Director
Division of Inspection Program Management
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Attention: Director

From: [redacted]

Subject: Senior Reactor Operator Exam Results
Docket No. [redacted]

Reference: NRC letter dated June 23, 2000

This letter and attachments contained herein constitute an informal NRC staff review of the grading of my examination pursuant to the Nuclear Regulatory Commission's letter of July 23, 2000. It is the applicant's understanding that this request was to be submitted on or before July 13, 2000 to be effective. It is also the applicant's understanding that the time limitation to request a hearing pursuant to 10 CFR 2.103(b)(2) would be tolled during this administrative appeal period. Further that if the administrative appeal request fails the applicant would have 20 additional days to determine whether a request for hearing would be due.

The enclosed attached administrative appeal request includes:

1. An Introduction which will outline the format used
2. An Analytical Section which will provide fact based data. This section will deal with issues associated with the performance by the applicant and claims documented by the NRC.
3. A General Testing Environment Section which will deal with concerns associated with bias of the testing environment.
4. A Conclusion which will provide final analysis of the test results.
5. Attachments
6. NRC Documentation

Based on this appeal, the applicant requests the NRC to take the following actions in reference to Docket No. [redacted]:

1. The applicant's primary desire is that the results of the operating test be changed from fail to pass.
2. Should the any portions of the operating test not be overturned, the applicant requests a retest on that portion(s).

The applicant requests that this letter and attachment and all associated correspondence be with held from public disclosure pursuant to the provisions of 10 CFR 2.790.

My understanding is that the NRC will provide a written response within 60 days from the date of this letter. You may contact me at [redacted] for questions regarding this appeal.

[redacted]

July 13, 2000

Introduction

The applicant had two examiners, the lead examiner (D. Charles Payne) and a trainee examiner (Glen Salyers) who was being observed by the lead examiner. In the applicant's appeal documentation, the trainee examiner will be referred to as the examiner and the lead examiner will be referred to as the lead examiner.

Section 2, the analytical section, will provide the applicant's responses to the examiners comments as identified to her on Form ES 303-1. Each response by the applicant will reference the appropriate page associated with the applicant's ES 303-1 form.
The applicant's responses in Section 2 will be presented in the following order:
JPM **B.1**.c
JPM **B.2**.b
JPM **B.2**.c
Scenario #1
Scenario #2
Scenario #3

Section 3, the general testing environment section, will be presented in a paragraph format. Included in this section will be a documented interview with MNS Human Resources. This section will point out trends and specific areas of unfairness and inconsistencies associated with the applicant's treatment during the examination process.

Section 4 will be the conclusion.

The attachments will be at the end of the document.

Section 2

Applicant Claims Associated with Administration of this JPM:

The applicant will not address the comments on page 7 specifically in the discussion of this JPM. Comments associated with the consequences as stated on page 7 are addressed on page 21 of this appeal and on attachment #3. Upon completion of this JPM, this applicant was sequestered with two other applicants who had previously performed the JPM. Both these applicants were stopped once they had reached 1905 and blocked low pressure SI. Neither of these applicants had the same examiner as this applicant. Because this applicant was not stopped, she was held to a higher standard in the performance of this JPM. Had this applicant been stopped, the comments on page 7, 8, and 9 would not exist. This is an example of inconsistency between examiners and an example of this applicant being held to a higher standard and being graded in too severe a manner.

A. Applicant's and Examiner's Actions:

A.1 The initial conditions of this JPM stated that a cooldown was occurring and the task was to depressurize the NC system to 1905 using NV spray. This JPM was to perform steps 13, 14, and 15 of EP/1/A/5000/ES-0.2. Per initial conditions, a plant cooldown was in progress per EP/1/A/5000/ES-0.2. Step 11 of EP/1/A/5000/ES-0.2 initiated NC system cooldown to cold shutdown, therefore the applicant had no reason to question the procedure had not been followed. The applicant was given no verbal or written communication that this cooldown was not occurring. At the conclusion of the JPM, the applicant was questioning why there was no decrease in NC temperature as the initial conditions had stated a cooldown would be on-going. The examiner asked the applicant why she expected temperature to decrease. The applicant stated that in previous performances of this procedure, temperature had decreased and there was nothing to indicate the procedure used in this JPM had not been followed (ie. the cooldown step had not been performed). The applicant told the examiner that pressure decreased, saturation temperature decreased, and temperature in the primary should have decreased. Had the cooldown been occurring as the initial conditions stated, as S/G temperature decreased, Tc would have been decreasing.

A.2 When performing this JPM, step 9 of EP/1/A/5000/G-1 states if the procedure in effect has restored PZR heaters, then manually operate heaters as desired to adjust NC system depressurization. The applicant did not leave the heaters on throughout this JPM as the examiner stated. The applicant turned the heaters off one bank at a time watching the system response to ensure the depressurization was controlled. The procedure does not direct that all the heaters be turned off, the procedure allows the operator to manual operate the heaters *as desired.* This flexibility in the procedure is allowed to enable the operator to adjust the heaters to control pressure. At this point in the JPM, the applicant still assumes a cooldown is occurring as the procedure had directed and the cooldown would be aiding the depressurization. Once the NC system reached 1905 psig, depressurization was stopped and low pressure SI was blocked and the heaters re-energized. The system repressurized based not only on the heaters being re-energized but also due to the lack of cooldown. Had the applicant been stopped upon reaching 1905 and blocking low pressure SI, the subsequent actions by the applicant and comments by the examiner would not exist.

B. Applicants claimed lack of knowledge and ability:

B.1 The examiner claimed the applicant displayed a lack of knowledge of understanding of system operation and parameter interrelationships. The examiner based this claim on the applicant's statement at the end of the scenario. Examiner's interpretation of the applicant's comment was not accurate. The applicant's statement was made looking at the whole system response based on the information she had been given that a cooldown was occurring, and that she had completed the depressurization ending the JPM but the lack of a cooldown was confusing. With

the depressurization, NC pressure should have decreased and Tsat in the pressurizer should have decreased, and with the cooldown, Tc should have decreased. The applicant's thought process was based on the initial conditions identified to her that a cooldown was occurring in accordance with the procedure. The applicant was given no information by the examiner, either written or verbal, to indicated the procedure had not been followed and the cooldown was not occurring.

B.2 The examiner claimed the applicant displayed a lack of ability to manipulate the controls so the RCS pressure was decreased in a controlled manner. There is no information or basis for this claimed of lack of ability. The applicant decreased NC pressure in a controlled and deliberate manner throughout this scenario. At no time during this JPM did the applicant depressurize the NC system in an uncontrolled manner.

C. Reasons for Discrepancy Between Applicant and Examiner's Assessment:

C.1 The examiner drew an incorrect inference based on the applicant's response to his question at the completion of the JPM. This inference is faulty in that the examiner drew this inference based upon his mis-interpretation of her statements. The examiner did not question the applicant further.

C.2 The examiner drew an incorrect claim of lack of ability based on his observations. As mentioned above, due to this applicant not being stopped during this JPM as others had been, she depressurized to 1905 twice and blocked low pressure SI successfully both times. At no time did the applicant approach the SI setpoint in an uncontrolled manner.

