Final Submittal

FARLEY EXAM
50-348 & 50-364/2003-301

MAY 19 - 26, 2003

1. As Given Simulator Scenario Operator Actions ES-D-2

Facility: Farley | Scenario No.: 1 | Op-Test No.: 1

Examiners: _____ Operators: SRO _____
_____ RO _____
_____ BOP _____

Objective: Evaluate applicant response to a failed open atmospheric relief valve followed by a feed line break inside containment

Initial Conditions: (IC-8) 100%, BOL, 2000 MWD, Equil Xenon, A Train on service. Boron Concentration is 1156 ppm.

Turnover: Perform STP-20.2, Penetration Room Filtration System Train B Monthly Operability Test immediately after turnover..
1B MDAFP OOS for motor lube schedule (OOS 1 hr, Expected RTS 4 hrs).
1A S/G has a 20 gpd tube leak. Steady for the past 2 weeks.
R70A Setpoint raised to 30 gpd.

Event No.	Malf. No.	Event Type*	Event Description
0	SNAPSHOTS / TRN / BOL / IC-8	------	100% BOL, 2000 MWD, Equil. Xenon, A Train on service.
0	READ SCENARIO / TST / IC-4	------	
0	SYSTEMS / MECH / BOP / 1A S/G	-----	Set tube leak = 20 gpd.
0	PANELS / MCB / 1B MDAFW / CMF / CONT POWER BREAKER 72	-----	1B MDAFP tagged out. (OPEN)
0	PANELS / MCB / 1B CHG / CMF / UPPER DF06 86X CONTACT	-----	1B Chg fails to auto start. (OPEN)
0	PANELS / MCB / MOV 8100 / CMF/ PHASE A CONTACT	C (ALL)	MOV 8100 fails to close on Phase A. (OPEN)
0	PANELS / MCB / MOV 8112 / CMF/ PHASE A CONTACT	C (ALL)	MOV 8112 fails to close on Phase A. (OPEN)
0	RAISE SETPOINT ON R70A	-----	Set to 30 gpd.
0	1B MDAFW pump		Place HOLD tag on HS

Do not start scenario until data collection is set up

1	Perform STP-20.2	N (BOP)	(Initiate next event when BOP is in the control room and NRC directs).
2	IMF / PRESSURE / MS 1A ATMOS REL VLV / PK 3371A DRIVER / FAIL OUTPUT DEMAND	R (ALL)	1A S/G Atmospheric fails open. Unable to close from MCB. Isolate in MSVR. (Set = 100%, 0 RAMP, 0 DELAY) Ramp Rx power down in response to failed open atmospheric.
3	PANELS / MCB / 1A CHG PUMP / CMF / 50G	C (RO)	1A Chg Pump trips. 1B Chg fails to auto start – can be manually started from MCB. (OVERLOAD)
5	IMF / PRESSURE / LTDN HX OUTLET / PT145	C (RO)	PT-145 fails LOW. PCV-145 can be controlled in manual from MCB. (Set = 0, 0 Ramp, 0 Delay)
6	IMF / MISC / SPEED CONTROL, SGFP 1A/1B / PT508	I (BOP)	Feed water PT-508 fails high causing SGFPs to roll back to minimum. (Set = 1200, 0 Ramp, 0 Delay)
7	SYSTEMS / MECH / BOP / 1B S/G	M (ALL)	Feed Line Break inside CTMT. (JMFWM28B) (Set = 1(E6), 600sec Ramp, 0 Delay)

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

Do not reinit simulator until data is downloaded

Op-Test No.: 1	Scenario No.: 1	Event No.: 1	Page 1 of 1

Event Description: STP-20.2, Penetration Room Filtration System Train B Monthly Operability Test
Initiating event: SRO direction per Turnover sheet to perform STP-20.2 immediately after turnover.

Time	Position	Applicant's Actions or Behavior
	BOP	- Perform STP-20.2 - Close HV3538B. - Open MOV3362B. - Verify MOV3361B in AUTO. - Start 1B PRF Recirc fan. - Start 1B PRF Exhaust fan. - Record MOV3361B local position indication. - Record indicated pressure PDI3367A PDI3367B. - Record time and total running time **Total run time per STP >15 minutes.** **NOTE: Next event can be initiated when 15 minute run time is started. STP need not be completed.** Annunciators: PENE RN TO ATMOS A TRN ΔP HI-LO (BK1) PENE RN TO ATMOS B TRN ΔP HI-LO (BK2)
	SRO	Review STP and verify proper ACCEPTANCE CRITERIA

Op-Test No.: 1	Scenario No.: 1	Event No.: 2	Page 1 of 1
Event Description:	1A S/G Atmospheric fails open. Unable to close from MCB. Isolate in MSVR. Rx power exceeds 100% Initiating event: NRC Direction		

Time	Position	Applicant's Actions or Behavior
	RO/BOP	Recognize Rx power increasing to >100% • Tave decreasing • Przr Level decreasing • SF/FF increasing Recognize 1A S/G Atmospheric failed open • Attempt to take manual control and close • Call Rover to manually isolate • Possibly will call TB SO to check MSVR Roof Possibly will enter AOP-14.0, SECONDARY SYSTEM LEAKAGE Annunciators: PR OVERPOWER AUTO/MAN ROD STOP (FD2) (Annunciator possible)
	RO	Control Reactor: *Tave/Tref* Rods
	BOP	Set in ramp per UOP-3.1 Select target and ramp rate DEH to "GO"
	SRO	Direct crew to ramp to < 100% IAW UOP-3.1 Notify OSS Check TS for atmospherics OPERABILITY 3.7.4 SOP-0 – notifications NOUE Notiify Switchyard

Op-Test No.: A	Scenario No.: 1	Event No.: 3	Page 1 of 1

Event Description: 1A Charging Pump Trips (1B Fails to Auto Start – Can be manually started)
Initiating event: NRC Direction

Time	Position	Applicant's Actions or Behavior
	RO	Recognize 1A Charging Pump Tripped - Charging flow decreasing. - VCT level increasing - Seal inj flow decreasing - Pressurizer level trending down Start 1B Charging Pump - Adjust Chg Flow - Adjust Seal Inj Flow (if req'd) Annunciators: - CHG PUMP OVERLOAD TRIP (EB1) - RCP SEAL INJ FLOW LO (DD1) - CHG HDR FLOW HI-LO (EA2)
	BOP	Place turbine on hold (if necessary)
	SRO	Ensure operators take actions required by ARPs. Consult Tech Specs: 3.5.2, TR13.1.5 Investigate and call for repairs and inform OSS

Op-Test No.: 1	Scenario No.: 1	Event No.: 4	Page 1 of 1

Event Description: PT-145 Fails Low (PCV-145 can be manually controlled)
Initiating event: NRC Direction

Time	Position	Applicant's Actions or Behavior
	RO	Recognize indications of PCV-145 failing closed. Increasing letdown pressure (indicated) Annunciators: LTDN ORIF ISO VLV REL LINE TEMP HI (DE3) RO may take manual control of PCV-145 and restore Letdown flow. Another alternative is to secure letdown. If Letdown is isolated, Then restore Letdown or place Excess Letdown in service IAW AOP-16 or SOP-2.1
	SRO	Ensure board operators take ARP actions.

