

Constellation Energy*
Generation Group

June 29, 2007

Revised 7/3/07

Mr. John Caruso
Division of Reactor Safety
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406-1415

Subject: R.E. Ginna Nuclear Power Plant
Docket No. 50-244

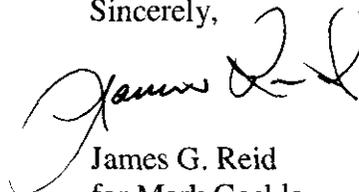
DRAFT 2007 License Operating Exam

Dear Mr. Caruso,

Enclosed please find the Draft operating exam for the Ginna 2007 License Class. The Ginna Training Department in conjunction with Western Technical Services constructed the exam utilizing the guidance of NUREG-1021, Rev. 9 and NUREG-1122, Rev. 2. In accordance with 10CFR55.49 and NUREG-1021 section ES-201 Attachment 1 these materials shall be withheld from public disclosure until after the examinations are completed.

If you have any questions or comments, please contact the General Supervisor, Operations Training, James Reid at (585) 771-5415 or via e-mail james.g.reid@constellation.com.

Sincerely,



James G. Reid
for Mark Geckle

Manager, Nuclear Training

Attachments Enc.

Attachments:

| | |
|--|---------------|
| Simulator Scenario Quality Checklist | Form ES-301-4 |
| Transient and Event Checklist | Form ES-301-5 |
| Competencies Checklist | Form ES-301-6 |
| Scenario 1 Exam | Form ES-D-2 |
| Scenario 2 Exam | Form ES-D-2 |
| Scenario 3 Exam | Form ES-D-2 |
| Admin JPM's (5) | Form ES-C-1 |
| Control/In-Plant JPM's (10) | Form ES-C-1 |
| Applicable reference materials for scenarios and JPM's | |

June 20, 2007

GINNA EXAM OUTLINE COMMENTS

Operating Exam

- General comment - good job providing descriptions of JPMs
- SRO Admin A.1.b - appears to be overly simplistic task.
- Sim JPM "E" - ensure does not overlap with scenarios.
- In-plant JPMs - all three are bank JPMs. These JPMs primarily test plant component location/familiarity consider revising or replacing at least one of these proposed JPMs.
- Scenario #1 - seems pretty straight forward - no subtle plant challenges will evaluate further during validation.

Written Exam

- Tier 1, Grp 1, Item 55, Q 49, 2.3.4 annunciator response tested on dynamic extensively
- Tier 1, Grp 1, Item 62, Q 52, check overlap with scenario #3.
- Tier 1, Grp 2, Item 61, Q 83, K/A entry level for AOP and EOP does not sound like SRO topic more RO.
- Tier 1, Grp 2, Item 33, Q 59, check overlap with Scenario #3.
- Tier 2, Grp 1, Item 13, Q 89, system purpose and function does not sound like SRO topic .
- Tier 2, Grp 1, Item 64, Q 90, TS entry does not sound like SRO topic more RO.
- Tier 2, Grp 1, Item 22, Q 13, topic may be difficult to write a discriminating Q.
- Tier 2, Grp 1, Item 62, Q 20, try to write more than simple power supply Q - more integrated plant - may be okay in limited numbers.
- Tier 2, Grp 2, Item 68, Q 92, system purpose and function does not sound like SRO topic .
- Tier 2, Grp 2, Item 11, Q 30, power supply to Pzr Htrs may be difficult to write an adequately discriminating Q on this topic.
- Tier 2, Grp 2, Item 35, Q 34, GFE topic okay if make the Q operationally oriented.
- Tier 2, Grp 2, Item 68, Q 37, make sure doesn't test same area as Q 24 (item 73).
- Tier 3, Cat 4, Q100, make sure written at the SRO level knowledge of RO actions

maybe RO level.

Review completed on 6/20 and called licensee and left phone message ready to discuss comments. On Monday 6/25 licensee returned my phone message from 6/20 and I provided comments in a telecom with Jim Reid and John Brown.

Licensee verified minimum overlap of written exam questions for last 2 NRC administered exams at this site.

J. Caruso and D. Silk reviewed this exam. Received written exam from licensee 7/17/07. Completed review by both Silk and Caruso and consolidating comments and on July 23, 2007 provided comments to licensee July 23-24, 2007 (one week after receiving the exam).

NOTE 1: Reviewed all questions against K/A statements specified in the question.

NOTE 2: Resolution of comments in bold and italics print.

| Q# | 1. LOK (F/H) | 2. LOD (1-5) | 3. Psychometric Flaws | | | | | 4. Job Content Flaws | | | | 5. Other | | 6. U/E/S | 7. Explanation | |
|----|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|----------|----------|----------|----------|----------------|--|
| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Backward | Q=K/A | SRO Only | | | |
| 1 | F | 2 | | | | X | | | | | | | | | U | Would prefer you edit this question to analyze a failed seal. "B&D are not plausible distractors. Operators check this parameter all the time and it is no more than a very simple set point Question. Replaced Q using same K/A |
| 2 | F | 2 | | | | | | | | | | | X? | | E | Not a real tight K/A fit since you are using "normal path" vs an emergency path. Modify Q to have normal boration unavailable so that "A or C" are correct. May elect to state basis for K/A match since normal path is not normal for this EOP. Modified Q to provide tighter K/A fit. |
| 3 | H | 2 | | X | | | | | | | | | | | E | H vs F the correct answer is the shortest which highlights the correct answer. Revised Q. |
| 4 | H | 3 | | | | | | | | | | | | | E | What is the CRF position - typo CRS? Fixed |
| 5 | H | 2 | | | | | | | | | | | | | S | |
| 6 | H | 2 | | | | | | | | | | | | | S | H vs F Done |
| 7 | H | 2 | | | | X | | | | | | | | | U | C&D why is entering the Loss of CCW procedure plausible on an increasing tank level? Also what procedure "could" be used or is required to be implemented? Revised distractors |
| 8 | H | 2 | X | | | X | | | | | | | | | U | Why is inlet temp. plausible A & B ?? Revised |

| Q# | 1. LOK (F/H) | 2. LOD (1-5) | 3. Psychometric Flaws | | | | | 4. Job Content Flaws | | | | 5. Other | | 6. U/E/S | 7. Explanation |
|-----|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|-----------|----------|----------|----------|---|
| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Back-ward | Q=K/A | SRO Only | | |
| 87 | H | 2 | | | | | | | | | | | | E | First bullet "RCS temp is" revised |
| 88 | F | 2 | | | | | | | | | | | | S | |
| 89 | H | 2 | | | | | | | | | | | | S | |
| 90 | H | 2 | | | | | | | | | | | | E | explained why B & D plausible |
| 91 | F | 3 | | | | | | | | | | | | S | |
| 92 | H | 2 | | | | | | | | | | | | S | |
| 93 | H | 2 | | | | | | | | | | | | S | |
| 94 | H | 3 | X | | | | | | | | | | | E | Add numerical value for SG"A" level. Done |
| 95 | F | 2 | | | | | | | | | | | | S | |
| 96 | H | 3 | | | | | | | | | | | | S | |
| 97 | F | 2 | | | | | | | | | | | | S | |
| 98 | F | 2 | | | | | | | | | | | | S | |
| 99 | H | 3 | | | | X | | | | | | | X | U | "B&C" are not plausible with ATWS in progress. The Q stem and distractors were revised to improve discriminatory value |
| 100 | F | 2 | | | | X | | | | | | | | E | Why D plausible? Revised distractors and explanations of plausibility |

The regional review of the Ginna written exam submittal concluded a total of "19" potentially unsat questions.

Ginna 2007 NRC Examination
 Post Review Modifications
 Revision 2
 8/23/07

*LICENSEE
 RESPONSE
 TO WRITTEN EXAM COMMENTS*

| Question | Comment | Resolution |
|----------|---|---|
| 1 | Make it a seal failure analysis | Will modify as directed Developed new item CE APPROVED Subsequently changed new item 2 nd half of each option. CE needs to see these changes Also revised seal leakoff rate in stem, as it was too high to be realistic for Ginna |
| 2 | Beef up justification | Will describe use of normal boration as part of emergency boration procedure Explained more 8/14 CE said still need to change, so removed option for normal boration flowpath, also subsequently added FCV- 110A as it is currently off- normal in plant |
| 3 | Use original bank item | Will replace Substituted bank item CE APPROVED Subsequently made editorial mod on wording and also revised info to make D completely correct and C incorrect |
| 4 | Typo (CRF) Add description of vortexing concern | Corrected typo and will add description Done CE APPROVED Subsequently put FCV-626 in AUTO in stem, minor mods to flow values and RCS level. Facility also made some changes, should look at |
| 6 | Make Higher cog | Modified as directed Done CE APPROVED |
| 7 | Is required – not could be used... plaus. of C/D | Will modify wording and either justify C and D or modify |