D. Conclusion:

The applicant correctly completed this JPM meeting the criteria of satisfactorily depressurizing the NC system to 1905 using NV spray and maintaining pressure at 1905. Other applicants were stopped upon blocking the low pressure SI signal which led to an inconsistency between examiners in the administration of this JPM. This applicant was held to a higher standard than other applicants. If this applicant had been stopped, the comments on page 7, 8, and 9 would not have been made. The examiner inappropriately marked this JPM as failed due to his incorrect inference associated with the applicant's answer to a question and also due to an inappropriate claim of lack of ability.

A. Applicants and Examiners Actions:

During performance of this JPM, upon reaching step 3.5.1 of the procedure which states, Verify line volts meter 3960-4360, the applicant verified the line volt meter was between the 3960 – 4360 band. The applicant received no cue at this point and proceeded with step 3.5.2 which states, Using the 1A D/G voltage adjust handle, match D/G and line voltage. At this point, the applicant expected a cue as D/G volt meter was indicating 0 volts. After waiting approximately 5-10 seconds, the applicant told the examiner she was going to assume the D/G and line volts were matched and she continued on to step 3.5.3. The applicant made this assumption due to receiving no cue and an assumption had to be made because the D/G volt meter was indicating 0 volts. After the applicant began reading the next step, the examiner stopped the applicant and using a pen pointed to a place on the line voltage meter. At no time did the applicant receive any verbal cues as to the line voltage reading. Looking at the pen on the line voltage meter, and its proximity to 4160 volts, the applicant again turned to the examiner and stated from her position looking at the meter and where he placed his pen, she was going to assume the voltages were matched. At this point she also stated, if the line voltage and D/G voltage were not matched she would have to use the D/G voltage adjust handle and either raise or lower D/G voltage to match the line voltage to the D/G voltage. The applicant did not receive any reply from the examiner and continued on with the JPM.

B. Applicants Assessment of Claimed Lack of Knowledge:

B.1 Lack of Fundamental Basic Electricity Knowledge
At no time during the performance of this JPM were there any discussions between the applicant and the examiner regarding the consequences of mismatched power sources and the potential effects on equipment or personnel. There were no discussions concerning the band value for the voltages (3960 and 4160) and the basis for this band. Per NUREG-1021, "if the applicant fails to accomplish the task standard for the JPM or demonstrates a lack of understanding regarding the equipment and procedures such as having difficulty locating information, control board indications, or controls, the examiner must be prepared to ask performance-based follow-up questions, as necessary, to clarify or confirm the applicant's understanding of the system as it relates to the task that was performed." Because the applicant specifically informed the examiner of the actions she would take if the line and D/G voltages differed, she demonstrated the fundamental underlying concepts of matching power source voltages. There is no information indicating a lack of knowledge in basic electricity during the performance of this JPM. (see attachment #1)

B.2 Weakness in Procedure Usage
As noted above, the applicant relied upon her stated assumption regarding voltage mis-match, informed the examiner what actions would be taken if this assumption was incorrect, and then executed the procedural steps in accordance with those assumptions. As such, the applicant complied with the procedure. There is no information indicating a weakness in procedure usage in this JPM.

C. Reasons for Discrepancy between Applicant and Examiners Assessment

C.1 Lack of Fundamental Basic Electricity Knowledge
C.1.i Ability to properly cue the applicant
The applicant noted above that the examiner failed to provide a cue, a cue was appropriate at this point because the D/G volt meter was indicating zero. With the applicant's previous JPM training experience, she was expecting a cue from the examiner identifying the reading on the meter. Due to there being no cue from the examiner, the applicant's only alternative was to make an assumption. Per NUREG-1021, "The JPM shall identify appropriate system response cues so that the examiner can provide the examinee with specific feedback regarding the component and system reactions to the examinee's manipulations, especially those procedural steps

identified as critical to task completion. The response cues are particularly important in the following situations: for in-plant tasks that will be simulated because the examinee will not have available the normal indications (e.g. alarms, flow rates, temperatures, and pressures) that would be observed during actual task performance."

C.1.ii Failing to Record Important Information
No record of applicant's comment regarding what action she would take had the voltages not been matched correctly. Therefore, the applicant's action description as provided is not complete as this information reflects the applicants knowledge in this regard.

C.1.iii Drawing Incorrect Inferences Regarding Applicant Knowledge from Circumstances
The examiner drew the conclusion that the applicant had inadequate knowledge of basic electricity. This inference is faulty in that it implies a lack of specific knowledge unsupported by the direct observations. The applicant indicated by direct statements a knowledge that the voltage adjust would be needed if a voltage mismatch existed. There were no detailed discussions regarding the consequences to equipment or personnel should the sources be paralleled with the voltages not matched nor were there any discussions as to the amount of mismatch the system could handle without experiencing any undesirable effects. Per NUREG-1021, "When evaluating an examinee, an examiner must be able to differentiate between what he know or believes to be true about the examinee's ability and how the examinee actually performs on the JPM."

C.2 Weakness in procedure Usage

C.2.i Ability to properly cue an Applicant
As stated in C.1.i, the examiner failed to cue the applicant properly which necessitated her making an assumption. She verbalized this assumption to the examiner and followed the procedure correctly, in accordance with the assumption. This is not a weakness in procedure usage.

C.2.ii Drawing Incorrect Inference Regarding Applicant Knowledge from Circumstances
The examiner drew the conclusion that the applicant exhibited a weakness in procedure usage. This is faulty as it implies that the applicant did not follow the procedure as written. The applicant followed the procedure correctly given her stated assumptions. She also directly stated to the examiner the steps which would be required had her assumptions been incorrect. By doing this she demonstrated that, regardless of the voltages (matched vs. mis-matched), the procedure would have been performed correctly.

D. Conclusion

The applicant completed the JPM successfully by meeting the success criteria of the JPM. The overall JPM success standard is that power to 4160V bus 1ETA is being powered from 1ATC and the D/G is shutdown. The mode select switch for D/G 1A has been returned to Auto. The applicant met this standard.
Because of the examiners (1) failure to properly cue, (2) drawing incorrect inferences, and (3) failure to record important information, there were two inappropriately identified weaknesses in this area, knowledge of basic electricity and procedural weakness. These inadequacies in the examiner's assessment caused him to inappropriately mark this JPM as failed with these weaknesses.

Additional Items Associated With The D/G JPM:

1. Applicant's Response to Alleged Consequences
The examiner stated that had the 160 volt difference existed between the D/G voltage and the line voltage upon closing the breaker, equipment damage could have occurred. The examiner also concluded that personnel injury could have occurred had someone been in the area of the normal breaker during the performance of this task. There is no evidence to support this conclusion. Per attachment #2, it is industry standard to sync the D/G to the grid with the D/G voltage slightly higher (100-200 volts).
On July 22, 2000, this applicant performed Step 3.5 of procedure OP/1/A/6350/002 enclosure 4.3 on the D/G simulator. This is the same procedure used during the performance of this JPM. During this performance, the applicant placed the line volts 200 volts below the D/G volts. The D/G was paralled using the normal breaker and upon closing the normal breaker, the breaker did not trip but remained closed. This simulation supports the information provided in attachment #2.
There are no bases for the conclusions reached by the examiner.

