

1. *Was a waiver or waivers of the operating test granted for other applicants who took the most recent examination? (Capehart, Bates, Meeks)*
  - a. *If so, what was the basis and threshold for granting the waiver(s)?*

Yes, waivers for the operating test were granted for other applicants who took the 2011 exam. The process that was followed is as described below:

Following the grading of the 2011 Vogtle exam, P. Capehart sent emails to both M. Meeks and J. Hopkins independently asking them if they would recommend giving a waiver to the applicants they examined (for future exams). Both M. Meeks and J. Hopkins recommended to not grant waivers for Carla Smith (reference attached emails). Carla was the only applicant that was not recommended for a routine waiver. P. Capehart forwarded these recommendations to M. Widmann, along with his own recommendation to not grant a waiver for Carla Smith.

On June 7, 2011, [REDACTED], Vogtle operations training supervisor, sent an email to M. Meeks discussing the potential waiver requests for the upcoming March 2012 initial exam. Of note in this email, [REDACTED] identifies Carla Smith as one of three applicants from the 2011 exam that Vogtle identified as requiring further evaluation. M. Meeks had been assigned as the Chief Examiner (under instruction) for the March 2012 exam, with M. Bates assigned as the Chief Examiner of record. After receiving this email, M. Meeks consulted with P. Capehart, J. Hopkins, M. Bates, and M. Widmann to formulate a consolidated response from the region. Because everyone agreed that Carla Smith's performance on the 2011 exam was sufficiently poor to not grant a routine waiver, the decision was made to notify Vogtle that all of the other applicants, except Carla Smith, would probably receive the routine waiver of the operating test. For Carla Smith, it was agreed to notify Vogtle that if she submitted a waiver request for the operating test, "...for C. Smith, Region II would likely deny a waiver of the operating test portion of the exam." M. Meeks replied to [REDACTED] email on August 2, 2011.

In Carla Smith's cover letter to request an appeal, she states:

It is understood that a waiver is granted on a case by case basis. If the intent was to deny the waiver then the applicant should have the opportunity to formally submit a waiver for review. If the regional office decided to deny the waiver then per ES-204, Page 2 of 7: "the regional office shall promptly notify the applicant in writing concerning the

disposition of the request, and provide an explanation for the denial.” Unfortunately this did not occur, The NRC examiners on the current examination team (to include the operating test examiner) were consulted and they strongly discouraged the submittal of a waiver of the operating exam on my behalf.

Throughout the exam development process, at no time did anyone from the NRC notify either Vogtle training personnel, or Carla Smith directly, that they were prohibited from submitting a waiver request from Carla Smith. As evidenced from the above statement and the attached emails, the consistent message to the Vogtle training management (there was no direct communication between anyone in the NRC and Carla Smith) was that if a waiver request was submitted, “it would likely be denied by the region.” Contrary to the applicant’s contention cited above, the “operating test examiner,” M. Bates, did not have any interaction with Carla Smith directly concerning her potential operating test waiver. Furthermore, M. Bates was not directly involved in the discussions concerning Carla Smith’s performance on the 2011 exam—the decision to likely deny a waiver was made by the 2011 exam team (P. Capehart, J. Hopkins, and M. Meeks), in consultation with the branch chief, independently of any input from M. Bates.

Irrespective of the region’s likely denial of an operating test waiver for Carla Smith, the facility licensee did not submit any waiver request to the region. Therefore, the region never denied any waiver. Accordingly, the reason that the region never formally sent a letter to Carla Smith explaining a denial of a waiver (per ES-204) was because the waiver request was never submitted.

In the applicant’s cover letter to her appeal of the grading of her operating test, she states:

It is unclear to the applicant why I was required to retake the operating test. The applicant passed the previous years’ simulator test with some margin and scored 100% (pass) on the JPM portion, (see results). Another applicant passed the JPM portion with the minimum score and was granted a waiver.

The other referenced applicant from the 2011 exam is [REDACTED]. For his operating test, he has three total comments on the entire simulator scenarios. Although [REDACTED] was graded as “UNSAT” on three JPMs, two of these are

administrative JPMs and one was a simulator JPM. A comparison between the two applicants' grading of the 2011 operating test is shown below:

Operating Test Portion	Carla Smith	
Total Number of Simulator Scenario Comments	12	3
Number of Administrative JPM Failures	0	2
Number of System/In-Plant JPM Failures	0	1
Number of Administrative JPMs with Comments	1	1
Number of System/In-Plant JPMs with Comments	5	2

As stated in NUREG 1021, ES-301 B.3., the simulator scenario portion of the operating test is "...the most performance-based aspect of the operating test and is used to evaluate the applicant's ability to safely operate the plant's systems under dynamic, integrated conditions." With this guidance in mind, the applicant's comparative performance on the dynamic simulator scenarios weighed more heavily in the regional decision to grant the waiver to [REDACTED]; on the one hand, and to notify the facility that the region would likely deny the waiver for Carla Smith, on the other.

In hindsight, Carla Smith's performance on the dynamic simulator portion of the 2012 exam, which led to documentation of approximately 18 comments on the 303 form, retroactively supports the region's position that her performance on the 2011 exam warranted additional evaluation on the 2012 exam.

To further answer question 1.a., the ultimate reason that Carla Smith was not granted a waiver was public health and safety—all three examiners (M. Meeks, P. Capehart, and J. Hopkins) from the 2011 exam agreed that her performance on the 2011 exam, specifically the simulator scenario portion, was

poor enough to warrant additional evaluation if she were to retake the exam at a later date.

2. *How did the applicant's performance on the previous examination operating test differ from any applicants who were granted waivers? (Capehart, Bates, Meeks)*

Please reference above answer. Specifically, Carla's performance on the previous examination was different in that she was especially weak in the simulator scenarios. As detailed above, the dynamic simulator scenario portion of the exam carries extra weight because it is the most operationally valid evaluation of the applicants in actual conditions in real time.

Although as detailed above, Carla had a large number of comments on the simulator scenario portion of the 2011 exam, there is no objective, quantitative criteria that I know of to evaluate whether an applicant should be granted a waiver from one test to the next. For me, in addition to the large number of documented deficiencies, the basis of my recommendation to not grant Carla a routine waiver was because Carla's performance on the simulator scenarios (2011 exam) stood out as being unsafe. I take very seriously my obligations to uphold the operator licensing standards in order to protect the public health and safety. So, based upon my knowledge and experience as a nuclear operator in the Navy, my knowledge and experience as a licensed Senior Reactor Operator (SRO) at a Westinghouse PWR in the commercial nuclear power field, and my training as a member of the NRC, I am required to differentiate between safe and unsafe operational performance. Therefore, following my observations of Carla's performance on the 2011 exam, my recommendation to not grant a routine waiver for Carla Smith was ultimately based upon my judgment that she was unsafe. I often tell applicants in the Appendix E brief that our signatures on the 303 forms represent our recommendation to management that we would be confident living next to their plant with our families and sleeping easy at night, knowing that they would be on watch, capable of handling any emergency. Based on her performance on the 2011 exam, I could not truthfully make that statement if I thought Carla was the SRO on watch. Her performance on the 2012 exam supported this determination.

3. *What did you discuss with the applicant and/or licensee regarding submitting a waiver for the operating test? (Capehart, Bates, Meeks)*

Please reference answer for question 1. above. No discussions were held with the applicant (Carla Smith). All discussions that I had with the licensee's training staff are included in the attached emails at the end of this document. As the assigned chief examiner (under instruction), I was always careful to ensure my management (M. Widmann) was briefed before I sent the emails, and always cc'ed on the emails that I sent to Vogtle regarding the waivers; and the language that we consistently used regarding Carla Smith was that she would "likely be denied" a routine waiver if such a waiver was requested. At no time did we tell Vogtle that they could not submit a waiver request for her; however, we felt that we should be honest with them (that she would likely be denied a waiver) so that they could arrange for the needed remedial training if they decided to include her in a future license class.

4. *Did you review the applicant's docket file, including ES-303, prior to administering the operating test to her? (Bates, Meeks)*  
a. *Why or why not?*

No, I did not review the applicant's (2011) docket file or (2011) ES-303 before administering the (2012) Vogtle operating test. The ultimate reason was that, if the facility licensee recommended her as ready for a license, I assumed that Carla's performance would have improved and would be satisfactory. Moreover, I did not want any evaluation that I made to be shaded by any comment from the 2011 exam—I wanted to ensure that I was as fair to Carla as I would be to any other applicant (*i.e.* to allow them to start from a 'blank sheet of paper' as much as possible). Finally, I thought that with the extra training and extra time practicing in the simulator Carla would perform as well as an upgrade SRO applicant, and so I also assumed that she would not have any trouble passing the operating test in 2012. The first time that I looked at Carla's ES-303 forms from the 2011 exam was in preparation for Don Jackson's review team in late June 2012.

5. *Did you review the docket files, including ES-303s, of any other applicants that were granted waivers prior to administering the operating test? (Bates, Meeks)*  
a. *Why or why not?*

No, I did not review any other docket files or ES-303s prior to administering the (2012) operating test. In my mind, the waiver question had been settled immediately following the 2011 exam (as detailed in the answer to 1. above) and therefore I did not believe there was any reason to revisit the decision or to review the 303s from that exam.

6. *What criteria or process was used to determine examiner assignments? (Bates, Meeks)*

When the facility licensee provided us with the final list of applicants, Mark Bates and I constructed a schedule using abbreviations (where "I1" was an instant SRO, "R1" a Reactor Operator Applicant, and "U1" an upgrade SRO applicant, etc.). This schedule was designed to minimize the number of scenarios that we were required to run, and to minimize the number of surrogate operators that were required. I also specifically decided to use any surrogates in the Balance-of-Plant position (BOP) if possible, instead of using surrogates in the SRO position. Once the applicant positions had been determined, we assigned examiners using abbreviations ("E1," "E2," and "E3") in order to ensure we met the NUREG 1021 requirement of only having the examiner of record evaluate an individual applicant during the simulator scenarios. Then, I organized the groups of applicants in a randomly-selected, reverse alphabetical order. In so doing, Carla Smith became designated as "I2" (or instant SRO applicant number 2). Because applicant "I2" had been assigned examiner "E2," we decided in the interest of fairness to ensure Mark Bates became "E2" in order to prevent anyone from claiming that we were unfair to the applicant and carried over any negative perceptions from the 2011 exam. I then decided to be "E1" and that made Phil Capehart "E3."

7. *What criteria or process was used to determine the number of scenarios to administer to each applicant? (Bates, Meeks)*

Please reference above answer to question 6.

8. *What steps, if any, did you take to mitigate any potential bias (predisposition based on knowledge of past performance) when administering the examination? (Bates, Meeks)*

The exam team was cognizant of the potential for bias or predisposition against applicants we had seen in 2011, and attempted to minimize it as follows:

As referenced in the emails between [REDACTED] and M. Meeks in the previous section, Vogtle initially considered scheduling a retake exam for the applicants that had failed in 2011, to be given before the next regularly scheduled exam in the spring of 2012. Ultimately, Vogtle decided not to attempt to give a specific retake exam, and the applicants who had failed the exam in 2011 were moved in with the class to be tested in the spring of 2012. This decision led to the

2012 Vogtle class size to be relatively large; ultimately the 2012 operating test was administered to 18 applicants, with 22 applicants taking the written exam.

As shown in the attached FY2012 weekly schedule (revision 1), the initial exam team consisted of M. Bates as the chief examiner, with B. Caballero and M. Meeks the other two examiners. Based on his qualification schedule, M. Meeks requested to serve as the chief examiner under instruction for this exam and was approved by the branch chief. During the corporate notification phone call ("120-day"), this exam team was communicated to the facility licensee. Due to other scheduling pressures, in approximately August of 2011 the exam team changed, and B. Caballero was forced by his additional obligations to be replaced on the Vogtle 2012 exam with P. Capehart.

When the final number and makeup of the applicant class was determined following the completion of the licensee "audit" exam, M. Bates and M. Meeks independently began development of the schedule for what was scheduled as two full weeks for the operating test. These draft schedules were in a generic format ("I1 I2 I3" to designate "Instant SRO 1, Instant SRO 2, Instant SRO 3," etc.) and did not include any applicant names. During the development of these generic schedules, M. Bates' schedule worked better than M. Meeks' schedule; however, M. Meeks asked M. Bates to modify his schedule so that any surrogate operators would be in the BOP position, instead of the SRO position. Once the generic schedule had been generated, M. Meeks assigned applicant names to the positions in an inverse alphabetical order. Carla Smith's name was assigned as "I2." A copy of this schedule is included at the end of this section. When Carla Smith was associated with "I2," the exam team purposely assigned M. Bates as the examiner of record for I2. This was specifically chosen to ensure that there would be no bias from the previous 2011 exam, and the branch chief was notified of this decision.

In the cover letter from Carla Smith requesting an appeal review of her grading, she states:

In addition, two of the three examiners were a part of the evaluation team from Hot License 16 examination. I was the only applicant that was re-evaluated from Hot License 16. I did not have the benefit of starting with a clean slate or without preconceived expectations, like the other applicants....

As shown in the preceding discussion and the following, this statement is without merit.

NUREG 1021, section ES-201 D.1.a states that: "The regional office shall not assign an examiner who failed an applicant on an operating test to administer any part of that applicant's retake operating test." Keeping the intent of this requirement in mind, as shown above M. Bates was intentionally assigned as Carla Smith's examiner of record. It would have been acceptable and in accordance with NUREG 1021 requirements to assign any one of the 2012 exam team members as Carla's examiner of record; however, we felt it would be better for all concerned to use Mark Bates, above and beyond the explicit NUREG requirements, because he had not seen her performance from 2011.

As mentioned earlier, M. Bates was not directly involved in the decision associated with the likely denial of a waiver for Carla Smith. This was purposely done to ensure that M. Bates would independently evaluate Carla Smith's performance without preconceived ideas based on her performance in 2011 on the previous exam. Specifically, M. Bates took special effort not to review any 303 documentation or any other record of Carla Smith's 2011 performance until after the 2012 exam report was issued.

9. *What threshold was used to determine whether or not to document an error committed by the applicant during administration of the operating test (simulator scenarios and JPMs)? (Bates, Meeks)*

Please see attached file "JPMs Administered by Meeks" to verify that every applicant received the same comments when warranted on the JPMs. The threshold that was used was the requirements of the examiner standard, NUREG 1021. Specifically, for the JPMs, if an applicant did not successfully complete a critical step of the JPM or did not complete the assigned task, the applicant was evaluated as not successfully completing the JPM. If an applicant made an error that was not associated with a critical step and was able to successfully complete the JPM, the applicant was graded as successfully completing the JPM but a comment was made to document the error.

Similarly, for the simulator scenarios the threshold that was used was as required by the NUREG 1021: because the NUREG specifies a grading scale based, in general, on individual competencies instead of the particular



consequences of a specific action or inaction, any error that related to an operator's competency was documented. The following several paragraphs speak directly to the grading philosophy used for the simulator scenarios, for all applicants:

### GRADING PHILOSOPHY AND CONSISTENCY

One of the principal assertions that is present throughout multiple comments made by Carla in her appeal is that she was graded excessively hard; specifically because many of her errors did not result in adverse consequences. However, NUREG 1021 directly contradicts this position; in section ES-303 it states:

Using Form ES-303-3 or ES-303-4, depending on the applicant's license level, and the following generic guidance, evaluate any deficiencies coded for the simulator test to determine a grade for every applicable rating factor (RF) and competency. Keep in mind that the simulator test is generally graded based on competencies rather than consequences; every error that reflects on an operator's competence is considered equal unless it is related to the performance of a critical task (as determined in accordance with ES-301 and Appendix D).

Therefore, with the exception of a critical task as noted above, the examiners were required to grade every error that reflects on an operator's competence equally, irrespective of the consequences or potential consequences of the error. The potential or actual consequences of the individual errors are documented in the 303 form write-up in accordance with NUREG 1021 ES-303 D.3.b., but do not have any bearing on the grading.

Furthermore, the applicant contends that some of her communications errors contained minimal consequences. In addition to the above guidance, NUREG-1021 recognizes that communications, on its own, has lesser significance. This is evidenced by the grading criteria specifically preventing a failure based solely on competency 4, Communications. Competency 4 is treated differently than all of the other competencies in that a score of less than 1.8 can still result in a passing grade for the dynamic simulator portion of the exam. Receiving a score of less than 1.8 only raises the cut score in the other competencies from 1.8 to 2.0. With this in mind, NUREG-1021 contains scoring mechanics that explicitly address the level of significance of communication errors. Lastly, as can be seen in the table discussed below,

several communications errors existed that were not documented. The numbers of communication errors display a pattern of poor communications, some of which did contain significance.

Another one of the principal assertions was that many of her errors were corrected by her teammates. However, in NUREG-1021, Appendix E, Part E, item 4, states:

Members of the operating team or crew (whether applicants or surrogates) should perform peer checks in accordance with the facility licensee's procedures and practices; non-crew members and NRC examiners will not perform this function. However, if you begin to make an error that is corrected by a peer checker, you will be held accountable for the consequences of the potential error without regard to mitigation by the crew.

Therefore, when corrected by her teammates when a direction or mis-operation was performed, the examiners were required to downgrade Carla and hold her accountable for the consequences of the potential error without regard to the mitigation by the crew.

NUREG-1021, ES-303, Section D.1.d, reads as follows:

..... Whenever possible, attempt to identify the root cause of the applicant's deficiencies and code each deficiency with no more than two different rating factors. However, one significant deficiency may be coded with additional rating factors if the error can be shown, consistent with the criteria in Section D.3.b, to be relevant to each of the cited rating factors.

Considering the above guidance, the errors were assigned to the rating factor the exam team believed to be the root cause of the deficiency. In many instances, the exam team discussed that it may be appropriate to place some of the errors in more than one rating factor. In the end, the exam team decided to only place each error in one rating factor that was most closely related to the root cause of the error, although the above guidance allowed for up to two different rating factors to be documented under normal circumstances. Throughout the analysis of the grading during the appeal process, the exam team has noted other rating factors in which the applicant displayed weakness during a specific error. Even though the errors were only documented under one rating factor, the association with other rating factors was used as

justification for placing a score of “1” in some rating factors where only two errors were documented.

Furthermore, prior to issuance of the license denial to Carla, the exam team sought independent reviews from two Senior Operations Engineers and one Operations Engineer, all having previously held senior reactor operator licenses, to critique the grading of the form 303 write-up and provide critical feedback. Comments from these reviews were largely incorporated into the final documentation.

The applicant contended in her cover letter that the grading was inconsistent due to there not being any errors documented in areas of Procedures (Competency 3) and Directing Shift Operations (Competency 5):

In addition, the overall exam results are not consistent. The applicant received a score of 3.0 in the areas of Procedure Usage and Directing Operations but received a 1.70 in Interpretation/Diagnosis and a 1.2 in Communication. These areas have a direct impact on the success path for Procedure usage and Directing Operations. In reviewing the comments there were instances where pertinent information was not included in the description of the assessment, allowing the competencies to be downgraded. How is the crew able to be successful when all directions are taken from the Shift Supervisor (role) and requires that individual to be able to interpret, diagnose, and communicate to navigate through the various procedures?

It is true that no errors were documented on the Form 303 in these two competency areas. The exam team had discussions with the Branch Chief on this exact point prior to issuance of the denial. It was recognized by the entire team that there were elements of Directing Shift Operations prevalent throughout the errors that were documented in other rating factors. The team chose to assign each error to only one rating factor even though there were elements of the error that could be assigned to additional rating factors. It was also noted, to a lesser degree, that there were also elements of procedure usage errors. See the following table for a depiction of rating factor association with applicant errors.

**Cross Reference Table of Errors and Related Rating Factors**

RF / 303 Pg # of Doc Error	8	10	12	14	16	18	19	20	21	23	24	25	26	27	28	29	30	31	RF Score
<b>1. Interpretation/Diagnosis</b>																			
a. Recognize & Attend	X																		3
b. Ensure Accuracy	D	D			X	X					X								1
c. Understanding			D	D					X										1
d. Diagnosis					D														2
<b>2. Procedures</b>																			
a. Reference				X															3
b. EOP Entry																			3
c. Correct Use		X										X							3
<b>3. Control Board Operations</b>																			
a. Locate & Manipulate						D	D	D											1
b. Understanding																			3
c. Manual Control									D										2
<b>4. Communications</b>																			
a. Clarity			X							D	D	D	D	D					1
b. Crew & Others Informed	X					X	X	X											1
c. Receive Information			3X												D				2
<b>5. Directing Operations</b>																			
a. Timely & Decisive Action																			3
b. Oversight		X		X															3
c. Solicit Crew Feedback	X										X								3
d. Monitor Crew Activities			X	X	X														3
<b>6. Technical Specifications</b>																			
a. Recognize & Locate																D	D	D	1
b. Compliance																			3
D: denotes where the actual error was originally placed on the Form 303-1.																			
X: denotes other rating factors where weaknesses were attributed, but not documented on the Form 303-1.																			

[13]

10. Please provide any evidence (written comments) that show that a similar threshold was used to document errors committed by other applicants. (Bates, Meeks)

Once again, in accordance with the guidance and requirements of NUREG 1021, as the chief examiner (under instruction) I was responsible for ensuring that every examiner graded the applicants in a consistent fashion, applying a uniform threshold. That said, Carla Smith made more errors than other applicants, and in some cases her errors were unique to her own performance and did not correlate to errors made by anyone else.

One way to demonstrate a similar threshold between examiners is to compare the documented comments for Carla Smith (examiner of record Mark Bates), with the documented comments for her simulator scenario team-mate [REDACTED] (examiner of record Michael Meeks):

-Carla's comment on p. 14 of her ES-303 is similar to [REDACTED] comment on p. 8 of his ES-303.

-Carla's comment on p. 16 of her ES-303 is similar to [REDACTED] comment on p. 11 of his ES-303.

-Carla's comment on p. 18 of her ES-303 is similar to [REDACTED] comment on p. 14 of his ES-303.

-Carla's comment on p. 20 of her ES-303 is similar to [REDACTED] comment on p. 7 of his ES-303.

-Carla's comment on p. 24 of her ES-303 is similar to [REDACTED] comment on p. 12 of his ES-303.

-Carla's comment on p. 25 of her ES-303 is similar to [REDACTED] comment on p. 13 of his ES-303.

-Carla's comment on p. 31 of her ES-303 is similar to [REDACTED] comment on p. 15 of his ES-303.

**Attachment 1: Emails associated with Vogtle waivers**

**Meeks, Michael**

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**From:** Capehart, Phillip  
**Sent:** Monday, May 02, 2011 2:59 PM  
**To:** Meeks, Michael  
**Subject:** Input for waivers  
**Attachments:** image001.png; image002.jpg

Michael, Malcolm has asked for input as to the status of future (operating portion of the exam) waivers for the Vogtle retake exam. I wanted to get your input as to the individuals you examined and passed on the operating portion of the exam. Of the 3 applicants that passed the operating portion of the exam but failed the written, do you recommend that they receive waivers for a retake for the operating portion of the exam? Malcolm is reviewing the 303s and would like to get back to [REDACTED] ASAP.



**Phillip G. Capehart**  
Senior Operations Engineer  
RII Operator Licensing  
204-997-4483



## Meeks, Michael

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**From:** Capehart, Phillip  
**Sent:** Tuesday, May 03, 2011 7:39 AM  
**To:** Widmann, Malcolm  
**Cc:** Meeks, Michael; Hopkins, Jay; Bacon, Daniel  
**Subject:** FW: Input for waivers  
**Attachments:** image001.png; image002.jpg

Malcolm, I spoke with both Michael and Jay about the possibility of future waiver denials. The only individual that all 3 of us are in agreement about is Carla. Even though she passed the operating test portion, we would recommend a future waiver of this portion of the exam be denied.

Phil

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**From:** Meeks, Michael  
**Sent:** Monday, May 02, 2011 3:19 PM  
**To:** Capehart, Phillip  
**Subject:** RE: Input for waivers

Phil,

I do not have any problems or concerns with granting a waiver of the operating exam to the three individuals listed below that I examined [REDACTED].

[REDACTED] I would recommend NOT granting waivers of the operating exam to [REDACTED] and C. Smith.

So you know, while I am at the G-103 class this week, I will have access to all NRC accounts and drives during my class in the day; however, the NRC laptop I have at the hotel is not working. I have access to the O: drive here at Region I if you need me to make changes to stuff, or read other people's changes...

Best regards,

*Michael Meeks*

Operations Examiner/Operations Engineer  
U.S. Nuclear Regulatory Commission (Region II)  
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Atlanta, GA 30303-1257  
office: 404.997.4467  
email: [Michael.Meeks@nrc.gov](mailto:Michael.Meeks@nrc.gov)

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**From:** Capehart, Phillip  
**Sent:** Monday, May 02, 2011 2:59 PM  
**To:** Meeks, Michael  
**Subject:** Input for waivers

Michael, Malcolm has asked for input as to the status of future (operating portion of the exam) waivers for the Vogtle retake exam. I wanted to get your input as to the individuals you examined and passed on the operating portion of the exam. Of the 3 applicants that passed the operating portion of the exam but failed the written, do you recommend that they receive waivers for a retake for the operating portion of the exam? Malcolm is reviewing the 303s and would like to get back to [REDACTED] ASAP.

[REDACTED]



*Phillip G. Capehart*

Senior Operations Engineer

RII Operator Licensing

404-997-4483

— P I I —

**Meeks, Michael**

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**From:** [REDACTED]  
**Sent:** Tuesday, June 07, 2011 7:24 AM  
**To:** Meeks, Michael  
**Cc:** Widmann, Malcolm [REDACTED]  
**Subject:** Vogtle NRC Exam Waiver Questions

Michael,

We are in the process of identifying individuals in which we plan on requesting a waiver for the March 2012 Operating Exam in accordance with ES-204, Section D.1.a. The individuals in which we are confident that we will request an Operating Exam waiver are:

[REDACTED]

Three other individuals from that class also passed the March 2011 Operating Exam; however, we are presently evaluating their status and are inquiring as to whether or not Region II would approve an Operating Exam waiver for the individuals below:

[REDACTED], and  
Charlissa Smith (55-23694).

If I understand ES-204, these waiver requests should be documented on Form 398 when the license applications are submitted and would be considered routine waivers with review/approval through the Region II office. I also understand that the requirements of D.1.k must also be met to waive the 24 month GFE requirement. However, in order to allow us to develop an appropriate recovery plan, I am asking if Region II would evaluate the status of the individuals listed above and indicate whether or not a waiver would be approved. If I need to follow up with a formal request (i.e. letter), please let me know so I may submit it in a timely manner.

In addition, I understand that you may not be the Chief Examiner for our March 2013 exam, however, I am asking for some assistance as to how I should proceed with a similar issue. There is one individual that will be enrolled in the LOIT program this fall and is scheduled to take an Initial Operating Exam in March 2013 that is about 2 months shy of the prerequisite 36 month eligibility requirement. We currently plan on requesting a waiver for this individual as well but I do not believe this would be considered a routine waiver as described in ES-204; thus requiring NRR approval. As you might expect, we would like to know whether or not this waiver request would be accepted. My question, how should I proceed? Should I submit a formal letter (signed by our VP) requesting evaluation of this request prior to submitting the Form 398 application? If so, when would submittal of a request be considered timely?

Any assistance on these issues would be greatly appreciated.

[REDACTED]  
Nuclear Operations Training Supervisor  
Vogtle Electric Generating Plant  
External [REDACTED]  
Internal: [REDACTED]  
Pager [REDACTED]

— P T T —

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## Meeks, Michael

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**From:** Capehart, Phillip  
**Sent:** Tuesday, August 16, 2011 2:06 PM  
**To:** Meeks, Michael  
**Cc:** Bates, Mark; Schaaf, Kenneth; Widmann, Malcolm; Franke, Mark  
**Subject:** RE: schedule additions

OK, I changed the schedule and RPS to reflect the change in the dates for the Vogtle exam. Also, I will be replacing Bruno on this exam to allow him more time to prep the Farley exam he is chiefing.

Phil

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**From:** Meeks, Michael  
**Sent:** Tuesday, August 16, 2011 1:17 PM  
**To:** Widmann, Malcolm  
**Cc:** Schaaf, Kenneth; Capehart, Phillip; Franke, Mark; Bates, Mark  
**Subject:** RE: schedule additions

Malcolm,

For what's it worth, I am willing to do the in-office portion of the Emergency Procedures inspection for WB2 mentioned below, as long as it can be worked in among my Chief Examiner U/I for Vogtle—especially since I will be working on the same IP (?) at Robinson with Rick the week of 12/5/2011 as mentioned below and during our branch meeting today.

Another schedule change for the March/April Vogtle exam is due to the Masters golf tournament, which is scheduled for April 5-8, 2012. Recommend putting a "Doc" block in for the "middle" week of 4/02 (2012) for myself, Bruno, and Mark Bates; and shifting the exam weeks to the right by one week (i.e. all three of us onsite the week of 4/09; Bruno and myself onsite the week of 4/16).

Thanks—

Best regards,

*Michael Meeks*

Operations Examiner/Operations Engineer  
U.S. Nuclear Regulatory Commission (Region II)  
245 Peachtree Center Ave. NE (Suite 1200)  
Atlanta, GA 30303-1257  
office: 404.997.4467  
email: [Michael.Meeks@nrc.gov](mailto:Michael.Meeks@nrc.gov)

---

**From:** Widmann, Malcolm  
**Sent:** Thursday, August 11, 2011 4:26 PM  
**To:** Capehart, Phillip; Schaaf, Kenneth

**Cc:** Franke, Mark; Aiello, Ronald; Capehart, Phillip; Laska, Gerard; Baldwin, Richard; Meeks, Michael; Bacon, Daniel; Toth, Amanda; Bates, Mark; Lanyi, David

**Subject:** schedule additions

We have some other activities, not exam related, that need to be added to the current FY schedule and 2012. Mostly for WB2 but some ROB follow-up stuff too.

- Delete 11/14 "WB U2 SU inspection" for Baldwin and Meeks.
- Add 11/28 "U1 SIM Insp" for Aiello and Baldwin
- Add 12/5 week "ROB EOP Inspection" for Baldwin and Meeks.
- Add 2/20 week "WB U2 prep" (onsite inspection of training objectives) for Aiello and Capehart
- Add (as a place holder) weeks 2/27, 3/5, 3/12 "WB U2 Review" for Aiello, Capehart, Laska (3-50Q tests); - Need to check on leave for Aiello on 3/5 if it is real ....
- Add week 3/26 "WB U2 Exam" for Aiello and Capehart (onsite)
- Correct under Bates "VG-IP" week 3/5, class size to 14/9/1 (licensee informed me via telecon).
- Add 5/7 "ROB PI&R" for Lanyi.
- Add (placeholders) 5/7 "WB U2 SU" (start-up inspection) for Bacon, Laska, Toth; 5/14 for Bacon, Lanyi, Toth; 5/21 Lanyi, Toth; 5/28 Aiello, Bates, Lanyi, Laska, Toth.

We also need to add IPs to be inspected at WB2; 370 man hrs (2 guys - 6 weeks, not all at once) effort to address IPs. Slated for March-April of 2012.