Ginna 2007 NRC Examination
 Post Review Modifications
 Revision 2
 8/23/07

| | | |
|----|---------------------------------------|---|
| | | Modified CE APPROVED Subsequently changed some wording to clarify, needs new look |
| 8 | A/B plausibility? | Will modify to say hot leg and cold leg instead of inlet and outlet of RHX Modified CE APPROVED Subsequently changed options because Thot and Tcold were technically incorrect terms for this condition |
| 9 | D plausibility? | Will describe plausibility. If no good, will modify. Described 8/14 CE said still not plausible, so I modified Also editorial mod is stem, 'lit' vs. 'received'. Need to ensure what has been reviewed is the latest. Facility made some post-review mods |
| 12 | Make higher cog | Modified as directed Done CE APPROVED |
| 13 | More explanation of C/D | Will discuss actuations on manual vs. all SI signals, or modify distractors if required Added to description CE APPROVED |
| 14 | Beef up justification | Will add additional info Added info CE APPROVED |
| 15 | Wording and clarification post-review | Added wording to ensure we are not saying that the action will be performed in E=0 |
| 17 | Higher cog | Modified as directed Done CE APPROVED Subsequently removed 3 rd bullet, was of no use |
| 18 | Typo – Explain D | Modified as directed Done |

Ginna 2007 NRC Examination
 Post Review Modifications
 Revision 2
 8/23/07

| | | |
|----|---|--|
| | | CE APPROVED |
| 19 | Post review clarifications | Changed structure of stem for readability, and also changed options to ensure we were not requiring memorization of an attachment |
| 21 | Too easy – change Q or replace KA | I will take a shot at this. If John doesn't like, we can replace KA Modified CE APPROVED Subsequently removed word 'set' from options. editorial |
| 22 | Add something about design time for operability | Will modify Q as directed Added words to stem CE APPROVED Subsequently removed 3 rd bullet – added no value |
| 23 | Higher cog | Modified as directed Done CE APPROVED |
| 24 | Post review technical mod | Reviewer said conditions implausible – changed back to original question – answer changed |
| 26 | Post review clarification | Added reason to 2 nd bullet |
| 30 | Post review editorial | Changed to say controlling channel fails, due to off-normal plant configuration at this time |
| 32 | Include SG level in stem | Modified as directed Done CE APPROVED Subsequently removed sg level from distractors but gave condition in stem. More readable |
| 33 | Post review technical change | Modified due to 2 potential correct answers. Changed C and D |
| 34 | What does B mean? | Will provide a better description Done CE APPROVED |
| 35 | Post review clarification | Added bullet that turbine is in IMP-IN |
| 36 | Concern about anything here that says reactor | I have other questions |

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Ginna 2007 NRC Examination
 Post Review Modifications
 Revision 2
 8/23/07

| | | |
|----|--|--|
| | is tripped | similar, will substitute 1 without reactor trip, or develop new Modified CE APPROVED |
| 38 | C/D subset of A/B. Ask about both valves | Will modify as directed Modified CE APPROVED |
| 43 | KA Mismatch? | If John says KA MM, then maybe will need new KA. Our discussion mentioned that he was thinking 026 Ctmt Spray. This KA is APE 026 Loss of CCW. I think ok, left as is CE APPROVED |
| 45 | KA Mismatch? | We think that at the RO level (for this item) that dispatching and notifying are synonymous. Would like to leave. Otherwise we probably have to write at SRO level Left as is 8/14 CE said typo in stem, and maybe put something in A/B about boration – modified as directed. Also changed initial to immediate actions |
| 46 | Post review clarification | Made SG level rising as that is what E-2 looks for. Make it technically bullet-proof |
| 48 | Beef up A/B explanation | Modified as directed Done CE APPROVED Added word 'connection' in stem |
| 49 | Post review clarification | 4 th bullet added 60 seconds prior, to ensure that time could not account for valve stroke time |
| 51 | B/D plausibility? | If description not enough, then may need to modify distractors. Modified 8/14 CE said still need to modify B – Modified as |

Ginna 2007 NRC Examination
 Post Review Modifications
 Revision 2
 8/23/07

| | | |
|----|---|---|
| | | directed |
| 52 | Plausibility of no entry to TS (C/D) | New item, a lot to understand here. I think plausibility is apparent, they have to know a lot to answer this. We are talking about splitting headers, not combining them, which is usually the cause for TS entry. Should we discuss more? Left as is CE APPROVED Subsequent technical change to structure of options due to requiring memorization of attachments |
| 53 | Get rid of AOV-294? | Will work on removing Left in, since this is RO section of exam, the system response is appropriate, and removing the valve seemed to make the question less discriminating, there wasn't much to ask. So I put it back in 8/14 CE said still needs modification – changed as directed and also made wording of distractors more consistent |
| 55 | Possibly remove last part of A and describe plausibility of B | Will remove last part of A. Will work on description of B plausibility, it is part of basis for 2 PORVs Done CE APPROVED |
| 56 | Post review clarification | Changed objectives to major action categories for plant specific wording, some wording mods on options |
| 58 | Beef up explanation | Modified as directed Done CE APPROVED |
| 59 | Beef up P-10 explanation (Minutiae?) | Will add to description. Was just trying to meet the |

Ginna 2007 NRC Examination
 Post Review Modifications
 Revision 2
 8/23/07

| | | |
|----|---|---|
| | | KA, so if John feels as though it is minutiae and you do too, I would be happy to randomly reselect KA Added to description CE APPROVED |
| 60 | Post review editorial | Changed 'will' to 'could' in stem |
| 61 | Why is A plausible | Was attempting to make a connection to valves that are operated in this alignment. There just wasn't much there. If I add to reasoning and it is no good, I will modify A Modified A CE APPROVED Subsequently added word 'verified' to locked closed. Also changed valve in D |
| 62 | Post review clarification | Slight change of plant conditions for plausibility |
| 63 | Post Review technical mod | Modified wording of option B as facility reviewer believed it could be argued as correct |
| 65 | Post-operating exam changes caused overlap with JPM | Randomly reselected KA and replaced question CE APPROVED |
| 68 | Post review clarification | Added line about admin requirements satisfied |
| 69 | NA? Explain | Will explain. It partially has to do with the PT identified Explained 8/14 CE said still wants to discuss -- agreed to discuss with J. Brown |
| 71 | Who cares? | Well, I guess I did at least for a short period of time. Will maybe look at something else, possible KA replace Replaced question CE APPROVED |
| 74 | Borderline. Never seen before | I've used it before. Could this be considered ok based on the remainder of the exam? It meets KA |

Ginna 2007 NRC Examination
Post Review Modifications
Revision 2
8/23/07

| | | |
|--|--|---|
| | | Left as is. Was hoping borderline meant 'borderline good' CE APPROVED Subsequent wording mod in stem for plant specific wording |
|--|--|---|

Ginna 2007 NRC Examination
 Post Review Modifications
 Revision 2
 8/23/07

| | | |
|----|---|--|
| 76 | KA mismatch? Add actions. Add whether refs are allowed (they are not) | I think if we add actions to this it may not make the question any different. The actions for these procedures aren't really mutually exclusive. I will give it a shot but I think for SRO this may be our best bet for discriminatory value. Added actions, you guys can decide if you like them CE APPROVED (Tentative) |
| 78 | Post review wording change and technical change | In stem, revised wording to say controlling channel failed, since plant is currently in a different alignment than normal. Also changed C because it could be argued correct IAW FSAR |
| 79 | Weak KA tie | Because the topic is ATWS we pretty much had to do it this way. We would normally make choices between reportable and not reportable to nail the ka but this was related to ATWS. Left as is, not sure what else to do. It would be non-discriminating to offer a distractor that says ATWS is not reportable CE APPROVED |
| 80 | Loose fit to KA. Modify slightly | I think ok but will mod as directed and see how it looks Modified but please check carefully for technical correctness CE APPROVED |
| 81 | Plausibility of A/D | I think these are good. I will improve description Added to description CE APPROVED Subsequent mod to add info to stem that AFW flow has already been addressed, to ensure only |

Ginna 2007 NRC Examination
 Post Review Modifications
 Revision 2
 8/23/07

| | | |
|-----|--|--|
| | | 1 correct answer |
| 82 | Post review mod – plausibility | Changed N-31 counts to include at least 1 doubling to ensure plausibility |
| 84 | Plausibility of A/C | Will improve description. RCPs are checked available prior to depressurization. Just not run Added to description CE APPROVED |
| 85 | Post review mod for realism | Changed RVLIS level to 80% - more realistic |
| 86 | Post review technical mod | Reviewer said not enough info in stem, so modified 2 options to ensure they could not be technically correct. Flow rate would be opposite Also changed VCT level to 22% for realism |
| 87 | RCS temperature 1 st bullet | Will correct wording Done CE APPROVED |
| 90 | Discussion on D plausibility | Will improve wording Done CE APPROVED |
| 91 | Post review modification – editorial | Changed name of ctmt coolers as applicable to Ginna |
| 92 | Post review mod – clarification | Added action to D to ensure completely correct - EPIP |
| 94 | SG A level value? | Will add SG level value Done CE APPROVED |
| 100 | Post review mod – tech clarification | Added procedure ER-FIRE.1 because it would also be used, made more technically correct |

Ginna 2007 NRC Examination
 Post Review Modifications
 Revision 2
 8/23/07

| | | |
|-----|-------------------|---|
| 99 | B/C plausibility? | Maybe can add something to make them realize an ATWS has occurred. Otherwise, may need some work Modified stem so they have to interpret conditions for ATWS |
| 100 | B/D plausibility? | I thought this was pretty discriminating because it is fairly deep into AOP Fire procedure usage. I would like to leave as is with maybe a better explanation. Left as is and added to description |
| | | |
| | | |
| | | |
| | | |

Right now it looks like we have 2 previous NRC questions on the RO and none on the SRO exam. I will make a final check when all questions are dispositioned.

SUMMARY OF NRC COMMENTS FOR GINNA OP TEST

For the SROU outline - ES-301, pg 14, D.4.a, states: 1) the SROU should evaluate at least 5 different safety functions. You have selected 2 safety function 2 JPMs and 2) One of the CR systems or evolutions must be an ESF - **revisions made by licensee and "G" will be safety function.**

JPM A Step 5 The comment should be modified to read, "When the applicant reports the failure ask the applicant what he recommends and if he states I would refer to ER-CVCS.1 give it to him. If the applicant fails open and has not recommendation for next steps then state this JPM is complete. **Comment accepted.**

Why is step 9, closing CCW return valves from RCP thermal barrier a critical step with regards to an emergency boration? **Seal package concern**

JPM C Step 6 - verify step doesn't critical - **temp is critical.**
Step 17 should this be critical? **Critical step**

JPM D JPM doesn't test operator understanding one critical step 9 to operate breaker.
Not very discriminating
Step 1 is not critical. (Verify)

Step 5 should this be Critical?

Step 7 is not critical. (Verify)

Step 8 is not critical. (Verify)

License replaced with a new JPM

JPM E What is the target cooldown temperature based on S/G pressure step 3 and 4?

Another one step JPM not very discriminating. **Revised JPM to have applicant determine required target temp.**

JPM G The Step 4 cue directs the applicant to take the alternate path. This does not meet the intent of an alternate path JPM. The alternate path must be directed by procedure or doesn't meet criteria for alternate path JPM. Modify or replace this JPM. **This JPM was replaced with a new JPM.**

JPM H Step 9 is not critical. (Verify) cue PZR level 30%.

JPM J Too simple??? Locate equipment and depress plunger???? Should be replaced does not test operator understanding. JPM "I" already easy operate two valves. **This JPM was replaced with a new JPM.**

JPM A.1.a Provide an exam key for this one. **Exam key provided.**

- JPM A.1.b Walk me through this one and provide me Attachment 14 per step 3 - not provided. **Attachment 14 not needed for this JPM narrative revised.**
- JPM A2 This is a simple reading exercise comparing to lists of equipment and recognition one parameter is out of spec.

Step 5 not critical. (Verify) **JPM revised to perform in the simulator to make it more discriminating and to make step 5 not critical.**
- JPM A3 May need or desire to do this one in the simulator. **JPM revised to perform in the simulator to make it more discriminating**
- JPM A4 Should be time critical (15 minutes) because PAR has to go out with the 15 minute notification. **Revised to reflect initial PAR is time critical and clarified secondary PAR.**

General Comments on Scenarios: 1) If we are going to use surrogates we need to ensure that the applicants get assigned most of the critical response actions. 2) When specifying taking manual action of a controller or placing a controller in manual the script should indicated the steps to accomplish this action.

- Scenario 1 If the BOP position is filled by a surrogate, can establishing AFW flow greater than 200 gpm be a CT? **No surrogates are now planned for this exam. This was recommended by the licensee due to an applicant being dropped. The licensee proposed testing all 3 remaining applicants on all 3 scenarios (i.e, each will be tested in all 3 positions). This required a fourth scenario to be developed and validated during the validation week (i.e., 3 plus a spare) .**

Event #4 - does VCT M/U stay in manual? **Revised**

Based on validation week changed load decrease rate from 10%/hour to 1%/minute.

- Scenario 2 Are there any TS associated with Event 5 also switch to alternate controlling channel?. **Yes, revised.**

Event #6&7 - commence rapid s/d? **Based on validation week changed from event 7 to event 3.**

See licensees summary for additional changes made following validation week.

- Scenario 3 Event 6&7 - List affected CI & CVI valves that should be manually closed - **revised to address comment.**

LICENSEE RESOLUTION OF COMMENTS RECORDS

On July 9th, 2007, R.E. Ginna submitted the following NUREG-1021 (Revision 9) forms to Region I, NRC in support of an initial licensing examination scheduled for 8/27/07:

| | |
|----------|---|
| ES-301-1 | Administrative Topics Outline (For Operating Test N07-1-1) |
| ES-301-2 | Control Room/In-Plant Systems Outline (For Operating Test N07-1-1) |
| ES-301-3 | Operating Test Quality Checklist (For R.E Ginna Operating Test) |
| ES-301-4 | Simulator Scenario Quality Checklist (For R.E Ginna Operating Test) |
| ES-301-5 | Transient and Event Checklist (For R.E Ginna Operating Test) |
| ES-301-6 | Competencies Checklist (For R.E Ginna Operating Test) |
| ES-D-1 | Scenario Outline (For Simulator Scenario N-07-1-1) |
| ES-D-1 | Scenario Outline (For Simulator Scenario N-07-1-2) |
| ES-D-1 | Scenario Outline (For Simulator Scenario N-07-1-3) |

Since that time, the operating test has undergone additional on-site validation testing, with the NRC present, resulting in changes to some of the documents originally submitted. The following summarizes these changes:

ES-301-1 Administrative Topics Outline (For Operating Test N07-1-1)

The Type Code for JPM A2 changed from "N, R" to "N, S." It was decided during validation week that the JPM would be more discriminating if the Simulator was used, rather than cues from the examiner, to provide the candidate with the necessary feedback for task performance.

The Type Code for JPM A3 changed from "N, R" to "N, S." It was decided during validation week that the JPM would be more discriminating if the Simulator was used, rather than cues from the examiner, to provide the candidate with the necessary feedback for task performance, and to allow performance of some tasks rather than mere discussion with the examiner.

The narrative of JPM A1b was changed to reflect that Attachment 14 would not be needed by the candidate as originally believed.

The narrative of JPM A2 was changed to reflect that the Simulator would be used as the setting.

The narrative of JPM A3 was changed to reflect that the Simulator would be used as the setting.

The narrative of JPM A4 was changed to reflect that the initial PAR is Time Critical and to more specifically define the secondary PARs.

ES-301-2 Control Room/In-Plant Systems Outline (For Operating Test N07-1-1)

JPM D was changed out altogether. The original JPM was involved a transfer of Instrument Bus A from normal to maintenance feed and had a low LOD. This was a

bank JPM. The re-written JPM involved a transfer of the B Instrument Bus from the maintenance feed to normal feed (A reversal of the original task). This JPM is new. The new JPM also includes additional board action as the candidate must place several controllers in and out of automatic control prior to and after operating defeat switches. On the final controller operation, the controller will fail and the operator will need to take manual action. The Type code on this JPM changed from "S, D," to "S, N." It was felt during validation week that this JPM did not meet the requirements of an Alternate Path JPM, even though the controller failure existed.

JPM E was changed to include the determination of the target cooldown temperature by the candidate. The original JPM provided the target temperature, therefore after validation the scope of the JPM was expanded.

JPM G was changed out altogether. The original JPM G was selected for the SRO Upgrade candidates and tested Safety Function 2. However, JPM H, also selected for the SRO Upgrade candidates, also tested Safety Function 2. The new JPM was selected to test a different Safety Function (5) and satisfy the requirement for the SRO Upgrade candidates to perform one JPM on an ESF in the Control Room.

JPM J was changed out altogether. The original JPM was a bank JPM that was determined to have a low LOD. A new JPM was developed and verified to have a higher LOD. The original JPM had two steps in which the candidate had to take actions in panels that were a few feet apart in the plant. The new JPM actually involves two separate tasks that would be expected to be performed by an operator outside the Control Room when identifying and responding to a Steam Generator Tube Rupture.

ES-301-3 Operating Test Quality Checklist (For R.E Ginna Operating Test)

The change involved the date that the author completed the checklist recorded as 8/10/07. This date should be revised to 8/18/07 as subsequent re-work was needed on JPM A2.

ES-301-4 Simulator Scenario Quality Checklist (For R.E Ginna Operating Test)

A second form was added to support a fourth Simulator Scenario (N07-1-4). During the NRC Validation week, the Licensee indicated to the NRC that only three of the four candidates originally intended to take the exam, would actually sit for the exam. Because of this, a decision was made between the Licensee and the NRC to have the three candidates rotate through the three positions (CRS, ATC RO, BOP), rather than use surrogates. Because of this, three scenarios and a spare would be needed; or a total of four (4) simulator scenarios. A fourth Simulator Scenario, which was the spare scenario produced by the Licensee for the 2006 NRC Exam, and not used for the NRC Exam, was used as a base scenario. Because the scenario had been placed in the Facility Licensed Operator Requalification Exam Bank, the scenario was substantially modified, and validated. The scenario was compared against the Criteria of ES-301, Section D.5.d and determined to have the necessary quantitative attributes. This is shown on ES-301-4, Page 2.

ES-301-5 Transient and Event Checklist (For R.E Ginna Operating Test)

Because the Licensee has decided to send only three candidates rather than four, this form was modified to reflect that there would be two SRO Upgrade Candidates and one Instant SRO Candidate.

Additionally, because there are now four Simulator Scenarios rather than three, the crew position assignments to the specific scenarios were modified.

ES-301-6 Competencies Checklist (For R.E Ginna Operating Test)

Because there are now four Simulator Scenarios rather than three, the form was modified to show the competencies for Scenario 4 at the SRO and the ROATC position.

ES-D-1 Scenario Outline (For Simulator Scenario N-07-1-1)

- Corrected load decrease rate from 10%/ hour to 1%/minute.
- Corrected typos.

ES-D-1 Scenario Outline (For Simulator Scenario N-07-1-2)

- Moved Rapid Downpower event from Event 7 to Event 3.
- Eliminated need to degrade SGTR to 10 gpm (removed Event 6).
- The Block of the Automatic Rx Trip was changed to include a failure of the manual pushbuttons as well, requiring the operator to de-energize the 480 volt busses on the ATWS.
- Added the Tech Spec portion of the failure to the script for Event 5 (Przr Failure).
- Corrected typos.

ES-D-1 Scenario Outline (For Simulator Scenario N-07-1-3)

- Changed IRPI Failure to MRPI Failure to reflect correct nomenclature.
- Added (TS) to Event 5 for SRO.
- Corrected typos

ES-D-1 Scenario Outline (For Simulator Scenario N-07-1-4)

This scenario was added during validation week. During the NRC Validation week, the Licensee indicated to the NRC that only three of the four candidates originally intended to take the exam, would actually sit for the exam. Because of this, a decision was made between the Licensee and the NRC to have the three candidates rotate through the three positions (CRS, ATC RO, BOP), rather than use surrogates. Because of this, three scenarios and a spare would be needed; or a total of four (4) simulator scenarios. A fourth Simulator Scenario, which was the spare scenario produced by the Licensee for the

2006 NRC Exam, and not used for the NRC Exam, was used as a base scenario. Because the scenario had been placed in the Facility Licensed Operator Requalification Exam Bank, the scenario was substantially modified (New initial conditions, four new events added, four old events removed), and validated.

Several Changes to JPMs were considered:

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| JPM C | Changed Performance Step 17 to a Critical Task. |
| JPM D | Considered making Performance Steps 7, 10 and 14 Critical Steps. Steps 7 and 14 deal with the Charging Pump Speed Controller going back to Auto operation after having been placed in manual for defeat switch manipulation. The procedure steps allow for either manual or automatic operation and therefore should not be critical. If the candidate places the controller in auto, or leaves the controller in manual, he is compliant with the procedure. On the other hand, Step 10 deals with the same issue on Przr pressure controller 431K and does not offer the candidate the same option. The procedural guidance simply states to place the controller in auto, and therefore the task should terminate with 431K in Auto. If not, the plant will be left outside of normal configuration. Step 10 was made a Critical Step. |
| JPM E | Considered making Performance Step 2 a Critical Step. This Step when performed will render the JPM an alternate path JPM. The intent is to use the normal steam dump system to cooldown the RCS during a SGTR. However, when the step is performed the Steam Dumps will not open and the candidate will be required to implement an alternate path. This is step should not be a Critical Step because it will not be able to performed with success. This JPM was not changed. |
| JPM H | Changed Performance Step 8 to a Critical Task. Changed Comment so that the cue originally provided in Step 8, was provided in part in step 8 (Level indicators on scale), and part in Step 9 (Actual Przr Level). Changed actual level cue from 30% to 4% to cause candidate to increase Charging Flow in Step 9. |
| JPM H | Considered making Performance Steps 18 and 19 Critical Steps. Decided against this because these steps relate only to closing off the ventilation in the Turbine Building as a precautionary against a potential radioactive release from the steam plant during a SGTR. If the steps were completed incorrectly, or not completed at all the essential task of isolating the ruptured Steam Generator from the steam plant is not affected. This JPM was not changed. |

Several Changes to Simulator Scenarios were made:

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| N07-1-1 | <p>On ES-D-1 changed Event 8 from M (Major Transient), to C (Component Failure) at request of Lead Examiner, and changed Event 9 from C (Component Failure) to M (Major Transient) also at the request of the Lead Examiner.</p> <p>Corrected Typo on Page 31 in Examiner's NOTE.</p> <p>Revised ES-D-1 to include attributes associated with the BOP at request of Lead Examiner. BOP receives credit for:</p> <p>Event 6 (N) Event 8 (C) Event 9 (M) Event 10 (C)</p> |
| N07-1-2 | <p>Corrected Typo on Page 30 in BOP Step to "Try to Establish MFW Flow to at Least One S/G," 2nd Bullet, 1st sub-bullet.</p> <p>Revised ES-D-1 to include attributes associated with the BOP at request of Lead Examiner. BOP receives credit for:</p> <p>Event 3 (N) Event 6 (M) Event 7 (C) Event 8 (C)</p> <p>Also assigned Events 7 and 10 as a component failure for the RO.</p> |
| N07-1-3 | <p>Revised ES-D-1 to include attributes associated with the BOP at request of Lead Examiner. BOP receives credit for:</p> <p>Event 5 (C) Event 6 (M)</p> |
| N07-1-4 | <p>Corrected Typo on Page 1 on ES-D-1 Initial Conditions, and on Page 2 narrative, 1st paragraph.</p> <p>Revised ES-D-1 to include attributes associated with the BOP at request of Lead Examiner. BOP receives credit for Event 5 (N), as well as others that were previously listed.</p> |
| ES-301-3 | Changed date of authorship from 8/10/07 to 8/18/07. |
| ES-301-4 | No Changes |
| ES-301-4b | No Changes |
| ES-301-5 | Added the ROATC individual attributes for SROU1 and 2, and added the BOP Attributes for all three candidates. Re-totaled all individual attributes. |
| ES-3016 | Revised the ROATC competencies and added competencies for BOP. |