

# FERMI SEPTEMBER 2004 INITIAL LICENSE EXAM

## JPM COMMENTS

#	Source	Comment	Resolution
1.	JPM B1.a Simulator	Replace JPM with one with a Safety Function of either 4 or 8, since JPM B1.b already has a Safety Function of 2. Original JPM (SBFW) was replaced due to it being performed during audit. Replaced with HPCI JPM; however, during validation the HPCI malfunction did not work. Required facility to find another replacement JPM. New JPM for RBCCW was found acceptable. However, facility noted it as the wrong safety function.	Replaced with RBCCW JPM. Corrected safety function designation to (8).
2.	JPM B1.b Simulator	In the Initial Conditions, delete the sentence: "Both divisions of Core Spray have failed to automatically initiate."	Changed as recommended..
		In the Initiating Cue(s), change "...Division I(II)..." to "...Division I...".	Changed as recommended.
		On the JPM outline, change the Safety Function from 4 to 2, since this JPM is associated with RPV level control instead of heat removal. Facility error.	Corrected, changed safety function to (2).
		Delete NOTE before step 4 of JPM, and replace with a CUE that says to acknowledge the malfunction and ask the applicant "What do you recommend."	Changed as recommended.
3.	JPM B1.c Simulator	During validation noted the setup was incorrect. The speed/load demand limiter was indicating +1 and not IAW JPM task.	Set up corrected.
		Editorial: In the Initial Conditions, correct the typo "Perquisites" to "Prerequisites".	Changed as recommended..
		Change the following steps so that they are NOT critical: Steps 2, 3, 7, 8, and 9 (since step 3 is only a verification step and the other steps are NOT associated with completing the Task Standard for the JPM).	Changed as recommended.
		In step 7, the applicant may refer to procedure 23.610, Section 6.1 (Reactor Protection System) to reset the half scram. Add steps from procedure 23.610 to reset half scram.	Changed as recommended.
4.	JPM B1.d Simulator	Original JPM not discriminating enough. Although it is an immediate action, it only has two required steps. However, the very first step is an auto function and no operator action is required. Changed JPM so that one is restoring the RR MG Set following maintenance with the scoop tube locked. After unlocking the scoop tube and going back to AUTO, have the RR flow increase in an uncontrolled manner, requiring the scoop tube be locked up again (and the RR MG Set tripped if RR flow increase was greater than 10%). Also, make the first step to lock scoop tube not critical for the system will automatically lock due to the malfunction.	Changed as recommended.  Post exam, validation time appears to be incorrect, too long. It should be approximately 5 to 6 minutes and not 15 minutes.
5.	JPM B1.e Simulator	Header and title of the JPM are different. The header was incorrectly noted as a different JPM, i.e., B.1.H instead of B.1.e. Also, it was identified as a 2003 JPM vice a 2004 JPM.	Changed as recommended.
		Remove EDG 11 (12, 13, 14) sentence from initial conditions. Also, only have 11EA and 64B in the initiating cues and remove sentence of another operator will shutdown EDG..	Changed as recommended.
		During validation, setup incorrect, also missing page in procedure.	Corrected for exam.
		Step 3 in JPM is critical. Step 4 is not necessarily critical, unless significant voltage adjustment is required.	Changed as recommended.
6.	JPM B1.f Simulator	In the Evaluator Notes, Correct typo of "23.623" to "24.623". Add a sentence to ensure the Reactor Mode switch is in SHUTDOWN position.	Changed as recommended.
		In the Initial Conditions, change the second sentence to "The reactor has been shutdown <u>and is in Mode 5.</u> (Information underlined added)	Changed as recommended.

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		Header incorrectly notes 2003 JPM vice 2004	was not corrected until post exam.
7.	JPM B1.g Simulator	Change the Initiating Cue to perform manual startup of Division 1 SGTS per 23.404 in preparation for RBHVAC fan work.	Changed as recommended.
		In the Evaluator Notes, change the sentence "..., <b>IF</b> the operator asks for guidance <u>ask for a recommendation</u> ." (Information underlined changed) Otherwise this would direct the action for the alternate path. Applicant must make the decision, thereby recommending the appropriate actions.	Changed as recommended.
		Editorial: Instep 1, change "of" to "or".	Changed as recommended.
		In step 3, add a NOTE that ARP 8D35, "DIV 1 SGTS AIR FLOW STOPPED" annunciator will alarm. The alarm response will require a check of T4600-F003A throttled and T4600-F002A open. If the applicant uses the ARP, add a CUE that T4600-F003A is throttled and T4600-F002A is closed. In addition, the reference section noted incorrect ARP 3D35, correct ARP is 8D35.	Changed as recommended.
		Delete the CUE before step 4 and replace with the CUE to ask the applicant "What do you recommend." Also, add a NOTE that the applicant may or may not shutdown Division 1 SGTS.	Changed as recommended.
		On page 3 of JPM: - Correct the step numbering from steps 9, 2, and 3 to steps 10, 11, and 12. - In new step 11, correct the damper numbers to T4600-F004B, F008B, and F408. - Change new step 12 to a non-critical step since it is only a verification step.	Changed as recommended.
8.	JPM B1.h Simulator	Original outline noted RWCU and SBFW JPMs as both safety function 2. Also, commented that no low power JPM for SROU. Licensee replaced with Vent Torus JPM to incorporate additional low power JPM for SROU with different safety function.	Changed as recommended.
		After step 2.18 add subsequent steps in procedure to close required valves when torus pressure is reduced to between 32 and 39 psig. This was noted during validation when the setup was not correct for the required Torus pressure. Editorial: Instep 2.5.2 change "Guideline" to "Guideline."	Changed as recommended.
9.	JPM B2.i	Require applicant to obtain the EOP package. Also, JPM step 2 standard incorrectly noted the terminal lead B-171. It was the same for step 1. The correct lead is E-191.	Changed as recommended.
		Validation time appeared to be too long. Actual time for applicants averaged 10 minutes, instead of 25 minutes. Also, updated post-exam, the JPM should note the use of lead boots as supplied in the EOP package.	Noted post-exam.
10.	JPM B2.j	Noted that this JPM and the original two other in-plant JPM did not enter the reactor building. Although all three JPMs were inside the RCA (BWRs in general everything is within the RCA), they were all within the turbine building. Also, JPM need to indicate the expected condition of the UPS panel as it should be indicated when shutdown.	Done. Changed the last in-plant JPM B2.k to be inside reactor building as noted below.
11.	JPM B2.k In-Plant	Original JPM - Take Corrective Action For Main Steam Line Radiation Monitor was replaced. JPM only required verification on indications. Only action was to push reset button without any qualifying decision process. The JPM was noted not to be discriminating and of low LOD. The JPM was replaced with actions to vent scram air header, located inside the reactor building.	Changed as recommended.
		Replacement JPM - Vent Scram Air Header. Add a step at the beginning of the JPM to obtain the 29.ESP.03 package from the Shift Manager.	Changed as recommended.

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		Need to re-format the JPM to conform to NRC format (similar to other JPMs). This JPM was selected by examiners from facility bank and reviewed during validation week. However, it was an old JPM, not updated for current plant configuration, and in the wrong format.	Changed as recommended.
		In the References, Task Standard, Initiating Cue(s), and Terminating Cue(s), change from the procedure from "29.ESP.03 Section 6.0" to "29.ESP.03 Section 7.0." Also, in the References section, change the title of 29.ESP.03 Section 7.0 to "Vent Scram Air Header".	Changed as recommended.
		In the Initiating Cue(s), change "NASS" to "CRS" to reflect current plant terminology.	Changed as recommended.
		Change the JPM so that it reflects the change to step 7.3 of 29.ESP.03 Section 7.0 (i.e., the step now allows either opening valve C1100-F226 or disconnecting piping to C11-R013). JPM bank was not updated to the current plant configuration.	Changed as recommended.
		In step 7.3 of 29.ESP.03, if the applicant opens valve C1100-F226, the scram header will NOT vent unless the swagelock cap downstream of valve C1100-F226 is also removed. Need proper CUES depending on whether the applicant does/does NOT remove the swagelock cap (i.e., air hissing/NOT hissing out).	Changed as recommended.
12.	JPM A1.1 RO/SRO	Original JPM - Verification of Offsite Electrical Lineup, was replaced. The JPM was basically visual verification with little or no actions by the applicant. No faults were included, therefore, a fail safe JPM where applicant does not have to do anything and still complete the JPM satisfactorily. The JPM was deleted due to lack of LOD. Replaced with Jet pump operability surveillance that required understanding of meter readings, procedure implementation, calculations, and plotting data on graphs to determine Tech Spec acceptance criteria. In addition, the original JPM was of poor quality. Incorrect step designations. Cue after step 3 repeated bus designation GH. Step 7 incorrectly repeated the step standards, i.e., verification of procedure steps 1.1.2, 1.1.4, and 1.1.5 was repeated twice. The second designations for the step verification was supposed to be procedure steps 1.2.2, 1.2.4, and 1.2.5. Cue in step 8 noted the wrong Bus designation, it noted Bus 101 when it was required to be Bus 301. Also, in step 8 standard incorrectly noted Bus 101 instead of Bus 301.	Changed as recommended.
		Replacement JPM - Jet Pump Operability Test. This was an in-plant JPM, but it was not marked as plant. Step 7 of JPM incorrectly repeated Pump A when it was Pump B.	Changed as recommended.
		The NRC data cue sheet for the jet pump indications were incorrectly repeated twice. Although the actual data was appropriate for the loop A, it had the wrong designations for jet pump # and indicator designations. Also, inaccurate validation time based on actual applicant performance. The JPM was very involved based on calculations and graph plotting for all 20 jet pumps. More appropriate time would be 30-40 minutes.	Appropriately identified and updated during exam. Changed as recommended.
13.	JPM A1.2 RO/SRO	Common - Valve Configuration - tag out of HCU. Need to add in reference the tag out admin procedure, MOP-12, the requirement to tag drains.	Changed as recommended.
		Remove statements in initiating cue, "on the P&IDs," and "provide the attached safety tagging record." Unnecessary.	Changed as recommended.
		Original submittal did not include the tagging record sheet needed to be provided to the applicant. It was difficult to verify without the actual document. Further verification completed during validation week. After facility's second verification noted two unnecessary tags and that the new tag record developed for different HCU, C1103D090 instead of originally noted C1103D062.	Changed as recommended.

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		After reviewing reference document, noted that the JPM was a direct look up. No faults existed and the reference document, procedure 23.106, "Control Rod Drive Hydraulic System," section 6.10, "HCU Isolation for Maintenance on HCU Components," listed the steps necessary for isolating the system. This would directly reflect to tagging out the system. To accept the JPM, faults were added. Removed from the tagging record the accumulator drain valve required by the reference document MOP-12. Identification of this omission was a critical step, in addition to the other required valves to isolate the system. This made the JPM not a direct look up. Also, examiner noted that this was a similar JPM from 2003, in tagging out the HCU without any faults. Potentially predictable, required faults in the JPM to be acceptable.	Changed as recommended.
		During the examination it was identified that the facility made an error in designating one of the required valves on the tagging record. Valve F104 was incorrectly designated for the wrong HCU. It was identified as C1103D066 instead of the correct designation of D090. This error was noted as an additional critical step for applicants to identify the error, due to potential safety concern of tagging the incorrect system.	Changed as recommended.
14.	JPM A1.2 SRO	Add in the initial conditions that the normal crew compliment on Sunday is at a minimum IAW shift assignment sheet. Also, remove information that the one person assuming the position for the individual leaving is not Fire Brigade qualified. This gives away one of the critical steps that the SRO applicant must identify himself.	Changed as recommended.
		Remove the cue in JPM step 3 that notes specific individual was called in by the RO. This again gives away a critical step where the SRO would be required to identify the appropriate operator to call in as a Fire Brigade qualified and IAW the overtime document. Additional critical steps added as appropriate.	Changed as recommended.
		As part of the responsibility of the SRO, provide as requested by the SRO applicant the documents necessary to appropriately identify and make the decision to call in an operator within the Tech Spec and admin procedure requirements. Shift staffing sheet, Fire Brigade qualification document, and overtime designation document.	Changed as recommended.
15.	JPM A1.3 RO	Original submittal did not include the RWP required for the JPM. It was expected to be a generic RWP for entry into the designated area. Also, the initiating cue specifically tells the applicant what to do for the JPM, i.e. the required steps to pass. It indicates the standard for the JPM. Need to reword to enter the area to perform a visual inspection of the system, rather than specifically noting the steps required for an emergency entrance using the RWP. Added steps to require applicant to identify where they need to go, to determine that is a high locked area, and to identify the specific RWP necessary to enter the area. No support from RP desk, and perform the JPM in-plant using the actual RWP. Otherwise, this JPM with given RWP would be a direct look up.	Changed as recommended.
16.	JPM A1.4 RO	This JPM too predictable, same JPM as in 2003 NRC exam. The JPMs were written differently, focusing on expanding certain steps; however, the overall JPM is identical in actions. Required additional enhancements to insert faults to make it more discriminating, otherwise too predictable and little discriminatory value if performed last year. Added additional critical steps to make the notification with failure of auto dial system. This required the applicant to locate and identify the specific organizations and phone numbers to timely make the required notifications within the time limit. Also, added the requirement that the operator must obtain the Met Tower data using the computer system instead of being given the information.	Changed as recommended.
		Remove statement on initiating cue, "This is a drill." Add, "just" in the statement, "Emergency Director has [just] declared a Site Area Emergency..." Remove the specific information noting the required notification be made within 15 minutes. This is a time critical JPM, and the applicant is expected to know what the time limit is and not be told the time limit.	Changed as recommended.

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17.	JPM A1.4 SRO	Add in the initiating cue, "review...". Also, need to rewrite JPM in proper format as with the other JPMs. Submitted with incorrect format. Significant discussion on this JPM. No actual filled in discharge permit on original submittal. During validation noted errors on the filled in discharge permit. Item C was originally marked N/A; however, after review it was identified that it should be marked as "Outfall Affected 002." Corrected for actual exam. Added additional critical steps to identify that the discharge is subject to radiological restrictions. Also, questionable of the 24 hour limit. Examiners noted that 24 hours would likely be specified in actual time and not just the following day for the required critical step to note the permit expiration date. Verified with radwaste that only the next day was required and not the specific hours to note 24 hour time limit.	Changed as recommended.. Although, during the exam noted that the applicants also designated a specific time in hours to note the 24 hour time limit, and not just the next day.
18.	JPM A1.5 SRO	Original JPM only had the applicant determine the implementation time for the PARs to evacuate the given designated areas. Based only on this expectation it appeared to be only a direct look up. There was no decision making by the SRO applicant on the safety information of the PARs. That is the PAR was given as part of the initial conditions. Given the PARs, the applicant only had to use the tables in the Emergency Plan to identify the time estimate and the estimated population. Further review resulted in identifying that the PARs given was not correct. Although the action to utilize the tables was considered an adequate evolution of use of procedures, it was not readily identified as a required or expected responsibility of the SRO. Even if the State requested such information, it would not have been an adequate critical safety item by itself to determine acceptable performance of the applicant. Required additional emphasis to have the applicant identify the appropriate PARs based on new plant conditions. Subject to identifying the correct PARs , required the remainder of the JPM to evaluate the use of the Emergency Plan to determine the evacuation times and population.	Changed as recommended.
		Rewrite JPM to require PARs based on new plant data. Also include time critical condition for identifying PARs and making the initial notification.	Changed as recommended.

Note: General comment on outline, the facility licensee through outline submittal noted the wrong dates of exam (9/13/2004). Correct date was 9/20/2004.