INTEGRATED OUTLINE COMMENTS (CP-2016-07)

Rev 1

Facility: CPNPP First Exam Date: 07-11-2016

| | Written Exam Outline (April 4, 2016) | | |
|---|---|--|--|
| | Comment | Resolution | |
| 1 | NRC Generated Written Exam Outlines | N/A | |
| 2 | From discussion on 1-13-16, Q87 was identified as not having a 55.43(b) tie – to confirm, CP was able to identify a tie to 55.43(b) for selected KA G2.2.3? | Chief Examiner requested that K/A be retained. Question was written with 55.43(b) tie. | |
| 3 | Is there a reason for the order of Q78 and Q79? Their order is out of sequence on the ES-401-2. | Questions are not out of order. NRC stated that it was acceptable to reorder questions as desired, but not to continue to move them after an assigned question number. Any questions that appear to be out of order are Questions with replacement K/As and the original Question/K/A was already assigned to that Question #. Q79 was originally system 038. When replaced with system 025 this moved Q79 before Q78. | |
| 4 | Likewise, is there a reason Q25 is out of order? (T1/G2)? | See item 3. | |
| 5 | Likewise, is there a reason Q35 and 36 are swapped, and Q37 and 38 are swapped, and Q40 and 41 are swapped, and Q52 is out of order (T2/G1)? | See item 3. This comment appears to be related to the Question # in () which were agreed could be reordered based on CPNPP's ordering philosophy. | |
| 6 | Likewise, for T2/G2 – why are Q64 and Q65 out of order? | See item 5. | |
| 7 | RO: K/A Category Point Totals for Tier 2 Group 2 are incorrect for K2 and A3. K2 should be 0 (not 1) and A3 should be 1 (not 0). The point totals for T2/G2 are correctly listed on ES-401-1 (skyscraper form). | Corrected. | |

| | Written Exam Outline (April 4, 2016) | | | |
|----|---|--|--|--|
| | Comment | Resolution | | |
| 8 | From ES-401-4: Q63 – Original K/A was knowledge of the operational implications of effect of pressure on CTMT leak rate in the E/APE of Loss of CTMT Integrity. The argument that operators are not trained on performing CTMT leakage calculations does not justify replacement of K/A. Provide Chief Examiner for info as to why this K/A must be replaced. | The operator's job responsibilities do not require them to perform these types of calculations during normal or emergency operations. As such the K/A has no operational validity for CPNPP. ES-401-4, Rejected K/A list will be revised to state clearer reason for rejection. | | |
| 9 | From ES-401-4: Q15 (Q – Original K/A was power supply to CS pumps and they're powered directly from 6.9 kV Safeguards bus – Are any other ESF pumps also powered directly from 6.9 kV Safeguards buses? If not, then concur with LOD=1 and reselecting replacement K/A | Per discussion with Chief Examiner on 4-13-16, it was determined that K/A rejection was appropriate but may be rethought if quality of replacement question did not meet the needs of all parties. | | |
| 10 | From ES-401-4: Q36 (Q63) – On 1-13-16, we discussed replacement of Q38 (Q65) K/A 075 K2.03 with 001 A3.07. Now you replaced K/A 071 A2.09 with 075 A2.02. How does this approach comply with replacement K/A criteria? Do concur that this original K/A should be replaced. | The original replacement went from K2 to A3 (as others K2s were not available in system 074; A3 was the only category at 0 test items and all others were at 1). When system 071 A2.09 required replacement, it was desirable to stay in the A2 category and as system 75 had originally been sampled but was no longer on the outline, it was chosen as the replacement system. | | |
| 11 | From ES-401-4: Q37 (Q65) – Concur with replacement IF CPNPP ARM system design has no features or interlocks that provide for Fuel Bldg isolation. | Correct. CPNPP has no ARM features or interlocks that provide for isolation. | | |
| 12 | From ES-401-4: Q79 – Does CP have any questions in its Initial License or Requal exam banks with the original K/A? On the surface, it appears that an SRO level question should be able to be written for the original K/A. Also, why not select another AA2 K/A before selecting a different E/APE? All other AA2 IRs are > 4.0. | Reviewed 040 AA2 K/As. Wrote new question to 040 AA2.05. Revised ES-301-2 and ES-401-4. | | |
| 13 | Of all questions that had K/A replacements, how many questions qualify as BANK? | 3 (Questions 24, 37 & 44) | | |

