Facility: <u>Duane Arnold Energy Center</u>		Scenario No.:	_1 Op-Test No.: <u>17-1</u>
Examiners:	Chuck Zoia	Operators:	SRO-U (2), SRO-I (7), RO (3)
	Mike Bielby		
	Randy Baker		

Initial Conditions/Turnover:

When the crew assumes the shift reactor power is approximately 80% following a sequence exchange. On the last shift, repairs were made to the 'B' FRV due to internal fault that caused the 'B' FRV to lock. Once the crew takes the shift they will be required to reset the 'B' FRV lockup using ARP 1C05A (F-1) section 4.

Following a sequence exchange, RE will request the crew to raise Reactor Power by 5% and hold prior to continuing raising power to 100%.

Event No.	Malf. No.	Event Type*	Event Description
1		N ATC	Reset 'B' FRV
2		R ATC N SRO	Raise power with recirc pump and rods
3	FW12B	LATC	'B' FRV fails downscale
4	RD0602 19	C ATC	Control Rod drift in
5	ED08C	IBOP	Loss of 1B20
		TS SRO	Tech Spec Entry (3.7.2/3.8.7) Remove S/U Transformer from service
6	AN1C08 A(7)	IBOP	
		TS SRO	Tech Spec Entry (3.8.1)
7	RR15A	M ALL	LOCA in Drywell
8		M ALL	Alternate Level Control
9		M ALL	Emergency Depressurization required
10	STRH0 1, STRH0 2	С ВОР	MO-1905 fails to open
* (1	<u>I</u> N)ormal, (R)	l)eactivity, (I	I)nstrument, (C)omponent, (M)ajor

			Event No.:	Page of				
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Time	Position	A	oplicant's Actions or Beha	vior				
		i						

Required Operator Actions

Form ES-D-2

Appendix D

Facility: <u>Duane Arnold Energy Center</u>		Scenario No.:	2 Op-Test No.: <u>17-1</u>
Examiners:	Chuck Zoia	Operators:	SRO-U (2), SRO-I (7), RO (3)
	Mike Bielby		
	Randy Baker		
Initial Conditi	ons/Turnover:		

The plant is starting up following a forced outage to repair "A"RFP operating at 10%

Turnover:

• Transfer Feed from the SUFRV to the "A" FRV

Event No.	Malf. No.	Event Type*	Event Description				
1		N ATC	Transfer Reactor Feed from the Startup Feed Regulating Valve to the "A" Feed Regulating Valve				
2		R ATC N-SRO	'Pull Control Rods to achieve BPV 2 at 50% open				
3	RD04A(x x-xx)	I ATC	Control Rod Position lost entry to AOP 255.1				
4	RM03R E4116B	I BOP TS SRO	RE-4116B Inoperable due to electrical power supply fault Tech Spec Inoperable (3.3.6.1 Function 2C				
5	DG07A, DG05A	C BOP	"A" SBDG Start with erratic Voltage Control – Place SBDG control switch to P-T-L Tech Spec Entry (38.1 Condition B / 3.7.3 Condition A)				
6	MS04A	M ALL	Steam Leak in the Steam Tunnel (SCRAM prior to Max Safe Operating Temperature)				
7	MS20I, MS20J	С ВОР	MO 4423, MO4424 failure to close on Group 1 Isolation				
8	RP05A,B ,C,D,E,F	M ALL	Electrical ATWS (Drifting Control Rods is successful)				
9	STRC01	C ATC	RCIC Failure to Auto Start				
* (1	N)ormal, (R)	eactivity, (I	* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor				

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Time	Position	A	oplicant's Actions or Beha	vior				
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Required Operator Actions

Form ES-D-2

Appendix D

Appendix D	Scenario Outline	Form ES-D-

Facility: <u>Duane Arnold Energy Center</u>		Scenario No.:	_ALT	Op-Test No.: <u>17-1</u>
Examiners:	Chuck Zoia	Operators:		
	Mike Bielby			
	Randy Baker			

Initial Conditions/Turnover:

When the crew assumes the shift reactor power is approximately 100%. The 'B' RHR Pump is inoperable due to breaker refurbishment; return time is approximately three days. After crew turnover, maintenance has requested immediately securing the "B" CRD Pump for a GE Service Bulletin that directs replacing the oil in the gear box.

Event No.	Malf. No.	Event Type*	Event Description
1		N BOP	Swap running EHC pumps
2	RR36B RR06	C BOP TS SRO	'B' Recirculation pump runback Tech Spec Entry (3.4.1)
3	RR06B	R ATC I BOP N SRO	'B' Recirculation pump trip
4	RD11A, RD0706 15, RD0734 35, RD0738	TS SRO	'A' CRD pump trip with accumulator lights Tech Spec Entry (3.1.5)
5	RR15B	M ALL	Coolant leak from steam line in containment
6	RP05G	M ALL	Hydraulic ATWS
7	DI-RH- 014	I BOP	Containment enable switch for 'A' side inoperable
8	DI-RH- 076	С ВОР	MO-2000 Inboard Drywell Spray valve fails to open
	N)ormal, (R)	eactivity, (I)nstrument, (C)omponent, (M)ajor

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Time	Position	A	oplicant's Actions or Beha	vior				
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Required Operator Actions

Form ES-D-2

Appendix D