

2015 PERRY NUCLEAR PLANT NRC INITIAL LICENSE EXAMINATION OPERATION TEST
SUBMITTAL COMMENTS

I. JPMS

A. RO ADMIN

1. OT-3701-ADM_001_RO; Determine Required Actions for, and Components Affected by, Placing 1E31-N700A A2-3 In A Tripped Condition
 - a. Initial Conditions – Include noun name for the transmitter 1E31-N034A
 - 1) No change made; no benefit gained by adding noun name.
 - b. Initiating Cue – Would a more appropriate cue be to “Determine and brief the crew on the actions associated with placing the affected trip unit in a tripped condition.”
 - 1) After further review and discussion, no change was made.
 - c. Performance Step (PS) 1
 - 1) Move list of PDBs to a bulleted list below the step description
 - 2) Add information in the “Notes” as one of the listed items with the PDBs.
 - 3) OK as is; no changes made for either comment.
 - d. A NOTE should be inserted prior to PS 2 stating that steps PS 2 and 3 can be performed in any order.
 - 1) OK as is; no changes made.
 - e. PS 2 should read “Locates the appropriate procedure(s) and identifies the required actions for placing the TRIP UNIT in a tripped condition.”
 - 1) OK as is; no changes made.
 - f. PS 3 should read “Identifies the “Control Action” (actuators) initiated by placing the the TRIP UNIT in a tripped condition”
 - 1) OK as is; no changes made.
2. OT-3701-ADM_028_RO; Evaluate Schedules to Maintain License Active.
 - a. Initiating Cue: Delete last bullet (satisfied by 1st bullet).
 - 1) Requested change was made.
 - b. Question – Does the FS position require the watch-stander to have a RO(SRO) license?
 - 1) Typically has a license, but position does not require one.
 - c. PS 1, 3, 4, & 5 – The first bullet in the standard should state “... in a **qualifying** Licensed Position.”
 - 1) Requested change was made.
 - d. PS 7 can be eliminated since completion of the previous steps satisfies the Standard.
 - 1) PS 7 deleted.

2015 PERRY NUCLEAR PLANT NRC INITIAL LICENSE EXAMINATION OPERATION TEST
SUBMITTAL COMMENTS

3. OT-3701-ADM_006_RO; Complete SVI-R10-T5227, Off-Site Power Availability Verification
 - a. Initial Conditions – Specify the condition requiring the performance of the SVI (See SRO Admin 006).
 - 1) OK as is, no changes made.
 - b. Initiating Cue – JPM should not be "Time Critical." (Enhancement)
 - 1) If the surveillance is not completed, the required action is to be in Mode 3 within 12 hours.
 - 2) Additionally, the estimated completion time is only 20 minutes. Examinee would have to take more than 3X the expected completion time which would be justification to fail.
 - 3) JPM no longer designated as "Time Critical."
 - c. Initiating Cue – Delete last two sentences.
 - 1) Change made as requested.
 - d. Initiating Cue – Delete "for LCO 3.8.1 Condition B"
 - 1) OK as is, no change made.
 - e. PS 1 – should NOT be "Critical"; actual performance of the correct step/section is the critical part.
 - f. PS 3 – The second sentence of the "Critical Step" is the standard; the first sentence is the reason/basis.
 - g. Who normally completes Step/Section 5.2? If it is the performer, then have the performer make the appropriate entry and complete the associated documentation.
 - 1) PS 5 added to incorporate comment.
4. OT-3701-ADM 002 RO; Select an Eligible NLO to Perform a Valve Manipulation in a High Radiation Area
 - a. Is this really an activity, normally performed by the licensed ROs?
 - b. Initiating Cue:
 - 1) The sentence associated with travel times and exposures is an "Initial Condition" and should be moved there.
 - 2) The last sentence is information that should either be known by the applicant or provided in a procedure. It should be unnecessary to provide this direction.
 - 3) Initial conditions and initiating cue revised to address above concerns.
 - c. Changed Step 1 since applicant may desire to review survey map. Added Cue for examiner to provide applicant survey map if requested.