| | Administrative JPM Outline (April 4, 2016) | | | |
|---|---|--|--|--|
| | Comment | Resolution | | |
| 1 | General comment: all calculated values should include a band or range of acceptable answers, and every band or range shall be justified and documented. | Understood. | | |
| 2 | RA1 – is this the exact JPM from the 2013 NRC exam? By reviewing this exam, will applicants know 50% of Admin JPMs (RA1 and RA3)? | Agreed to replacement. Replaced with Bank JPM. | | |
| 3 | RA2 – ensure a copy of original JPM is included in Proposed Exam submittal. | Not required per NUREG-1021, but will be included. This is an error trap as the potential exists to give the unmodified version of the JPM. | | |
| 4 | RA3 – is this the exact JPM from the 2013 NRC exam? By reviewing this exam, will applicants know 50% of Admin JPMs (RA1 and RA3)? | Yes. No as RA1 has not appeared on any NRC exams. | | |
| 5 | RA4 – does CPNPP have a Bank JPM that would test Emergency Procedures/Plan? Typically, JPMs as described in the Task Summary offer little insight into Licensed Operator competence as the tasks are essentially the same as a General Rad Worker. It is difficult for these types of JPMs to qualify for LOD > 1.0. In addition, CPNPP has not tested RO's in the Emergency Procedures/Plan category in the last 3 NRC exams (at least). | No. ROs have no administrative responsibilities other than to operate or act as a communicator which does not have written requirements if being asked to fill the role. | | |
| 6 | SA3 - is this the exact JPM from the 2013 NRC exam? | Yes. | | |
| 7 | SA4 – is this the same as RA4 but with an SRO element added? Also, add the Generic K/A (and IR) that covers reporting requirements to the ES-301-1. | Yes. Added second K/A and IR for SRO only portion. | | |

| | Administrative JPM Outline (April 4, 2016) | | |
|---|--|--|--|
| | Comment | Resolution | |
| 8 | SA5 – is this the exact JPM from the 2014 NRC exam? It appears that for the 2013 and 2015 NRC exams, SA5 was to Determine PARs. For the 2014 and 2016 NRC exams, SA5 is to Classify an Emergency Plan Event. Discuss with Chief Examiner how this is not a predicable Admin JPM. One option is to change the JPM to a Chemical or Toxic Gas Emergency classification if CPNPP has these types of procedures. | No this is an Emergency Classification that has never been used on an Initial Operating Test. It is Direct from Bank because it has been used once on a Requal Operating Test. | |

| | Control Room / In-Plant System JPM Outline (April 4, 2016) | | |
|---|---|---|--|
| | Comment | Resolution | |
| 1 | Generic comment – what does the number in parentheses that follows all the K/As mean? For example, for S-1, it is (RO1024A). | The numbers in parentheses refers to the CPNPP JPM number (either from the bank or the number assigned after the test when it will be added to the bank). The number is the CPNPP task number followed by an 'alpha' character if more than one JPM exists tied to the specific task. | |
| 2 | Potential overlap with 2013 NRC exam: Are S-3 and S-8 the same JPMs that were used on 2013 NRC exam? Are S-5 and P-1 modified JPMs from those used on the 2013 exam? | S-3 replaced with different JPM not used on any of the last 3 exams. This is a modified JPM last used on the 2012 NRC at which time it was a New JPM. S-8 is same JPM as was used on 2013 NRC exam and is being retained. The modified version of S-5 was unable to be validated. The 2013 NRC exam version is being used. P-1 is not modified from the 2013 exam, but is an existing bank JPM on the same task. | |
| 3 | S-1: To confirm, CPNPP does not intend to freeze procedures for this class of applicants. Correct? | Correct. | |
| 4 | S-1: Is Summary Description correct for critical steps in that the entire bank is withdrawn to a known position then H-8 is aligned? | Correct. | |
| 5 | S-2: Is the JPM designed for the applicant to perform the operability test on both PORV Block Valves? If time is a concern, consider having applicant perform the second PORV Block Valve (first one done by previous Crew and test was turned over to next shift). | Yes both valves are tested. Time is not a concern. | |

| | Control Room / In-Plant System JPM Outline (April 4, 2016) | | | |
|---------|--|---|--|--|
| Comment | | Resolution | | |
| 6 | S-3: For CPNPP, are Time Sensitive Actions (TSA) considered the same as Time Critical actions defined in NUREG 1021 (must be completed within a time period specified in a regulation or a facility commitment to the NRC)? See Appendix C, B.5 Develop a Time Standard. | S-3 is being replaced with a modified JPM, Respond to a Shutdown Loss of Coolant. | | |
| | Also, JPM steps that record start/stop times for TSAs need to include cues for Examiners and places to record start/stop times for accurate and ease of documentation. | Yes, this will be included where appropriate (S-5) | | |
| 7 | S-4: Will applicant receive an annunciator alarm in response to over speed condition? If so, add to Summary Description (since K/A is Turbine valve indicators, alarms and annunciators). | No. | | |
| 8 | S-5: For the additional Alternate Path (cavitation), does procedure guidance exist for the applicant to follow? | Cavitation alternate path removed, returning to direct from bank version. | | |
| 9 | S-5: See S-3 for TSA question. | STI-214.01 provides guidance. NRC to review. | | |
| 10 | S-5: What is the RWST level at the start of the JPM? When does TSA-2.8 (70 seconds) start? Will it be clear to the examiner? Will it be consistent from one applicant to the next? | 7%. TSA starts when operator reads less than 6%. It should appear clear to the examiner as the applicant should be reading the RWST level meters and then commence the evolution when they see indication that level is less than 6%. It should be consistent between all applicants. | | |
| 11 | S-5: Is TSA-2.8 (70 seconds) applicable when there is two alternate paths involved? In the end, both trains of Containment Spray are secured so it would seem there isn't really a time limit for transferring CS to Recirc Mode. | No longer applicable with return to bank JPM. 70 seconds is valid with the single failure which exists in the bank JPM. | | |
| 12 | S-5: Is the cue to continue on with performance of the procedure required? What is the direction in the Initiating Cue? Shouldn't the applicant be expected to know they should continue without being directed? | No longer applicable. Procedure enhancement captured as ROs were confused by intent of step and consistent performance could not be obtained during validation. SROs were clear on the procedure intent and execution. | | |

| | Control Room / In-Plant System JPM Outline (April 4, 2016) | | | |
|----|--|---|--|--|
| | Comment | Resolution | | |
| 13 | S-6: Ensure Ops and Training concur that not performing sync scope ops is sufficient JPM failure criteria. | S-6 is being replaced with S-6 from 2014 NRC exam per Chief Examiner request. | | |
| 14 | S-6: If possible, add more critical steps to this JPM. Transfer 2 buses? Performing an additional action after Bus 1A4 has been transferred? | See item 13. | | |
| 15 | S-7: Ensure this is NOT an event on any of the simulator scenarios. | It is not. | | |
| 16 | P-2: Can this JPM be performed on either unit? | All three plant JPMs have a Unit 1 and Unit 2 version. Current plans are to have P-1 performed on Unit 1 as a contamination area may interfere on Unit 2; P-2 to be performed on Unit 1 as the Unit 2 version is different panels and switches as has not been validated. P-3 will be the Unit 2 version. | | |
| 17 | P-2: Summary Description is missing K/A and IR at end of paragraph. | Corrected. | | |
| 18 | P-3: Is there an opportunity to incorporate actions from the applicant in response to the security threat as they transition to the Hot Shutdown Panel? Depending on the actions, this might cause this JPM to be withheld from public disclosure and require SUNSI handling requirements. | No actions to be performed with the exception of transgressing from Control Room to Hot Shutdown Panel. Initial Conditions will be reviewed to ensure no concern over security actions will lead to applicant confusion during task performance. | | |
| 19 | P-3: For CPNPP, is it called Hot Shutdown Panel (as identified in the Summary Descriptions) or Remote Shutdown Panel (as on ES-301-2)? | Both are used at CPNPP. | | |
| 20 | P-3: If possible, add more critical steps to this JPM. Transfer more equipment from Control Room to HSP? Start more equipment than just Boric Acid Transfer Pump? | The entire Attachment from ABN-905B is five steps long. The only actions nor performed are terminating the boration. | | |

| Simulator Scenario Outline Comments (April 4, 2016) | | |
|---|---|---|
| | Comment | Resolution |
| Generic | Number Critical Tasks (CTs) in each scenario as CT1, CT2, etc in order to promote more effective communications between NRC and CPNPP Exam Development Team. | Okay. |
| Generic | The basis for the safety significance of each CT needs to be clearly identified and documented in the Scenario Guide. The Critical Task Determination table is an acceptable means to document this, however, since there is not a specific column in the table dedicated to this, either create one or make sure the information is added to the Safety Significance column. | This is already adequately covered in the ES-D-1s. No additional action needed. |
| Generic | For the Target Quantitative Attributes table on Form D-1 for all scenarios: EOPs entered/requiring substantive actions does NOT include E-0. See Appendix D. | That is correct. There was an error on a ES-D-1. |
| Generic | Initiating Cues for the Lead Examiner will be established during validation. If possible, include how each event will be initiated (by Lead Examiner, on timer, at specific procedure step, etc) in the Scenario Summary for all scenarios. | Not necessary, but will be included. |
| Generic | CTs are not included in the Scenario Summary. It is helpful to the Examiners to know when it is expected the CTs will be performed. Include CTs in the summaries if possible. | This information is included in the ES-D-2s, but will add additional information in the summary. |
| Scen | Scenario 1: Both Critical Tasks are associated with Step 4 of FRZ-0.1. Scenario should have diversity between Critical Tasks. | Scenario rewrite has corrected this issue. |
| 1 2 | CT to manually initiate Cnmt Isolation Phase B is LOD<2. Need to create situation for an additional CT in this scenario. | Definitely not LOD 1, but added complexity of manual isolation does not work and the applicant must align manually. |
| | | |

| | Simulator Scenario Outline Comments (April 4, 2016) | | |
|-----------|---|---|--|
| | Comment | | Resolution |
| | 3 | CT2 – Initiate Train B Chem Add Tank flow, does not have a basis or reference identified in the Safety Significance column. | Deleted as CT. |
| | 4 | Event 4: the Event Description states RCS leak of 600 gpm on 10 min ramp. Does CPNPP consider this a "leak" or a LOCA? | This is an RCS leak that progresses to a SBLOCA. |
| | 5 | Event 6: Scenario Summary states when EOP-1 is entered, a LBLOCA will occur. How is this LOCA different than Event 4? Is it the same point of break but the timer is just removed? Not sure this qualifies as a separate Major Transient. | The response to a LBLOCA at this point in the scenario results in a different recovery strategy which also includes progress through the FRG response. |
| | 6 | Since this is desired to be one of the scenarios seen by all crews, add another RO event prior to the first Major. Consider electrical bus fault that impairs equipment during Major Transient recovery such that a CT can be generated. | See item 1 for scenario 1. |
| | 7 | Termination Criteria – how long does it take to reach conditions for Transfer to Cold Leg Recirc? Concern is that this will take too long (>1.5-2 hrs) | 17 minutes. |
| | 8 | Event 5: SRO also gets credit for component failure. | Okay. |
| | 1 | Event 1: SRO is also given credit for the Normal | Okay. |
| | 2 | Event 2: Is the rate of failure large enough to ensure all crews will enter the TS? | Scenario rewrite has occurred. |
| Scen 2 | 3 | The D-2's need to include sufficient Examiner Notes and places to record when loss of subcooling occurs and when RCPs are tripped in order to properly document pass/fail of CT1. | Okay. |
| | 4 | Event 8: SRO also gets credit for component failure. | Okay. |

| | Simulator Scenario Outline Comments (April 4, 2016) | | |
|-----------|---|--|--|
| | | Comment | Resolution |
| Scen 3 | 1 | For Events 6, 7 and 8, the SRO is also given credit for the component failures. | Okay. |
| | 2 | It would be helpful, but not required, to separate out Events 6, 7 and 8 in the Scenario Summary. | Okay. |
| | 1 | Events 1-4: SRO also gets credit for the event. | Okay. |
| | 2 | Events 8-9: SRO also gets credit for the component failures. | Okay. |
| Scen 4 | 3 | Event 4: Is the Reactor Power band from 6-8% the normal power band used in the plant when making preps for synchronizing MG to grid? | This is the procedurally controlled next plateau. The plateau where the turbine is synched to the grid is 10 to 12%. |
| | 4 | Termination Criteria – does the scenario terminate directly after the transition to EOS-1.2, Post LOCA Cooldown and Depressurization, such that no steps are taken in EOS-1.2? | Yes. |

| | Schedule Comments – Rev 0 (April 4, 2016) | | |
|---|--|--|--|
| | Comment | Resolution | |
| 1 | Chief Examiner to send CPNPP a version of the schedule using MS Word. This is the format to be used for the final rev of the schedule. | If the Chief Examiner has his own schedule format that is fine but needs to be provided in sufficient time to not add additional burden. | |
| 2 | Use of I (Instant) is used instead of D (Direct) for the one SRO (SRO-I vs SRO-D). | Non-impactive. | |
| 3 | Thursday: Are S-2, S-5 and S-7 designed to be run simultaneously or in series? | No JPMs are designed to be run together. With only 9 candidates it was not deemed necessary. | |
| 4 | Thursday: The block for S-3 is missing applicant R1. | Correct. | |
| 5 | Thursday: Are S-1 and S-6 designed to be run simultaneously or in series? | See item 3. | |
| 6 | Thursday: The block for S-1 and S-6 is missing applicant R1. | Correct. | |
| 7 | Friday: The block for S-4 is missing applicant R1. | Correct. | |
| 8 | Friday: The block for S-8 is missing applicant R1. | Correct. | |