**IP 41500, Training inspection (for differences and SAT inspection): Level of effort = 136 man hours (2 people, 1 week in office and 1 week in the field). If a HQ Human Factors person is used and one typically is, add 40 hours. 16 hours post inspection documentation.**

**IP 42400, Plant Procedures inspection: Level of effort = 104 hours. 2 people one week in the field with 8 hour prep and 16 man hours post inspection documentation.**

**IP 42452, Emergency Procedures inspection: Level of effort = 136 man hours (2 people, 1 week in office and 1 week in the field). On occasion a third person is used. If so, add 40 hours. 16 hours post inspection documentation.**

- P I I -

**Meeks, Michael**

From: Meeks, Michael  
Sent: Tuesday, August 02, 2011 10:18 AM  
To: [REDACTED]  
Cc: Widmann, Malcolm; [REDACTED]; Bates, Mark; Franke, Mark  
Subject: RE: Vogtle NRC Exam Waiver Questions

[REDACTED]

Sorry to be so long getting back to you. I have checked with Mark Bates and Malcolm and have preliminary answers for you:

1. For [REDACTED]: these would be routine waivers approved by Region II. These individuals would have the operating test portion of the exam waived, and would only need to take the written exam. When their applications are submitted, they would need to specify deficiencies (i.e. as noted in the last NRC exam) and the remedial training they did to correct these deficiencies.
2. For C. Smith, Region II would likely deny a waiver of the operating test portion of the exam. However, she could re-take the entire exam (both a complete operating exam and the written).
3. For the individual in the March 2013 class, we need some additional information. S-204 D.1.i allows the region to approve a routine waiver of "up to 6 months of the 3 years of (responsible nuclear) power plant experience for an RO (or an SRO), but not to exceed 2 months of the year of onsite experience for an RO and 1 month of the 6 for an SRO." Therefore, if the applicant meets this criteria, Region II could approve a routine waiver. If the applicant does not meet this criteria, we would need to receive authorization from the IOLB program office (NRC Headquarters) to grant the waiver. In either case, after the applicant passed the NRC exam, we would issue a "pass" letter stating that the applicant passed the exam, and that the license would be issued once the applicant completes the required experience.

Please let me know if you have any further questions—

Best regards,

*Michael Meeks*

Operations Examiner/Operations Engineer  
U.S. Nuclear Regulatory Commission (Region II)  
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office: 404.997.4467  
mail: [Michael.Meeks@nrc.gov](mailto:Michael.Meeks@nrc.gov)

- P I I -

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- P I I -

**From:** [REDACTED]  
**Sent:** Tuesday, June 07, 2011 7:24 AM  
**To:** Meeks, Michael  
**Cc:** Widmann, Malcolm [REDACTED]  
**Subject:** Vogtle NRC Exam Waiver Questions

Michael,

We are in the process of identifying individuals in which we plan on requesting a waiver for the March 2012 Operating Exam in accordance with ES-204, Section D.1.a. The individuals in which we are confident that we will request an Operating Exam waiver are:

[REDACTED]

Three other individuals from that class also passed the March 2011 Operating Exam; however, we are presently evaluating their status and are inquiring as to whether or not Region II would approve an Operating Exam waiver for the individuals below:

[REDACTED], and  
Charlissa Smith (55-23694).

If I understand ES-204, these waiver requests should be documented on Form 398 when the license applications are submitted and would be considered routine waivers with review/approval through the Region II office. I also understand that the requirements of D.1.k must also be met to waive the 24 month GFE requirement. However, in order to allow us to develop an appropriate recovery plan, I am asking if Region II would evaluate the status of the individuals listed above and indicate whether or not a waiver would be approved. If I need to follow up with a formal request (i.e. letter), please let me know so I may submit it in a timely manner.

In addition, I understand that you may not be the Chief Examiner for our March 2013 exam, however, I am asking for some assistance as to how I should proceed with a similar issue. There is one individual that will be enrolled in the LOIT program this fall and is scheduled to take an Initial Operating Exam in March 2013 that is about 2 months shy of the prerequisite 36 month eligibility requirement. We currently plan on requesting a waiver for this individual as well but I do not believe this would be considered a routine waiver as described in ES-204; thus requiring NRR approval. As you might expect, we would like to know whether or not this waiver request would be accepted. My question, how should I proceed? Should I submit a formal letter (signed by our VP) requesting evaluation of this request prior to submitting the Form 398 application? If so, when would submittal of a request be considered timely?

Any assistance on these issues would be greatly appreciated.

[REDACTED]  
*Nuclear Operations Training Supervisor*  
*Vogtle Electric Generating Plant*  
**External:** [REDACTED]  
**Internal:** [REDACTED]  
**Pager:** [REDACTED]

Tracking:

- P I I -

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**Recipient**

Widmann, Malcolm



Bates, Mark

Franke, Mark

**Delivery**

Delivered: 8/2/2011 10:18 AM

Delivered: 8/2/2011 10:18 AM

Delivered: 8/2/2011 10:18 AM

**Read**

Read: 8/2/2011 10:23 AM



- P I I -

**Meeks, Michael**

**From:** [REDACTED]  
**Sent:** Friday, September 09, 2011 2:15 PM  
**To:** Meeks, Michael  
**Cc:** [REDACTED]  
**Subject:** RE: Vogtle NRC Exam Waiver Questions

For item 3 below, we will be requesting a waiver for no greater than 80 days of the 36 months responsible power plant experience for an instant SRO candidate (ES-202 D.2.a.(1)). All other requirements will be met.

Also, how would I go about finding out whether or not Region II will grant an operating exam waiver for the individuals submitted? This would be very beneficial as we tailor their remediation program to the specific needs.

Thanks for your help,

[REDACTED]  
*Nuclear Operations Training Supervisor*  
*Vogtle Electric Generating Plant*  
**External:** [REDACTED]  
**Internal:** [REDACTED]  
**Pager:** [REDACTED]

---

**From:** Meeks, Michael [mailto:Michael.Meeks@nrc.gov]  
**Sent:** Tuesday, August 02, 2011 10:18 AM  
**To:** [REDACTED]  
**Cc:** Widmann, Malcolm; [REDACTED]; Bates, Mark; Franke, Mark  
**Subject:** RE: Vogtle NRC Exam Waiver Questions

[REDACTED]

Sorry to be so long getting back to you. I have checked with Mark Bates and Malcolm and have preliminary answers for you:

1. For [REDACTED] and [REDACTED]: these would be routine waivers approved by Region II. These individuals would have the operating test portion of the exam waived, and would only need to take the written exam. When their applications are submitted, they would need to specify deficiencies (i.e. as noted in the last NRC exam) and the remedial training they did to correct these deficiencies.
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issue a "pass" letter stating that the applicant passed the exam, and that the license would be issued once the applicant completes the required experience.

Please let me know if you have any further questions—

Best regards,

*Michael Meeks*

Operations Examiner/Operations Engineer  
U.S. Nuclear Regulatory Commission (Region II)  
245 Peachtree Center Ave. NE (Suite 1200)  
Atlanta, GA 30303-1257  
office: 404.997.4467  
email: [Michael.Meeks@nrc.gov](mailto:Michael.Meeks@nrc.gov)

**From:** [REDACTED]  
**Sent:** Tuesday, June 07, 2011 7:24 AM  
**To:** Meeks, Michael  
**Cc:** Widmann, Malcolm; [REDACTED]  
**Subject:** Vogtle NRC Exam Waiver Questions

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- P T I -

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evaluation of this request prior to submitting the Form 398 application? If so, when would submittal of a request be considered timely?

Any assistance on these issues would be greatly appreciated.

  
*Nuclear Operations Training Supervisor*

*Vogtle Electric Generating Plant*

*External:* 

*Internal:* 

*Pager:* 

- P I I -

Meeks, Michael

From: Meeks, Michael  
Sent: Tuesday, September 27, 2011 11:01 AM  
To: [REDACTED]  
Cc: [REDACTED]; Bates, Mark; Widmann, Malcolm; [REDACTED]  
Subject: RE: Vogtle NRC Exam Waiver Questions

[REDACTED]

Thanks for your email. I am just back in the office today from a two-week exam, and starting to go through my email backlog.

[REDACTED] wrote: "For item 3 below, we will be requesting a waiver for no greater than 80 days of the 36 months responsible power plant experience for an instant SRO candidate (ES-202 D.2.a.(1)). All other requirements will be met."

Good, therefore as long as the individual has 6 months of responsible nuclear power plant experience at Vogtle this should be a routine waiver that we can approve within the Region per ES-204 D.1.i. When the results of the exam are issued, the individual applicant would receive a letter stating that he had passed the exam, and once you certify to us that the remaining 80 days of responsible nuclear power plant experience are met (i.e. after the exam), we would issue the individual a license.

[REDACTED] wrote: "Also, how would I go about finding out whether or not Region II will grant an operating exam waiver for the individuals submitted? This would be very beneficial as we tailor their remediation program to the specific needs."

I'm not sure I understand if you are asking a new question. For [REDACTED], [REDACTED], [REDACTED], [REDACTED], and [REDACTED]: as long as these individuals' applications demonstrate that they have completed a remedial training program to address deficiencies, these would be routine waivers approved by Region II. These five individuals would have the operating test portion of the exam waived, and would only need to take the written exam. For C. Smith, Region II would likely deny a waiver of the operating test portion of the exam. However, she could re-take the entire exam (both a complete operating exam and the written). I had briefed regional management on the above individuals and received concurrence before I sent my earlier email; so they were "preliminary" answers insofar as we have not received/evaluated the actual applications.

Please let me know if you have any further questions—

Best regards,

*Michael Meeks*

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U.S. Nuclear Regulatory Commission (Region II)  
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Atlanta, GA 30303-1257  
office: 404.997.4467  
email: [Michael.Meeks@nrc.gov](mailto:Michael.Meeks@nrc.gov)

- P<sup>1</sup> I -

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- P I I -

From: [REDACTED]  
Sent: Friday, September 09, 2011 2:15 PM  
To: Meeks, Michael  
Cc: [REDACTED]  
Subject: RE: Vogtle NRC Exam Waiver Questions

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Thanks for your help,

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Nuclear Operations Training Supervisor  
Vogtle Electric Generating Plant  
External: [REDACTED]  
Internal: [REDACTED]  
Pager: [REDACTED]

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Sent: Tuesday, August 02, 2011 10:18 AM  
To: [REDACTED]  
Cc: Widmann, Malcolm; [REDACTED]; Bates, Mark; Franke, Mark  
Subject: RE: Vogtle NRC Exam Waiver Questions

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- P I I -

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Please let me know if you have any further questions—

Best regards,

*Michael Meeks*

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Atlanta, GA 30303-1257  
office: 404.997.4467  
email: [Michael.Meeks@nrc.gov](mailto:Michael.Meeks@nrc.gov)

**From:** [REDACTED]  
**Sent:** Tuesday, June 07, 2011 7:24 AM  
**To:** Meeks, Michael  
**Cc:** Widmann, Malcolm; [REDACTED]  
**Subject:** Vogtle NRC Exam Waiver Questions

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- P I I -

30

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*Nuclear Operations Training Supervisor*

*Vogtle Electric Generating Plant*

*External:* 

*Internal:* 

*Pager:* 

Tracking:

**Recipient**

Bates, Mark

Widmann, Malcolm

**Delivery**

Delivered: 9/27/2011 11:01 AM

Delivered: 9/27/2011 11:01 AM

**Read**

Read: 9/27/2011 11:11 AM



- P I I -

Meeks, Michael

From: [REDACTED]  
Sent: Tuesday, September 27, 2011 11:09 AM  
To: Meeks, Michael  
Subject: RE: Vogtle NRC Exam Waiver Questions

Thanks, I just wanted to verify that we were all on the same page.

[REDACTED]  
Nuclear Operations Training Supervisor  
Vogtle Electric Generating Plant  
External: [REDACTED]  
Internal: [REDACTED]  
Pager: [REDACTED]

---

From: Meeks, Michael [mailto:Michael.Meeks@nrc.gov]  
Sent: Tuesday, September 27, 2011 11:01 AM  
To: [REDACTED]  
Cc: [REDACTED]; Bates, Mark; Widmann, Malcolm; [REDACTED]  
Subject: RE: Vogtle NRC Exam Waiver Questions

[REDACTED]

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- P T T -

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- PII -

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Best regards,

*Michael Meeks*

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Atlanta, GA 30303-1257  
office: 404.997.4467  
email: [Michael.Meeks@nrc.gov](mailto:Michael.Meeks@nrc.gov)

**From:** [REDACTED]  
**Sent:** Friday, September 09, 2011 2:15 PM  
**To:** Meeks, Michael  
**Cc:** [REDACTED]  
**Subject:** RE: Vogtle NRC Exam Waiver Questions

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Thanks for your help,

[REDACTED]  
Nuclear Operations Training Supervisor  
Vogtle Electric Generating Plant  
External: [REDACTED]  
Internal: [REDACTED]  
Pager: [REDACTED]

**From:** Meeks, Michael [<mailto:Michael.Meeks@nrc.gov>]  
**Sent:** Tuesday, August 02, 2011 10:18 AM  
**To:** [REDACTED]  
**Cc:** Widmann, Malcolm; [REDACTED]; Bates, Mark; Franke, Mark  
**Subject:** RE: Vogtle NRC Exam Waiver Questions

[REDACTED]  
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2. For C. Smith, Region II would likely deny a waiver of the operating test portion of the exam. However, she could re-take the entire exam (both a complete operating exam and the written).

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Best regards,

*Michael Meeks*

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Atlanta, GA 30303-1257  
office: 404.997.4467  
email: [Michael.Meeks@nrc.gov](mailto:Michael.Meeks@nrc.gov)

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**From:** [REDACTED]  
**Sent:** Tuesday, June 07, 2011 7:24 AM  
**To:** Meeks, Michael  
**Cc:** Widmann, Malcolm; [REDACTED]  
**Subject:** Vogtle NRC Exam Waiver Questions

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- PTT -

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[REDACTED]  
*Nuclear Operations Training Supervisor*  
*Vogtle Electric Generating Plant*  
External: [REDACTED]  
Internal: [REDACTED]  
Pager: [REDACTED]

- P I I -

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**Attachment 2: OB FY2012 schedules and Vogtle Exam schedule**

2nd Quarter FY2012

2012	1/02	1/9	1/16	1/23	1/30	2/06	2/13	2/20	2/27	3/05	3/12	3/19	3/26
HOLIDAY		MLG					M20						
Aiello			WB Rev	WB Rev	WB Rev			WB-IP 4/10/2			WB-E	WB-E	Doc
Baldwin				HR-IP 8-1-4			HR-E	HR-E				BF Rev	BF Rev
Bates	Doc	Doc			VG Rev	VG Rev	VG Rev			VG-IP 12/8/1			VG-E
Caballero		TP Doc	TP Doc	HR-IP	TP Doc		HR-E	HR-E		VG-IP			VG-E
Capehart		TP Doc	TP Doc	TP Doc						SM Review	SM Review	SM Review	
Einhardt													
Laska			SQ-E	SQ-E	Doc	Doc	Doc	WB-IP?			WB-E	WB-E	Doc
Lea	Doc	Doc	BF Review	BF Review	BF Review								Doc
Meeks				HR-IP			HR-E			VG-IP			VG-E
Riches	Doc	Doc						WB-IP			WB-E	WB-E	Doc
Schaaf			SQ-E	SQ-E									Doc
New Hire												Doc	Doc
New Hire													
Other			SQ-E?	SQ-E?									
Other													



3rd Quarter FY2012

2012	4/02	4/09	4/16	4/23	4/30	5/07	5/14	5/21	5/28	6/04	6/11	6/18	6/25
HOLIDAY													
Aiello	Doc WB	Doc WB	OC Review	OC Review	OC Review			OC-IP 6/1/12	M28		OC-E	Doc	Doc
Baldwin	BF Rev							Doc	Doc	Doc			Doc
Bates	VG-E	Doc	Doc	NA Review	NA Review	NA Review							Doc
Caballero	VG-E	VG-E	Doc	Doc	FA Review	FA Review	FA Review		FA-IP 6/11/12			FA-E	FA-E
Capehart		SM-IP 6/11/12			SM-E	SM-E	Doc	Doc	Doc	Doc		BW Review	BW Review
Handi													
Laska	Doc WB	SM-IP			SM-E	SM-E	Doc		Doc				Doc
Lea	Doc BF	Doc BF	Doc BF		HT Review	HT Review	HT Review		HT-IP 5/8/12			HT-E	HT-E
Meeks	VG-E	VG-E	Doc	Doc					HT-IP			HT-E	HT-E
Riches	Doc WB	Doc						Doc	FA-IP			FA-E	FA-E
Schaaf	Doc BF	SM-IP			SM-E	SM-E	Doc	Doc	HT-IP			HT-E	HT-E
New Hire													Doc
New Hire									FA-IP?			FA-E	FA-E
Other								OC-IP?			OC-E?		
Other								OC-E?			OC-E?		