2015 PERRY NUCLEAR PLANT NRC INITIAL LICENSE EXAMINATION OPERATION TEST
SUBMITTAL COMMENTS

- d. PS 2
 - 1) The step should be: "Candidate evaluates the identified workers exposure records against the anticipated job dose and using the guidance provided in NOP –OP-4201 and NOP-OP-4202, selects the appropriate NLO." Everything else procedural guide supporting the performance of the step and should be removed.
 - 2) The standard is then: "Selects Amanda Smith"
 - e. PS 3 should then be: Determines that Amanda Smith will need an ACL Extension Form completed.
 - 1) Changes were made to address concerns with 'd' and 'e' above.
 - f. The current PS 3 then becomes PS 4 with the standard (Answer Key) identifying what items MUST be completed correctly.
 - 1) Wouldn't the candidate sign as the SUPERVISOR and Amanda Smith sign as the WORKER.
 - 2) Examiner will sign for Amanda Smith (worker)
 - 3) Answer key changed to reflect applicant as supervisor.
- B. SRO ADMIN
- 1. OT-3701-ADM 025 SRO; Verify Proper Placement of In-Core Components during Refuel Ops
 - 2. OT-3701-ADM_028 SRO; Evaluate Schedules to Maintain License Active.
 - a. Initiating Cue: Delete last bullet (satisfied by 1st bullet).
 - 1) Requested change was made.
 - b. Question – Does the FS position require the watch-stander to have a RO(SRO) license?
 - 1) Typically has a license, but position does not require one.
 - c. Delete PS 1 and renumber subsequent steps
 - 1) OK as is; no changes made.
 - d. PS 1, 3, 4, & 5 (step numbers after renumbering) – The first bullet in the standard should state "... in a **qualifying** Licensed Position."
 - 1) Requested change was made.
 - e. PS 7 can be eliminated since completion of the previous steps satisfies the Standard.
 - 1) PS 7 deleted.

2015 PERRY NUCLEAR PLANT NRC INITIAL LICENSE EXAMINATION OPERATION TEST
SUBMITTAL COMMENTS

3. OT-3701-ADM_006 SRO; Complete SVI-R10-T5227, Off-Site Power Availability Verification
 - a. Initiating Cue – JPM should not be "Time Critical." (Enhancement)
 - 1) If the surveillance is not completed, the required action is to be in Mode 3 within 12 hours.
 - 2) Additionally, the estimated completion time is only 20 minutes. Examinee would have to take more than 3X the expected completion time which would be justification to fail.
 - 3) JPM no longer designated as "Time Critical."
 - b. Initiating Cue – Delete last two sentences.
 - 1) Change made as requested.
 - c. PS 1 – should NOT be "Critical"; actual performance of the correct step/section (PS 2) is the critical part.
 - 1) Change made as requested.
 - d. PS 3 – The second sentence of the "Critical Step" is the standard; the first sentence is the reason/basis.
 - 1) See markup and discuss with facility.
 - e. Who normally completes Step/Section 5.2? If it is the performer, then have the performer make the appropriate entry and complete the associated documentation.
 - 1) PS 6 added to incorporate comment.
 - f. Procedure Comment – Where is step 5.3?
 - g. PS 4 – CUE : Insert before the present Cue, "If applicant makes the determination that the Acceptance Criteria are Satisfactory, then Terminate the JPM."
 - 1) OK as is, no change made.
 - h. PS 4 – CUE: Combine three bullets into one statement: "Evaluate Tech Spec 3.8.1 and determine the required actions to be performed."
 - 1) Cue revised to address concern.
 - i. PS 5 – Standard; Condition B was already entered (Initial Condition).
 - j. Who completes the Test Cover Sheet? This should also be part of the JPM (ROs too if the performer is the one expected to complete the sheet,)
 - 1) PS 6 added to incorporate comment.
4. OT-3701-ADM 029 SRO; Approve Liquid Radwaste Discharge.
 - a. Initial Conditions – Add:
 - 1) "You are the Shift Manager"
 - i. Requested change was made
 - 2) "The attached Liquid Radwaste Release Permit has been presented to you for authorization."
 - i. Determined to be unnecessary

2015 PERRY NUCLEAR PLANT NRC INITIAL LICENSE EXAMINATION OPERATION TEST
SUBMITTAL COMMENTS

- b. PS 1 through 6 – Steps should state the action being performed from procedure step 5.1.9 (e.g., Step 1 would read “Verifies that all required data has been entered in Attachment 2.”)
 - 1) OK as is; no changes made.
 - c. PS 7 – Should read “Grants permission to start the discharge.”
 - 1) OK as is; no changes made.
 - d. PS 7 – Standard should state after ensure that all corrections have been made, ...”
 - 1) OK as is; no changes made.
- 5. OT-3701-ADM 308 SRO; Classify Event and Complete E-Plan Forms.
 - a. Initial Conditions –
 - 1) Add “You are the Shift Manager.”
 - i. Requested change was made.
 - 2) Move wind speed and direction to applicable performance step.
 - i. OK as is, no changes made
 - b. Initiating Cue – Should read: “Assess the above conditions, classify the event, and complete the necessary E-Plan actions.”
 - 1) Requested change was made.
 - c. PS 1 – Should read “Identifies the appropriate Emergency Action Level and declares the appropriate Emergency Classification.”
 - 1) OK as is; no changes made.
 - d. PS 2 should be to make PA announcement of emergency. The current PS 2 should be PS 4 and subsequent steps renumbered as needed.
 - 1) Requested change was made.
 - e. Why is sounding (or directing the activation) of the Plant Emergency Alarm marked N/A? This should be PS 3
 - 1) Task cannot be performed from the RSP.
 - f. ~~Current PS 3 (New PS 5)~~ should read completes “Initial Notification Form” and forwards to I&C communicator.
 - 1) OK as is; no changes made.
 - g. ~~Current PS 4 (New PS 6)~~ should be replaced with “Identifies which emergency facilities must be activated and makes the associated PA announcement. Standard would be that candidate announces activation of the required facilities.”
 - 1) Requested change was made.
- C. CONTROL ROOM (SIMULATOR) SYSTEMS JPMs
 - 1. OT-3701-B33 502 RO; Raise Reactor power with Flow and Respond to APRM A Failure (Alternate Path)
 - a. Redefine fault trigger to take evaluator out of loop (e.g., operation of FCV slide switch or FCV position)
 - 1) No change was made. Simulator driver will control activation of malfunction.

2015 PERRY NUCLEAR PLANT NRC INITIAL LICENSE EXAMINATION OPERATION TEST
SUBMITTAL COMMENTS

- b. PS 2 – remove the word “concurrently”; not part of procedure direction
1) Requested change was made.
 - c. If flow control is not in AUTO, why is this critical (i.e., if power is not changing there is no adverse consequence of not performing the step)?
1) FCVs will runback regardless of FLOW Controller mode.
- 2. OT-3701-G33 001 RO; Restore RPV level Using RWCU Blowing-Down to Main Condenser
 - a. PS 2 – Why is step “critical.” What is the consequence if the operator does not perform the step?
1) Step necessary to ensure enough pressure to drive flow.
 - b. Typo in Terminating Cue.
1) OK as is; no changes made.
- 3. OT-3701-B21 008 RO; Slow Close MSIV’s on MS Line ‘A’
 - a. PS 5 – Why is releasing the MSIV Test switch early an automatic failure? This would be no different than testing the MSIV at power.
 - b. PS 9 – Same question, especially since MSL is already isolated.
1) Wording changed to reflect that releasing switch early “may” be a failure.
- 4. OT-3701-E12 002 RO; Establish Alternate Shutdown Cooling using the Suppression Pool Feed and Bleed
 - a. Verify cooldown rate is not exceeded/challenged
1) Verified. Setup is such that temperature cannot change by more than 100 degrees.
 - b. Remove PS 13 and PS 14; clutter
1) Requested change was made.
 - c. PS 15 – Why critical? Per the initial conditions both RHR A and B are already in Pool Cooling.
1) JPM changed to terminate earlier, eliminating concern.
- 5. OT-3701-B21 507 RO; Perform a Manual NS4 BOP Inboard Isolation (Alternate Path)
 - a. PS 2 – Typo on switch EINs
1) corrected
 - b. Where is the procedural guidance, or checklist, for verifying that the isolation is complete?
1) There is a hard card, posted on P601.
 - c. If operator elects to manual close inboard valves individually, does that constitute a failure?
1) The postulated action is not in accordance with the procedure or given order. May require case by case evaluation if situation arises.

2015 PERRY NUCLEAR PLANT NRC INITIAL LICENSE EXAMINATION OPERATION TEST
SUBMITTAL COMMENTS

6. OT-3701-R10 001 RO; Transfer Station 13Kv buses
 - a. Initiating Cue – remove reference to IOI-3 Step 4.9.8; add “from Aux Transformer to Startup Transformer”
 - 1) Revised to address concern.
 - b. PS 10 – Since L1202 does not automatically open this should be two separate steps and JPM should be classified as Alternate Path.
 - 1) OK as is; no changes made.
 - c. Redefine fault trigger to remove evaluator from loop.
 - 1) No change was made. Simulator driver will control activation of malfunction.
7. OT-3701-C51 501 RO; Perform SRM Detector Withdrawal (Alternate Path)
 - a. IC should be setup with the reactor stable (e.g., POAH)
 - 1) OK as is; no changes made.
 - b. PS 1 – Note states that operator should not withdraw all four SRMs at the same time. What if they do?
 - 1) Action is not restricted, but would deserve a comment.
 - c. PS 3 – Why “critical”? Isn’t drive power deenergized automatically by a position limit switch?
 - 1) No longer classified as “critical”
 - d. Insert NOTE prior to PS 1 to state that PS 1 through PS 4 should be repeated as necessary until SRMs A, B, and D are fully retracted and SRM C is identified as stuck.
 - 1) Note added to PS 1.
 - e. Terminating Cue should include “SRMs A, B, and D fully retracted”
 - 1) Requested change was made.
8. OT-3701-M15 501 RO; Shift AEGTS Trains (Alternate Path)
 - a. PS 2 and 8 – Why 5 minutes before starting standby fan? Seems like it should be ensure 5 minutes have elapsed (from de-energization of the heater) before stopping the off-going fan.
 - 1) OK as is; no changes made.
 - b. Procedure assumes normal operation of trains. Do time delays apply for abnormal conditions? (If there is a low flow condition, fan may be damaged)
 - 1) OK as is; no changes made.

2015 PERRY NUCLEAR PLANT NRC INITIAL LICENSE EXAMINATION OPERATION TEST
SUBMITTAL COMMENTS

D. IN-PLANT JPMs

1. OT-3701-R14 501; Shift Division 1 ATWS UPS to the Inverter
 - a. PS 1 – What is key for? Is this a key an on-shift operator would normally have in his possession?
 - 1) Key for local mechanical blocking device. Key is not carried by operators and must be checked out.
2. OT-3701-C11 007; Align CRD Pumps for Additional CRD Alternate Injection
 - a. NONE
3. OT-3701-P54 505; Manually Initiate the Div 1 Diesel Generator Room C02 System
 - a. NONE

II. SIMULATOR SCENARIOS

A. Scenario 1

1. Event 2
 - a. If instruments are not modeled on panels, then Post a picture or graphic aid rather than rely on evaluator cue.
 - 1) Comment incorporated.
 - b. SRO should inform crew members what the LCO Required Action is and the associated completion time.
 - 1) Determined that no change to scenario guide was necessary.
2. Event 3
 - a. If instruments are not modeled on panels, then Post a picture or graphic aid rather than rely on evaluator cue.
 - 1) Comment incorporated.
 - b. For ONI-B21-1 step 3.1 indicate that performance of step is not anticipated (e.g. insert [Contingency – Performance NOT expected]).
 - 1) Comment incorporated.
 - c. Closing the SRV should not be a “Critical Task.” Scramming the reactor per ONI step 3.1 would be a “Contingent Critical Task.”
 - 1) Agreed, no longer designated as “Critical Task.”
 - d. Would the US normally complete ONI Step 4.7 or would this be delegated to the SM.
 - 1) Directed to SM.
3. Event 4
 - a. Evaluate accuracy of 1st **Evaluator** NOTE on Lube oil temperature indication.
 - 1) Note is accurate; no change required.
 - b. 2nd **Driver** Instruction should be contingent on whether controller has been taken to manual and adjusted.
 - 1) Comment incorporated.
 - c. Last ATC action should state IF rather than When

2015 PERRY NUCLEAR PLANT NRC INITIAL LICENSE EXAMINATION OPERATION TEST
SUBMITTAL COMMENTS

- 1) Comment incorporated.
- 4. Event 6
 - a. ONI Step 3.3 unnecessary unless containment access had been restored earlier.
 - 1) OK as is; no changes made.
 - b. ONI Step 3.4 was previously performed
 - 1) OK as is; no changes made.
 - c. Manual Scram should be "Critical Task #1"
 - 1) Agreed
- 5. Event 7/8
 - a. Combine to single Event
 - 1) OK as is; no changes made.
 - b. Manual Scram actions would be part of Event 6; Event 7 begins with Incomplete Scram
 - 1) OK as is; no changes made.
 - c. Why start RHR Pump C if goal is to T&P Injection.
 - 1) OK as is; no changes made. Required by procedure.
- 6. Event 10
 - a. Seems to be a lot of variables associated with whether this event occurs or not.
 - 1) ED is not expected but left in scenario as a contingency.
- 7. Critical Tasks
 - a. CT #1 should not be a "Critical Task"
 - 1) Simply exceeding a TS LCO does not warrant classification as a CT.
 - 2) There is no significant degradation until temperature exceeds 110°F where the RX must be shutdown immediately (CT#2)
 - 3) No longer a Critical Task
 - b. CT#2(1) should not be critical unless the action will result in some success
 - 1) There must be some rod motion caused by placing the Mode Switch in Shutdown to be considered a CT
 - i. There is some rod motion.
 - 2) Task should be redefined to include scram hard-card actions of ARI actuation and RR downshift.
 - i. There is no additional rod motion with actuation of ARI and downshifting RR simply reduces power and is not part of shutdown criteria.
 - c. CT#6-8 should be clearly identified as contingencies unless scenario is clearly designed to force those actions
 - 1) Agreed. CTs (5-7) identified as contingent.

