

Facility: <u>Byron Nuclear Station</u>	Scenario No.: <u>1</u>	Op-Test No.: <u>2013301</u>	
Examiners: <u>D. McNeil</u> <u>R. Baker</u> <u>B. Palagi</u>	Operators: _____ _____ _____		
Initial Conditions: <u>IC-22</u> _____ _____			
Turnover: <u>Unit 1 is at 100% power, steady state, equilibrium xenon, MOL. Unit output is 1230 MW. Boron concentration is 888 ppm. Online risk is green. A TV/GV surveillance is scheduled to be performed. The unit will be ramped to 89% power at 3MW/min for the surveillance.</u>			
Event No.	Malf. No.	Event Type*	Event Description
Preload	IMF RP26C IMF RP28C Trgset 4 "zdi1fw012c(1).gt.0" Trg 4 "dor zlo1fw012c1" Trgset 5 "fwv1fw012c.gt.0.9" Trg 5 "ior zlo1fw012c1 off"		ESF relay failure of 1A RH pump ESF relay failure of 1B RH pump
1		R (RO) (SRO) N (BOP, SRO)	Ramp down for TV/GV Surveillance
2	IMF PA0253 ON IOR ZDI1MS018A CLS	TS (SRO)	S/G PORV 1MS018A Inop
3	IMF FW16 0	I (BOP, SRO)	1PT508 fails low
4	IMF CV10 200 180 134	C (RO, SRO)	1CV121 slowly fails open. Manual control is available.
5	IMF RX10A 0 30	I (RO, SRO) TS (SRO)	1PT 505 fails low
6	ED11D	TS (SRO)	Loss of IB 114 due to a bus fault. Tech Spec 3.8.9 required shutdown within 8 hours
7	Ramp fwv1FW012C 1 1 08:00:00	C (BOP, SRO)	1FW012C recirc fails open
8	MF TH04C 540000	M (all)	LB LOCA terminating in transfer to Cold Leg Recirc
9	Pre-load	C (all)	ESF relay failure of 1A & B RH pumps – manual start required
* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor			

Facility: <u>Byron Nuclear Station</u>	Scenario No.: <u>2</u>	Op-Test No.: <u>2013301</u>
Examiners: <u>D. McNeil</u>	Operators: _____	
<u>R. Baker</u>	_____	
<u>B. Palagi</u>	_____	
Initial Conditions: <u>IC-22, 75% power, steady state, MOL</u>		

Turnover: <u>Unit 1 is at 76% power, steady state, MOL, CB D is @ 141 steps and boron concentration is 998 ppm.. Online risk is green. Crew is to switch Bus 156 from SAT to UAT following ACB 1561 maintenance. 1D CD/CB pump is OOS for maintenance..</u>		

Event No.	Malf. No.	Event Type*	Event Description
Preload	ZDI 1CD05PD PTL ZLO1CB113DOPN OFF ZLO1CB113DCLS OFF ZDI1CB113D CLS ZDI1CD05PDB PTL IMF RP02A IMF RP02B IMF TC03 ZDIHSTG010 NORM		Turbine fails to AUTO trip from Rx trip Manual Turbine trip PB fails to trip turbine
1		N (BOP,SRO)	Switch Bus 156 Electrical Lineup
2	None	TS (SRO)	Notified that SI pump failed ASME surveillance
3	IMF FW22C	C (BOP,SRO) R (RO, SRO)	1C CD/CB pp Trip requiring entry to 1BOA SEC-1 and Turbine Runback
4	MF RX18A 630	I (RO, SRO) TS (SRO)	1A TCOLD RTD Fail High
5	IMF RX04D 0 30	I (BOP,SRO)	Feedwater flow channel 1FT-521 fails Low
6	MF CV16 0	I (RO, SRO)	VCT Level Channel LT-112 Fail Low
7	MF CH08 60 120	TS (SRO)	CNMT Pressure 1PT-936 Fail High
8	MF TH16C	M (ALL)	ATWS 1C RCP Trip with Rx Trip Breakers Fail To Open
9	Pre-load	C (ALL)	Failure of Main Turbine to Trip on auto signal or manual push button
* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor			

Facility: Byron Nuclear StationScenario No.: 3Op-Test No.: 2013301Examiners: D. McNeil

Operators: _____

R. BakerB. PalagiInitial Conditions: IC-16, 56% power, steady state, equilibrium xenon, BOL

Turnover: Unit 1 is at 56% power, steady state, equilibrium xenon, BOL CB D is at XXX steps and boron concentration is 998 ppm. Preconditioned to 100% power at 6400 EFPH. Online risk is yellow. 1A CS pp is O.O.S. for a motor lube oil change and is scheduled to be released at the end of shift. It is expected that Power Team will call for the unit to be ramped to 880 MWe at 0.2MW/min.

Event No.	Malf. No.	Event Type*	Event Description
Preload	IOR ZDI1CS01PB PTL IRF CS05 OVER IMF CH01B IMF CH01C	Preload	1A CS pp O.O.S. Prevents 1B CS pp from Auto start 1B RCFC fails to start in Lo Speed 1C RCFC fails to start in Lo Speed
1	None (from 10-1-5 cert)	N (BOP, SRO) R (RO, SRO)	Ramp unit up
2	IMF RD13AK08	TS (SRO)	DRPI failure (1 rod) in CB A for 1 train
3	MF CV07A 80 60	C (RO, SRO)	RCP Seal Injection Filter Clogged
4	MF RX13A 100	I (RO, SRO) TS (SRO)	Pzr LT-459A Fail High (controlling channel)
5	IMF FW02A	C (BOP, SRO)	1B TDFP Trip with 1A MFP available for manual start
6	IMF RX01K 0-(from 10-1-1 cert)	I (BOP, SRO) TS (SRO)	Steam Generator 1D controlling Steam Pressure channel fails low requiring Manual control of 1D SG Main Feed Reg Valve. Enter Tech Spec 3.3.2 for actions.
7	MF MS07D 4 240	M (ALL)	1D Steam Line Break inside CNMT
8	(Preloaded) MF CS01A RF CS05 OVER IMF CH01B IMF CH01C	C (SRO, CREW)	CS Pumps Auto Start Failure, Manual Start required; 1A CS pump fail to start. 1B RCFC fails to start in Lo Speed 1C RCFC fails to start in Lo Speed
* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor			