Facility: Fermi 2 Scenario No.: 1 Op-Test No.: 2017-1

Examiners: _____ Operators: SRO1(CRS) SRO2(ATC) RO1(BOP)

_____ SRO3(CRS) RO2(ATC) RO3(BOP)

_____ SURR(CRS) RO4(ATC) RO5(BOP)

Initial Conditions: IC-20, MOL, 100% Rx. Power

Turnover: The plant has been operating at 100 % Reactor power for the last 205 days. #4 GSW is OOS for motor replacement. Expected return to service is two weeks. "B" CRD Pump is OOS for oil replacement on gear reducer. Return to service is expected tomorrow.

Event No.	Malf. No.	Event Type*	Event Description
1	NGADN3021C 002TVSP	C(BOP) C(SRO)	#2 TCV Unitized Actuator Failure (Oil Leak) – 4D2
2		R(ATC) R(SRO)	Reduce Reactor Power < 93% to lock down #2 TCV
3		N(BOP) N(SRO)	Lock Down #2 TCV - 23.109, Main Turbine
4	C11MF1106	C(ATC) C(SRO)	CR 58-39 Individual SCRAM from half scram during #2TCV lockdown and blown fuse. Disarm CR due to badly damaged fuse clip. CRS enter TS 3.1.3, Control rod operability – one rod inop and inserted.
5	C93RF0001 C97MF1087	NA	Earthquake - AOP 20.000.01 – AOP Actions
6	E51MF0010 EOPRF0024 EOPRF0025	C(BOP) C(SRO)	RCIC Steam Leak. Auto Isolation Fails. Manual isolation Successful. EOP 29.100.01 Sheet 5 **(CT 1)** CRS enter TS 3.5.3, RCIC
7	N20MF0023 N20MF0024 N20MF0025	M(All)	Loss of Feedwater – AOP 20.107.01 – Mode Switch to S/D EOP 29.100.01 Sheet 1 - RPV Control
8	E41MF0011 N21MF0011 N21MF0038	C(All)	Loss of High Pressure Feed Sources – Lower RPV pressure to feed with HFP. Inhibit ADS **(CT -2)**

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

Facility: Fermi 2 Scenario No.: 1 Op-Test No.: 2017-1

Examiners: _____ Operators: _____

_____ _____

_____ _____

Initial Conditions: IC-20, MOL, 100% Rx. Power

Event No.	Malf. No.	Event Type*	Event Description
9	B31MF0066	M(All)	Leak in drywell – EOP 29.100.01 Sheet 2 – Primary Containment Control Emergency Depressurization EOP 29.100.01 Sheet 3 – Open 5 SRV before -25" **(CT-3)**
10	E21RF0005	C(ATC) C(SRO)	Auto Start Failure – Div. 1 Core Spray
11	E11MF0016	C(ATC) C(BOP) C(SRO)	Containment Spray Valve Failure E1150-F016A Torus Cooling and Sprays **(CT-4)** Spray Drywell **(CT 5)**

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

Facility: Fermi 2 Scenario No.: 2 Op-Test No.: 2017-1

Examiners: _____ Operators: SRO2(CRS) SRO3(ATC) RO4(BOP)

_____ SRO1(CRS) RO5(ATC) RO2(BOP)

_____ SURR(CRS) RO1(ATC) RO3(BOP)

Initial Conditions: IC-20, MOL, 100% Rx. Power.

Turnover: The plant has been operating at 100 % Reactor power for the last 185 days. Center Recirc MG Cooling fan is OOS for motor replacement. Expected return to service is one weeks.

Event No.	Malf. No.	Event Type*	Event Description
1		N(BOP) N(SRO)	Shift RBCCW Pumps
2	C51MF0003	C(ATC) C(SRO)	APRM Downscale – Bypass APRM 3 – TS 3.3.2.1 Tracking
3	B21MF004	C(BOP) C(SRO)	Drywell Pressure Transmitter Failure TS 3.3.1.1, 3.3.6.1, 3.3.6.2, 3.3.7.1(Drywell Pressure Instrumentation)
4	TAXMP817_ A096NOISE TACET41C01 2TVSP	C(BOP) C(SRO)	High Vibration North Recirculation MG Cooling Fan (Field report) with flashing amps. Trip North Recirculation MG Cooling Fan (Manual or Automatic)
5		R(SRO)	Direct manual Trip of North Rx Recirculation Pump (or automatic if temp limit reached) AOP Entry 20.138.01 Recirculation Pump Trip - TS Entry 3.4.1 AOP Entry 20.107.02 Loss feed water Heating
		R(ATC)	Reduce power with CRAM array and monitor for thermal hydraulic instabilities. (in exit region of power to flow) **(CT-1)**
6.	B31MF0057 C71MF0006 C11MF0001	M(All)	Trip of South Rx Recirculation Pump (due to collateral damage from cooling fan failure). Mode Switch to Shut down **(CT-2)**. Manual RPS Fails to Cause a Scram (Total Scram Failure) and All Rods Stuck
7.	C41RF0008 C41RF0009	C(ATC) C(SRO)	SRO directs SLC injection. ATC Injects SLC. SLC Squib valve fails to fire Crew Injects SLC **(CT 3)**
8		ALL	SRO directs 29.ESP.03. ATC manually inserts Control Rods per 29.ESP.03 **(CT 4)** SRO directs 29.ESP.10. ATC resets ARI to perform scram-reset-scram per 29.ESP.03. All rods insert when ARI is re-initiated twice
9		ALL	SRO directs Terminate and Prevent. BOP performs Terminate and Prevent for Level to lower RPV level <114 inches. Maintain RPV level 50 to 100 inches **(CT 5)**.
10	E51MF0002	C(BOP) C(SRO)	RCIC isolates on high exhaust diaphragm pressure. BOP utilizes alternate systems to maintain level.

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

Facility: Fermi 2 Scenario No.: 3 Op-Test No.: 2017-1

Examiners: _____ Operators: SRO2(CRS) SRO1(ATC) RO5(BOP)

_____ SRO3(CRS) RO3(ATC) RO1(BOP)

_____

Initial Conditions: IC-10 MOL 5.6% Rx Power 650 psig Reactor Pressure. N RFP is feeding via the SULCV.

Turnover: Reactor startup is in progress. GOP 22.00.02 Up to step 6.2.24 is complete. Current direction is to continue the GOP by raising pressure, and complete step 6.2.25. Additional crew is being briefed to perform GOP 7.2.1 through 7.2.3 (Preparing Main Turbine for Roll), they will be coming to the control room in about an hour. Diesel Fire Pump is tagged out, due to spurious start earlier today. An Emergent Issues Team (MWC 18) has been formed and is troubleshooting the Diesel Fire Pump.

Event No.	Malf. No.	Event Type*	Event Description
1	C11RF0398	R(ATC) R(SRO)	Raise reactor pressure with pressure regulator. Maintain Bypass valve 15-30% open my withdrawing control rod to increase Reactor Power.
2	C11MF1111	C(ATC) C(SRO)	Control Rod 58-43 Drift into the core. Enter TS 3.1.3, 3.1.6, 3.3.2.1
3	P41MF0006	C(BOP) C(SRO)	Trip #2 GSW Pump. Enter AOP 20.131.01 Loss Of General Service Water System. Direct start of standby GSW pump using hard card.
4		N(BOP) N(SRO)	Shutdown Electric Fire Pump Per SOP 23.501.01 Fire Water Suppression System Enter TR 3.12.2
5	E41MF0007 E41RF0033	C(BOP) C(SRO)	HPCI Steam Leak (field report). Manual isolation unsuccessful, E4150-F600 Breaker Trips. AOP 20.000.02 Abnormal Release Of Radioactive Material CRS enter TS , HPCI
6		M(All)	EOP 29.100.01 Sheet 5, Secondary Containment - >MSO Temperature – HPCI exceeds Max Safe -> Mode Switch to Shutdown **(CT 1)**
7	C71MF0001	C(ATC) C(SRO)	Mode SW failure EOP 29.100.01 Sheet 1 RPV Control
8	TA20TEN206 ZOUT	M(All)	Two Areas > MSO Temperature due to HPCI watertight door not closed – EOP 29.100.01 Sheet 3 – Emergency Depressurization **(CT 2)**
9	B21MF0030	C(BOP) C(SRO)	SRV H Failure during ED – Open One other SRV

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