2. Applicant's Issues Associated with Administration of The D/G JPM:
Upon reaching the steps in the JPM which perform the paralleling of the D/G to the grid, (steps 5.5.5, 3.5.6, 3.5.7) the applicant attempted to explain the proper method to perform this procedure to the examiner. These three steps must be performed essentially by memory. To properly parallel, the applicant would have to place the procedure aside and use both hands. In her attempts to explain this to the examiner he acted irritated and informed the applicant in a loud, indignant manner that she must perform the procedure step by step and in order. The lead examiner stepped in at this point and explained to the examiner that the applicant was just trying to describe how the procedure would actually be performed. Per NUREG-1021, "an examiner must be familiar with the JPM to accurately evaluate performance."

Applicant's Claim Associated with Administration of this JPM:

This JPM was one of the facility walk-through JPMs administered to this applicant and the task was to emergency borate RCS locally. This JPM is an immediate action type JPM and the expectation is that the applicant be able to locate the emergency boration valve from memory. When the examiner administered the JPM to this applicant, she was handed the initial condition sheet only and was required to perform the JPM based on this information only. When this same examiner administered this JPM to another candidate, he was handed the emergency boration procedure. Both applicants received a satisfactory rating on this JPM. The administration of this JPM is an example of inconsistency of this examiner between candidates.

A. Applicant's actions:

During Scenario #1 while applicant was Control Room SRO, the applicant was informed by the BOP that the letdown orifice isolation valve,1NV35, had failed to close when 1NV2 closed. This valve (1NV35) is expected to close if either 1NV1 or 1NV2 closes via an electrical interlock. Upon the transient being secured, the applicant, acting upon the information from a member of her crew, began to investigate the ramifications to the plant of a potential inoperability associated with this valve. The applicant referred to the Test Acceptance Criteria book to determine any potentially affected Technical Specifications sections. This was appropriate behavior based upon the information given. The applicant explained to the examiner the purpose of the Test Acceptance Criteria book. The BOP then informed the SRO that he had failed to inform her that Pressurizer Level Channel 1 had failed low which had caused the loss of letdown and that the SRO should refer to the channel failure in Technical Specifications. The applicant was still reviewing 1NV35 concerns when advised of this fact. The applicant upon completing the review of 1NV35 concerns would have addressed the failed channel without being prompted.

B. Applicant's Assessment of Claimed Lack of Knowledge

There is no record of the applicant's discussion with the examiner concerning the use of the Test Acceptance Criteria book. When the applicant first went to the back of the Control Room to use the reference material, the examiner did not immediately follow her. The applicant had finished reviewing the Test Acceptance Criteria book when the examiner came to the back of the Control Room. The applicant discussed the purpose of this book and why she had used this book. She informed the examiner this book was used to cross reference to Technical Specifications when a component, not individually listed in Technical Specifications, failed. This was the correct behavior given the information provided. Once informed of the level channel failure, the applicant referred to the Technical Specification Reference Manual to locate the applicable Technical Specification section. When the BOP identified the failed channel he suggested the applicant refer to the Technical Specification section for the failed instrument channel. This does not indicate a lack of knowledge by the applicant but was an example of good teamwork based on incomplete information previously delivered to the applicant by the BOP. At no time during the investigation of the channel failure or on post scenario questioning was the applicant questioned on this aspect of the scenario. Per NUREG-1021, "If an applicant does not perform as expected, the examiner should note the applicant's actions (or lack of actions) next to or below the expected action and follow up with appropriate questions after the simulator scenario is completed."

C. Reasons for Discrepancy between Applicant and Examiners Assessment

As noted above, the applicant explained the purpose of the Test Acceptance Criteria book. Neither this information nor subsequent Technical Specification information was recorded. There is a failure to record pertinent information regarding the use of the Test Acceptance Criteria book. The examiner drew the conclusion that the applicant displayed a lack of familiarity with Technical Specifications and lack of ability to apply Technical Specifications to a component that failed. This conclusion is incorrect as the applicant displayed the knowledge of when to use the Test Acceptance Criteria book vs. when to use the Technical Specification Reference Manual. The examiner drew incorrect inference regarding the applicant's knowledge from circumstances associated with communication with the BOP. The examiner inferred that the applicant would not have referred to Technical Specification unless prompted by the BOP. There is no data or information to support this inference.

D. Conclusion

There is no information to support the claim that the applicant displayed a lack of familiarity with and ability to apply Technical Specifications to a component that had failed. The applicant performed correctly based on the information provided to her. She demonstrated that she could cross referenced using the Test

Acceptance Criteria Book and the Technical Specification Reference book. She used the references correctly based upon the failure that was identified.

A. Applicant's actions:

During Scenario #1 while applicant was Control Room SRO, an ATWS occurred. The applicant recognized the ATWS and exited procedure EP/1/A/5000/E-0 appropriately as she was aware of the ATWS and entered EP/1/A/5000/FR-S.1. EP/1/A/5000/E-0 is the reactor trip and safety injection procedure and due to procedure priority it the first procedure entered if a reactor trip or safety injection has or should have occurred. Upon an ATWS event, the RNO of step 1 directs the crew to implement the Functional Restoration Procedures and enter EP/1/A/5000/FR-S.1. EP/1/A/5000/FR-S.1 procedurally directs the SRO when to send someone to open the Reactor Trip Breakers (reference EP/1/A/5000/FR-S.1 step 7 RNO). The applicant's actions were in accordance with MNS guidelines (reference OMP 4-1 and 4-3) of proper procedure use and adherence.

B. Applicant's Assessment of Claimed Lack of Ability

A claim of lack of ability to evaluate plant performance and make timely operational judgements based on reactor behavior is not correct. The applicant performed in accordance with her training guidelines and in accordance with MNS guidelines on correct procedure adherence. The applicant had been trained to follow the procedure during an ATWS event and her priority was to guide the crew through the red path functional restoration procedure. She had been trained that her first responsibility was to implement the procedure with the crew and not take time away from progressing through the procedure to dispatch an NLO to open the Reactor Trip Breakers prior to step 7 of the procedure. Her actions were correct.
This scenario was performed by two of the four simulator crews on Monday May 8, 2000. The other two crews did not perform this scenario. The Control Room SRO in the other crew performed the procedure the same way as this applicant and was not penalized in his grading for this action. This Control Room SRO was graded by the same examiner as this applicant.

C. Reasons for Discrepancy Between Applicant and Examiners Assessment

The examiner drew an incorrect inference regarding applicant knowledge based on the event. The applicant performed the procedure in accordance with MNS guidelines and training expectations. (see attachment #4) There is no information to support the applicant displayed a lack of ability to evaluate plant performance. The applicant guided the crew through E-0 and then through a transition to FR-S.1. There was no discussion between the applicant and the examiner associated with this aspect of the scenario.

D. Conclusion

The applicant correctly performed the procedure and there was no weakness in the applicant's ability to evaluate plant performance and reactor behavior.
There is an issue of inconsistency between the grading of the two applicants by this examiner and this applicant was graded too severely.

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Attachment #6

A. Applicant's Actions:

During scenario #1 the applicant was the Control Room SRO. During the reading of FR-H.1 step 17e, upon receiving a negative response, the procedure directed a progression to the RNO of step 17i (see attachment #6). Upon turning the page of the procedure, the applicant inadvertently read the ERO column rather than the RNO column of step 17i. When the applicant read the ERO of step 17i to the crew, she realized it did not make sense and looked at the control board to ensure the MSIVs were closed and verified this with the RO. At this point the applicant looked back in the procedure and concurrent with the applicant's realization of the correct flowpath, the BOP verbally confirmed the correct flowpath with a peer check. The applicant was using self-checking skills by retracing the previous steps in the procedure to verify the correct flowpath as the step she read did not make sense for the conditions she knew existed.

B. Applicant's Assessment of Claimed Lack of Ability

B.1 Lack of ability to remain cognizant of plant conditions
The applicant was aware the MSIVs were closed and had been closed earlier which is supported by the fact that she questioned the RO upon reading the ERO of step17i. If the applicant had not been aware of the MSIVs being closed she would not have questioned the validity of the step. This is an example of self checking by the applicant. The questioning attitude and peer check of the crew is an expectation in accordance with MNS management philosophy. There is no action performed by the applicant or information supporting a lack of ability to remain cognizant of plant conditions.

B.2 Lack of Properly Executing Emergency Procedures
The applicant did not direct the crew to perform any inappropriate actions and therefore did not improperly execute the emergency procedures. Upon reading the ERO of step 17i instead of the RNO for step 17i, the applicant realized her mistake and questioned the step prior to any attempted actions initiated by the RO. No steps were improperly executed therefore the applicant executed the emergency procedure properly.

C. Reasons for Discrepancy between Applicant and Examiners Assessment

C.1 Drawing Incorrect Inferences Regarding Applicants Knowledge Based on Circumstances
The applicant was cognizant of plant conditions as exemplified by her questioning the step. The examiner drew the conclusion that the applicant was not aware of plant conditions. This inference is faulty as it implies a lack of knowledge unsupported by direct statements by the applicant. In contrast, the applicant questioned the step with the crew and did not direct any action based on the step.

C.2 Inappropriate and Severe Grading
The examiner inappropriately stated that the applicant did not properly execute the emergency procedures. There is no information to support the applicant directed the crew to perform any incorrect manipulations of plant equipment. There is no information to support the emergency procedures were not executed properly. This is an example of the applicant being graded in too severe a manner by the examiner.

D. Conclusion
There is no information to support the applicant displayed a lack of ability to remain cognizant of plant conditions or that the emergency procedures were not properly executed. The examiner inappropriately identified two areas of lack of ability due to his drawing incorrect inferences and grading too severely.

During this scenario the applicant was the Control Room SRO. This is an example of the applicant being graded too severely. The consequences of the applicant's actions are incorrect. The examiner stated that the scenario ended with a lo FWST level, an SI, and an eventual transition to ES-1.3. An SI was occurring as a result of the feed and bleed process, not the result of any improper actions by the applicant, and when the scenario was stopped, the crew had not reached the step in the procedure to evaluate SI termination criteria. Therefore SI was continuing in accordance with proper procedure use and adherence and not a consequence of the applicant's actions. The crew did not receive a lo FWST level and did not enter ES-1.3. Per discussion with the Control SRO of the other crew which performed this scenario, they did reach lo FWST level. The consequence of the crew receiving an unnecessary feedwater isolation signal is faulty, as this signal had been blocked using Enclosure 6 of FR-H.1. The scenario involved returning feedwater to the S/G using CM/CF system. Had there been a main steam isolation signal it would have been noticed and reset during the depressurization of the S/Gs. The crew was in this part of the procedure when the scenario was stopped. The conclusions reached by the examiner caused him to unnecessarily grade the applicant in too severe a manner as the consequences of her actions as stated by the examiner are faulty.

A. Applicant and Examiner's Actions:

During the scenario while the applicant was the RO, the applicant took manual control of the feedwater pumps to provide adequate feed flow to the S/G. This was in response to an instrument failure(steam header pressure failed low) which caused the feed pump control circuitry (in automatic) to decrease the feed flow to the S/G. In this type transient, the operator's primary responsibility is to restore feed flow to the S/Gs to return level to normal. The examiner, during post scenario questioning asked the applicant why she had run the feed pumps with a mismatch. The examiner did not quantify the mismatch to the applicant. The applicant's replied to the examiner correctly that the feedwater pumps are normally run with a mismatch. The applicant did explain to the examiner that she had been adjusting the feed flows but was doing so slowly allowing the system to settle after each adjustment of the feed pump speed to prevent inducing another transient. Using the flows stated in Form ES 303-1, "A" pump would have been carrying approximately 42% of the load with "B" pump carrying approximately 57% of the load. The applicant was adjusting the feedwater pumps during the event and as she explained to the examiner, she was doing so slowly due to the sensitivity of the feed pumps and to prevent inducing another transient.

B. Applicant's Assessment of Claimed Lack of Knowledge:

The examiner asked the applicant why the feedwater pumps were run with a mismatch. She explained this to the examiner as noted above. The applicant was responding to a transient on the feedwater system and adjusting feedwater pump speed slowly while maintaining S/G level. There was no discussion associated with the amount of mismatch which would normally be observed when the feedwater pumps are run in automatic at any given power level. There was no discussion concerning potential problems associated with operating with a large mismatch.

C. Applicant's Assessment of Claimed Lack of Knowledge:

The examiner drew an incorrect inference regarding applicant knowledge. At no time was the applicant asked about the mismatch associated with the feedwater pumps while operating in automatic. She was never questioned about the basis for the mismatch or the size of the mismatch while operating the feedwater pumps in automatic. She was only asked why she had run the feedwater pumps in manual with a mismatch. Her response was correct as in automatic the feedwater pumps are run with a mismatch. She was not questioned as to the size of the mismatch. The examiner incorrectly stated the applicant displayed a lack of knowledge. There is no data either by direct observation or direct questioning to support the claimed lack of knowledge.
There is no evidence or data to support the consequences proposed by the examiner. Per discussion with the system engineer [redacted]) the consequences of running these pumps with a mismatch will not weaken the pump unless one pump is robbed of flow or reaches pump runout. At no time in this scenario was either pump robbed of flow or did either pump reach runout conditions. These pumps are variable speed pumps, unlike centrifugal pumps which are single speed pumps. With centrifugal pumps there is an issue with mismatch, but with variable speed pumps like the feed water pumps, as long as the flow rates are above minimum and below runout, operating the pumps with a mismatch will not cause one pump to weaken quicker than the other. It would not be desirable to run the feedwater pumps for long periods with a large mismatch but during a transient such as temporary loss or rapidly decreasing feedwater flow, the priority for the operator is to return feed flow to the S/G to restore level.

D. Conclusion:

The examiner made an incorrect inference of a claimed lack of knowledge associated with operating the feedwater pumps in automatic with a small mismatch. The applicant was never questioned about the automatic control of the feedwater pumps. Therefore, there is no basis by either direct observation or data to support the claimed lack of knowledge. The examiner also stated an incorrect consequence of operating

the feedwater pumps with a mismatch. Due to the incorrect inference and the incorrect consequences, the examiner graded the applicant too severely on this item.

During this scenario the applicant was the RO. Due to a failure of the steam header pressure instrumentation feeding the feedwater pump speed control circuitry, the applicant took feed pumps to manual and began to increase their output to bring S/G levels back to program level. To accommodate this, feed flow had to be higher than steam flow. During an event, the applicants were trained to diagnose the problem quickly if possible but the operator's first priority was to secure the transient and to stablize the plant and the transient. Once the feed pumps were somewhat stable, the RO looked at the computer and vocalized that delta P indication was not correct and the crew began scanning the boards and the BOP was the first to recognize the steam header pressure had failed. Again, this was identified by a member of the crew. Determining exact failures and seeing guage failures is often dependent upon ones vantage point in the control room and dependent upon which of the inputs one chooses to check first. For example, in this case a feedwater header pressure failure high could have caused the same effect to the feed pumps.
In a different simulator crew performing this same scenario, the RO and BOP were both watching the feed pumps and S/G levels and the Control SRO called to their attention to check main steam header pressure and to check feed header pressure. This crew did not receive a deficiency in this area of their scenario. This is an example of the applicant being graded too severely by the examiner.