2nd Quarter FY2012

2012	1/02	1/9	1/16	1/23	1/30	2/06	2/13	2/20	2/27	3/05	3/12	3/19	3/26
HOLIDAY													
Aiello	AL		N16	HR-IP	Doc	AL	HR-E	N20					
Bacon					GE TTC	GE TTC	GE TTC	SR Prep Written	GE TTC	GE TTC	SR Prep Written	GE TTC	GE TTC
Baldwin	HR Rev	HR Rev		HR-IP			HR-E	HR-E	Doc	Doc	Doc	BF Rev	BF Rev
Bates			SQ-E	SQ-E	Doc	VG Review	VG Review		VG-IP				VG-E
Caballero	TP Doc								Doc	AL 9	AL		AP-1000 Sim Obs
Capehart	AL	Surry Corp. Ltr	AL 1/17		AL 2/1-2/8	AL		2/22 CR3 Mfg. 2/23 RPS Trng	VG-IP			3/21 VG Mtg	VG-E
Goldau			SQ- Cert	SQ- Cert		GE Series		SR Prep Written	GE Series	GE Series		GE Series	
Lanyi				HR Certify			HR Certify	HR Certify	TTC G-107	TTC G-107	SR Prep Written		
Laska			SQ-E	SQ-E	Doc	Doc	Doc						
Lea				HR-IP			HR-E	HR-E	Doc	Doc	Doc		AP-1000 Sim Obs
Meeks	Prep	NA- RO	Doc		VG Rev Chief UI	VG Rev Chief UI	VG Rev Chief UI		VG-IP				VG-E C-UI
Riches			SQ-E	SQ-E	BF PI&R		BF PI&R	SR Prep Written				SR Prep Written	AP-1000 Sim Obs
Schaaf		NA- RO		HR-IP			HR-E C-UI	HR-E C-UI				SR Prep Written	SR Prep Written
Toth		P-105					G-105	AL	SR Prep Written	SR Prep Written	SR Prep Written	SR Prep Written	SR Prep Written
Mark Lintz (Qualification)							SR Prep Written	SR Prep Written	SR Prep Written	SR Prep Written	SR Prep Written	SR Prep Written	SR Prep Written



3rd Quarter FY2012

2012	4/02	4/09	4/16	4/23	4/30	5/07	5/14	5/21	5/28	6/04	6/11	6/18	6/25
HOLIDAY					Examiner's Conference 5/1-3								
Bacon	SR Prep Written	SR Prep Written	SR Prep Written	G-205		SR Prep Written	FA-IP	OC resident rotation	SR Prep Written	AL	AL	FA-E	FA-E
Baldwin	BF Rev	BF Rev	BF-IP 4/3/4 V23170			BF-E	BF-E	Doc	Doc	Doc	Doc		SR Review
Bates	Doc	Doc	Doc	Doc	Doc	Doc	AL	AL	AL		Doc	Doc	Doc
Caballero			FA Review	FA Review		FA Review	FA-IP 6/8/0 V23173				Doc	FA-E	FA-E
Capehart	Doc	Doc	Doc	Doc		5/9 E- Plan Drill		OC-IP	SR Written Review	SR Written Review	Doc		Doc
Goldau	SR Prep Written	SR Prep Written						SR Prep Written	SR Prep Written	Com Tm PDC	AL	AL	AL
Lanyi	RB EOP	SR Prep Written	SR Prep Written	SR Prep Written		RB PDC	TTC West	RB PDC		B&W Cross Tmg	B&W Cross Tmg 6/15	B&W Cross Tmg	
Laska	RB EOP		OC Review	OC Review	Exam Conference Lead	OC Review	OC Review	OC-IP 4/30/5 V23171			Doc	Doc	Doc
Lea				HT Review		HT Review	HT Review	HT Review	HT-IP 5/1/0 V23171				
Meeks	Doc	Doc	Doc	Doc		Farley E- Plan Drill	AP-1000 TTC	AP-1000 TTC			Doc		AL
Riches			BF-IP			BF-E	BF-E	Doc	HT-IP	Doc		HT-E	
Schaaf			BF-IP			BF-E	BF-E			NA CDBI	NA CDBI	NA CDBI	
Toth	SR Prep Written	SR Prep Written	SR Prep Written	SR Prep Written	SR Prep Written	SR Prep Written	AP-1000 TTC	AP-1000 TTC	SR Prep Written	B&W Cross Tmg	B&W Cross Tmg 6/15	B&W Cross Tmg	
Larry Vick									HT-IP				
S. Currie							FA-IP					FA-E	FA-E
Mark Lintz	SR Prep Written	SR Prep Written	SR Prep Written	SR Prep Written	SR Prep Written	SR Prep Written	SR Prep Written	SR Prep Written	SR Prep Written				

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# Vogtle Initial Licensed Operator Exam 2012-301

## WEEK 1

	MONDAY (3/26)	TUESDAY (3/27)	WEDNESDAY (3/28)	THURSDAY (3/29)	FRIDAY (3/30)
0700-1000	Scenario #6 CRS: I2 / E2 OATC: I1 / E1 BOP: R1 / E3	Scenario 7 CRS: I1 / E1 OATC: I2 / E2 BOP: R1 / E3	Scenario #2 CRS: U1 / E1 OATC: R7 / E2 BOP: R8 / E3	Scenario #3 CRS: I4 / E2 OATC: R2 / E3 BOP: Surrogate E1: A3 & A1-1 (U1, I8, R4, R3, R5, R6, R7)	Scenario #1 CRS: U1 / E1 OATC: R8 / E3 BOP: R7 / E2
1000-1300	Scenario #6 CRS: I4 / E2 OATC: I3 / E1 BOP: R2 / E3	Scenario 7 CRS: I3 / E1 OATC: I4 / E2 BOP: R2 / E3	Scenario #2 CRS: I5 / E1 OATC: R5 / E2 BOP: R6 / E3	Scenario #3 CRS: I2 / E2 OATC: R1 / E3 BOP: Surrogate E1: A3 & A1-1 (I1, I3, I5, I6, I7, R8)	Scenario #1 CRS: I1 / E1 OATC: R6 / E3 BOP: R5 / E2
1300-1600	Scenario #6 CRS: I6 / E2 OATC: I5 / E1 BOP: R3 / E3	Scenario 7 CRS: I5 / E1 OATC: I6 / E2 BOP: R3 / E3	Scenario #2 CRS: I8 / E2 OATC: I7 / E1 BOP: R4 / E3	Scenario #3 CRS: I8 / E2 OATC: R4 / E3 BOP: Surrogate E1: A3 & A1-1 (I2, R1, I4, R2)	Scenario #1 CRS: I6 / E2 OATC: R3 / E3 BOP: Surrogate
1600-1800		Scenario 7 CRS: I7 / E1 OATC: I8 / E2 BOP: R4 / E3			

I1: [REDACTED]  
 I2: Charissa Smith (Carla)  
 I3: [REDACTED]  
 I4: [REDACTED]  
 I5: [REDACTED]  
 I6: [REDACTED]  
 I7: [REDACTED]  
 I8: [REDACTED]  
 U1: [REDACTED]

R1: [REDACTED]  
 R2: [REDACTED]  
 R3: [REDACTED]  
 R4: [REDACTED]  
 R5: [REDACTED]  
 R6: [REDACTED]  
 R7: [REDACTED]  
 R8: [REDACTED]

E1: Michael Meeks (Chief – Under Instruction)  
 E2: Mark Bates (Chief)  
 E3: Phil Capehart

# Vogle Initial Licensed Operator Exam 2012-301

## WEEK 2

MONDAY (4/9)	E1 (Meeks)	E2 (Bates)	E3 (Capehart)
0700-0800	Travel	Travel	Travel (Potential JPM B?)
0800-0900	Travel	Travel	Travel (Potential JPM B?)
0900-1000	Travel	Travel	Travel (Potential JPM B?)
1000-1100	Sim B (R4, I7, I8)	Travel	Travel
1100-1300	Scenario 4 CRS: I7 / E1 OATC: I8 / E2 BOP: R4 / E3	Scenario 4 CRS: I7 / E1 OATC: I8 / E2 BOP: R4 / E3	Scenario 4 CRS: I7 / E1 OATC: I8 / E2 BOP: R4 / E3
1300-1400	Sim B (I5, I6, R1, R2)	Admin A4 (U1, I1, I2, I3, I4)	Admin A4 (U1, I1, I2, I3, I4)
1400-1500	Sim B (R6, R7, R8, I1, U1)		
1500-1600	Sim B (I2, I3, I4, R3, R5)	Admin A4 (I5, I6, I7, I8)	Admin A4 (I5, I6, I7, I8)
1600-1700	Complete Sim B	Complete Admin A4	Complete Admin A4

TUESDAY (4/10)	E1 (Meeks)	E2 (Bates)	E3 (Capehart)
0700-0800	Sim A (I1, I2, I3)	Travel to Plant & Setup	Travel to Plant & Setup
0800-0900	Sim A (I4, I5, I6)	Plant I (U1, R1, R2, R3, R4)	Plant J (R5, R6, R7, R8)
0900-1000	Sim A (I7, I8)	Plant I (R5, R6, R7, R8)	Plant J (U1, R1, R2, R3, R4)
1000-1100	Sim A (R1, R2)	Plant I (I1, I2, I3, I4)	Plant J (I5, I6, I7, I8)
1100-1200	Sim A (R5, R6, R7)	Plant I (I5, I6, I7, I8)	Plant J (I1, I2, I3, I4)
1200-1300	Sim A (R8, R3, R4)	Complete Plant I	Complete Plant J
1300-1400	Sim F (R1, R2, R3, R4, R5, R6)	Return to Training Building	Return to Training Building
1400-1500	Sim F (R7, R8, I1, I2, I3)		
1500-1600	Sim F (I4, I5, I6, I7, I8)		

WEDNESDAY (4/11)	E1 (Meeks)	E2 (Bates)	E3 (Capehart)
0700-0800	Sim G (I1, I2)	Travel to Plant & Setup	Travel to Plant & Setup
0800-0900	Sim G (I3, I4)	Plant K (U1, R1, R2, R3)	CR H (R4, R5, R6, R7, R8)
0900-1000	Sim G (I5, I6)	Plant K (R4, R5, R6, R7)	CR H (R1, R2, R3)
1000-1100	Sim G (I7, I8)	Plant K (R8, I1, I2)	Complete CR H
1100-1200	Sim G (R1, R2)	Plant K (I3, I4, I5, I6)	Return to Training Building
1200-1300	Sim G (R3, R4)	Complete Plant K	Sim G (R3, R4)
1300-1400	Sim G (R5, R6)	Return to Training Building	Sim G (R5, R6)
1400-1500	Sim G (R7, R8)		Sim G (R7, R8)
1500-1600	Complete Sim G		Complete Sim G

THURSDAY (4/12)	E1 (Meeks)	E2 (Bates)	E3 (Capehart)
0700-0800	Admin A2 (U1, I1, I2, I3, I4, I5)	Sim C (R1, R2, R3)	Sim C (R1, R2, R3)
0800-0900		Sim C (R4, R5, R6)	Sim C (R4, R5, R6)
0900-1000	Admin A2 (I6, I7, I8, R1, R2, R3)	Sim C (R7, R8, U1)	Sim C (R7, R8, U1)
1000-1100		Sim C (I1, I2, I3, I4)	Sim C (I1, I2, I3, I4)
1100-1200	Admin A2 (R4, R5, R6, R7, R8)	Sim C (I5, I6, I7, I8)	Sim C (I5, I6, I7, I8)
1200-1300		Sim D (R1, R2, R3)	Sim D (R1, R2, R3)
1300-1400	Admin A1-2 (U1, I1, I2, I3, I4, I5)	Sim D (R4, R5, R6)	Sim D (R4, R5, R6)
1400-1500	Admin A1-2 (I6, I7, I8, R1, R2, R3)	Sim D (R7, R8, I1)	Sim D (R7, R8, I1)
1500-1600	Admin A1-2 (R4, R5, R6, R7, R8)	Sim D (I2, I3, I4)	Sim D (I2, I3, I4)
1600-1700	Complete Admin A1-2	Sim D (I5, I6, I7, I8)	Sim D (I5, I6, I7, I8)

FRIDAY (4/13)	E1 (Meeks)	E2 (Bates)	E3 (Capehart)
0700-0800	Sim E (R1, R2, R3, R4)	Sim E (R1, R2, R3, R4)	Sim E (R1, R2, R3, R4)
0800-0900	Sim E (R5, R6, R7, R8)	Sim E (R5, R6, R7, R8)	Sim E (R5, R6, R7, R8)
0900-1000	Sim E (I1, I2, I3, I4)	Sim E (I1, I2, I3, I4)	Sim E (I1, I2, I3, I4)
1000-1100	Sim E (I5, I6, I7, I8)	Sim E (I5, I6, I7, I8)	Sim E (I5, I6, I7, I8)
1100-1200	Lunch and Prep for Exit Meeting	Lunch and Prep for Exit Meeting	Lunch and Prep for Exit Meeting
1200-1300	Exit Meeting	Exit Meeting	Exit Meeting
1300-1400	Travel	Travel	Travel
1400-1500	Travel	Travel	Travel
1500-1600	Travel	Travel	Travel

**Attachment 3: JPMs Administered by Meeks for Vogtle 2012 Exam**

## 2012-301 VOGTLE ILO EXAM – JPM REPORT

### JPMs Administered by M. Meeks

(1) Applicant: [REDACTED] (RO)

Administrative Topic “a:” Perform AFD Monitoring. Satisfactory, no comments.

Administrative Topic “b:”  $K_{eff}$  Determination for Shutdown Banks Withdrawn.

Satisfactory, no comments.

Administrative Topic “c:” Determine Tagging Requirements. **Unsatisfactory, comments below.**

Administrative Topic “d:” Determine if Task Can Be Completed Without Exceeding any Radiological Limits. **Unsatisfactory, comments below.**

Systems: Control Room “a:” Perform Control Rod Operability Test. Satisfactory, no comments.

Systems: Control Room “b:” Transfer ECCS Pumps to Cold Leg Recirculation.

Satisfactory, no comments.

Systems: Control Room “f:” Dilute Containment with Service Air. Satisfactory, no comments.

Systems: Control Room “g:” Returning ESF Bus from Diesel Generator to Normal Supply. **Satisfactory, with comments below.**

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### CROSS REFERENCE:

Administrative Topic “c”

### JPM/TASK:

Determine Tagging Requirements.

### EXPECTED ACTION/RESPONSE:

Given the appropriate references, the applicant was expected to correctly determine the appropriate boundary points and required positions of components to (1) isolate the fluid boundary and (2) drain the “A” Containment Spray Pump (CSP), 1-1206-P6-001, in preparation for maintenance work on the pump seals. The applicant was expected to identify 1-1206-U4-108, CSP A Pump Casing Vent Valve, as a required vent path to be tagged in the UNFLANGE/OPEN or UNCAP/OPEN position. The other required vent path was via 1-1206-X4-108, CSP A Header Vent Valve, which was required to be tagged in the UNCAP/OPEN position. Proper tagging of both 1-1206-U4-108 and 1-1206-X4-108 were critical steps in the JPM, because both vents being open were required to completely drain the pump. The

applicant was also expected to identify 1-1206-U4-002, CSP A Suction Floor Drain Isolation, as a required drain path to be tagged in the OPEN position. Proper tagging of 1-1206-U4-002 was not a critical step in the JPM.

**APPLICANT ACTION/RESPONSE:**

When the applicant developed the tagout, the applicant incorrectly did not include 1-1206-U4-108 in any position on the tagout. The applicant also did not include 1-1206-U4-002 in any position on the tagout.

During post-JPM discussion with the examiner, the applicant incorrectly stated that 1-1206-X4-108 was the only required vent path for the pump. The applicant did not correctly perform a critical step in the JPM. Therefore, the applicant was evaluated as not successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of knowledge of tagging and clearance procedures. (K/A G2.2.13).

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**CROSS REFERENCE:**

Administrative Topic "d"

**JPM/TASK:**

Determine if Task Can Be Completed Without Exceeding any Radiological Limits.

**EXPECTED ACTION/RESPONSE:**

Given a Radiological Work Permit (RWP), a valve map in Containment, other appropriate references, and the task to close and danger tag valve 1-1204-U4-111, the applicant was expected to correctly determine (1) the minimum protective clothing requirements for the task, (2) the projected total gamma dose to complete the task, (3) whether the operator could complete the task without exceeding any limits, and (4) the reason for (3), if applicable. All four of the above elements were critical steps in the JPM.

Given that the dose rate at valve 1-1204-U4-111 was 84 mrem/hr, time to complete the task was 5 min, and the total round-trip transit dose was 6 mrem, the applicant was expected to complete the projected total gamma dose as follows:

$$\left(\frac{84 \text{ mrem}}{\text{hr}}\right)\left(\frac{1 \text{ hr}}{60 \text{ min}}\right)(5 \text{ min}) = 7 \text{ mrem [at the valve]}$$

$$\therefore 7 \text{ mrem} + 6 \text{ mrem} = 13 \text{ mrem [total projected dose].}$$

This projected total gamma dose is within the limits authorized on the RWP for total dose (15 mrem); however, the dose rate at the valve (84 mrem/hr) exceeds the allowable RWP dose rate setting of 80 mr/hr. Therefore, the applicant was expected to determine that the operator can NOT perform the task under the current RWP for this reason.

#### APPLICANT ACTION/RESPONSE:

When the applicant determined the projected total dose, he incorrectly used the dose rate for valve 1-1204-X4-411 (14 mr/hr) instead of the valve that was specified in the cue sheet, 1-1204-U4-111 (84 mr/hr). Based on this error, the applicant calculated the projected dose as follows:

$$\left(\frac{14 \text{ mrem}}{\text{hr}}\right)\left(\frac{1 \text{ hr}}{60 \text{ min}}\right)(5 \text{ min}) = 1.167 \text{ mrem [at the valve]}$$

$$\therefore 1.167 \text{ mrem} + 6 \text{ mrem} = 7.167 \text{ mrem [total projected dose]}.$$

Therefore, because this error carried forward, the applicant incorrectly stated that operator could perform the task on the current RWP with no other restrictions, and that no radiological limits would be violated. The applicant did not correctly perform a critical step in the JPM. Therefore, the applicant was evaluated as not successfully completing the JPM.

#### LACK OF ABILITY/KNOWLEDGE:

The applicant demonstrated a lack of ability to interpret reference materials, such as graphs, curves, tables, etc. (K/A G2.1.25) associated with a lack of ability to comply with radiation work permit requirements during normal or abnormal conditions. (K/A G2.3.7).

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#### CROSS REFERENCE:

Systems: Control Room "g"

#### JPM/TASK:

Returning ESF Bus from Diesel Generator to Normal Supply.

#### EXPECTED ACTION/RESPONSE:

The applicant was directed to parallel RAT "B" to bus 1BA03, and then remove DG1B from bus 1BA03 in accordance with procedure 13427B-1, "4160V AC BUS 1BA03 1E ELECTRICAL DISTRIBUTION SYSTEM." At step 4.2.2.10 of this procedure, with the DG loaded to approximately 3250 kW, the applicant was expected to properly set the DSL GEN 1B LOADING SET PT CONTROL to the current DG load as follows:

$$\frac{\text{Diesel Load [kW]}}{700} = \text{LOAD POT SETTING}$$

$$\therefore \frac{\sim 3250 \text{ kW}}{700} = \sim 4.6$$
$$\sim 3 \sim$$

The purpose of this step is to ensure the D/G does not pick up excess load when RAT "B" was paralleled to bus 1BA03. When the applicant reached step 4.2.5.1, the diesel would be running with ~3250 kW load and ~300 kVARs lagging. At step 4.2.5.1, the applicant was expected to lower DG1B load to 3000 kW in maximum increments of 1000 kW and 500 kVAR in time increments of 5 minutes. Step 4.2.5.2 of the procedure directs the operator to concurrently unload the D/G to 700 kW and 200-300 kVARs lagging after the diesel load has been stable at 3000 kW for a 5 minute period. None of the above-mentioned steps in the procedure were critical steps in the JPM.

#### **APPLICANT ACTION/RESPONSE:**

During the JPM, at step 4.2.2.10 of the procedure the applicant incorrectly read the load on the DG1B as ~4250 kW, instead of the correct reading of ~3250 kW, and accordingly set the potentiometer as follows:

$$\therefore \frac{\sim 4250 \text{ kW}}{700} = \sim 6.0.$$

Therefore, when the applicant paralleled RAT "B" with the D/G an excessively large transient was placed on the diesel, which went to ~4600 kW loading nearly instantaneously. When the applicant performed step 4.2.5.1 of the procedure to unload the diesel, he lowered load from 4600 kW-4000 kW-3000 kW-2000 kW in 5 minute increments, which was incorrect as he continued to lower load past 3000 kW.

During post-JPM questions with the examiner, the examiner asked the applicant to go back over the calculation for the pot setting. The applicant [incorrectly] stated that DG load had been ~4200 kW, and the pot setting of 6.0 was correct. When the examiner asked the applicant to go back through the procedural steps of 4.2.5.1 and 4.2.5.2, the applicant again [incorrectly] stated that he had performed the sequence correctly. However, the applicant correctly performed all critical steps in the JPM. Therefore, the applicant was evaluated as successfully completing the JPM.

#### **LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of ability to interpret and execute procedure steps (K/A G2.1.20), and a lack of ability to interpret control room indications to verify the status and operation of a system, and understand how operator actions affect plant and system conditions. (K/A G2.2.44).

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(2) Applicant: [REDACTED] (RO)

Administrative Topic "a:" Perform AFD Monitoring. Satisfactory, no comments.

Administrative Topic "b:" K<sub>eff</sub> Determination for Shutdown Banks Withdrawn.

Satisfactory, no comments.

Administrative Topic "c:" Determine Tagging Requirements. **Satisfactory, with comments below.**

Administrative Topic "d:" Determine if Task Can Be Completed Without Exceeding any Radiological Limits. Satisfactory, no comments.

Systems: Control Room "a:" Perform Control Rod Operability Test. Satisfactory, no comments.

Systems: Control Room "b:" Transfer ECCS Pumps to Cold Leg Recirculation.

**Satisfactory, with comments below.**

Systems: Control Room "f:" Dilute Containment with Service Air. Satisfactory, no comments.

Systems: Control Room "g:" Returning ESF Bus from Diesel Generator to Normal Supply. **Satisfactory, with comments below.**

---

#### CROSS REFERENCE:

Administrative Topic "c"

#### JPM/TASK:

Determine Tagging Requirements.

#### EXPECTED ACTION/RESPONSE:

Given the appropriate references, the applicant was expected to correctly determine the appropriate boundary points and required positions of components to (1) isolate the fluid boundary and (2) drain the "A" Containment Spray Pump (CSP), 1-1206-P6-001, in preparation for maintenance work on the pump seals. The applicant was expected to identify 1-1206-U4-002, CSP A Suction Floor Drain Isolation, as a required drain path to be tagged in the OPEN position. Proper tagging of 1-1206-U4-002 was not a critical step in the JPM.

#### APPLICANT ACTION/RESPONSE:

When the applicant developed the tagout, the applicant incorrectly stated that 1-1206-U4-002 should be tagged in the CLOSED position.

During post-JPM discussion with the examiner, the applicant incorrectly stated that valve -002 was an isolation boundary that was required to be tagged in a closed configuration. However,

the applicant correctly performed all critical steps in the JPM. Therefore, the applicant was evaluated as successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of knowledge of tagging and clearance procedures. (K/A G2.2.13).

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**CROSS REFERENCE:**

Systems: Control Room "b"

**JPM/TASK:**

Transfer ECCS Pumps to Cold Leg Recirculation.

**EXPECTED ACTION/RESPONSE:**

The applicant was directed to transfer ECCS pumps to cold leg recirculation using procedure 19013-C, "ES-1.3 TRANSFER TO COLD LEG RECIRCULATION." However, per the design of the JPM, "A" train RHR suction valve HV-8812A (RWST TO RHR PMP-A SUCTION) fails to close, and "B" train RHR suction valve HV-8811B (SNMT SUMP TO RHR PMP-B SUCTION) fails to open. Based on this system configuration, alignment for cold leg recirculation is not possible and a transition to 19111-C, "ECA-1.1 LOSS OF EMERGENCY COOLANT RECIRCULATION," is required at RNO step 3.e of Attachment A to 19013-C.

As the applicant worked through Attachment A of procedure 19013-C, it was a critical step in the JPM to secure the "A" RHR pump when it was determined that HV-8812A would not close. It was a critical step in the JPM to secure the "B" RHR pump at step RNO 3.b.\_1) of Attachment A at the first procedural check for HV-8811B being open, and it was a critical step in the JPM to not re-start the "B" RHR pump (which would not have a suction source) at step RNO 3.b.\_4). The applicant was expected to correctly follow procedural rules of usage and continue with step RNO 3.b.\_5), which directed the operator to perform step 3.d. The applicant was then expected to perform step 3.d and ultimately RNO step 3.e, which directed the required transition to 19111-C. Determining that a transition to 19111-C was required was also a critical step in the JPM.

**APPLICANT ACTION/RESPONSE:**

During the JPM, the applicant correctly determined that HV-8811B would not open, and also correctly determined that the "B" RHR pump should not be started. However, at this point the applicant basically stopped performing procedure 19013-C, looked back at previous procedural steps and forward at potentially upcoming procedural steps, and then notified the examiner that a transition to 19111-C was required based on a loss of recirculation capability.

During post-JPM questions with the examiner, the examiner asked the applicant to go back over the procedural sequence of RNO step 3.b. During this discussion, the applicant recognized that the procedure also directed a transition to 19111-C, and stated that he should have performed

steps 3.d. and 3.e instead of independently recommending a transition to 19111-C. However, the applicant correctly performed all critical steps in the JPM. Therefore, the applicant was evaluated as successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of ability to interpret and execute procedure steps. (K/A G2.1.20).

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**CROSS REFERENCE:**

Systems: Control Room "g"

**JPM/TASK:**

Returning ESF Bus from Diesel Generator to Normal Supply.

**EXPECTED ACTION/RESPONSE:**

The applicant was directed to parallel RAT "B" to bus 1BA03, and then remove DG1B from bus 1BA03 in accordance with procedure 13427B-1, "4160V AC BUS 1BA03 1E ELECTRICAL DISTRIBUTION SYSTEM." At step 4.2.5.1 of this procedure, the applicant was expected to lower DG1B load to 3000 kW in maximum increments of 1000 kW and 500 kVAR in time increments of 5 minutes. When the applicant reached step 4.2.5.1, the diesel would be running with ~3250 kW load and ~300 kVARs lagging. Step 4.2.5.2 of the procedure directs the operator to concurrently unload the D/G to 700 kW and 200-300 kVARs lagging after the diesel load has been stable at 3000 kW for a 5 minute period. None of the above-mentioned steps in the procedure were critical steps in the JPM.

**APPLICANT ACTION/RESPONSE:**

During the JPM, when the applicant performed step 4.2.5.1 of the procedure to unload the diesel, he lowered load from ~3200 kW to ~2100 kW and then waited 5 minutes. This was incorrect because diesel load was lowered below ~3000 kW.

During post-JPM questions with the examiner, the examiner asked the applicant to go back through the procedural steps of 4.2.5.1 and 4.2.5.2. At this time, the applicant stated that he should have only lowered load to 3000 kW instead of 2100 kW, and that he realized the mistake when he turned the page and read step 4.2.5.2. However, the applicant correctly performed all critical steps in the JPM. Therefore, the applicant was evaluated as successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of ability to interpret and execute procedure steps (K/A G2.1.20).

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(3) Applicant: [REDACTED] (RO)

Administrative Topic "a:" Perform AFD Monitoring. Satisfactory, no comments.

Administrative Topic "b:"  $K_{eff}$  Determination for Shutdown Banks Withdrawn.

Satisfactory, no comments.

Administrative Topic "c:" Determine Tagging Requirements. **Unsatisfactory, comments below.**

Administrative Topic "d:" Determine if Task Can Be Completed Without Exceeding any Radiological Limits. Satisfactory, no comments.

Systems: Control Room "a:" Perform Control Rod Operability Test.

**Satisfactory, with comments below.**

Systems: Control Room "f:" Dilute Containment with Service Air. Satisfactory, no comments.

Systems: Control Room "g:" Returning ESF Bus from Diesel Generator to Normal Supply. Satisfactory, no comments.

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#### CROSS REFERENCE:

Administrative Topic "c"

#### JPM/TASK:

Determine Tagging Requirements.

#### EXPECTED ACTION/RESPONSE:

Given the appropriate references, the applicant was expected to correctly determine the appropriate boundary points and required positions of components to (1) isolate the fluid boundary and (2) drain the "A" Containment Spray Pump (CSP), 1-1206-P6-001, in preparation for maintenance work on the pump seals. The applicant was expected to identify 1-1206-U4-034, CSP A Discharge to Eductor Isolation Valve, as a required isolation point to be tagged in the CLOSED position. Proper tagging of 1-1206-U4-034 was a critical step in the JPM.

#### APPLICANT ACTION/RESPONSE:

When the applicant developed the tagout, the applicant incorrectly did not include 1-1206-U4-034 on the tagout in any position. The applicant did tag 1-1206-U4-116, a valve in the educator piping downstream of the CSP "A" discharge, in the CLOSED position. However, valve -116 is within the isolation boundary of valve -034 and does not provide pressure isolation for the piping from the spray additive tank, through valve -034 and the educator recirculation piping, and to the suction of the "A" CSP.

During post-JPM discussion with the examiner, the applicant incorrectly stated that the educator path was isolated by tagging valve -116 in CLOSED. The applicant did not correctly perform a critical step in the JPM. Therefore, the applicant was evaluated as not successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of knowledge of tagging and clearance procedures. (K/A G2.2.13)

---

**CROSS REFERENCE:**

Systems: Control Room "a"

**JPM/TASK:**

Perform Control Rod Operability Test.

**EXPECTED ACTION/RESPONSE:**

The applicant was expected to correctly perform surveillance procedure 14410-1, "CONTROL ROOM OPERABILITY TEST," for control banks A, B, C, and D. Step 5.1.7 of this procedure directs the operator to "Record the test IPC Bank Demand reading for the control bank being tested on Data Sheet 1." At this step, the applicant was expected to correctly determine IPC Bank Demand using the plant computer and record the appropriate value on the data sheet. However, properly determining the IPC Bank Demand was not a critical step in the JPM.

**APPLICANT ACTION/RESPONSE:**

At step 5.1.7, the applicant called up IPC screen "SHOW30" on the main control board, which displayed both IPC Bank Demand information and IPC individual rod position information. However, the applicant incorrectly recorded the IPC individual rod position information (which was at 216 steps) instead of the correct reading for IPC Bank Demand (which was at 218 steps).

During post-JPM questions, the examiner asked the applicant how to determine IPC bank demand. The applicant again incorrectly pointed to the IPC individual rod positions on the computer screen, and stated that these data points were IPC Bank Demand. Although the applicant did not correctly perform this specific portion of the surveillance, the applicant did correctly perform all of the critical steps in the JPM. In this case, incorrectly recording IPC Bank Demand did not impact any Technical Specification requirements. Therefore, the applicant was evaluated as successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of ability to use plant computers to evaluate system or component status. (K/A G2.1.19)

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(4) Applicant: [REDACTED] (RO)

Administrative Topic "a:" Perform AFD Monitoring. Satisfactory, no comments.

Administrative Topic "b:"  $K_{eff}$  Determination for Shutdown Banks Withdrawn.

Satisfactory, no comments.

Administrative Topic "c:" Determine Tagging Requirements. Satisfactory, no comments.

Administrative Topic "d:" Determine if Task Can Be Completed Without Exceeding any Radiological Limits. Satisfactory, no comments.

Systems: Control Room "a:" Perform Control Rod Operability Test. Satisfactory, no comments.

Systems: Control Room "f:" Dilute Containment with Service Air. Satisfactory, no comments.

(5) Applicant: [REDACTED] (RO)

Administrative Topic "a:" Perform AFD Monitoring. Satisfactory, no comments.

Administrative Topic "b:"  $K_{eff}$  Determination for Shutdown Banks Withdrawn.

**Satisfactory, with comments below.**

Administrative Topic "c:" Determine Tagging Requirements. Satisfactory, no comments.

Administrative Topic "d:" Determine if Task Can Be Completed Without Exceeding any Radiological Limits. Satisfactory, no comments.

Systems: Control Room "a:" Perform Control Rod Operability Test. Satisfactory, no comments.

Systems: Control Room "f:" Dilute Containment with Service Air. Satisfactory, no comments.

---

#### **CROSS REFERENCE:**

Administrative Topic "b"

#### **JPM/TASK:**

$K_{eff}$  Determination for Shutdown Banks Withdrawn.

#### **EXPECTED ACTION/RESPONSE:**

Given the appropriate references, the applicant was expected to correctly determine the effective neutron multiplication factor ( $K_{eff}$ ) with shutdown rod banks withdrawn in preparation for a reactor startup. The applicant was expected to use Data Sheet 3 of surveillance procedure 14005-1, "SHUTDOWN MARGIN AND K<sub>EFF</sub> CALCULATIONS," and determine that  $K_{eff}$  would be 0.974 and within acceptance criteria for withdrawing shutdown bank rods.

#### **APPLICANT ACTION/RESPONSE:**

When the applicant began working on the JPM, the applicant selected Data Sheet 2 of 14005-1 as the appropriate procedure section. Data Sheet 2 is designed to calculate the current  $K_{eff}$  in MODES 3, 4, or 5 with rods fully inserted. Before completing the JPM, the applicant asked the examiner if he was in the correct procedure section. The examiner referred the applicant to the initiating cue as given in the JPM handout sheet. At this point, the applicant corrected the mistake and correctly completed all steps of Data Sheet 3, as expected, including correctly calculating the  $K_{eff}$  value.

During post-JPM discussion with the examiner, the applicant stated that he had initially misunderstood the JPM task, and should not have completed Data Sheet 2. However, the applicant correctly performed all critical steps in the JPM. Therefore, the applicant was evaluated as successfully completing the JPM.



**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of ability to use procedures to determine the effects on reactivity of plant changes. (K/A G2.1.43).

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(6) Applicant: A. [REDACTED] (RO)

Administrative Topic "a:" Perform AFD Monitoring. Satisfactory, no comments.

Administrative Topic "b:"  $K_{eff}$  Determination for Shutdown Banks Withdrawn.

Satisfactory, no comments.

Administrative Topic "c:" Determine Tagging Requirements. Satisfactory, no comments.

Administrative Topic "d:" Determine if Task Can Be Completed Without Exceeding any Radiological Limits. Satisfactory, no comments.

Systems: Control Room "a:" Perform Control Rod Operability Test. Satisfactory, no comments.

Systems: Control Room "b:" Transfer ECCS Pumps to Cold Leg Recirculation. Satisfactory, no comments.

Systems: Control Room "f:" Dilute Containment with Service Air. Satisfactory, no comments.

Systems: Control Room "g:" Returning ESF Bus from Diesel Generator to Normal Supply. Satisfactory, no comments.

(7) Applicant: [REDACTED] (RO)

Administrative Topic "a:" Perform AFD Monitoring. Satisfactory, no comments.

Administrative Topic "b:"  $K_{eff}$  Determination for Shutdown Banks Withdrawn.

Satisfactory, no comments.

Administrative Topic "c:" Determine Tagging Requirements. **Satisfactory, with comments below.**

Administrative Topic "d:" Determine if Task Can Be Completed Without Exceeding any Radiological Limits. Satisfactory, no comments.

Systems: Control Room "a:" Perform Control Rod Operability Test. Satisfactory, no comments.

**Systems: Control Room "b:" Transfer ECCS Pumps to Cold Leg Recirculation. Unsatisfactory, comments below.**

Systems: Control Room "f:" Dilute Containment with Service Air. Satisfactory, no comments.

Systems: Control Room "g:" Returning ESF Bus from Diesel Generator to Normal Supply. **Satisfactory, with comments below.**

---

#### CROSS REFERENCE:

Administrative Topic "c"

#### JPM/TASK:

Determine Tagging Requirements.

#### EXPECTED ACTION/RESPONSE:

Given the appropriate references, the applicant was expected to correctly determine the appropriate boundary points and required positions of components to (1) isolate the fluid boundary and (2) drain the "A" Containment Spray Pump (CSP), 1-1206-P6-001, in preparation for maintenance work on the pump seals. The applicant was expected to identify 1-1206-U4-002, CSP A Suction Floor Drain Isolation, as a required drain path to be tagged in the OPEN position. Proper tagging of 1-1206-U4-002 was not a critical step in the JPM.

#### APPLICANT ACTION/RESPONSE:

When the applicant developed the tagout, the applicant incorrectly stated that 1-1206-U4-002 should be tagged in the CLOSED position.

During post-JPM discussion with the examiner, the applicant incorrectly stated that valve -002 was an isolation boundary that was required to be tagged in a closed configuration. However, the applicant correctly performed all critical steps in the JPM. Therefore, the applicant was evaluated as successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of knowledge of tagging and clearance procedures. (K/A G2.2.13).

---

**CROSS REFERENCE:**

Systems: Control Room "b"

**JPM/TASK:**

Transfer ECCS Pumps to Cold Leg Recirculation.

**EXPECTED ACTION/RESPONSE:**

The applicant was directed to transfer ECCS pumps to cold leg recirculation using procedure 19013-C, "ES-1.3 TRANSFER TO COLD LEG RECIRCULATION." However, per the design of the JPM, "A" train RHR suction valve HV-8812A (RWST TO RHR PMP-A SUCTION) fails to close, and "B" train RHR suction valve HV-8811B (SNMT SUMP TO RHR PMP-B SUCTION) fails to open. Based on this system configuration, alignment for cold leg recirculation is not possible and a transition to 19111-C, "ECA-1.1 LOSS OF EMERGENCY COOLANT RECIRCULATION," is required at RNO step 3.e of Attachment A to 19013-C.

As the applicant worked through Attachment A of procedure 19013-C, it was a critical step in the JPM to secure the "A" RHR pump when it was determined that HV-8812A would not close. It was a critical step in the JPM to secure the "B" RHR pump at step RNO 3.b.\_1) of Attachment A at the first procedural check for HV-8811B being open, and it was a critical step in the JPM to not re-start the "B" RHR pump (which would not have a suction source) at step RNO 3.b.\_4). The applicant was expected to correctly follow procedural rules of usage and continue with step RNO 3.b.\_5), which directed the operator to perform step 3.d. The applicant was then expected to perform step 3.d and ultimately RNO step 3.e, which directed the required transition to 19111-C. Determining that a transition to 19111-C was required was also a critical step in the JPM.

**APPLICANT ACTION/RESPONSE:**

During the JPM, the applicant incorrectly read step 2.c of Attachment A, which states "Close RWST TO RHR PMP-A SUCTION HV-8812A," as "check OPEN HV-8812A." Because HV-8812A was open, the applicant did not secure the "A" RHR pump as required by a critical step in the JPM. Furthermore, although the applicant correctly secured the "B" RHR pump, he did not determine that a transition to 19111-C was required, which was another critical step in the JPM. As the applicant continued with follow-on steps in Attachment A of 19013-C, RWST EMPTY alarms were received, but the applicant did not correctly determine that these alarms were due to the abnormal alignment caused by his previous errors.

During post-JPM questions with the examiner, the examiner asked the applicant to go back over the procedural sequence of step 2 of Attachment A. During this discussion, the applicant recognized that he should have closed HV-8812A instead of checking the valve open and

stated, "how did I miss that step?" When the examiner asked the applicant was line-up the "A" RHR system was in, the applicant stated correctly that he had left the "A" RHR pump taking a suction from both the RWST and the containment sumps, which was the reason he had received RWST level alarms. The applicant failed to correctly perform multiple critical steps in the JPM. Therefore, the applicant was evaluated as not successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of ability to interpret and execute procedure steps. (K/A G2.1.20).

-----

**CROSS REFERENCE:**

Systems: Control Room "g"

**JPM/TASK:**

Returning ESF Bus from Diesel Generator to Normal Supply.

**EXPECTED ACTION/RESPONSE:**

The applicant was directed to parallel RAT "B" to bus 1BA03, and then remove DG1B from bus 1BA03 in accordance with procedure 13427B-1, "4160V AC BUS 1BA03 1E ELECTRICAL DISTRIBUTION SYSTEM." At step 4.2.5.1 of this procedure, the applicant was expected to lower DG1B load to 3000 kW in maximum increments of 1000 kW and 500 kVAR in time increments of 5 minutes. When the applicant reached step 4.2.5.1, the diesel would be running with ~3250 kW load and ~300 kVARs lagging. Step 4.2.5.2 of the procedure directs the operator to concurrently unload the D/G to 700 kW and 200-300 kVARs lagging after the diesel load has been stable at 3000 kW for a 5 minute period. None of the above-mentioned steps in the procedure were critical steps in the JPM.

**APPLICANT ACTION/RESPONSE:**

During the JPM, when the applicant performed step 4.2.5.1 of the procedure to unload the diesel, he lowered load from ~3200 kW to ~2100 kW and then waited 5 minutes. This was incorrect because diesel load was lowered below ~3000 kW.

During post-JPM questions with the examiner, the examiner asked the applicant to go back through the procedural steps of 4.2.5.1 and 4.2.5.2. At this time, the applicant stated that he should have only lowered load to 3000 kW instead of 2100 kW, and that he realized the mistake when he turned the page and read step 4.2.5.2. However, the applicant correctly performed all critical steps in the JPM. Therefore, the applicant was evaluated as successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of ability to interpret and execute procedure steps (K/A G2.1.20).

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(8) Applicant: C. [REDACTED] (RO)

Administrative Topic "a:" Perform AFD Monitoring. Satisfactory, no comments.

Administrative Topic "b:"  $K_{eff}$  Determination for Shutdown Banks Withdrawn.

Satisfactory, no comments.

Administrative Topic "c:" Determine Tagging Requirements. **Satisfactory, with comments below.**

Administrative Topic "d:" Determine if Task Can Be Completed Without Exceeding any Radiological Limits. Satisfactory, no comments.

Systems: Control Room "a:" Perform Control Rod Operability Test.

**Satisfactory, with comments below.**

**Systems: Control Room "b:" Transfer ECCS Pumps to Cold Leg Recirculation. Unsatisfactory, comments below.**

Systems: Control Room "f:" Dilute Containment with Service Air. Satisfactory, no comments.

Systems: Control Room "g:" Returning ESF Bus from Diesel Generator to Normal Supply. **Satisfactory, with comments below.**

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#### CROSS REFERENCE:

Administrative Topic "c"

#### JPM/TASK:

Determine Tagging Requirements.

#### EXPECTED ACTION/RESPONSE:

Given the appropriate references, the applicant was expected to correctly determine the appropriate boundary points and required positions of components to (1) isolate the fluid boundary and (2) drain the "A" Containment Spray Pump (CSP), 1-1206-P6-001, in preparation for maintenance work on the pump seals. The applicant was expected to use the full system nomenclature to identify the components that needed to be tagged. For example, on the system print, the valve labeled "108" was expected to be designated as "1-1206-U4-108" on the tagout, where e.g. "1-1206-" is the system designator for the Unit 1 Containment Spray system and "-U4-" is the common valve designator for valves not prefixed with "X." Similarly, the valve labeled as, for example, "X-108" on the system print was expected to be designated as "1-1206-X4-108" on the tagout.

#### APPLICANT ACTION/RESPONSE:

When the applicant developed the tagout, the applicant listed the components as they appeared on the print; i.e. listing "108" instead of "1-1206-U4-108." The applicant also differentiated between components that carried an "X" prefix from those valves that did not.

During post-JPM discussion with the examiner, the applicant incorrectly stated that the full valve designation would be "1-1206-U" and then the specific number. The applicant stated that he did not remember whether the designator was "U4" or "U6," but the applicant further stated that he would use the electronic SOMS system to find the correct designator for creating an actual tagout. The examiner went over the system print valve-by-valve with the applicant to ensure the applicant listed all the correct components in the correct configuration. The examiner was thereby able to determine that the applicant had correctly performed all critical steps, even if the nomenclature as listed in the manual tagout sheet was less than optimal. Therefore, the applicant was evaluated as successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of knowledge of tagging and clearance procedures. (K/A G2.2.13).

---

**CROSS REFERENCE:**

Systems: Control Room "a"

**JPM/TASK:**

Perform Control Rod Operability Test.

**EXPECTED ACTION/RESPONSE:**

The applicant was expected to correctly perform surveillance procedure 14410-1, "CONTROL ROOM OPERABILITY TEST," for control banks A, B, C, and D. Step 5.1.7 of this procedure directs the operator to "Record the test IPC Bank Demand reading for the control bank being tested on Data Sheet 1." At this step, the applicant was expected to correctly determine IPC Bank Demand using the plant computer and record the appropriate value on the data sheet. However, properly determining the IPC Bank Demand was not a critical step in the JPM.

**APPLICANT ACTION/RESPONSE:**

At step 5.1.7, the applicant called up IPC screen "SHOW30" on the main control board, which displayed both IPC Bank Demand information and IPC individual rod position information. However, the applicant incorrectly recorded the IPC individual rod position information (which was at 216 steps) instead of the correct reading for IPC Bank Demand (which was at 218 steps).

