main Feedwater Pump.
Maintenance has just completed their evaluation and determined that the Main Feedwater Pump must be removed from service.
The objective of the shift is to reduce power to 55% and secure 1P-28A.
OP-3A is the procedure in effect and has been completed through step 4.6.
P-38B, Electric Auxiliary Feedwater Pump has been OOS for two days to repair recirc line cracks.

Event No.	Malf. No.	Event Type*	Event Description
1		I/ (RO)	HC-135, Letdown Line Pressure Controller Fails High.
2		N/ (RO)	Place Excess Letdown in service.
3		C/ (ALL)	Loss of Condenser Vacuum
4		R/ (RO) N/ (ALL)	Rapid Plant Down-Power IAW AOP-17A due to vacuum loss.
5		M/ (ALL)	Condenser Vacuum degrades to reactor trip criteria.
6		C/ (RO)	Main Turbine Fails to AUTO & MANUALLY Trip.
7		C/ (BOP)	1P-29, Turbine Driven Auxiliary Feedwater Pump trips on overspeed.
8		C/ (BOP)	P-38A, Electric Driven Auxiliary Feedwater Pump Discharge Valve Controller Fails.
9		M/ (ALL)	Loss of Heat Sink that is recoverable using Main Feedwater.

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