Op-Test No.: 1	Scenario No.: 1	Event No.: 5	Page 1 of 4
Event Description:	PT-508 fails High (SGFPs roll back to minimum) Initiating event: NRC Direction		

Time	Position	Applicant's Actions or Behavior
	BOP	Recognize indications of SGFP speed control failure - Decrease in SGFP speeds, flow - FRV Position increases to full open Annunciators: - 1A/B/C SG LVL DEV (JF1/2/3) - 1A/1B/1C SG STM FLOW > FEED FLOW (JB1/2/3)
	BOP	Check SGFP speeds, disch press, flows Determine SGFP speed control failure Shift SGFP speed control to Manual; restore program FRV ΔP If necessary, take manual control of FRVs and restore SG levels to normal
	SRO	Refer to ARPs and direct supplementary actions

May cause a Rx trip: Go to next event when directed by NRC.

Op-Test No.: 1	Scenario No.: 1	Event No.: 6	Page 1 of 3
Event Description:	1B S/G Feedline Break Inside CTMT Initiating event: Initiate upon completion of regaining feed control		

Time	Position	Applicant's Actions or Behavior
	BOP	Respond to annunciators *Recognize problem in CTMT* Increasing feed flow Decreasing SG levels Rapidly rising CTMT Pressure Annunciators: - LIQ OR GAS PROC PNL ALARM (MK4) - 1A/1B/1C SG STM FLOW > FEED FLOW (JB1/2/3) - 1A/B/C SG LVL DEV (JF1/2/3) - CTMT PRESS HI 1 ALERT (EE1) - CTMT PRESS HI-1 RX TRIP SI (GF1) - BOP PANELS ALARM (BE3) - CTMT SUMP LVL HI-HI OR TRBL (PG3 BOP) - CTMT TO PENE RM ΔP HI LO (BG5) - CTMT AIR TEMP HI (BB3) - CTMT CLR DRN LVL HI (BB1)
	SRO	Direct Rx Trip and Safety Injection and transition to EEP-0
	SRO	Enter EEP-0, Reactor Trip or Safety Injection Direct subsequent actions of EEP-0
	RO/BOP	Perform immediate actions of EEP-0 without reference: - Check Rx tripped RTBs & associated bypass bkrs open NI power falling Rod bottom lights lit - Check turbine tripped - Verify at least one train of 4160 V ESF busses energized - Check SI actuated

Op-Test No.: 1	Scenario No.: 1	Event No.: 7	Page 2 of 3
Event Description:	1B S/G Feedline Break Inside CTMT		

Time	Position	Applicant's Actions or Behavior
	Crew	- Verify each SW train has 2 SW pumps started - Verify each train of CCW started CCW flow > 0 SW Flow > 0 -Verify one Chg pump in each Train Started– amps > 0. -Verify RHR pumps started amps > 0 - Check HHSI flow > 0 gpm RCS Press >265 - Verify ctmt vent isolation Ctmt purge dampers - closed Mini purge dampers - closed Stop mini purge supp/exh fan - Verify ctmt fan cooler alignment At least one ctmt fan started in slow Associated emer SW outlet vlv open - Verify AFW pumps started – amps >0 and flow to each SG > 0 gpm - Verify MFW status Verify MFW flow control & bypass vlvs closed Verify both SG feed pumps tripped Verify SG blowdown isolated - Check no MSL iso signal present - Check that ctmt press has remained < 27 psig - Verify Phase A ctmt iso Verify Ph A ctmt iso actuated Check all MLB-2 lights lit. **NO – 5.1 & 15.1 Not Lit** (MOV8112 & MOV8100 closed). Manually close MOV8112 & MOV8100. - Announce "Unit 1 reactor trip and Safety Injection" - Verify all Rx trip and bypass bkrs open - Trip CRDM MG set supply breakers
* Critical		

Op-Test No.: 1	Scenario No.: 1	Event No.: 7	Page 3 of 3
Event Description:	1B S/G Feedline Break Inside CTMT		

Time	Position	Applicant's Actions or Behavior
___ * ___ Critical	CREW	- Check AFW status Total AFW flow > 395 gpm or any NR level >31% Control MDAFWP and TDAFWP flow for 31% to 65% NR level When two SG NR levels >28% and TDAFWP not required, stop TDAFWP - Verify two trains of ECCS equipment aligned Bkrs DF01, DF02, DG15, and DG02 closed Two trains of battery chargers energized Two trains of ESF equip aligned All MLB-1 lights lit Chg pump suction and discharge vlvs open All post accident ctmt air mixing fans started - Secure secondary components *Both heater drain pumps* All but one cond pump Align backup cooling to cond pumps - Check RCS avg temp stable at or approaching 547 deg - Check Pzr PORVs & Spray valves - Check RCP trip criteria; subcooling > 16 deg - Monitor chg pump miniflow criteria - Check SGs not faulted; no SG falling in uncontrolled manner or less than 50 psig - 1B S/G is faulted. RNO – Go to EEP-2, FAULTED STEAM GENERATOR ISOLATION * Crew should Transition to EEP-2
	SRO	Direct transition to EEP-2, Faulted Steam Generator Isolation
___ * ___ Critical		*Transition to EEP-1.0.
___ * ___ Critical		*Exit EEP-1.0 and transition to ESP-1.1, SI TERMINATION

OPERATING TEST 1
SCENARIO 1

Initial Conditions: 100% power, BOL, 2000 MWD, Equilibrium Xenon, A Train O/S, RCS boron concentration is 1156 ppm.

- 1B MDAFP tagged out for motor bearing lube schedule. (oos 1 hr.) Expected RTS in 4 hrs.
- 1A S/G tube leak approximately 20 gpd. Steady for 3 weeks.
- R70A, Secondary tube leak detection monitor for the 1A S/G, setpoint raised to 30 gpd.

STPs/Evolutions: Perform STP-20.2, Penetration Room Filtration System Train B Monthly Operability Test immediately after turnover.

Set in:
- 1A SG tube leak 20 gpd.
- 1B MDAFP tagged out.
- 1B Chg Pump fails to auto start.
- MOV 8100/8112 fails to auto close.

Event 1 – Perform STP-20.2, Penetration Room Filtration System Train B Monthly Operability Test.

Event 2 – 1A SG Atmospheric fails open. Unable to close from MCB. Isolate in MSVR.
Rx power exceeds 100%
Ramp Rx power down in response to failed open atmospheric.

Event 3 – 1A Chg Pump trips. 1B Chg Pump fails to auto start (can be manually started).

Event 4 – PT-145 fails low. PK-145 can be manually controlled from MCB.

Event 5 –Feedwater press PT-508 fails high causing SGFPs to roll back to minimum.

Event 6– Feed Line Break inside containment (1 E6).

STP-20.2/UOP-3.1/AOP-14.0/EEP-0/EEP-2/EEP-1/ESP-1.1

OPERATING TEST 1
SCENARIO 1
COMMUNICATIONS SHEET

Event 1 – Perform STP-20.2, Penetration Room Filtration System Train B Monthly Operability Test.

When requested:
Rad Man reports: MOV3361B local position is 100% open.

Event 2 – 1A SG Atmospheric fails open.

If asked: Report that there is steam coming from the top of the MSVR, cannot tell what it is from.
When requested to isolate: Ramp manual isolation valve closed 5 min delay, 5 min ramp.
ROVER reports: 1A S/G Atmospheric Relief is manually isolated.

Event 3 –1A Chg pump Trips. 1B Chg fails to auto start.

ROVER reports overcurrent trip on 1A Chg Pump Bkr DF06
Rad Man reports strong insulation smell at pump

Event 4 – PT-145 fails low. PK-145 can be manually controlled from MCB.

Event 5 –Feedwater press PT-508 fails high causing SGFPS to roll back to minimum.

Event 6 – Feed Line break inside containment (1E6)

Procedures used:
STP-20.2/UOP-3.1/AOP-14.0/EEP-0/EEP-2/EEP-1/ESP-1.1

SHIFT SUPERVISOR RELIEF CHECKSHEET FARLEY NUCLEAR PLANT

Unit No. ***ONE***

Offgoing Supv.	Oncoming Supv.	☐N ☐D ☐E Date

Part I - To be reviewed by the oncoming Supervisor prior to assuming the shift.

Unit Status ***100%, BOL, 2000 MWD, Equil. Xenon, A Train on service. RCS boron concentration is 1156 ppm.***

STPs/Evolution's (completed/in progress/planned)

Perform STP-20.2, Penetration Room Filtration System Train B Monthly Operability Test immediately after turnover.

General Information and Equipment Status

1B MDAFP is tagged out for motor bearing lube schedule. (OOS -1 hour)

Expected RTS in 4 hours

1A S/G has a 20 gpd tube leak. Steady for the past 3 weeks.

R70A Setpoint raised to 30 gpd.

Waste Management Status

LCO Status ***3.7.5 Condition B: 1B MDAFP***

Night Orders

☒ Part II P.O. Logbook, Chemistry Report, Shift Complement, Tag Order Index, reviewed as early in shift as possible

☒ Part III	STP-1.0 reviewed/signed	P.O. Logbook reviewed/initialed	UO/OATC Logs reviewed/initialed	Keys turned over
	☒ Yes	☒ Yes	☒ Yes	☒ Yes

Facility: Farley | Scenario No.: 2 | Op-Test No.: 1

Examiners: | Operators: SRO / RO / BOP

Objective: Evaluate applicant response to a small break LOCA.
Initial Conditions: (IC-11) 20-25%, EOL, ramping up, A Train on service. Boron Concentration is 211 ppm.

Turnover: 1A S/G has 20 gpd tube leak – steady for 2 weeks
1B MDAFW Pump Tagged out for Motor bearing lube schedule
Operations Manager directs a power increase at 2 MW/min

Event No.	Malf. No.	Event Type*	Event Description
0	SNAPSHOTS / EXAM / IC-1	-------	20-25% EOL, ramping up, A Train on service.
0	READ SCENARIO / TST / IC-5	------	
0	PANELS / MCB / 1B MDAFW / CMF /	-----	CONT POWER BREAKER 72 / OPEN
0	PANELS / MCB / 1A CCW Pump / CMF / 50G	C (ALL)	1A CCW Pump fails to start. (Must secure 1C CHG & 1B RHR) (OVERLOAD)
0	SYSTEMS / MECH / BOP / 1A S/G	-----	Set tube leak = 20 gpd.
0	NA	------	Tag 1B MDAFW pump
0	Raise setpoint on R-70A	-----	Set to 30 gpd
Do not start scenario until data collection is set up			
1	STP-80.1, 1B DG Operability test	N (BOP)	Need to provide STP-80.1 to student – marked up
2	N/A	R (RO, SRO)	Ramp to 33% Power
3	PANELS / EPB / VA3	C (BOP)	High Temperature alarm on 1B DG (DB SO will inform EPB of Annun. on DLCP). (ALARM)
4	SYSTEM / ELECTRICAL / 120 VAC Dist. / 120v Vital TRN A	C (RO, BOP)	Open supply breaker to 1A Vital Instrument bus (OPEN)
5	IMF / PRESS / PRZR CONT / PT444	I (RO)	PT-444 Fails HIGH. (Set=2500; Ramp 5 sec, 0 Delay)
6	Panels / MCB / SI HS / OVERRIDE / contact closed	I (ALL)	Inadvertent SI **Clear after SI initiated**
7	SYS / Mech / RCS / PRZR / Break Icon	M (ALL)	Pzr steam space leak JMLPRS1 (Set = 250 gpm, Ramp 0, Delay 0)

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

Do not reinit simulator until data is downloaded

Op-Test No.: 1	Scenario No.: 2	Event No.: 1	Page 1 of 1

Event Description : Perform STP-80.1 DG 1B OPERABILITY TEST- (Fast speed start on header #1)
Initiating event: NRC DIRECTION/ Turnover Sheet

Time	Position	Applicant's Actions or Behavior
	BOP	• Candidate reviews paperwork • Place MSS in Mode 2 • Prepare SST – timer • Start DG and time the start • Adjust Voltage and Freq. • Synchronize DG to grid (DG08) ➢ Synch switch to MAN ➢ Adjust volt / freq ➢ Synch scope to 12:00, close DG08 ➢ Raise load to 50 kw ➢ Synch switch to OFF ➢ slowly load DG
	SRO	Ensure board operators take appropriate actions per STP

Op-Test No.: 1	Scenario No.: 2	Event No.: 2	Page 1 of 1
Event Description:	Ramp to 33% power Initiating event: NRC DIRECTION/ turnover sheet		

Time	Position	Applicant's Actions or Behavior
	RO	• Begin raising turbine load to 33% per UOP-3.1 • Monitor plant parameters and start HDPs as necessary • Maintain Tavg/Tref matched
	SRO	• Ensure board operators take proper actions per UOP-3.1

Op-Test No.: 1	Scenario No.: 2	Event No.: 3	Page 1 of 1

Event Description : 1B DG High Lube Oil Temperature
Initiating event: NRC DIRECTION / Annunciator VA3 on EPB

Time	Position	Applicant's Actions or Behavior
	BOP	• Call DBSO to find out alarm status ➢ DBSO reports Local panel #21 in alarm – LO Temperature High And that the LO temp is 173°F and increasing slowly. (DG would trip at 180°F) • Commence Shutdown of DG IAW STP-80.1 • Proceed to step 5.11 and complete the following: ➢ Decrease load on DG ➢ Adjust Volt/Freq (not necessary but may be done IAW procedure) ➢ Stop DG ➢ Place in Mode 3 if determined to be INOPERABLE • Complete rest of procedure and sign-offs as time allows
	SRO	• Ensure 1B DG is secured IAW applicable procedures • Address Tech Spec Operability – 3.8.1 Condition A • Call the following: ➢ OSS ➢ Dispatcher or ATL/TL ➢ OPS Manager (if OSS not called) ➢ SSS-P to check 1B DG for problems

Op-Test No.: 1	Scenario No.: 2	Event No.: 4	Page 1 of 1
Event Description:	Loss of 1A Vital Instrument Bus – put in before 30% power / P-8 bistables come in Initiating event: NRC DIRECTION		

Time	Position	Applicant's Actions or Behavior
	RO/BOP	Recognize failure 1A Vital Instrument Bus 1A Inverter amps = 0 Annunciators: - WD1, 1A INV FAULT - EC4, SSPS A TRN TRBL - EC1, PROC CAB PWR FAILURE - FD3, OP DELTA T AUTO/MAN ROD STOP - FD4, OT DELTA T AUTO/MAN ROD STOP - KG4, TURB TV CLOSED ALERT - KH5, TURB AUTO/STOP OIL PRESS LOW - DF1, LTDN TO DEMIN DIVERTED-TEMP HI - DF2, LTDN DIVERTEED TO RHT- VCT LVL HI - FD2, PROVERPOWER AUTO/MAN ROD STOP - FC5, PR CH DEV No amperage on inverter 1A ammeter Recognize loss of NI-41, 31 and 35
	SRO	Ensure board operators take immediate actions per ARPs Direct subsequent actions per ARPs
	CREW	Recognize loss of 1A Vital panel Secure auto makeup (if makeup was in AUTO, it will start) Place LCV-115A in VCT position
	SRO	Notify I&C to determine the cause and correct the fault Inform OSS of conditions and make recommendations. Refer to Tech Spec: 3.8.7

Op-Test No.: 1	Scenario No.: 2	Event No.: 5	Page 1 of 1
Event Description:	Pzr Pressure Xmtr PT-444 fails HIGH Initiating event: NRC DIRECTION		

Time	Position	Applicant's Actions or Behavior
	RO	Recognize failure of Pzr pressure Xmtr PT-444 - Both spray valves open - PORV PCV-444B opens Annunciators: - PRZR PORV TEMP HI (HA5) - PZR SAFETY VLV TEMP HI (HA4) - PRZR PRESS HI-LO (HC1) - PRZR CONT PRESS OUTPUT HI (HD3) - PRT TEMP HI (HE3) - REL VLV 444B/445A OPEN (HE1)
	SRO	Ensure board operators take immediate actions per ARPs Direct subsequent actions per ARPs
	RO	Determine actual Pzr pressure Attempt to close PORV PCV-444B, then close Block Valve Take manual control of heaters and spray valves; close spray valves Monitor actual pressure against DNB LCO (2209 psig) Return actual pressure to the normal band
	SRO	Notify I&C to determine the cause and correct the fault Inform OSS of conditions and make recommendations. Refer to LCOs 3.3.1 / 8 a, M and b, E 3.3.2 / 1 d, D 3.4.1 and 3.4.11 / B

Op-Test No.: 1 Scenario No.: 2 Event No.: 6 Page 1 of 3

Event Description: Inadvertent Safety Injection
Initiating event: NRC DIRECTION

Time	Position	Applicant's Actions or Behavior
	CREW	Recognize Safety Injection Reactor trip
	SRO	Enter EEP-0, Reactor Trip or Safety Injection Direct subsequent actions of EEP-0
	RO/BOP	Perform immediate actions of EEP-0 without reference: - Check Rx tripped RTBs & associated bypass bkrs open NI power falling Rod bottom lights lit - Check turbine tripped - Verify at least one train of 4160 V ESF busses energized - Check SI actuated
	Crew	- Verify each SW train has 2 SW PUMPS started - Verify each train CCW – started by CCW & SW Flow – A CCW PUMP does not start *Crew should secure 1C HHSI AND 1 B RHR Pumps* - Start one Chg pump in each Train – amps > 0 - Verify RHR pump started amps > 0 start 1A RHR pump - Check HHSI flow > 0 gpm - yes - Check RCS press > 265 psig - yes - Check LHSI flow > 1500 gpm - yes - Verify ctmt vent isolation Ctmt purge dampers - closed Mini purge dampers - closed Stop mini purge supp/exh fan - Verify ctmt fan cooler alignment At least one ctmt fan started in slow Associated emer SW outlet vlv open - Verify AFW pumps started – amps >0 and flow to each SG > 0 gpm - Verify MFW status Verify MFW flow control & bypass vlvs closed Verify both SG feed pumps tripped Verify SG blowdown isolated - Check no MSL iso signal present - Check that ctmt press has remained < 27 psig

Op-Test No.:	Scenario No.: 2	Event No.: 7	Page 2 of 3
Event Description:	Inadvertent Safety Injection		
Initiating event:	NRC DIRECTION		

Time	Position	Applicant's Actions or Behavior
	CREW	- Verify Phase A ctmt iso Verify Ph A ctmt iso actuated Check all MLB-2 lights lit- Initiate action to make all MLB-1 lights lit - Announce "Unit 1 reactor trip and Safety Injection" - Verify all Rx trip and bypass bkrs open - Trip CRDM MG set supply breakers - Check AFW status Total AFW flow > 395 gpm or any NR level >30% Control MDAFWP and TDAFWP flow for 30% to 60% NR level When two SG NR levels >25% and TDAFWP not required, stop TDAFWP - Verify two trains of ECCS equipment aligned Align all A Train components Both trains of SI actuated Bkrs DF01, DF02, DG15, & DG02 closed Two trains of battery chargers energized Two trains of ESF equip aligned All MLB-1 lights lit Chg pump suction and discharge vlvs open All post accident ctmt air mixing fans started - Secure secondary components Both heater drain pumps All but one cond pump Align backup cooling to cond pumps - Check RCS avg temp stable at or approaching 547 deg - If heatup is in progress attempt to dump steam to condenser - If heat up continues, dump steam to atmosphere - Direct counting room to perform CCP-645, Main Steam Abnormal Environmental Release. - Check Pzr pressure & PORVs PRT parameters - Check RCP trip criteria; subcooling > 16 deg - Monitor chg pump miniflow criteria - Check SGs not faulted; no SG falling in uncontrolled manner or less than 50 psig - Check SGs not ruptured (Step 27) Secondary rad indication normal - YES No SG level rising in uncontrolled manner – *- Check RCS intact – NO – Ctmt rad in alarm / ctmt press increasing **Check Transition criteria to ESP-1.1**
___*___ Critical		

Op-Test No.: 1	Scenario No.: 2	Event No.: 7	Page 3 of 3
Event Description:	Pzr Steam Space leak		
Initiating event:	Immediately upon transition to ESP-1.1		

Time	Position	Applicant's Actions or Behavior
	SRO	Direct transition to ESP-1.1 Inform OSS of conditions and direct classifications
	BOP/RO	Recognize Steam space leak/ RCS PRESSURE FALLING
	CREW	Recognize transition to ESP-1.2 at step 6 - TRANSITION TO ESP-1.2 , POST LOCA COOLDOWN AND DEPRESSURIZATION - Monitor RWST level - Verify SI, PHASE A and PHASE B RESET - Verify 4160 v busses energized - Check LHSI pumps – STOPPED - Check Intact SG NR level > 31%, maintain 31-65% - Begin RCS cooldown to cold shutdown - Using steam dumps - Cooldown < 100°F in any 60 min period - Block Low steam line pressure SI when P-12 lit - Check SI in service HHSI flow > 0 gpm - Turn OFF Pzr heaters - Check PZR level > 15% - should be SOLID - Check if a RCP should be stopped - Stop all but 1 RCP- preferably leave 1B RCP running - Check if one chg pump should be stopped – only 1 running - Establish Normal charging - Control RCS pressure by controlling subcooling **Continue with procedure until NRC recommends securing**

OPERATING TEST 1
SCENARIO 2

Need to sign off SOP-28.1 up to step 4.9.2 ; increasing load to 170 MW
UOP-1.2 Sign off steps 5.36 – 5.40.1,
NA 5.40.2
unsigned 5.40.3,
sign 5.41/42/43.1 45 and 47,
unsigned 5.43.2

Initial Conditions: 22% power, EOL, Ramping up, A Train O/S

- 1B MDAFW Pump (placed out of service 1 hour ago; expected back in 4 hours)
- 1 "A" S/G tube leak approximately 20 gpd. Steady for 3 weeks.
- R-70A Setpoint has been raised to 30 gpd.

OSS directions are to ramp up at 2 MW/min to 33% and hold for chemistry.
OSS directions are to complete STP-80.1 IMMEDIATELY after turnover.

Set in:

- 1B MDAFWP Tagged out
- 1A CCW Pump will trip on overload when started.

Event 1 – Start 1B DG STP-80.1

Event 2 – Ramp to 33% power.

Event 3 – High Temperature on 1B DG LO.

Event 4 – 1A Vital Instrument panel input breaker trips open.

Event 5 – PT-444 fails high.

Event 6 – Inadvertent SI

Event 7 – Pzr Steam Space Leak = 250 gpm

Procedure use-
STP-80.1 / UOP-3.1 / EEP-0 / ESP-1.1 / ESP- 1.2

OPERATING TEST 1
SCENARIO 2
COMMUNICATIONS SHEET

Event 1 – Start 1B DG

DB SO: Communications necessary to start DG. (ie. Check list complete, LO level SAT, etc.)

Event 2 – Ramp to 33% Power

Event 3 – 1B DG High temperature alarm

DB SO: When called: DLCP annunciator #21 in alarm – LO Temperature High
The LO temp is 173°F and increasing slowly.(approx. 1°F/min, IFG asked)

Event 4 – 1A 120v Vital Instrument panel de-energized.

Rover: Breaker #8 in Regulated AC Distribution Panel 1G is closed
If asked, 1A Vital panel input breaker is tripped open

Rad side SO: FAF5L IS CLOSED

Event 5 – PT-444 Failure

Event 6 – Inadvertent SI

Event 7 – Pzr Steam Space Leak

Procedure use-
STP-80.1 / UOP-3.1 / EEP-0 / ESP-1.1 / ESP- 1.2

SHIFT SUPERVISOR RELIEF CHECKSHEET FARLEY NUCLEAR PLANT

Unit No. ***ONE***

Offgoing Supv.	Oncoming Supv.	☐N ☐D ☐E Date

Part I - To be reviewed by the oncoming Supervisor prior to assuming the shift.

Unit Status ***22% ramping up following a xenon free startup, EOL, 14000 MWD, A Train on service. RCS boron concentration is 605 ppm.***

STPs/Evolution's (completed/in progress/planned)

Step 4.9.1 in SOP-28.1 has been completed and applicable steps of UOP-1.2 have been signed off.
Transfer of FRV bypass to FRVs in progress. Steam dumps in Steam Pressure mode.
Commence Ramp to 33% power at 2 MW/min after shift turnover.
Hold at 33% for chemistry.

Perform FNP-1-STP-80.1 IMMEDIATELY after shift turnover
1B DG was just run for a maintenance start. Prelube is not necessary.

General Information and Equipment Status

1B MDAFP is tagged out for motor bearing lube schedule. (OOS -1 hour)
Expected RTS in 4 hours
1A S/G has a 20 gpd tube leak. Steady for the past 3 weeks.
R70A Setpoint has been raised to 30 gpd.

Waste Management Status

LCO Status ***3.7.5 Condition B: 1B MDAFP***

Night Orders

☒ Part II P.O. Logbook, Chemistry Report, Shift Complement, Tag Order Index, reviewed as early in shift as possible

☒ Part III	STP-1.0 reviewed/signed	P.O. Logbook reviewed/initialed	UO/OATC Logs reviewed/initialed	Keys turned over
	☒ Yes	☒ Yes	☒ Yes	☒ Yes

Appendix D | Scenario Outline | Form ES-D-1

Facility: Farley Scenario No.: 3 Op-Test No.: 1

Examiners: _____
_____
_____

Operators: SRO _____
RO _____
BOP _____

Objective: Evaluate applicant response to an ATWT event with a failure of ALL AFW pumps to Auto-start

Initial Conditions: (IC-9) 100%, EOL, **15000** MWD, Equil Xenon, A Train on service. Boron Concentration is **211** ppm.

Turnover: Decrease Load to 60% power to remove 1A SGFP from service.
1B MDAFP OOS for motor lube schedule (OOS 1 hr, Expected RTS 4 hrs).

EventNo.	Malf. No.	Event Type*	Event Description
0	SNAPSHOTS / TRN / EOL / IC- 9	------	100% EOL, 15000 MWD, Equil. Xenon, A Train on service.
0	READ SCENARIO / TST / IC- 6	------	
0	PANELS / MCB / 1B MDAFW / CMF /	-----	CONT POWER BREAKER 72 / OPEN
0	PANELS / MCB / TDAFWP / CMF /	----	LEFT **AND** RIGHT MR 11 CONTACT / OPEN (TDAFP fails to auto start)
0	PANELS / MCB / 1A MDAFWP / CMF / 50G	C (ALL)	1A MDAFWP trips on overcurrent when started (OVERLOAD)
0	PANELS / MCB / 1B EH PUMP / CMF /	-----	63X CONTACT / OPEN (1B EH Pump fails to AUTO start. Can be started manually.)
0	PANELS / MCB / RX TRIP BREAKERS / CMF /	C	RT52A **AND** RT52B / CLOSED (Fail A **and** B reactor trip breakers closed)
0	PANELS / MCB / 1A CRDM MG SET / CMF /	C	BRK TRIP BOX / Fail 1A CRDM MG SET fails to trip.
0	PANELS / MCB / PCV 445A / CMF / OPTIONS / MECH / STICK	C	PORV fails to close when opened. (Set = 100, Ramp 0, Delay 0, Link to RRC445A > 0.9)
0	1B MDAFW pump	---	Place HOLD tag on HS

Do not start scenario until data collection is set up

1	Swap air ejectors	N (BOP)	Swap air ejectors
2	IMF/PRESSURE/ STM HDR / PT-464	I (BOP)	PT-464 slowly fails high (Set = 1200, 60 sec Ramp. 0 Delay)
3	SYS / MECH / RCS / LETDOWN / LEAK ICON OC	C (ALL)	Letdown HX Leak (Set = 10%, Ramp 0, Delay 0)
4	IMF / PRESSURE / PRZR CONT / PT-445	I (RO)	PT-445 Xmtr Fails HIGH. PORV fails to close. Block valve can be manually closed) ((Set=2500; Ramp 0, Delay 0)
5		R (ALL)	*Ramp Rx power down to 60% power to remove 1A SGFP from service.*
6	PANELS / MCB / 1A EH PUMP / CMF / options / mech / Degraded head	C (BOP)	1A EH pump has degraded head. 1B does not auto start. (Can be manually started). (88%, 30 sec ramp)
6	Bring KG1 into alarm after it has come in and cleared due to starting 1B EH pump PANELS / MCB / ANNUN KG1	C (ALL)	When desired ramp is reached **per NRC**, bring into alarm KG1. (ALARM) **TB SO reports leak on 1A SGFP**.
6	PANELS / MCB / ANNUN KG2 PANELS / MCB / 1B EH PUMP / CMF / *600V BKR 52*		**5 minutes** after reporting leak/makeup commenced, bring into alarm KG2. **TB SO reports** leak getting worse. Need more EH Fluid. WHEN directed and rapid ramp has started, trip 1B EH pump *(OPEN)*
7	Failure of Rx to TRIP either Auto or manually	M (ALL)	Already in scenario

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

Do not reinit simulator until data is downloaded

Op-Test No.: 1	Scenario No.: 3	Event No.: 1	Page 1 of 1
Event Description:	Swap SJAEs Initiating event: turnover sheet		

Time	Position	Applicant's Actions or Behavior
	BOP	Station appropriate personnel at SJAEs Open the SJAE isolation valves on MCB Have personnel verify proper operation of steam and SJAEs Have SO check valves, etc Close SJAE isolation valves on MCB Monitor condenser vacuum
	SRO	Review ARPs KK1 and KK2

Op-Test No.: 1	Scenario No.: 3	Event No.: 2	Page 1 of 1
Event Description:	PT-464 fails High (SGFPs roll up to maximum speed) Initiating event: NRC Direction		

Time	Position	Applicant's Actions or Behavior
	BOP	Recognize indications of SGFP speed control failure - Increase in SGFP speeds, flow - FRV Position decreases to a minimum position Annunciators: - 1A/B/C SG LVL DEV (JF1/2/3)
	BOP	Check SGFP speeds, disch press, flows Determine SGFP speed control failure Shift SGFP speed control to Manual; restore program FRV ΔP If necessary, take manual control of FRVs and restore SG levels to normal
	SRO	*Refer to ARPs and direct supplementary actions*

Op-Test No.: 1	Scenario No.: 3	Event No.: 3	Page 1
Event Description:	Small Letdown Hx leak >10 gpm *Initiating event: NRC Direction*		

Time	Position	Applicant's Actions or Behavior
	RO	R17 B in alarm Notice rise in CCW surge tank level *Notice drop in Letdown flow* Notice drop in Chg flow Isolate letdown, Place Excess letdown O/S IAW AOP-16.0 or SOP-2.1 ANNUNCIATORS: RMS Hi RAD (FH1) CCW SRG TK LVL A (B) TRN HI – LO (AA4, AB4)
	SRO	Direct Placing Excess letdown O/S IAW AOP-16.0 or SOP-2.1 Notify OSS

Op-Test No.: 1	Scenario No.: 3	Event No.: 4	Page 1 of 1
Event Description:	PT-445 Fails High Initiating event: NRC Direction		

Time	Position	Applicant's Actions or Behavior
	SRO	Direct crew to ramp to < 100% IAW UOP-3.1
	RO	Recognize failure of Pzr pressure Xmtr PT-445 - Both spray valves open - PORV PCV-445A opens Annunciators: - PRZR PORV TEMP HI (HA5) - PZR SAFETY VLV TEMP HI (HA4) - PRZR PRESS HI-LO (HC1) - PRT TEMP HI (HE3) - REL VLV 444B/445A OPEN (HE1) - PRZR PRESS REL VLV 445A OR B/U HTRS ON (HD1)
	SRO	Ensure board operators take immediate actions per ARPs Direct subsequent actions per ARPs
	RO	Determine actual Pzr pressure Attempt to close PORV PCV-445A, then close Block Valve Monitor actual pressure against DNB LCO (2209 psig) Return actual pressure to the normal band
	SRO	Notify I&C to determine the cause and correct the fault Inform OSS of conditions and make recommendations. Refer to LCOs 3.3.1 / 8 a, M and b, E 3.3.2 / 1 d, D 3.4.1and 3.4.11 / B

Op-Test No.: A	Scenario No.: 3	Event No.: 5	Page 1 of 1
Event Description:	Ramp Rx power down to 60% power.		
	Initiating event: NRC direction / OSS phone call to remove 1A SGFP from service		

Time	Position	Applicant's Actions or Behavior
	SRO	Direct crew to ramp to 60% IAW UOP-3.1
	RO	Control Reactor Tave/Tref Rods
	BOP	Set in ramp per UOP-3.1 Select target and ramp rate DEH to "GO"

Op-Test No.: 1	Scenario No.: 3	Event No.: 6	Page 1 of 2
Event Description:	Event Description: 1A EH FLUID PUMP has degraded head Initiating event: NRC DIRECTION		

Time	Position	Applicant's Actions or Behavior
	BOP	Recognize indications of 1A EH Fluid pump HEAD DEGRADATION: - Lowering pressure of EH Fluid system - Possible turbine throttle and governor valves going shut Possible SGFP trip Annunciators: - DEH TRBL (LB1) - EH FLUID SYS TRBL (KG1) Ensure conditions return to normal
	SRO	Ensure board operators take ARP actions and start the 1B EH fluid pump.

Op-Test No.: 1	*Scenario No.: 3*	*Event No.: 6*	*Page 2 of 2*
Event Description:	EH FLUID LEAK – annunciator KG1 in alarm Initiating event: When directed by NRC		

Time	Position	Applicant's Actions or Behavior
	BOP	Recognize annunciator in alarm Annunciators: EH FLUID SYS TRBL (KG1) Call TB SO to locate problem
	SRO	- Ensure ARP actions taken
	BOP	Upon receiving call from TB SO report to SRO conditions of losing EH fluid from 1A SGFP and make up to the EH System is in progress, maintaining level steady at present.
Bring KG2 into alarm per NRC signal to initiate Rapid Ramp.		
	SRO	Evaluate situation and order ramp to 60%, then take 1A SGFP out of service and isolate leak. - Enter AOP – 17, RAPID LOAD REDUCTION - may enter AOP-13, LOSS OF SGFP ramp would be very quick.
	CREW	Co-ordinate to ramp unit to 60% per AOP-17. - Auto rod control - Reduce turbine load at desired rate - Maintain Tavg/Tref w/i 5 deg F - Maintain Delta I w/i limits - Control SGWL - Przr level - Pressure within limits.
Go to next event **when NRC directs**: ie enough of Rapid Ramp complete		

Op-Test No.: A	Scenario No.: 3	Event No.: 7	Page 1 of 4

Event Description: ATWT- 1B EH FLUID PUMP TRIPS
Initiating event: when unit has been ramped down and KG2 is in alarm as directed by NRC

Time	Position	Applicant's Actions or Behavior
	BOP	Recognize annunciator KG2 in alarm - EH FLUID LEVEL LO-LO (KG2) Recognize indications of 1B EH Fluid pump tripping: - Lowering pressure of EH Fluid system - Possible turbine throttle and governor valves going shut - Possible SGFP trip Annunciators: - DEH TRBL (LB1) - EH FLUID SYS TRBL (KG1) - TURB AUTO STOP OIL TURB TRIP (GH2)RX TRIP CAUSED BY TURB TRIP (GF4)
	SRO	Ensure board operators take Immediate actions of EEP-0 - Turbine trip without a Reactor Trip - Direct trip of Reactor – both handswitches - Direct trip of CRDM MG sets supply breakers Direct entry into FRP-S.1
* Critical	RO/BOP	Perform immediate actions of EEP-0 without reference: - Check Rx tripped RTB's & associated bypass bkrs open NI power falling Rod bottom lights lit - Trip of Reactor – both handswitches - Trip of CRDM MG sets supply breakers * Enter FRP-S.1 Drive rods in AUTO (>48 spm) or MANUAL
* Critical * Critical	CREW	- Check turbine tripped - * Verify AFW pumps running (TDAFW PUMP will not AUTO start) - * Emergency Borate - Establish adequate charging flow/letdown flow - Verify containment ventilation isolated - Check Rx trip brkers open – call for Rover to open – (wait 3 min. from call) - Check turbine stop valves closed - Monitor CST level - Check S/G levels > 31% - Verify dilution flow paths isolated - Check for uncontrolled cooldown - Check S/G's not faulted - Check CETC's < 1200 deg F - Check if Rx critical - Transition to EEP-0

Op-Test No.: A	Scenario No.: 3	Event No.: 7	Page 2 of 4

Event Description: ATWT- 1A EH FLUID PUMP TRIPS
Initiating event: when unit has been ramped down and KG2 is in alarm as directed by NRC

Time	Position	Applicant's Actions or Behavior
___*___ Critical	CREW	RE-Enter EEP-0 Perform actions of EEP-0: - Check Rx tripped RTBs & associated bypass bkrs open NI power falling Rod bottom lights lit - Check turbine tripped - Verify at least one train of 4160 V ESF busses energized - Check SI actuated Direct subsequent actions of EEP-0 ***Crew may not have a Safety Injection signal. If NOT, transition should be made to ESP-0.1*** - Check Rx tripped RTBs & associated bypass bkrs open NI power falling Rod bottom lights lit - Check turbine tripped - Verify at least one train of 4160 V ESF busses energized Check SI actuated Direct subsequent actions of EEP-0 - Verify one CHG PUMP in each train started – amps > 0 - Verify at least one RHR pump started – amps > 0 - Check SI flow - HHSI FLOW > 0 gpm - RCS pressure < 265 psig - LHSI flow >1500 gpm - Verify ctmt vent isolation Ctmt purge dampers - closed Mini purge dampers - closed Stop mini purge supp/exh fan - Verify ctmt fan cooler alignment At least one ctmt fan started in slow Associated emer SW outlet vlv open - Verify at least one SW train has 2 SW pumps started - Verify at least one CCW pump started - Verify AFW flow to each SG > 0 gpm and amps >0 - Check TDAFWP start required Verify MFW status Verify MFW flow control & bypass vlvs closed Verify both SG feed pumps tripped Verify SG blowdown isolated Check no MSL iso signal present - if present MSIV's need to be manually closed Check that ctmt press has remained < 27 psig

Op-Test No.: A	Scenario No.: 3	Event No.: 7	Page 3 of 4

Event Description: ATWT- 1A EH FLUID PUMP TRIPS
Initiating event: when unit has been ramped down and KG2 is in alarm as directed by NRC

Time	Position	Applicant's Actions or Behavior
	REW	- Verify Phase A ctmt iso Verify Ph A ctmt iso actuated Check all MLB-2 lights lit - Announce "Unit 1 reactor trip and Safety Injection" - Verify all Rx trip and bypass bkrs open - *Trip CRDM MG set supply breakers* - Check AFW status Total AFW flow > 395 gpm or any NR level >30% Control MDAFWP and TDAFWP flow for 30% to 60% NR level When two SG NR levels >25% and TDAFWP not required, stop TDAFWP - Verify two trains of ECCS equipment aligned Both trains of SI actuated Bkrs DF01, DF02, DG15, & DG02 closed Two trains of battery chargers energized Two trains of ESF equip aligned All MLB-1 lights lit Two SW pumps running in both SW trains Chg pump suction and discharge vlvs open All post accident ctmt air mixing fans started - Secure secondary components Both heater drain pumps All but one cond pump Align backup cooling to cond pumps - Check RCS avg temp stable at or approaching 547 deg **RNO** - Verify stm dumps closed. - Atmospherics closed - Isolate TB loads - Minimize AFW flow - Close MSIV's - Check Pzr pressure - Check RCP trip criteria; subcooling > 16 deg - Monitor chg pump miniflow criteria

Op-Test No.: A	Scenario No.: 3	Event No.: 7	Page 4 of 4
Event Description:	ATWT- 1A EH FLUID PUMP TRIPS Initiating event: when unit has been ramped down and KG2 is in alarm as directed by NRC		

Time	Position	Applicant's Actions or Behavior
	CREW	Check SGs not faulted; no SG falling in uncontrolled manner or less than 50 psig
___*___ Critical	SRO	Direct Transition to ESP-1.1 - Update and Inform OSS of plant conditions

7/9/2003

OPERATING TEST 1
SCENARIO 3

Initial Conditions: 100% power, EOL, 15000 MWD, Equilibrium Xenon, A Train O/S, RCS boron concentration is 211 ppm.

- 1B MDAFP tagged out for motor bearing lube schedule. (oos 1 hr.) Expected RTS in 4 hrs.

STPs/Evolutions:

- Expect to ramp down to remove 1A SGFP from service this shift to clean the LO strainer.
- Swap SJAEs

Set in:

- 1B MDAFP tagged out.
- TDAFWP FAILS TO AUTOSTART
- 1B EH Fluid pump fails to auto start.
- Rx trip breakers fails to open
- 1A CRDM MG set breaker fails to trip
- PCV-445A sticks open when it lifts.

Event 1 – Swap SJAEs

Event 2 - PT-464 fails high

Event 3 – Letdown Heat exchanger leak.

Event 4 – PT-445 fails high. PORV will stick open.

Event 5 – Ramp down to remove 1A SGFP from service UOP-3.1

Event 6 – EH Fluid pump degraded head

Event 6 – EH Fluid leak on 1A SGFP to include losing EH Fluid level and Fast ramp.

Event 7 –1B EH pump trip - ATWT event. FRP-S.1

Procedures used:
SOP-28.5/SOP-2.1 or AOP-16/UOP-3.1/AOP-17.0/EEP-0/FRP-S.1/EEP-0/ESP-1.1or ESP-0.1

OPERATING TEST 1
SCENARIO 3
COMMUNICATIONS SHEET

Event 1 – Swap SJAEs

Event 2 – PT-464 fails high

If requested:
TB Man reports: Both SGFPs are running at approx. 3500 rpm.

Event 3 – Letdown Heat exchanger leak.

ROVER reports: The CCW surge tank vents are closed.

Event 4 – PT-445 fails high

Event 5 – Ramp down to remove 1A SGFP from service UOP-3.1

Event 6 – EH Fluid pump degraded head

TB Man reports: There is a leak on the 1A SGFP.

Event 6 –
TB Man reports: I am making up to the EH reservoir.

Later report: The leak is getting worse. Leak can be isolated if SGFP taken off line.

Event 7 – 1B EH pump trips ATWT event. FRP-S.1

Procedures used:
SOP-28.5/SOP-2.1 or AOP-16/UOP-3.1/AOP-17.0/EEP-0/FRP-S.1/EEP-0/ESP-1.1or ESP-0.1

SHIFT SUPERVISOR RELIEF CHECKSHEET FARLEY NUCLEAR PLANT

Unit No. ***ONE***

Offgoing Supv.	Oncoming Supv.	☐N ☐D ☐E Date

Part I - To be reviewed by the oncoming Supervisor prior to assuming the shift.

Unit Status ***100%, EOL, 15000 MWD, Equil. Xenon, A Train on service. RCS boron concentration is 211 ppm.***

STPs/Evolution's (completed/in progress/planned)

Swap on service sections of both SJAEs immediately after shift turnover for Engineering Support testing

Expect to remove 1A SGFP from service to clean the lube oil strainer later in shift.

General Information and Equipment Status

1B MDAFP is tagged out for motor bearing lube schedule. (OOS -1 hour)

Expected RTS in 4 hours

Waste Management Status

LCO Status ***3.7.5 Condition B: 1B MDAFP***

Night Orders

☒ Part II P.O. Logbook, Chemistry Report, Shift Complement, Tag Order Index, reviewed as early in shift as possible

☒ Part III	STP-1.0 reviewed/signed	P.O. Logbook reviewed/initialed	UO/OATC Logs reviewed/initialed	Keys turned over
	☒ Yes	☒ Yes	☒ Yes	☒ Yes