

## Appendix D

## Scenario Outline

Form ES-D-1

Facility: Prairie IslandScenario No.: 1Op-Test No.: 2012301Examiners: D. McNeil

Operators: \_\_\_\_\_

M. BielbyD. ReeserInitial Conditions: Power is level near 10%. The main generator is synched to the grid @ 10 MWe.Turnover: The Crew will prepare to perform a power ascension to 15% power and complete the remainder of 1C1.2 actions including transferring from the M to R sources.

Event No.	Malf. No.	Event Type*	Event Description
1		R (RO)	Raise power to 15%
2		N (SRO) (BOP)	Transfer on-site loads from the M to R source
3		I (RO) TS (SRO)	Pressurizer level channel fails high
4		C (RO)	11 CV Pump trips.
5		I (RO/ BOP) TS (SRO)	N43 Power Range NI Fails Low
6		M (ALL)	Turbine Trip occurs - Loss of All AC Power (Station Blackout)
7		C (BOP, SRO)	TDAFW Pump Auto Start Failure

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

Facility: **PINGP Units 1 and 2**Scenario No.: **2**Op-Test No.: **2012301**

Examiners: D. McNeil  
M. Bielby  
D. Reeser

Operators: \_\_\_\_\_  
 : \_\_\_\_\_  
 : \_\_\_\_\_

Initial Conditions: Unit 1 @ ~ 225 MWe BOL, Plant Startup in Progress. Unit 2 @ 100% power, MOL Equilibrium Xenon. Repairs and testing complete on 12 MFW pump. 2<sup>nd</sup> Condensate pump is in service.

Turnover: Power is to be reduced < MWe to facilitate a common cause evaluation of the 11 MFP. Crew will brief power reduction and MFP swapping prior to entering the simulator. Maintain Unit 2 @ 100% power. Equipment OOS, Nothing abnormal, only equipment related to plant specific issues.

Event No.	Malf. No.	Event Type*	Event Description
1		R (RO) N (BOP)	Reduce power to < 200 MWe
2		N (SRO) N (BOP)	Swap Running MFP (Start 12 MFP and Secure 11 MFP)
3		I (RO) TS (SRO)	12 SG Pressure Transmitter Fails High
4		I (RO) TS (SRO)	Pressurizer Pressure Channel Fails High
5		M (ALL)	12 SG Tube Rupture ~ 250 gpm
6		C (BOP) C (SRO)	12 MSIV Fails to Close
7		C (BOP)	SI Pumps Fail to Auto Start
8		C (BOP)	12 MDAFW Pump Fails to Auto Start

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

Facility: Prairie IslandScenario No.: 3Op-Test No.: 2012301Examiners: D. McNeil

Operators: \_\_\_\_\_

M. BielbyInitial Conditions: 93% Power and stable

Turnover: TSO is waiting to direct a reduction to 90% power. When directed, the crew is expected to reduce power to ~ 90% power and then perform a condensate pump swap.

Event No.	Malf. No.	Event Type*	Event Description
1		I (RO) TS (SRO)	$T_{cold}$ Instrument Fails High
2		R (RO) N (BOP)	Restore $T_{ave}$ to $T_{ref}$ (Power reduction per TSO)
3		N (BOP)	Swap Condensate Pumps
4		C (RO) TS (SRO)	Pressurizer PORV significant leakage
5		C (BOP)	Condensate Pump Trip
6		C (RO)	Reactor Fails to Auto Trip
7		M (ALL)	Main Feedwater Line Break Inside Containment
8		C (BOP)	'A' Train Safeguards Equipment Fails to Auto Actuate
* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor			