

**NRC COMMENTS TO THE PROPOSED OPERATING TEST
FOR THE PERRY INITIAL EXAM - FEBRUARY 2007**

OPERATING TEST SUBMITTAL REVIEW
2/1/07

Admin JPMs:

NRC COMMENT:	LICENSEE RESPONSE/RESOLUTION:
<p><u>RO Conduct of Ops / Fire Protection Leak Isolation and Evaluation:</u> 1) Step 2, RO task to determine Functional Specification?</p>	<p>1) All ROs are qualified Fire Brigade Leaders and determination of Functional Specifications are part of their required knowledge. Will leave JPM as written.</p>
<p><u>SRO Conduct of Ops / Staff Oncoming Shift Positions Based on Personnel Qualifications:</u> 1) JPM Steps 2 through 5 – Bold Instructor Cue and add 'When the Operator locates the appropriate Qualification Matrix for each shift position in the FITS computer database, then provide the Operator with the appropriate hard copy of the Qualification Matrix'.</p>	<p>1) Information added.</p>
<p><u>SRO Emergency Plan / Verify notification paperwork is correct prior to notification:</u> 1) Initial Condition – Delete 'Time Critical JPM.' Add in bold 'This is a drill.' 2) Initiating Cue – Delete 'Time Critical JPM.' and add at the end of cue 'This is a Time Critical JPM.' 3) JPM Step 1 – Add a block or line for 'START TIME: _____' since it is time critical. 4) JPM Step 2 – Change to read 'Blocks 1 and 2 are correct. Block 3 should be checked Site Area Emergency and HS1 identified in the EAL block.' 5) JPM Step 2 – Critical Step – Modify to read 'Sire Area Emergency should be checked and HS1 identified in the EAL block.' 6) JPM Step 3 – Add a block or line for 'STOP TIME: since it is time critical.' 7) JPM Step 5 – Change 'Critical Step' to 'Standard'. 8) CADAP sheet – Create a header that identifies this sheet as the 'ANSWER KEY' so it is not mistakenly handed to the Operator.</p>	<p>1) Deleted Time Critical JPM, added bold. 2) Done. 3) Added block to Step 2. 4) Changed Blocks 1,2,3. 5) Made Step 2 critical. 6) Added block. 7) Changed. 8) Identified Answer Key.</p>
<p><u>RO/SRO Conduct of Ops / Knowledge of radiation exposure limits:</u> 1) Initiating Cue – Change last line to read 'Calculate expected dose and complete Form PNPP No. 6639, Increased Dose Control Level Authorization, if you will exceed 90% of your quarterly Administrative Dose Limit per HPI-B3.' 2) JPM Step 1 – Bold cue. 3) JPM Step 2 – Critical step for valve G33F057/58 dose calculation, change '180' to '160' and '90' to '80'. 4) JPM Step 2 – Notes, change '130' to '120'. 5) JPM Step 3 – Critical step, change to read 'Operator determines that 90% of quarterly Administrative Dose Limit per HPI-B3 is 900 mrem and that a dose extension is not required.'</p>	<p>1) Revised Initiating Cue. 2) Bolded cue. 3) Revised. 4) Revised. 5) Revised.</p>

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System JPMs:

NRC COMMENT:	LICENSEE RESPONSE/RESOLUTION:
<p>General: 1) Only apply one KA task to the JPM.</p>	<p>1) Will apply most applicable KA.</p>
<p><u>a. RO/SRO-I -U; N27-02 / Shift MFP to RFPT "B", Respond to RFPT "B" Trip:</u> Task is to respond to RFPT trip to prevent RRP downshift or reactor scram. Alternate path is shifting from MFP to RFPT "B", then having RFPT "B" trip and shifting RWL control back to the MFP. 1) What is failure criteria? 2) JPM Step 2 – Add NA in front of procedure Step 7.5.4. 3) JPM Step 6 – Bold Instructor Cue "Enter ONI-N27".</p>	<p>1) Failure criteria would be either a RRP downshift, or reactor scram on low RWL. 2) Added NA. 3) Bolded cue.</p>
<p><u>b. RO/SRO-I -U; B21-02 / Failure of ADS to Inhibit (Time Critical):</u> Task is to take actions to inhibit ADS logic. Alternate path is failure of ADS keylock switch, need to reset 105s timer or shutoff RHR pump. 1) Why is Step 1 included in task (ie, "initiate SLC demin water alternate injection")? 2) Would not be considered Time Critical JPM. Failure criteria would be initiation of ADS.</p>	<p>1) Normally, initiate SLC demin water alternate injection and inhibiting ADS actions are done together. Leave JPM as written. 2) JPM will not be a Time Critical.</p>
<p><u>c. RO/SRO-I -U; E12-06 / Initiate SDC:</u> Task is to take actions to establish SDC through the normal return path, then establish a cooldown rate. Alternate path is failure of valve in normal return path, must establish flow through the alternate SDC return path. 1) JPM Step 2 – Add note of expectation to hold switch in close position 6 to 8 seconds after green closed light comes on to ensure valve is closed. 2) JPM Step 4 – Add note about verifying MFV closure if operator starts RHR Pump A. 3) JPM Step 3-Clarify status of FW. 4) JPM Step 7 – Change Flow Band from 3000 to 5000 to 4000 to 5000 gpm so operator has to make an adjustment. 5) Add note that reactor temperature greater than 200 degrees is a mode change and considered JPM failure criteria.</p>	<p>1) Note added. 2) Note added. 3) FW status clarified. 4) Flow band changed. 5) Note for failure criteria added.</p>

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<p>d. RO/SRO-I; C11-13 / Insert Stuck Control Rod: Task is to take actions to withdraw a stuck control rod. Alternate path is failure of rod to withdraw at normal CRD pressure, use double-clutching and increased CRD pressure. 1) JPM Step 9-add same cue from Step 8 2) JPM Step 11-add note that operator closes 1C11-F003 to raise drive water dP. 3) JPM Step 14-clarify that procedure Step 7.24.7 is not N/A.</p> <p>4) Initial Condition - change second sentence to "Time events analyzer was the primary method used to time control rods. ICS was unavailable. Currently no control rods have an Active or Potential LCO documented." 5) Initiating Cue - for ROs, change to "US directs you to evaluate Time Events Analyzer data sheet for scram time testing per section 5.1.3 using attachment 1 of SVI-C11-T1006 and inform the US of any slow or inoperable rods. Complete SVI-C11-T1006 data sheets column 5.1.3.1. -Provide initialed SVI-C11-T1006 -Provide Time Events Analyzer Scram Time Data -Provide Full Core Display 6) Initiating Cue - for SROs change to "As the RO evaluate Time Events Analyzer data sheet for scram time testing per section 5.1.3 using attachment 1 of SVI-C11-T1006. Complete SVI-C11-T1006 data sheets column 5.1.3.1. As the US identify any TS LCO and complete LCO paperwork. -Provide SVI-C11-T1006 -Provide Time Events Analyzer Scram Time Data -Provide Full Core Display 7) Change from Critical Task to Standard Step 2 8) Corrected Limiting Max Time numbers 9) Eliminated rounding. Step 6</p>	<p>1) Added cue to Step 9. 2) Added note to Step 11. 3) Added clarification that Step 7.24.7 is not N/A. 4) Changed Initial Condition. 5) Changed RO Initiating Cue. 6) Changed SRO Initiating Cue. 7) JPM Step 2 not critical. 8) Limiting Max Time numbers revised. 9) Eliminated rounding Step 6.</p>
<p>e. RO/SRO-I; E12-05 / Terminate CS and Establish SPC on RHR A: Task is to take actions to shift RHR from CS to SPC. 1) JPM Step 5 is critical.</p>	<p>1) SPC is required, Step 5 is critical.</p>
<p>f. RO/SRO-I; R10-10 / Perform Off-site Power Availability Verification: Task is to perform Off-site power availability verification. 1) Add to Initiating Cue-SVI-R10-T5227 is being performed to verify weekly requirement. 2) Step 3-add cue to give applicant U2 electrical line-up.</p>	<p>1) Licensee agreed, Step 3 is not critical, will revise JPM accordingly.</p>
<p>g. RO; C51-02 / Evaluate and Bypass Power Range Instrumentation: Task is to bypass power range instrumentation. 1) JPM Step 2-clarify available LPRMs and level location. 2) JPM Step 7-add "OPRM bypass is ON at Panel P680" and add cue that a half scram is acceptable for plant conditions.</p>	<p>1) Added information. 2) Added information and cue.</p>
<p>h. RO/SRO-I; M25-01 / Reset Emergency Recirc Auto Initiation: Task is reset of emergency recirc auto initiation. 1) JPM Step 2: All caps for "ON" (switch position).</p>	<p>1) Caps "ON".</p>
<p>i. RO/SRO-I;-U; C41-07 / Lineup Alternate Boron Injection: Task is lineup alternate boron injection. 1) Add letters to pictures and corresponding cue sheets to ensure examiner hands correct picture to applicant.</p>	<p>1) Added letters to pictures and corresponding cue sheet to identify correct picture to hand to applicant.</p>

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<p><u>j. RO/SRO-I;-U; C61-07 / Place RHR in SPC from RSP:</u> Task is place RHR in SPC from RSP. 1) Step 2 is not critical (ie, ...verify...) 2) Initiating Cue – Add "In Accordance With IOI-11, Attachment 9, start at procedure step 4.4." 3) Initial Conditions – Add statement that attachment 12 and attachment 11 is complete.</p>	<p>1) Licensee agrees, will change JPM accordingly. 2) Added statement to Initiating Cue. 3) Added statement to Initial Conditions.</p>
<p><u>k. RO/SRO-I; P54-04 / Locally Start Diesel Fire Pump:</u> Task is local start of Diesel Fire Pump. 1) Steps 1 and 2 are not critical, ie, not required to accomplish the task). 2) JPM Step 1 – Delete "...continue with section 4.2.7." 3) JPM Step 2 – Delete "Perform an emergency run of diesel fire pump." 4) Initiating Cue – Change 'Specifications' to 'Specification(s)'. 5) JPM Step 1 – Bold examiner cue and add 'when the Operator determines the correct 914 drawing to use, then provide the drawing to the Operator'.</p>	<p>1) Licensee agrees, will change JPM accordingly. 2) Deleted. 3) Deleted. 4) Changed to "Specification(s)." 5) Added bold and phrase to cue.</p>

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Scenarios:

NRC COMMENT:	LICENSEE RESPONSE/RESOLUTION:
<p>1) Put each event writeup on separate D-2 pages and identify event by number. See examples/format in ES 1021, Appendix D, Section B.3.</p> <p>2) List significant operator actions/expectations for each event. See examples/format in Appendix D, Section B.3 of ES 1021.</p> <p>3) Identify position to get credit for event on D-1 page (Event Type column). See examples/format in Appendix D of ES 1021.</p>	<p>1) Licensee incorporated.</p> <p>2) Licensee incorporated.</p> <p>3) Licensee incorporated.</p>
SCENARIO 1	
Event 1, R, SRO/ATC	
Event 2, N, SRO/BOP	
Event 3, I/C, SRO/BOP. SRO receives credit for two TS's.	
<p>Events 4 and 5, I/C, SRO/ATC: 1) Combine Events 4 and 5 to provide better evaluation. They are related to the same system. Together, they provide adequate evaluation of the SRO/ATC.</p>	Licensee agreed, combined Events 4 and 5, re-label as 4..
Event 6: Delete, don't need this I/C, just makes scenario lengthy.	Licensee deleted Event 6.
Events 7: Re-label as Event 5, M, ALL.; I/C SRO/BOP	Licensee re-labeled as Event 5.
Event 8: Delete, not enough evaluation for I/C credit.	Event 8 deleted.
<p>Events 9 and 10, I/C, SRO/ATC/BOP: Combine Events 9 and 10, both event actions are related, re-label as Event 6, I/C, SRO/ATC/BOP. Good chance the RCIC L2 instrument failure will be masked by starting RCIC early, will not be able to evaluate applicant's diagnosis of the failed instrument. Additionally, RCIC will trip 5 minutes after injection. Applicant has no success path. Both events are use of HP feed to restore RWL</p>	Licensee combined events and re-labeled as Event 6.
Event 11, M,ALL: Re-label as Event 7.	Licensee re-labeled as Event 7.
SCENARIO 2	
Event 1, R,SRO/ATC	
Event 2, N,SRO/BOP	
<p>Events 3 and 4, I/C,SRO/BOP: Combine Events 3 and 4. They have a common link (isolation system). Based on the instrument failure, the applicant is required to verify the related isolations. Either event alone does not provide adequate evaluation.</p>	Licensee agreed, combine Events 3 and 4.
Event 5,N,SRO/BOP: Re-label as Event 4.	Licensee re-labeled as Event 4.

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Event 6,I/C,SRO/ATC: Re-label as Event 5.	Licensee re-labeled as Event 5.
Event 7,M,ALL: Re-label as Event 6.	Licensee re-labeled as Event 6.
Events 8 and 9,I/C,SRO/ATC: Combine Events 8 and 9 to provide adequate evaluation. Both are related to RWL control. Event 9 could be masked if RWL exceeds L8, then HPCS L8 trip not reset before RWL goes below L2. Re-label as Event 7.	Licensee agreed, combined Events 8 and 9. Licensee re-labeled as Event 7.
Events 10,11,and 12, I/C, SRO/BOP: Combine and re-label Event 8.	Licensee combined Events 10,11, and 12. Re-labeled as Event 8.
SCENARIO 3	
Event 1,R,SRO/ATC	
Event 2,N,SRO/BOP	
Event 3,I/C,SRO/BOP: 1) Not both C and N. Should be C.	1) Licensee agreed, make Event 3 I/C.
Event 4,I/C and R,SRO/ATC: 1) What is ADFL? 2) Break up into two events (I/C and R). Re-label as Events 4 and 5.	1) Auto Demand Flow Limiter. 2) Licensee broke up events and re-labeled as Events 4 and 5.
Event 5,M, ALL: Re-label as Event 6.	Licensee re-labeled as Event 6.
Event 7, I/C, SRO/BOP	
Events 6 I/C, SRO/ATC: Event 6 does not provide sufficient evaluation.	Licensee deleted event.
Event 8, M and I/C,SRO/BOP: Break up into two events, and relabel as Events 8 and 9.	Licensee broke up events and re-labeled as Events 8 and 9.
SCENARIO 4	
Event 1, N,SRO/BOP:	
Event 2, R,SRO/ATC:	
Event 3, I/C,SRO/BOP:	
Event 4, I, SRO/ATC	
Event 4, I, SRO/ATC Re-label as Event 5.	Licensee re-labeled as Event 5.
Event 5,R, SRO/ATC: 1) R not M for SRO/ATC. Decrease power due to decreasing vacuum. Re-label as Event 6.	1) Licensee made event M, re-labeled as Event 6.
Event 6, M,ALL: 1) Event 6 not enough evaluation for C, part of M.	
Events 7 and 8, I/C, SRO/BOP: 1) Combine Events 7 and 8. Both are part of terminate and prevent, same evolution.	1) Licensee deleted Event 8.