



Vincent, Janet

From: Capehart, Phillip
Sent: Monday, February 04, 2013 8:38 PM
To: Vincent, Janet; Widmann, Malcolm
Subject: FW: Vogtl Fairness questions
Attachments: 2011 VG waivers of the operating test granted for other applicants who took the most recent examination.docx

Here are my written responses I sent to Frank.

From: Capehart, Phillip
Sent: Thursday, August 09, 2012 2:13 PM
To: Ehrhardt, Frank
Subject: Vogtl Fairness questions

Frank, attached are my responses to the 3 fairness questions you asked for me to respond to. If you need any additional information, feel free to contact me.

Phillip G. Capehart
 Senior Operations Engineer
 United States Nuclear Regulatory Commission
 Protecting People and the Environment
 404-997-4483

| United States Nuclear Regulatory Commission Official Hearing Exhibit | |
|--|---|
| In the Matter of: | Charlissa C. Smith (Denial of Senior Reactor Operator License) |
|  | ASLBP #: 13-925-01-SP-BD01 |
| | Docket #: 05523694 |
| | Exhibit #: CCS-015-00-BD01 |
| | Admitted: 7/17/2013 |
| | Rejected: |
| Other: | Identified: 7/17/2013 Withdrawn: Stricken: |

| AI

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)?*

Seven out of the ten applicants failed the 2011 NRC exam. Six failed the written portion of the 2011 exam. One applicant failed the operating portion of the exam. That applicant subsequently resigned from the plant. The six remaining applicants from the 2011 exam were scheduled to take the 2012 exam and therefore were expected to request a waiver for the operating portion of the exam that they had previously passed. Five of the six applicants submitted and received a waiver for the operating portion of the exam. There was no waiver request submitted for Carla.

Based on her weak overall operating performance from the 2011 exam, the three examiners from that exam (Phil Capehart, Michael Meeks, and Jay Hopkins) ALL agreed that she was not a good candidate to be approved for a waiver request, if received, and informed Malcolm of our opinion.

There is currently no minimum threshold standard stated by the NUREG or by RII to determine whether an applicant should be denied a waiver for an exam. However, in this case, all three examiners from the original exam team were in agreement that her previous operating exam performance was a borderline pass, at best.

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

Jay Hopkins was the examiner of record for Carla and in that capacity evaluated her simulator performance. As the chief examiner for the 2011 exam I concurred on his write ups for Carla. I recall that Jay was very surprised that on completion of his 303 write-ups that Carla's overall simulator performance competency scores resulted in a PASS evaluation.

It is important to note that even though Carla passed all of her JPMs, she had six JPM write-ups for non-critical errors. These same JPM errors were also reflected in some of her simulator errors. She demonstrated poor self checking techniques and was observed several times improperly operating equipment. While these failures on JPMs were not critical, they were revealing and supported our overall impression of her performance as a borderline competent/non-competent operator. During the simulator performance, Carla had a total of 9 competency write-ups. The other five applicants who received waivers for the operating exam portion had, at the most, four simulator competency write-ups. Four of the five applicants had three or less competency write-ups. Therefore, the weighting of her competency downgrade, even though she passed overall, was at a minimum, twice that of any other applicant.

In the simulator, the applicant's errors were complicated by poor diagnosis, failure to respond to auto failures, and improper operation of controllers. The applicant was noted several times to use the first indication available to her for diagnosis and did not use redundant, alternate indications to back up her assessment prior to providing incorrect information to the crew. The applicant, in both the RO and SRO roles, at times needed assistance from the other applicants to perform activities that were under her cognizance (such as immediate operator actions or actions required for equipment that should have auto operated but failed to do so). In the SRO role, several of her missteps were due to improper procedure usage and misunderstanding of the mitigating actions of the procedure. She directed improper steps at times that were subsequently corrected by her board operators.

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

Part of the normal review process for potential exam waivers is to ask the previous exam team for their input on potential waiver request. I provided our exam team's input to Malcolm on this matter in an email per his request. In my response to his request I stated:

"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."

As best as I can recall and based on my emails, I had no communication with the licensee regarding any of the waiver requests for the 2012 exam. I never spoke with the applicant until I saw her again during the 2012 exam.

Vincent, Janet

From: Meeks, Michael
Sent: Monday, February 04, 2013 3:10 PM
To: Vincent, Janet
Cc: Widmann, Malcolm
Subject: FW: C. SMITH PRELIMINARY FORM 398

Janet,

Email 2 of 2 concerning my communications w/F. Ehrhardt's fairness assessment/latest C. Smith FOIA request. Thanks--

Best regards,

Michael Meeks

Senior Operations Engineer
U.S. Nuclear Regulatory Commission (Region 11)
245 Peachtree Center Ave. NE (Suite 1200)
Atlanta, GA 30303-1257
office: 404.997.4467
email: Michael.Meeks@nrc.gov

From: Meeks, Michael
Sent: Thursday, August 30, 2012 8:01 AM
To: Ehrhardt, Frank
Cc: Bates, Mark
Subject: RE: C. SMITH PRELIMINARY FORM 398

Frank,

I don't remember whether Mark Bates or I was the first one to see that they had checked block 17 for a waiver for Carla on the preliminary application. I remember calling (b)(6) to ask him about it, and he told me that it was essentially a typo—they were not actually requesting an op. test waiver for her, and that everyone at Vogtle was planning on her re-taking the entire exam, including the op. test. I don't remember if they provided any justification for the "waiver" on the preliminary application. During the phonecall, I remember asking (b)(6) to re-verify with his management that they were not intending to submit a waiver for Carla (i.e. that it was actually a typo or mistake), because if they were going to formally request a waiver we would need the time to prepare our response (and potentially involve the program office). EXU

I don't have any record of emails back from (b)(6) on this issue, so he probably gave me a call to verify that the waiver block on Carla's preliminary application was a mistake/typo. I don't specifically recall the details of that conversation, other than Vogtle's message was consistent in telling us that Carla's preliminary app being checked for a waiver was a mistake or typo on their part. Vogtle

I'm back in the office today if you need any further info, then I'm off tomorrow for an extended holiday weekend (back in the office next Tuesday). Thanks—

Best regards,

Michael Meeks

Senior 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

From: Ehrhardt, Frank
Sent: Wednesday, August 29, 2012 3:59 PM
To: Meeks, Michael
Subject: FW: C. SMITH PRELIMINARY FORM 398
Importance: High

Michael,

Anything to add?

Frank

From: Bates, Mark
Sent: Wednesday, August 29, 2012 3:46 PM
To: Ehrhardt, Frank
Subject: RE: C. SMITH PRELIMINARY FORM 398

That is correct – Michael told me that the licensee had stated that it was a typo on their part. We do not keep preliminary unsigned applications – there is no requirement in the NUREG to retain these. I do not recall looking at the prelim apps – I think Michael may have been the only one to look at those.

From: Ehrhardt, Frank
Sent: Wednesday, August 29, 2012 3:08 PM
To: Bates, Mark
Subject: C. SMITH PRELIMINARY FORM 398
Importance: High

Michael stated that Carla's preliminary 398 had 4.f checked for a waiver of the op test and that this was basically a typo or oversight on the licensee's part (i.e. they did not intend to request a waiver of the op test).

Do we still have the form?

Do you remember if they provided any justification in block 17 for a waiver of the op test (I would think not, supporting the typo conclusion).

Vincent, Janet

From: Meeks, Michael
Sent: Monday, February 04, 2013 3:07 PM
To: Vincent, Janet
Cc: Widmann, Malcolm
Subject: FW: Vogtle 2012 Exam Examiner Fairness Questions
Attachments: Meeks Answers to Frank Ehrhardt Questions.pdf

Janet,

Malcolm asked me to forward this email and attached document as part of the most recent C. Smith FOIA request. There is one additional email that I will be sending associated with this issue. Thanks—

Best regards,

Michael Meeks

Senior 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

From: Meeks, Michael
Sent: Friday, August 10, 2012 10:56 AM
To: Ehrhardt, Frank
Cc: Widmann, Malcolm; Franke, Mark; Bates, Mark; Capehart, Phillip
Subject: Vogtle 2012 Exam Examiner Fairness Questions

Frank,

As requested, please find attached a .pdf scanned file with my answers and supporting documentation to the questions regarding Carla Smith's operating test appeal and associated examiner fairness issues.

Please let me know if you need any additional information. Thanks—

Best regards,

Michael Meeks

Senior 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

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, (b)(6) 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, (b)(6) 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 (b)(6) 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 (b)(6). For his operating test, he has three total comments on the entire simulator scenarios. Although (b)(6) 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 | (b)(6) |
|--|-------------|--------|
| 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 (b)(6) 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 (b)(6) 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 |
|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|
| 1. Interpretation/Diagnosis | | | | | | | | | | | | | | | | | | | |
| a. Recognize & Attend | X | | | | | | | | | | | | | | | | | | 3 |
| b. Ensure Accuracy | D | D | | | X | X | | | | | X | | | | | | | | 1 |
| c. Understanding | | | D | D | | | | | X | | | | | | | | | | 1 |
| d. Diagnosis | | | | | D | | | | | | | | | | | | | | 2 |
| 2. Procedures | | | | | | | | | | | | | | | | | | | |
| a. Reference | | | | X | | | | | | | | | | | | | | | 3 |
| b. EOP Entry | | | | | | | | | | | | | | | | | | | 3 |
| c. Correct Use | | X | | | | | | | | | | X | | | | | | | 3 |
| 3. Control Board Operations | | | | | | | | | | | | | | | | | | | |
| a. Locate & Manipulate | | | | | | D | D | D | | | | | | | | | | | 1 |
| b. Understanding | | | | | | | | | | | | | | | | | | | 3 |
| c. Manual Control | | | | | | | | | D | | | | | | | | | | 2 |
| 4. Communications | | | | | | | | | | | | | | | | | | | |
| a. Clarity | | | X | | | | | | | D | D | D | | | | | | | 1 |
| b. Crew & Others Informed | X | | | | | X | X | X | | | | | D | D | | | | | 1 |
| c. Receive Information | | | 3X | | | | | | | | | | | | D | | | | 2 |
| 5. Directing Operations | | | | | | | | | | | | | | | | | | | |
| 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 |
| 6. Technical Specifications | | | | | | | | | | | | | | | | | | | |
| 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. | | | | | | | | | | | | | | | | | | | |

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 (b)(6) (b)(6) (examiner of record Michael Meeks):

-Carla's comment on p. 14 of her ES-303 is similar to (b)(6) comment on p. 8 of his ES-303.

-Carla's comment on p. 16 of her ES-303 is similar to (b)(6) comment on p. 11 of his ES-303.

-Carla's comment on p. 18 of her ES-303 is similar to (b)(6) comment on p. 14 of his ES-303.

-Carla's comment on p. 20 of her ES-303 is similar to (b)(6) comment on p. 7 of his ES-303.

-Carla's comment on p. 24 of her ES-303 is similar to (b)(6) comment on p. 12 of his ES-303.

-Carla's comment on p. 25 of her ES-303 is similar to (b)(6) comment on p. 13 of his ES-303.

-Carla's comment on p. 31 of her ES-303 is similar to (b)(6) comment on p. 15 of his ES-303.