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Applicant's Claim of Severe Grading and Incomplete Information:

Note: This claim by the applicant references two separate comments by the examiner. The event was the same and the comments were similar which enabled the applicant to combine her appeal comments on this issue.

During this scenario, the applicant was the RO. During a transient situation, once the transient had begun to settle out, rods began moving in. The applicant checked the three inputs to rod control which are turbine impulse pressure, nuclear power and Tave. She did not see any indication of a change in these parameters to cause rod movement. The applicant placed the rods in manual at which time the applicant looked at the rod motion demand indicator. She informed the SRO that the rod motion indicator showed a positive mismatch possibly due to the feedwater transient, and with the concurrence of the SRO she placed rods back in auto, at which time the rods stepped in a few steps at 8 steps a minute. There is no mention in the examiner's report about the time frame the rods were not stepping in. This represents a lack of completeness of the report and a lack of including pertinent information. The rods were in manual for only a brief time frame. During this time frame no manual control manipulations associated with the rods was attempted.
This is an example of incomplete information and too severe grading by the examiner.

Applicant's Claim of Severe Grading, Incomplete Information, and Inaccurate Information:

During this scenario the applicant was the RO and the RO and BOP were working together to cooldown the NC system and to maintain the S/G levels appropriately. The SRO had requested the BOP to feed the S/Gs using the CA valves to maintain level while the RO dumped steam from the S/Gs. During this time due to direction by the SRO, the RO had been relieved of monitoring S/G levels. There is no documentation of this aspect of the event in the examiner's report. Once this part of the scenario was complete, it again became the RO's responsibility to maintain level correctly. As soon as the applicant recognized levels were below 22 %, the applicant began feeding the S/Gs.
The examiner stated that the applicant failed to modulate the CA flow. The procedure directs the operator to throttle feed flow to maintain the S/G levels. This guidance does not imply that the CA valves cannot be either full opened or full closed because if level is at 50%, correct operator action would be to close the valves or if S/Gs were approaching low feedwater levels, especially if conditions were approaching loss of heat sink setpoint, the correct operator action would be to open the valves. During the performance of this type of scenario, there are times during which these valves must be either closed or opened fully. When in EP/1/A/5000/E-0, the valves are closed to prevent unnecessary cooldown once proper S/G levels are obtained. Once procedural direction is given to control S/G levels, and the RO recognizes there is a S/G tube rupture, the RO should feed up S/G as close to the upper end of the setpoint as possible to begin the setup for EP/1/A/5000/E-3.
The examiner states that failing to keep level above 22% results in losing the preferred heat sink and undercooling the RCS. Per the basis document and training document associated with the step to maintain S/G levels between 22% and 50%, the basis for the 22% is to provide a cushion or a margin to prevent the actuation of the auxiliary feedwater signal because actuation of this signal could result in potential releases from the ruptured S/G.
As a result of (1) incomplete information captured and documented by the examiner and (2) inaccurate consequences stated by the examiner, the examiner inappropriately graded the applicant too severely.

A. Applicant's actions:

During scenario #3 the applicant was the BOP. During the load increase the applicant took manual control of charging, The applicant discussed this with the Control Room SRO and with his concurrence, she documented the controller position on a CCC card and manually controlled charging. This was done to maintain positive control over the fluctuations in the NV system during the load increase. This action is allowed per MNS quidelines in OMP 2-2 and OMP 4-1. There was no discussion between the applicant and the examiner concerning this issue.

B. Applicant's Assessment of Claimed Lack of Knowledge:

There is no documentation to support the claimed lack of knowledge in evaluating plant performance and making operational judgements based on operating characteristics and instrument interpretation. The applicant chose to manually control charging after concurrence was obtained from the Control Room SRO and after the valve position had been documented on a CCC card. The actions taken by the applicant were in accordance with both MNS quidelines and management concurrence. The actions taken by the applicant are common actions taken by Control Room Operators during a load increase to better control level swings. By her actions, the applicant did not negatively affect the operation of the NV system. The examiner states in the consequences that the applicant's actions were equivalent to the automatic function of the controller. The examiner also states that the applicant's control was more coarse that had the controller been in automatic and that swings would have been more exaggerated and may have initiated a more severe system transient. There is no documentation or direct observation of the inability of the applicant to maintain the system within operational parameters or of any transients caused by her actions. In a similar situation during scenario #1, a different applicant acting as BOP performed the same actions as this applicant and he was not penalized on his grading for this action. The applicant acting as BOP in scenario #1 was not graded by the same examiner as this applicant.

C. Reasons for Discrepancy Between Applicant and Examiners Assessment

The examiner drew an incorrect inference regarding applicant knowledge associated with manual control of NV system charging. There was no discussion or follow-up question associated with the use of manual control. In conflict with this claim by the examiner is the statement by the examiner that the consequences were minor in that the applicant's actions were equivalent to the automatic function of the controllers.

D. Conclusion

The applicant's actions are in accordance with MNS quidelines. The applicant conferred with management (Control Room SRO) prior to taking the component to manual and properly documented the position of the component using a CCC(configuration control card) card. The applicant maintained positive control over the component and operated the system within the design basis. There is no data or information to support the claim of lack of knowledge associated with evaluating plant conditions and making operational judgements.
There is an issue of inconsistency between the grading of the two applicants by different examiners, and this applicant was graded too severely.

References: Form ES 303-1 page 3 of 31
Form ES 303-1 Cross Reference page 17 of 31
Attachment #3

This is an example of the applicant being graded too severely. During this point in the scenario, the applicant in the BOP position was adding Boron to the NC system to control NC system temperature as well as monitoring system changes associated with the event.
At no time during the performance at the BOP position did the applicant allow Regenerative Heat Exchanger Letdown Temperature to reach a point where there would be steam flashing in the letdown line. The REGEN HX LETDN HI TEMP alarm actuates at 395 degrees. At normal letdown pressure of 350 psig, flashing would occur at approximately 432 degrees. This temperature alarm actuates well below the point where flashing could occur to enable operator action to correct the situation. Upon receiving this alarm which actuated one time, the applicant took action per the Annunciator Response Procedure (ARP) to correct the situation. There is no information or direct observation to support a major system perturbation resulting in operating outside the design basis. This alarm is common during certain testing and flow balance procedures. As noted above, the REGEN HX LETDN HI TEMP alarm actuates well below the point any system disturbances would occur. Per discussion with the system engineer (see attachment # 3) the actuation of the REGEN HX HI TEMP alarm does not constitute operation outside the design basis of the NV system nor does the receipt of the alarm constitute flashing in the letdown line. At no time were the consequences suggested by the examiner experienced. There was no evidence of flashing in the letdown line supported by the fact the Letdown Relief Hi Temp alarm never actuated nor were there any pressure or temperature fluctuations on any of the control board meters associated with the letdown line. The applicant corrected the situation promptly upon receipt of the alarm and the alarm condition cleared. There is a claimed lack of knowledge that the applicant did not anticipate operational changes and failed to scan the boards. There is no information to support a claimed lack of knowledge. This is an example of incorrect inference by the examiner. There was never any discussion between the applicant and the examiner concerning this issue to support a lack of knowledge. The conclusions stated by the examiner caused him to unnecessarily grade the applicant in too severe a manner as the consequences of her actions as stated by the examiner are incorrect. (see attachment #3)

References: Form ES 303-1 page 3 of 31
Form ES 303-1 Cross Reference page 20 of 31

A. Applicant's Actions:
During this scenario, the applicant was the BOP and the applicant does not wish to appeal the issues associated with applicant's actions with one exception. The Control Room SRO was the member of the crew who noticed the channel select switch was not in the correct position.

B. Applicant's Assessment of Claimed Lack of Knowledge:
During post scenario questioning, the examiner asked of the applicant " What does Channel 2 of pressurizer pressure control?" The applicant answered this by stating that Channel 2 controls the opening of PORVs NC32 and NC36. The examiner asked "how channel 2 affected pressurizer heaters?" The applicant answered that it did not affect the control of the heaters. The examiner never asked the applicant to explain the difference between the control functions associated with the different positions on the selector switch. As the applicant was explaining her actions to the examiner, she did explain to him that by mispositioning the switch, she had placed the failed channel in service as the backup channel. In this explanation, the applicant told the examiner that first channel was controlling and the second channel was backup. The questions asked by the examiner were confusing and the applicant asked several times for clarification of the exact question.

C. Reasons for Discrepancy Between Applicant and Examiners Assessment:
During post scenario questioning, the examiner asked the applicant to review her actions and the implications of her actions, which she did. The examiner asked questions in a confusing manner to the applicant and she had to ask him to rephrase or repeat questions as they were not clear to her. The applicant was never asked to explain the control functions associated with the first and second digit of the Pressurizer Control Selector Switch as it was rotated through the three positions.

D. Conclusion
The examiner drew an incorrect inference regarding applicant knowledge based on incomplete information. The examiner exhibited difficulty in conveying questions to the applicant. The applicant was never asked to explain the first and second digits of the Pressurizer Pressure Control Selector Switch as it was rotated through the three positions. The applicant, by explaining her actions to the examiner, did explain the result of the mis-position which essentially explains the functions associated with positions on the switch. As a result of the incorrect inference by the examiner, the applicant was graded too severely.

A. Applicant and Examiners Actions:

During scenario #3 the applicant was the BOP. The applicant took control of charging as a result of the load increase to maintain positive control over charging. During load changing maneuvers, the inability to maintain Tave constant often requires the operator to place level control in manual. The applicant did not take control of charging based on any perception on her part that there had been a failure of a controller to respond in automatic. During the load increase, the applicant took manual control after conferring with the Control Room SRO and properly documenting on a CCC card.

B. Applicant's Assessment of Claimed Lack of Ability:

The applicant took control of charging based on her desire to maintain positive control of level perturbations as load was increased. This action is in accordance with MNS guidelines and management concurrence. Due to the level swings created during a load increase on the simulator, this action is consistent with training quidelines and skill of the craft operation. The Control Room SRO concurred with the applicant's actions and the action was properly documented.

C. Reasons for Discrepancy Between Applicant and Examiners Assessment

The examiner drew an incorrect inference regarding applicant's ability associated with manual control of NV system charging. The applicant did not take control of NV charging based on any assumption of automatic failure of a controller. There were no follow-up questions or discussions associated with the manual control.

D. Conclusion:

The applicant's actions are in accordance with MNS guidelines. The applicant conferred with management Control Room SRO) and properly documented the position of the component using a CCC card. The applicant operated the system correctly and there is no documentation or discussion to support a lack of ability. The applicant was inappropriately penalized for this action.

References: Form ES 303-1 page 3 of 31
Form ES 303-1 Cross Reference page 26 of 31
Attachment #3

This is an example of the applicant being graded too severely. At no time during the performance at the BOP position did the applicant allow Regenerative Heat Exchanger Letdown Temperature to reach a point where there would be steam flashing in the letdown line. The REGEN HX LETDN HI TEMP alarm actuates at 395 degrees. At normal letdown pressure of 350 psig, flashing would occur at approximately 432 degrees. This temperature alarm actuates well below the point where flashing could occur to enable operator action to correct the situation. Upon receiving this alarm which actuated one time, the applicant took action per the Annunciator Response Procedure (ARP) to correct the situation. There is no information or direct observation to support a major system perturbation resulting in operating outside the design basis. As noted above, the REGEN HX LETDN HI TEMP alarm actuates well below the point any system disturbances would occur. Per discussion with the system engineer (see attachment #) the actuation of the REGEN HX HI TEMP alarm does not constitute operation outside the design basis of the NV system nor does the receipt of the alarm constitute flashing in the letdown line. At no time were the consequences suggested by the examiner experienced. There was no evidence of flashing in the letdown line supported by the fact the Letdown Relief Hi Temp alarm never actuated nor were there any pressure or temperature fluctuations on any of the control board meters associated with the letdown line. The applicant promptly corrected the situation promptly upon receipt of the alarm and the alarm condition cleared.
There is a claimed lack of ability that the applicant failed to manipulate the controls in an accurate and timely manner resulting in major system perturbations resulting in operating parameters deviating outside design specifications. As noted above and on attachment #3, there is no data to indicate any major system perturbations occurred, on the contrary, the prompt action by the applicant in response to the alarm quickly restored the in alarm condition.
In conclusion, this is an example of inaccurate consequences draw by the examiner and of the applicant being graded in too severe a manner.

Section 3

July 11, 2000

Memo to File

Subject: Interview with [redacted]
Re: NRC License Exam

The following are comments made to me by [redacted] regarding her concern about an NRC examiner and his evaluation of her license exam.

[redacted] said the simulator portion of her exams began on Monday, Tuesday, and Wednesday of the first week of testing. She said simulator testing includes three Duke applicants with each applicant having at least one examiner assigned to him/her. On Thursday and Friday they were tested on administrative JPMs (Job Performance Measures). This is typically a one on one test. Each applicant keeps the same examiner throughout the testing process. [redacted] said she was assigned lead examiner, Charles Payne, and a trainee examiner, Glen Salyers.

[redacted] indicated that two weeks prior to the simulator exams they were told that there would be observing NRC examiners who are trainees. When the examiners arrived she discovered that a trainee would be doing her evaluation and the lead examiner would be evaluating the trainee examiner.

According to [redacted] the NRC assigns each examiner four applicants to evaluate. Thomas said she was in a group that consisted of [redacted], [redacted], and [redacted]. [redacted] pointed out that [redacted]l, [redacted], and [redacted] are ex-Navy and the trainee examiner was also ex-Navy. [redacted] felt this group was not a representative sample. She said there is a difference in experience level, comfort level, and knowledge level between the three ex-Navy applicants and a female Engineer.

[redacted] said the trainee examiner, Salyers, made numerous mistakes administering the JPMs. She said this can be substantiated by written comments she has received from [redacted], [redacted], and [redacted].

During simulator testing [redacted] said she was evaluated along with another engineer, [redacted]. In simulator testing three positions must be filled during the testing. [redacted] said she was evaluated in all three positions but [redacted] was only evaluated in two positions. [redacted] felt this was unfair because it was subjecting her to a set of conditions that [redacted] was not subjected to. [redacted] said the decision to place them into these positions was determined by the NRC examiners prior to us entering the simulator for testing.

[redacted] said she discovered after her simulator test that she and [redacted] had been tested on the same scenario. She said [redacted] and she performed the same actions of which she was given a lower grade than [redacted]. She says she can substantiate this by the grades

and conversations with [redacted]. She and [redacted] were both evaluated by Salyers. She said this incident would be included in her appeal to the NRC.

[redacted] said after day one of the simulator test Salyers came to her and asked her a question which she had trouble understanding. When asked to rephrase the question Salyers had trouble doing so to her understanding. After a third attempt [redacted] asked the lead examiner, Payne, to interpret. Payne was able to ask the question in an understandable way. [redacted] said she believes this may have set the tone between Salyers and her because Salyers was trying to look good in front of Payne.

According to [redacted] Salyers did not prompt with cues appropriately on Thursday and Friday during the admin portion of the JPMs. According to [redacted] other applicants had similar experiences with Salyers. During one of the JPMs Payne asked [redacted] a question that no one else was asked. [redacted] isn't sure why he did this. According to [redacted] the question didn't pertain to the satisfactory completion of the JPM.

During week two they took their written exam. On week three the NRC came back to administer JPMs to RO candidates and instant SRO candidates. These JPMs were for the control room and plant. (The admin JPMs were completed during week one). On day one of the third week during the first JPM [redacted] said she was forced to go further with her JPM than two other candidates. (Note: The two other candidates had different examiners.) At this point [redacted] felt that the decision was made that they were going to test me further in an attempt to fail me.

On either Monday afternoon or Tuesday morning of the third week [redacted] said she and [redacted] told [redacted], Operations Trainining Manager, about the unfairness of the examiners and how poor Salyers was at administering the JPMs. On Wednesday morning [redacted] asked [redacted] and [redacted] if Salyers had gotten any better? [redacted] said she told him maybe a little bit but [redacted] response was "hell no".

On Tuesday of the third week [redacted] said an incident occurred while leading Salyers and Payne through Turbine Building. According to Thomas Salyers bumped his head against a pipe and lost his hat. [redacted] said she told Salyers that he could not go look for his hat because of the safety danger. [redacted]s said she and Payne tried unsuccessfully to find it but had to acquire another hat for Salyers to wear. [redacted] feels this incident may have been an embarrassment to Salyers and he could have held this against her since she was the one leading them through the Turbine Building.

On Wednesday morning [redacted] told Chris Christianson, Payne's boss, of the NRC that she felt the examiners were intimidating her. According to [redacted]s his reply was they don't mean to be. [redacted] said intimidation to her meant that she felt she was being severely scrutinized. They made her feel she had to perform miles above everyone else to get a satisfactory rating.

According to [redacted] during a JPM in the Diesel generator room on Wednesday Salyers was not cueing correctly. [redacted] said she was trying to explain to him the correct way

the procedure was run. [redacted] said Salyers became angry and irritated with her and said you must perform this step by step and wait for me to cue you. [redacted] indicated his tone of voice and reaction made her feel very uncomfortable. [redacted] said Payne stepped in and told Salyers that she was only trying to explain to him the correct way the procedure is performed.

On Thursday during a timed JPM Salyers had trouble accessing the RCA because he was logging in inappropriately. [redacted]s said she pointed this out to him. Also, according to [redacted] he put his dosimetry on incorrectly of which she pointed out. [redacted] feels this may have been an embarrassment to Salyers in front of Payne.

Sometime during the third week [redacted] was riding in a car with Salyers and Payne going from the TTC to the plant. [redacted] said Salyers made a comment about going on a trip somewhere with his wife and how long it took to get there because he always had to stop for her to go to the bathroom. According to [redacted] this comment made her stop and think how many times during the past weeks she had requested a bathroom break that may have irritated Salyer. [redacted] said it was already a stressful situation and this comment just added to it.

[redacted] indicated that the NRC does not want you to see the book they carry with them. At one point during the third week [redacted] said she was following Salyers into the simulator. She said Salyers stopped abruptly and opened his book. [redacted] said she immediately stopped and walked a wide path around him. [redacted] indicated when she did this that Salyers looked at her in an accusatory manner. [redacted] said Payne noticed this and he told Salyers that he stopped right in front of her and she is only doing what she thinks is right.

[redacted] feels Salyers was being evaluated by his supervisor and needed to prove his worth by finding multiple flaws in at least one of the candidates. [redacted] feels he picked her because the other three applicants were ex-navy as himself. [redacted] doesn't know why Salyers had it out for her. She isn't sure if it was due to her being a female or not or due to the fact she didn't make him look good in front of his supervisor. [redacted] feels Salyers was biased in his evaluation. According to [redacted]s there are numerous inferences in his written evaluation of her that are not fact based. In one comment he stated that [redacted] displayed a lack of knowledge in basic electricity. [redacted] said this is incorrect because there is no basis for it and he never asked her any electrical questions. [redacted] said she has her North Carolina Electrical Contractor's license. Also, [redacted] said most of her work at Duke has been associated with electrical. She said this and other examples will be brought out in detail in her appeal.

[redacted] said after she was informed that she had not passed the NRC exam an employee at McGuire called her to tell her that he also had had problems with Salyers as had other people in Region II in the Emergency Planning arena. They had found him to be unfair. She was told that when he would leave a station they would think everything was okay but later to find that he had cited them for a violation.

[redacted]s feels that Salyers' inexperience added more stress to her. She said [redacted], [redacted], and [redacted]l were able to overcome Salyers' lack of experience due to their own experience with the processes. [redacted] felt that due to her inexperience Salyers' inexperience put her at a disadvantage.

[redacted]
Interviewer
Human Resources
McGuire Nuclear

Summary of Applicant's Assessment of Treatment by Examiner

This applicant contends that there was some bias involved in the examination and grading of the examination of this applicant by the examiner. The issues brought forth in this appeal are not coincidental or insignificant in magnitude. These issues represent a trend in the treatment this applicant received during her examination process. These issues are threaded throughout the documentation of the applicant's performance by the NRC examiner. The unfair treatment this applicant received along with all the other issues involved added considerable stress to the examination process. The motive behind this bias and unfair treatment is not for this applicant to speculate, but the results of this applicant's examination were influenced by this bias.

There are numerous examples documented in this appeal associated with improper use of cues by the examiner during the administration of the JPMs. This improper use involved cuing incorrectly, cuing at the wrong time, cuing slowly, or not cuing at all when a cue was required. Attachment 5 of this appeal includes accounts of other candidates experiences with this examiner which support this applicant's claims.

There are numerous examples of inconsistency by the examiner in his grading of different applicants. Attachment 5 of this appeal includes accounts of other candidates experiences to support the issue of inconsistency. This applicant was held to higher standards than other applicants performing the same task. She was evaluated in a Control Room position (BOP) while the other instant SRO applicant was not evaluated in this role. This is a clear example of inconsistency and bias as there was no reason for this to occur. This certainly put this applicant at an unfair disadvantage. It is this applicant's contention that comments associated with her performance in this position should be disregarded.

There are also examples of inconsistencies between the grading of individuals by different examiners. For at least 2-3 of the 7 applicants to be stopped much earlier in one scenario does not lend itself to the fair and equal treatment and grading of all applicants.

