

Facility: Duane Arnold Energy Center Scenario No.: 1		Op-Test No.: <u>2015301</u>	
Examiners: _____		Operators: _____	
_____		_____	
_____		_____	
Initial Conditions: The plant is operating at 80% power due to a downpour for maintenance. Thunderstorms are forecast for the area. "B" SBDG was recently returned from maintenance.			
Turnover:			
<ul style="list-style-type: none"> • Complete 'B' SBDG Testing per OI 324, SBDG, Section 6.4, synchronize and load. • Raise Reactor power using control rods to a load line of 94-95%. 			
Event No.	Malf. No.	Event Type*	Event Description
1	None	N BOP	Synchronize and load the 'B' SBDG IAW OI 324, Sect 6.4, FAST MANUAL STARTUP OF THE B SBDG SYSTEM.
2	None	C BOP TS SRO	Report from field that 'B' SBDG has a jacket cooling water leak 'B' SBDG declared inoperable per TS 3.8.1
3	None	R ATC	Raise reactor power with control rods
4	rd02 3023	C ATC	Stuck Control Rod
5	rd11b	C RO	CRD Pump trip
6	hp01	C BOP TS SRO	HPCI spurious start requiring manual shutdown/isolation HPCI declared inoperable per TS 3.6.
7	ed01(a-e) rr15b stdg01	M ALL	Loss of Offsite Power with Small break LOCA. Failure of 'A' SBDG to start in AUTO, will start in Manual.
8	hp02	C BOP	HPCI starts in Manual but trips shortly after. Emergency Depressurization required.
* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor			

Facility: Duane Arnold Energy Center Scenario No.: 2

Op-Test No.: 2015301

Examiners: _____ Operators: _____

Initial Conditions: The plant is operating at 80% power due to a downpower for maintenance. Thunderstorms are forecast for the area. "B" CRD pump was recently taken OOS for maintenance.

Turnover:

- Start 'B' SBDG for ST after maintenance.
- Raise Reactor power recirculation flow.

Event No.	Malf. No.	Event Type*	Event Description
1	None	N BOP	Perform MSIV test per STP 3.3.1.1-17 for "D" MSIV's
2	None	R RO R SRO	Raise Power with Recirculation Flow to 85% RTP
3	rp02a	C BOP TS SRO	Trip of RPS MG Set Tech Spec 3.3.8; 3.4.5, A & B & C; TRM 3.3.4 entry
4	rd01 3023	C ATC TS SRO	Control Rod Drift (30-23) with AOP 255.1& 255.2 entry Tech Spec entry 3.1.3
5	ed13a	C BOP TS SRO	125 VDC Div 1 panel 1D11 trip results in AOP entries Tech Spec entry 3.8.7, Condition B
6	rc08	BOP TS SRO	Spurious start of RCIC, requires manually stopping RCIC Tech Spec Entry 3.5.3, Condition A
7	mc04b	R RO C BOP	Condenser Vacuum Leak (recoverable) Fast Power Reduction
8	mc04b	M ALL	Rising backpressure from Event 5 progression necessitates reactor scram. ATWS occurs
9	hp03	I BOP	Failure of HPCI controller (complicates RPV level restoration).

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

Facility: Duane Arnold Energy Center Scenario No.: 3

Op-Test No.: 2015301

Examiners: _____ Operators: _____

Initial Conditions:

- Reactor power approximately 40%.
- Power ascension in progress.

Turnover:

- Continue power ascension in accordance with IPOI 3, POWER OPERATIONS (35% - 100%) RATED POWER, Section 4.0. Steps are completed up to step 5.
- Raise power to approximately 50%.
- Stabilize power at approximately 50% and perform RCIC pump surveillance test.

Event No.	Malf. No.	Event Type*	Event Description
1		R ATC	Raise power with recirculation flow.
2	rr17a	C ATC C SRO	'A' Recirc Pump Speed Controller Failure.
3	nm08c	I ATC TS SRO	APRM 'C' fails (inoperable). Tech Spec review (3.3.1.1, 3.3.2.1)
4		N BOP	RCIC Start IAW OI 150
5	rc06 sw14a sw14b	C BOP TS SRO	A RCIC system isolation signal is received due to steam leak; isolation is faulted. Tech Spec entry (3.5.3)
6	sw19b	C BOP C SRO	River Water Supply Pump trip.
7		M (ALL)	Large break LOCA occurs (Recirc Pump suction break). Faulted LPCI initiation.

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