2015 PERRY NUCLEAR PLANT NRC INITIAL LICENSE EXAMINATION OPERATION TEST
SUBMITTAL COMMENTS

B. Scenario 2

1. Event 3

- a. If indication is as he sees, eliminate **Evaluator** Cue
1) Cue eliminated.
- ~~b. If instruments are not modeled on panels, then Post a picture or graphic aid rather than rely on evaluator cue.~~
- c. SRO should inform crew members what the LCO Required Action is and the associated completion time.
1) Determined that no change to scenario guide was necessary.

2. Event 4

- a. If instruments are not modeled on panels, then Post a picture or graphic aid rather than rely on evaluator cue.
1) Comment incorporated.
- b. SRO should inform crew members what the LCO Required Action is and the associated completion time.
1) Determined that no change to scenario guide was necessary.

3. Event 5

- a. What plausible event would cause both pumps to trip simultaneously
1) Event based on actual occurrences.
- b. Include visual/audible cues for that event (e.g., failed instrument/alarms)
1) OK as is; no changes made.

4. Event 6

- a. Should Isolating RWCU be a "Critical Task"
1) No, system is isolated by transient.
- b. Remove actions that are not expected to occur (e.g., Emergency Depressurization and associated actions)
1) OK as is; no changes made.
- c. Critical Task 2 should include SLC initiation
1) Agreed

5. Event 7

- a. Actuating Cont Spray A should not be part of the "Critical Task" since actuation is failed.
1) Containment Spray A No longer part of the Critical Task

6. Critical Task 3

- a. Measurement of success should be maintenance of level below 100" or
- b. Below level lowered to because of Containment Conditions (Leak bypassing the drywell and suppression pool)
1) Task revised

2015 PERRY NUCLEAR PLANT NRC INITIAL LICENSE EXAMINATION OPERATION TEST
SUBMITTAL COMMENTS

- c. May be beyond initial license level if ATWS continues concurrently with leak.
 - 1) OK as is; no changes made.
- C. Scenario 3
 - 1. Event 4
 - a. If instruments are not modeled on panels, then Post a picture or graphic aid rather than rely on evaluator cue.
 - 1) Comment incorporated.
 - b. Required Action is and the associated completion time.
 - 1) Determined that no change to scenario guide was necessary.
 - 2. Event 5
 - a. SRO should inform crew members what the LCO Required Action is and the associated completion time.
 - 1) Determined that no change to scenario guide was necessary.
 - 3. Event 6
 - a. What plausible event would trigger event
 - 1) Radio interference?
 - b. Third ATWS – is this failure really necessary?
 - 1) Not considered an ATWS since rods go in on ARI activation.
 - 4. Event 7 through 10
 - a. All part of the Major (Event 6) not separate events.
 - b. Component failures and/or actions in support of event
 - 1) OK as is; no changes made.
- D. Scenario 4
 - ~~1. Initial Conditions/Turnover~~
 - ~~a. If restart is in progress would RWCU already be aligned for Reduced Feedwater Temperature Control as part of shutdown?~~
 - ~~2. Event 1~~
 - ~~a. This does not seem like an action that would be conducted during approach to critical.~~
 - ~~b. Remove evaluator notes; these items were part of turnover.~~
 - c. Normal Event eliminated.
 - 3. Event 2
 - a. Would SRO be expected to place rod pulls on hold
 - 1) YES

2015 PERRY NUCLEAR PLANT NRC INITIAL LICENSE EXAMINATION OPERATION TEST
SUBMITTAL COMMENTS

4. Event 3
 - a. SRO should inform crew members what the LCO Required Action is and the associated completion time.
 - 1) Determined that no change to scenario guide was necessary.
5. Event 4
 - a. What is Event 13?
 - 1) Driver initiated override.
6. Event 5
 - a. Does rod start of position 00? NO
7. Event 8
 - a. If crew scrams early may want to delay actuation of Event 9 until after scram immediate actions are complete.
 - 1) OK as is; no changes made.
8. Event 9
 - a. 4th ATWS?
 - 1) Actions significantly different due to initial power level (MODE 2)
 - b. Cooldown cannot commence until reactor is subcritical; need to add this determination prior to commencing cooldown.
 - 1) Added
9. Event 9 through 11
 - a. All part of the Major (Event 9) not separate events.
 - b. Component failures and/or actions in support of event
 - 1) OK as is; no changes made.