During post-JPM questions, the examiner asked the applicant how to determine IPC bank demand. The applicant again incorrectly pointed to the IPC individual rod positions on the computer screen, and stated that these data points were IPC Bank Demand. Although the applicant did not correctly perform this specific portion of the surveillance, the applicant did correctly perform all of the critical steps in the JPM. In this case, incorrectly recording IPC Bank Demand did not impact any Technical Specification requirements. Therefore, the applicant was evaluated as successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**



The applicant demonstrated a lack of ability to use plant computers to evaluate system or component status. (K/A G2.1.19)

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#### **CROSS REFERENCE:**

Systems: Control Room "b"

#### **JPM/TASK:**

Transfer ECCS Pumps to Cold Leg Recirculation.

#### **EXPECTED ACTION/RESPONSE:**

The applicant was directed to transfer ECCS pumps to cold leg recirculation using procedure 19013-C, "ES-1.3 TRANSFER TO COLD LEG RECIRCULATION." However, per the design of the JPM, "A" train RHR suction valve HV-8812A (RWST TO RHR PMP-A SUCTION) fails to close, and "B" train RHR suction valve HV-8811B (SNMT SUMP TO RHR PMP-B SUCTION) fails to open. Based on this system configuration, alignment for cold leg recirculation is not possible and a transition to 19111-C, "ECA-1.1 LOSS OF EMERGENCY COOLANT RECIRCULATION," is required at RNO step 3.e of Attachment A to 19013-C.

As the applicant worked through Attachment A of procedure 19013-C, at the second bullet of step 1.c., which states "[check] NSCW CLG TOWER Fans – FOUR IN AUTO EACH TRAIN," the applicant was expected to check four red lights lit on each tower fan handswitch to verify the step. This was not a critical step in the JPM. It was a critical step in the JPM to secure the "A" RHR pump when it was determined that HV-8812A would not close. It was a critical step in the JPM to secure the "B" RHR pump at step RNO 3.b.\_1) of Attachment A at the first procedural check for HV-8811B being open, and it was a critical step in the JPM to not re-start the "B" RHR pump (which would not have a suction source) at step RNO 3.b.\_4). The applicant was expected to correctly follow procedural rules of usage and continue with step RNO 3.b.\_5), which directed the operator to perform step 3.d. The applicant was then expected to perform step 3.d and ultimately RNO step 3.e, which directed the required transition to 19111-C. Determining that a transition to 19111-C was required was also a critical step in the JPM.

#### **APPLICANT ACTION/RESPONSE:**

During the JPM, the applicant incorrectly checked NSCW Return/Bypass Valves status instead of NSCW cooling tower fan status at the second bullet of step 1.c. The applicant correctly determined that HV-8811B would not open, and also correctly determined that the "B" RHR pump should not be started. However, at this point the applicant basically stopped performing procedure 19013-C, and looked back at previous procedural steps and forward at potentially upcoming procedural steps. The applicant then made a report to the examiner that he was unable to continue with the procedure, and that maintenance and I&C personnel would need to be dispatched to operate the failed RHR suction valves in order to establish recirc flow. The applicant never stated that a transition to 19111-C was required based on a loss of recirculation capability during the JPM.

During post-JPM questions with the examiner, the examiner asked the applicant to go back over checking the NSCW cooling tower fans running. At this time, the applicant stated that he had

checked the wrong indications for the NSCW tower fans during the JPM. The examiner also asked the applicant to go back over the procedural sequence of RNO step 3.b. During this discussion, the applicant basically repeated what he had stated before: that performance of the procedure had to stop at RNO step 3.b.\_4); that the team would need to consider making up to the RWST and sending maintenance personnel to troubleshoot and fix the problems with the suction valves, including I&C personnel to look at the valve handswitches. The applicant never stated that a transition to 19111-C was required during the post-JPM discussions, and as such did not successfully complete a critical step in the JPM. Therefore, the applicant was evaluated as not successfully completing the JPM.

#### **LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of ability to interpret and execute procedure steps. (K/A G2.1.20).

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#### **CROSS REFERENCE:**

Systems: Control Room "g"

#### **JPM/TASK:**

Returning ESF Bus from Diesel Generator to Normal Supply.

#### **EXPECTED ACTION/RESPONSE:**

The applicant was directed to parallel RAT "B" to bus 1BA03, and then remove DG1B from bus 1BA03 in accordance with procedure 13427B-1, "4160V AC BUS 1BA03 1E ELECTRICAL DISTRIBUTION SYSTEM." At step 4.2.5.1 of this procedure, the applicant was expected to lower DG1B load to 3000 kW in maximum increments of 1000 kW and 500 kVAR in time increments of 5 minutes. When the applicant reached step 4.2.5.1, the diesel would be running with ~3250 kW load and ~300 kVARs lagging. Step 4.2.5.2 of the procedure directs the operator to concurrently unload the D/G to 700 kW and 200-300 kVARs lagging after the diesel load has been stable at 3000 kW for a 5 minute period. None of the above-mentioned steps in the procedure were critical steps in the JPM.

#### **APPLICANT ACTION/RESPONSE:**

During the JPM, when the applicant performed step 4.2.5.1 of the procedure to unload the diesel, he lowered load from ~3200 kW to ~2100 kW and then waited 5 minutes. This was incorrect because diesel load was lowered below ~3000 kW.

During post-JPM questions with the examiner, the examiner asked the applicant to go back through the procedural steps of 4.2.5.1 and 4.2.5.2. At this time, the applicant stated that he should have only lowered load to 3000 kW instead of 2100 kW, and that he realized the mistake when he turned the page and read step 4.2.5.2. However, the applicant correctly performed all critical steps in the JPM. Therefore, the applicant was evaluated as successfully completing the JPM.

#### **LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of ability to interpret and execute procedure steps (K/A G2.1.20).

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(9) Applicant: [REDACTED] (SRO)

Administrative Topic "a:" Perform AFD Monitoring. Satisfactory, no comments.

Administrative Topic "b:"  $K_{eff}$  Determination for Shutdown Banks Withdrawn.

Satisfactory, no comments.

Administrative Topic "c:" Determine Tagging Requirements. **Unsatisfactory, comments below.**

Administrative Topic "d:" Determine if Task Can Be Completed Without Exceeding any Radiological Limits. Satisfactory, no comments.

Systems: Control Room "a:" Perform Control Rod Operability Test. Satisfactory, no comments.

Systems: Control Room "b:" Transfer ECCS Pumps to Cold Leg Recirculation. Satisfactory, no comments.

Systems: Control Room "f:" Dilute Containment with Service Air. Satisfactory, no comments.

Systems: Control Room "g:" Returning ESF Bus from Diesel Generator to Normal Supply. Satisfactory, no comments.

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#### **CROSS REFERENCE:**

Administrative Topic "c"

#### **JPM/TASK:**

Determine Tagging Requirements.

#### **EXPECTED ACTION/RESPONSE:**

Given the appropriate references, the applicant was expected to correctly determine the appropriate boundary points and required positions of components to (1) isolate the fluid boundary and (2) drain the "A" Containment Spray Pump (CSP), 1-1206-P6-001, in preparation for maintenance work on the pump seals. The applicant was expected to identify 1-1206-U4-108, CSP A Pump Casing Vent Valve, as a required vent path to be tagged in the UNFLANGE/OPEN or UNCAP/OPEN position. The other required vent path was via 1-1206-X4-108, CSP A Header Vent Valve, which was required to be tagged in the UNCAP/OPEN position. Proper tagging of both 1-1206-U4-108 and 1-1206-X4-108 were critical steps in the JPM, because both vents being open were required to completely drain the pump.

#### **APPLICANT ACTION/RESPONSE:**

When the applicant developed the tagout, the applicant incorrectly did not include 1-1206-U4-108 in any position on the tagout.

During post-JPM discussion with the examiner, the applicant incorrectly stated that 1-1206-X4-108 was the high point, and the only required vent path for the pump. The applicant did not correctly perform a critical step in the JPM. Therefore, the applicant was evaluated as not successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of knowledge of tagging and clearance procedures. (K/A G2.2.13).

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(10) Applicant: Carla Smith (SRO)

Administrative Topic "a:" Perform AFD Monitoring. Satisfactory, no comments.

Administrative Topic "b:"  $K_{eff}$  Determination for Shutdown Banks Withdrawn.

Satisfactory, no comments.

Administrative Topic "c:" Determine Tagging Requirements. **Satisfactory, with comments below.**

Administrative Topic "d:" Determine if Task Can Be Completed Without Exceeding any Radiological Limits. Satisfactory, no comments.

Systems: Control Room "a:" Perform Control Rod Operability Test.

**Satisfactory, with comments below.**

Systems: Control Room "b:" Transfer ECCS Pumps to Cold Leg Recirculation.

Satisfactory, no comments.

Systems: Control Room "f:" Dilute Containment with Service Air. Satisfactory, no comments.

Systems: Control Room "g:" Returning ESF Bus from Diesel Generator to Normal Supply. **Satisfactory, with comments below.**

---

#### **CROSS REFERENCE:**

Administrative Topic "c"

#### **JPM/TASK:**

Determine Tagging Requirements.

#### **EXPECTED ACTION/RESPONSE:**

Given the appropriate references, the applicant was expected to correctly determine the appropriate boundary points and required positions of components to (1) isolate the fluid boundary and (2) drain the "A" Containment Spray Pump (CSP), 1-1206-P6-001, in preparation for maintenance work on the pump seals. The applicant was expected to identify 1-1206-U4-002, CSP A Suction Floor Drain Isolation, as a required drain path to be tagged in the OPEN position. Proper tagging of 1-1206-U4-002 was not a critical step in the JPM.

#### **APPLICANT ACTION/RESPONSE:**

When the applicant developed the tagout, the applicant incorrectly stated that 1-1206-U4-002 should be tagged in the CLOSED position.

During post-JPM discussion with the examiner, the applicant incorrectly stated that valve -002 was an isolation boundary that was required to be tagged in a closed configuration. However,

the applicant correctly performed all critical steps in the JPM. Therefore, the applicant was evaluated as successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of knowledge of tagging and clearance procedures. (K/A G2.2.13).

---

**CROSS REFERENCE:**

Systems: Control Room "a"

**JPM/TASK:**

Perform Control Rod Operability Test.

**EXPECTED ACTION/RESPONSE:**

The applicant was expected to correctly perform surveillance procedure 14410-1, "CONTROL ROOM OPERABILITY TEST," for control banks A, B, C, and D. Step 5.1.7 of this procedure directs the operator to "Record the test IPC Bank Demand reading for the control bank being tested on Data Sheet 1." At this step, the applicant was expected to correctly determine IPC Bank Demand using the plant computer and record the appropriate value on the data sheet. However, properly determining the IPC Bank Demand was not a critical step in the JPM.

**APPLICANT ACTION/RESPONSE:**

At step 5.1.7, the applicant called up IPC screen "SHOW30" on the main control board, which displayed both IPC Bank Demand information and IPC individual rod position information. However, the applicant incorrectly recorded the IPC individual rod position information (which was at 216 steps) instead of the correct reading for IPC Bank Demand (which was at 218 steps).

Although the applicant did not correctly perform this specific portion of the surveillance, the applicant did correctly perform all of the critical steps in the JPM. In this case, incorrectly recording IPC Bank Demand did not impact any Technical Specification requirements. Therefore, the applicant was evaluated as successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of ability to use plant computers to evaluate system or component status. (K/A G2.1.19)

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**CROSS REFERENCE:**

Systems: Control Room "g"

**JPM/TASK:**

Returning ESF Bus from Diesel Generator to Normal Supply.

**EXPECTED ACTION/RESPONSE:**

The applicant was directed to parallel RAT "B" to bus 1BA03, and then remove DG1B from bus 1BA03 in accordance with procedure 13427B-1, "4160V AC BUS 1BA03 1E ELECTRICAL DISTRIBUTION SYSTEM." At step 4.2.5.1 of this procedure, the applicant was expected to lower DG1B load to 3000 kW in maximum increments of 1000 kW and 500 kVAR in time increments of 5 minutes. When the applicant reached step 4.2.5.1, the diesel would be running with ~3250 kW load and ~300 kVARs lagging. Step 4.2.5.2 of the procedure directs the operator to concurrently unload the D/G to 700 kW and 200-300 kVARs lagging after the diesel load has been stable at 3000 kW for a 5 minute period. None of the above-mentioned steps in the procedure were critical steps in the JPM.

**APPLICANT ACTION/RESPONSE:**

During the JPM, when the applicant performed step 4.2.5.1 of the procedure to unload the diesel, she lowered load from ~3200 kW to ~2100 kW and waited 5 minutes, then again lowered load to ~1000 kW and waited an additional 5 minutes. This was incorrect because diesel load was lowered below ~3000 kW.

During post-JPM questions with the examiner, the examiner asked the applicant to go back through the procedural steps of 4.2.5.1 and 4.2.5.2. At this time, the applicant [correctly] stated that a better way to perform the procedure would have been to stabilize load at 3000 kW for 5 minutes, and then to lower load all the way to minimum per step 4.2.5.2. However, the applicant correctly performed all critical steps in the JPM. Therefore, the applicant was evaluated as successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of ability to interpret and execute procedure steps (K/A G2.1.20).

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(11) Applicant: Chris Smith (SRO)

Administrative Topic "a:" Perform AFD Monitoring. Satisfactory, no comments.

Administrative Topic "b:"  $K_{eff}$  Determination for Shutdown Banks Withdrawn.

Satisfactory, no comments.

Administrative Topic "c:" Determine Tagging Requirements. Satisfactory, no comments.

Administrative Topic "d:" Determine if Task Can Be Completed Without Exceeding any Radiological Limits. Satisfactory, no comments.

Systems: Control Room "a:" Perform Control Rod Operability Test. Satisfactory, no comments.

Systems: Control Room "b:" Transfer ECCS Pumps to Cold Leg Recirculation. Satisfactory, no comments.

Systems: Control Room "f:" Dilute Containment with Service Air. Satisfactory, no comments.

Systems: Control Room "g:" Returning ESF Bus from Diesel Generator to Normal Supply. **Satisfactory, with comments below.**

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**CROSS REFERENCE:**

Systems: Control Room "g"

**JPM/TASK:**

Returning ESF Bus from Diesel Generator to Normal Supply.

**EXPECTED ACTION/RESPONSE:**

The applicant was directed to parallel RAT "B" to bus 1BA03, and then remove DG1B from bus 1BA03 in accordance with procedure 13427B-1, "4160V AC BUS 1BA03 1E ELECTRICAL DISTRIBUTION SYSTEM." At step 4.2.5.1 of this procedure, the applicant was expected to lower DG1B load to 3000 kW in maximum increments of 1000 kW and 500 kVAR in time increments of 5 minutes. When the applicant reached step 4.2.5.1, the diesel would be running with ~3250 kW load and ~300 kVARs lagging. Step 4.2.5.2 of the procedure directs the operator to concurrently unload the D/G to 700 kW and 200-300 kVARs lagging after the diesel load has been stable at 3000 kW for a 5 minute period. None of the above-mentioned steps in the procedure were critical steps in the JPM.

**APPLICANT ACTION/RESPONSE:**

During the JPM, when the applicant performed step 4.2.5.1 of the procedure to unload the diesel, he lowered load from ~3200 kW to ~2100 kW and then waited 5 minutes. This was incorrect because diesel load was lowered below ~3000 kW.

During post-JPM questions with the examiner, the examiner asked the applicant to go back through the procedural steps of 4.2.5.1 and 4.2.5.2. At this time, the applicant stated that he should have only lowered load to 3000 kW instead of 2100 kW, and that he realized the mistake when he turned the page and read step 4.2.5.2. However, the applicant correctly performed all critical steps in the JPM. Therefore, the applicant was evaluated as successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of ability to interpret and execute procedure steps (K/A G2.1.20).

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(12) Applicant: [REDACTED] (SRO)

Administrative Topic "a:" Perform AFD Monitoring. Satisfactory, no comments.

Administrative Topic "b:" K<sub>eff</sub> Determination for Shutdown Banks Withdrawn.

Satisfactory, no comments.

Administrative Topic "c:" Determine Tagging Requirements. **Unsatisfactory, comments below.**

Administrative Topic "d:" Determine if Task Can Be Completed Without Exceeding any Radiological Limits. Satisfactory, no comments.

Systems: Control Room "a:" Perform Control Rod Operability Test.

**Satisfactory, with comments below.**

Systems: Control Room "b:" Transfer ECCS Pumps to Cold Leg Recirculation.

Satisfactory, no comments.

Systems: Control Room "f:" Dilute Containment with Service Air. Satisfactory, no comments.

Systems: Control Room "g:" Returning ESF Bus from Diesel Generator to Normal Supply. Satisfactory, no comments.

---

#### **CROSS REFERENCE:**

Administrative Topic "c"

#### **JPM/TASK:**

Determine Tagging Requirements.

#### **EXPECTED ACTION/RESPONSE:**

Given the appropriate references, the applicant was expected to correctly determine the appropriate boundary points and required positions of components to (1) isolate the fluid boundary and (2) drain the "A" Containment Spray Pump (CSP), 1-1206-P6-001, in preparation for maintenance work on the pump seals. The applicant was expected to identify 1-1206-U4-108, CSP A Pump Casing Vent Valve, as a required vent path to be tagged in the UNFLANGE/OPEN or UNCAP/OPEN position. The other required vent path was via 1-1206-X4-108, CSP A Header Vent Valve, which was required to be tagged in the UNCAP/OPEN position. Proper tagging of both 1-1206-U4-108 and 1-1206-X4-108 were critical steps in the JPM, because both vents being open were required to completely drain the pump.

#### **APPLICANT ACTION/RESPONSE:**

When the applicant developed the tagout, the applicant incorrectly did not include 1-1206-U4-108 in any position on the tagout. The applicant did tag the other vent path, valve 1-1206-X4-

108 in the OPEN position, but did not recognize that the -X4-108 valve was also required to be un-capped.

During post-JPM discussion with the examiner, the applicant incorrectly stated that 1-1206-X4-108 was the high point, and the only required vent path for the pump. The applicant did not correctly perform a critical step in the JPM. Therefore, the applicant was evaluated as not successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of knowledge of tagging and clearance procedures. (K/A G2.2.13).

---

**CROSS REFERENCE:**

Systems: Control Room "a"

**JPM/TASK:**

Perform Control Rod Operability Test.

**EXPECTED ACTION/RESPONSE:**

The applicant was expected to correctly perform surveillance procedure 14410-1, "CONTROL ROOM OPERABILITY TEST," for control banks A, B, C, and D. Step 5.1.7 of this procedure directs the operator to "Record the test IPC Bank Demand reading for the control bank being tested on Data Sheet 1." At this step, the applicant was expected to correctly determine IPC Bank Demand using the plant computer and record the appropriate value on the data sheet. However, properly determining the IPC Bank Demand was not a critical step in the JPM.

**APPLICANT ACTION/RESPONSE:**

At step 5.1.7, the applicant called up IPC screen "SHOW30" on the main control board, which displayed both IPC Bank Demand information and IPC individual rod position information. However, the applicant incorrectly recorded the IPC individual rod position information (which was at 216 steps) instead of the correct reading for IPC Bank Demand (which was at 218 steps).

Although the applicant did not correctly perform this specific portion of the surveillance, the applicant did correctly perform all of the critical steps in the JPM. In this case, incorrectly recording IPC Bank Demand did not impact any Technical Specification requirements. Therefore, the applicant was evaluated as successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of ability to use plant computers to evaluate system or component status. (K/A G2.1.19)

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(13) Applicant: [REDACTED] (SRO)

Administrative Topic "a:" Perform AFD Monitoring. Satisfactory, no comments.

Administrative Topic "b:"  $K_{eff}$  Determination for Shutdown Banks Withdrawn.

Satisfactory, no comments.

Administrative Topic "c:" Determine Tagging Requirements. Satisfactory, no comments.

Administrative Topic "d:" Determine if Task Can Be Completed Without Exceeding any Radiological Limits. Satisfactory, no comments.

Systems: Control Room "a:" Perform Control Rod Operability Test.

**Satisfactory, with comments below.**

Systems: Control Room "b:" Transfer ECCS Pumps to Cold Leg Recirculation. Satisfactory, no comments.

Systems: Control Room "f:" Dilute Containment with Service Air. Satisfactory, no comments.

Systems: Control Room "g:" Returning ESF Bus from Diesel Generator to Normal Supply. Satisfactory, no comments.

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**CROSS REFERENCE:**

Systems: Control Room "a"

**JPM/TASK:**

Perform Control Rod Operability Test.

**EXPECTED ACTION/RESPONSE:**

The applicant was expected to correctly perform surveillance procedure 14410-1, "CONTROL ROOM OPERABILITY TEST," for control banks A, B, C, and D. Step 5.1.7 of this procedure directs the operator to "Record the test IPC Bank Demand reading for the control bank being tested on Data Sheet 1." At this step, the applicant was expected to correctly determine IPC Bank Demand using the plant computer and record the appropriate value on the data sheet. However, properly determining the IPC Bank Demand was not a critical step in the JPM.

**APPLICANT ACTION/RESPONSE:**

At step 5.1.7, the applicant called up IPC screen "ALLRODS" on the main control board, which displayed both IPC Bank Demand information and IPC individual rod position information. However, the applicant incorrectly recorded the IPC individual rod position information (which was at 216 steps) instead of the correct reading for IPC Bank Demand (which was at 218 steps).

During post-JPM questions, the examiner asked the applicant how to determine IPC bank demand. The applicant again incorrectly pointed to the IPC individual rod positions on the computer screen, and stated that these data points were IPC Bank Demand. Although the applicant did not correctly perform this specific portion of the surveillance, the applicant did correctly perform all of the critical steps in the JPM. In this case, incorrectly recording IPC Bank Demand did not impact any Technical Specification requirements. Therefore, the applicant was evaluated as successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of ability to use plant computers to evaluate system or component status. (K/A G2.1.19)

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(14) Applicant: [REDACTED] (SRO)

Administrative Topic "a:" Perform AFD Monitoring. **Unsatisfactory, comments below.**

Administrative Topic "b:"  $K_{eff}$  Determination for Shutdown Banks Withdrawn. Satisfactory, no comments.

Administrative Topic "c:" Determine Tagging Requirements. **Unsatisfactory, comments below.**

Administrative Topic "d:" Determine if Task Can Be Completed Without Exceeding any Radiological Limits. Satisfactory, no comments.

Systems: Control Room "a:" Perform Control Rod Operability Test.

**Satisfactory, with comments below.**

Systems: Control Room "b:" Transfer ECCS Pumps to Cold Leg Recirculation. Satisfactory, no comments.

Systems: Control Room "f:" Dilute Containment with Service Air. Satisfactory, no comments.

Systems: Control Room "g:" Returning ESF Bus from Diesel Generator to Normal Supply. Satisfactory, no comments.

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#### CROSS REFERENCE:

Administrative Topic "a"

#### JPM/TASK:

Evaluate Inoperable Axial Flux Difference (AFD) Monitor Alarm.

#### EXPECTED ACTION/RESPONSE:

Given an operationally valid set of delta-flux values for several different times, the applicant was expected to correctly determine that the surveillance for AFD was met (i.e. within the listed acceptance criteria) in accordance with surveillance procedure 14915-1, "SPECIAL CONDITIONS SURVEILLANCE LOGS," Data Sheet 6 for AFD. Specifically, only one data point at time 0700 was out of specification, and all other data points were within the limits. In accordance with Technical Specifications (TS), Data Sheet 6 step 4. specifies that acceptance criteria were not met/required actions were needed "With the indicated AFD outside of the above required limits on 2 or more channels...." Therefore, with only one channel outside the limits, the surveillance met its acceptance criteria, and no TS required actions were needed. Marking "yes" for step 7.2 of 14915-1 (Results obtained through the performance of this procedure meet the ACCEPTANCE CRITERIA of Section 6.0) was a critical step in the JPM.

#### APPLICANT ACTION/RESPONSE:

The applicant correctly determined the required limits at the given power levels, and correctly identified that only one data point was outside the limits. However, the applicant incorrectly checked the "no" block in step 7.2 of the procedure, and stated that the surveillance test results did not meet the acceptance criteria.

During post-JPM questions with the examiner, the applicant stated that although the test results did not meet acceptance criteria, TS required actions did not have to be taken, because only one channel was outside the limits. The applicant repeated that the surveillance had to be considered as not met, although no further TS required actions needed to be performed. The applicant did not correctly perform a critical step in the JPM. Therefore, the applicant was evaluated as not successfully completing the JPM.

#### **LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of knowledge of surveillance procedures associated with AFD monitoring requirements. (K/A G2.2.12).

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#### **CROSS REFERENCE:**

Administrative Topic "c"

#### **JPM/TASK:**

Determine Tagging Requirements.

#### **EXPECTED ACTION/RESPONSE:**

Given the appropriate references, the applicant was expected to correctly determine the appropriate boundary points and required positions of components to (1) isolate the fluid boundary and (2) drain the "A" Containment Spray Pump (CSP), 1-1206-P6-001, in preparation for maintenance work on the pump seals. The applicant was expected to identify 1-1206-U4-108, CSP A Pump Casing Vent Valve, as a required vent path to be tagged in the UNFLANGE/OPEN or UNCAP/OPEN position. Proper tagging of 1-1206-U4-108 was a critical step in the JPM. The applicant was also expected to identify 1-1206-U4-002, CSP A Suction Floor Drain Isolation, as a required drain path to be tagged in the OPEN position. Proper tagging of 1-1206-U4-002 was not a critical step in the JPM.

#### **APPLICANT ACTION/RESPONSE:**

When the applicant developed the tagout, the applicant incorrectly stated that 1-1206-U4-108 should be tagged in the CLOSE position, and also incorrectly stated that 1-1206-U4-002 should be tagged in the LOCKED CLOSED position.

During post-JPM discussion with the examiner, the applicant stated that both of the above points were isolation boundaries that were required to be tagged in a closed configuration. The applicant did not correctly perform a critical step in the JPM. Therefore, the applicant was evaluated as not successfully completing the JPM.

#### **LACK OF ABILITY/KNOWLEDGE:**



The applicant demonstrated a lack of knowledge of tagging and clearance procedures. (K/A G2.2.13).

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**CROSS REFERENCE:**

Systems: Control Room "a"

**JPM/TASK:**

Perform Control Rod Operability Test.

**EXPECTED ACTION/RESPONSE:**

The applicant was expected to correctly perform surveillance procedure 14410-1, "CONTROL ROOM OPERABILITY TEST," for control banks A, B, C, and D. Step 5.1.7 of this procedure directs the operator to "Record the test IPC Bank Demand reading for the control bank being tested on Data Sheet 1." At this step, the applicant was expected to correctly determine IPC Bank Demand using the plant computer and record the appropriate value on the data sheet. However, properly determining the IPC Bank Demand was not a critical step in the JPM.

**APPLICANT ACTION/RESPONSE:**

At step 5.1.7, the applicant called up IPC screen "ALLRODS" on the main control board, which displayed both IPC Bank Demand information and IPC individual rod position information. However, the applicant incorrectly recorded the IPC individual rod position information (which was at 216 steps) instead of the correct reading for IPC Bank Demand (which was at 218 steps).

Although the applicant did not correctly perform this specific portion of the surveillance, the applicant did correctly perform all of the critical steps in the JPM. In this case, incorrectly recording IPC Bank Demand did not impact any Technical Specification requirements. Therefore, the applicant was evaluated as successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of ability to use plant computers to evaluate system or component status. (K/A G2.1.19)

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(15) Applicant: [REDACTED] (SRO)

Administrative Topic "a:" Perform AFD Monitoring. Satisfactory, no comments.

Administrative Topic "b:"  $K_{eff}$  Determination for Shutdown Banks Withdrawn.

Satisfactory, no comments.

Administrative Topic "c:" Determine Tagging Requirements. Satisfactory, no comments.

Administrative Topic "d:" Determine if Task Can Be Completed Without Exceeding any Radiological Limits. Satisfactory, no comments.

Systems: Control Room "a:" Perform Control Rod Operability Test.

**Satisfactory, with comments below.**

Systems: Control Room "f:" Dilute Containment with Service Air. Satisfactory, no comments.

Systems: Control Room "g:" Returning ESF Bus from Diesel Generator to Normal Supply. Satisfactory, no comments.

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#### **CROSS REFERENCE:**

Systems: Control Room "a"

#### **JPM/TASK:**

Perform Control Rod Operability Test.

#### **EXPECTED ACTION/RESPONSE:**

The applicant was expected to correctly perform surveillance procedure 14410-1, "CONTROL ROOM OPERABILITY TEST," for control banks A, B, C, and D. Step 5.1.7 of this procedure directs the operator to "Record the test IPC Bank Demand reading for the control bank being tested on Data Sheet 1." At this step, the applicant was expected to correctly determine IPC Bank Demand using the plant computer and record the appropriate value on the data sheet. However, properly determining the IPC Bank Demand was not a critical step in the JPM.

#### **APPLICANT ACTION/RESPONSE:**

At step 5.1.7, the applicant called up IPC screen "SHOW30" on the main control board, which displayed both IPC Bank Demand information and IPC individual rod position information. However, the applicant incorrectly recorded the IPC individual rod position information (which was at 216 steps) instead of the correct reading for IPC Bank Demand (which was at 218 steps).

Although the applicant did not correctly perform this specific portion of the surveillance, the applicant did correctly perform all of the critical steps in the JPM. In this case, incorrectly

recording IPC Bank Demand did not impact any Technical Specification requirements. Therefore, the applicant was evaluated as successfully completing the JPM.

**LACK OF ABILITY/KNOWLEDGE:**

The applicant demonstrated a lack of ability to use plant computers to evaluate system or component status. (K/A G2.1.19)

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(16) Applicant: [REDACTED] (SRO)

Administrative Topic "a:" Perform AFD Monitoring. Satisfactory, no comments.

Administrative Topic "b:"  $K_{eff}$  Determination for Shutdown Banks Withdrawn.

Satisfactory, no comments.

Administrative Topic "c:" Determine Tagging Requirements. Satisfactory, no comments.

Administrative Topic "d:" Determine if Task Can Be Completed Without Exceeding any Radiological Limits. Satisfactory, no comments.

Systems: Control Room "a:" Perform Control Rod Operability Test. Satisfactory, no comments.

Systems: Control Room "f:" Dilute Containment with Service Air. Satisfactory, no comments.

(17) Applicant: [REDACTED] (SRO-Upgrade)

Administrative Topic "a:" Perform AFD Monitoring. Satisfactory, no comments.

Administrative Topic "b:"  $K_{eff}$  Determination for Shutdown Banks Withdrawn.

Satisfactory, no comments.

Administrative Topic "c:" Determine Tagging Requirements. Satisfactory, no comments.

Administrative Topic "d:" Determine if Task Can Be Completed Without Exceeding any Radiological Limits. Satisfactory, no comments.

Systems: Control Room "b:" Transfer ECCS Pumps to Cold Leg Recirculation. Satisfactory, no comments.