There are several accounts in this appeal of incomplete and inaccurate documentation by the examiner. Had this occurred once or twice it would not be an issue, but that is not the case. This appeal contains many instances citing this lack of completeness and accuracy. This inaccuracy and incompleteness led to the description of events that were not factually complete and ultimately led to the inaccuracy in the grading of this applicant.

There are several accounts of the examiner drawing incorrect inferences. The documentation and data associated with these incorrect inferences are throughout this appeal. There are also several accounts of the examiner drawing incorrect consequences associated with his perception of the applicant's knowledge or ability. Due to the lack of factual support, data, or direct observation to justify these inferences and consequences they should not be included in this applicant's report.

It is this applicant's opinion that had she been evaluated by one of the other examiners she would have certainly received a pass on the Operating Test. It is this applicant's belief that had she not been singled out and had she been graded without bias the outcome of her examination results would have been different. This bias led to heightened scrutiny of this applicant by the examiner. This bias was not only evident in the examiner's treatment of this applicant but also in his grading.

Conclusion

Conclusion:

The applicant has identified numerous areas of technical inadequacies associated with the examiner. Some of these inadequacies have been confirmed with the attachments to this appeal document. These areas of technical inadequacy include the examiner's: inability to cue correctly and promptly, making inferences without the data to support such inferences, failure to document accurately and completely, drawing consequences which are not fact based, and grading applicants in an inconsistent manner. All of these areas led to the applicant being graded too severely and inappropriately.

The applicant has also identified areas associated with unfair treatment of the applicant by the examiner. Any attempt to try to determine a motive for the examiner's behavior would be speculation. To attempt to separate these two areas while performing the review of this appeal would be an injustice.

During the applicant's examination she was subjected to an inordinate amount of scrutiny by her examiner. She was subjected to different examination conditions than the rest of the applicants, and she was held to higher standards.

As a result of these factors, this applicant feels she was unfairly and unjustly denied a license. She performed at a level deserving of a Senior Reactor Operator License from the Nuclear Regulatory Commission. Consequently, it is the opinion and desire of this applicant that the grade of Fail on the Operating Test documented June 23, 2000 Docket No. [redacted] be overturned to a grade of Pass.

Attachments

Attachment #1

LICENSE YEAR [redacted]

LICENSE NUMBER [redacted]

STATE OF NORTH CAROLINA

BOARD OF EXAMINERS OF ELECTRICAL CONTRACTORS

This is to Certify that:

[redacted]
Mooresville, NC
[redacted], Qualified

is duly registered and entitled to practice Electrical Contracting in the

LIMITED CLASSIFICATION
Limitation: No one project to exceed $25,000.00 and 600 volts maximum

until June 30, [redacted] *when this Certificate expires.*

Witness our hands and seal of the Board
Dated, Raleigh, N.C.

[redacted]
[redacted] *irman*
[redacted]
Secretary - Treasurer

[redacted]

From: [redacted] on 07/11/2000 10:30 AM

To: [redacted]/Gen/DukePower@DukePower
cc: [redacted]/Gen/DukePower@DukePower
Subject: Emergency Generator Voltage

[redacted],

There are several factors that exist when synchronizing the emergency diesel generator to the grid for testing. First, engine speed is increased slightly faster than grid frequency so that the synchroscope indicator is moving slow in the fast direction. When the synchroscope indicator is at approximately 1 to 2 minutes before the noon position the emergency breaker pushbutton is depressed to connect the generator in parallel with the grid. This compensates for any time delays that may occur in the switchgear, circuits, etc. (as well as other electrical and mechanical stuff occurring in the generator and engine). This also causes positive real power (current) to flow out of the generator to the grid, which prevents reverse power (motoring) situations. When the diesel is connected in parallel with the grid, the governor operates in droop mode and is magnetically locked into rotating at 60 Hz (grid frequency).

Likewise, the generator voltage is increased slightly higher than line voltage (typically 100 to 200 VAC). This range is typical in the industry (owners group discussions) for a 4160 VAC machine. The 4160 VAC generator is designed for a continuous overvoltage rating of 5% and this voltage range is less than 5%. Again, since the generator is operating in droop mode, generator voltage will immediately decrease and match line voltage, and reactive power (VARs) will flow out of the generator to the grid. This prevents the generator from being underexcited or a loss of field condition. Also, there is impedance associated with the generator, transformers, buss, etc. that will dampen the current rate of rise as well as protective relaying to protect the equipment. The 4160 VAC breakers are actually 5 kV breakers including the emergency breaker. In addition, the operator is present at the controls to manage diesel loading (kW, kVARs, pf, etc.). In summary, I have discussed this with the General Office and Catawba and a voltage deviation of 200 VAC to synchronize the emergency generator to the grid is not a concern and will not cause any equipment damage.

If you any questions or concerns, please contact me at 875-5923.

[redacted]
CEN Electrical Engineering

From: [redacted] on 07/11/2000 01:14 PM

To: [redacted]/Gen/DukePower@DukePower

cc:

Subject: Bases for Regen Letdown Hi-temp Alarm

The purpose of the of Regen Ht-X Letdown hi and hi-hi temperature alarms is primarily to warn of a charging and letdown mis-match. From a thermal stress analysis design standpoint, we keep track of severe transcients (loss letdown/charging) to ensure compliance with the design basis. Receipt of the hi-regen letdown temp alarm would not be characterized as a significant transcient. The regen letdown hi-temperature OAC alarm (375°F) is commonly rec'd during routine letdown flow reductions for containment entries, performance of monthly controlled leakage PT, rapid downpowers, etc. The annunciator hi-temp alarm (395°F) could provide a secondary function as advance warning of approach to flashing (Tsat is ~436°F for the normal letdown backpressure control 350 psig); however, flashing would only be expected due to a loss of charging, spurious closure of NV-1/2, or a malfunction of the letdown backpressure control valve. For these events the alarm would provide little insight/warning. The piping design downstream of the orifice block valves is 600 psig and 383°F; however, receipt of the hi regen letdown temp alarm would not result in exceeding the piping design temperature, since it is dependent on both temp and pressure (simultaneously).

[redacted]
07/11/2000 12:36 PM

To: [redacted]/Gen/DukePower@DukePower
cc: [redacted]/Gen/DukePower@DukePower, [redacted]/Gen/DukePower@DukePower
Subject: Priority for dispatching operator to LOCALLY trip reactor during an ATWS

It is my assessment that the license examiner's expectation that the SRO procedure reader (license candiate) delay potentially time critical steps in FR-S.1(ATWS) to dispatch operators to locally trip the reactor is inappropriate. Steps were performed in sequence established by the WOG. If the examiner feels that the WOG has assigned incorrect priority to local actions in FR-S.1, he should take this up with the utility or WOG, but not down grade a license candidate for following established sequence of steps.

If the examiner is trying to set expectations that we deviate from the sequence of steps in our emergency procedures, he is sending the wrong message. We do not want licensed operators to think they will be down graded for following the sequence of actions defined in emergency procedures. Exceptions may be required if the procedure is not written to cover the particular situation or based on 50.54x exceptions (reference OMP 4-3 sections for deviating from a procedure), but that certainly is not the case here. The license cadidate performed actions in expected sequence.

The following information may be used to evaluate when we should dispatch operator to locally trip the reactor during an ATWS.

The Westinghouse Owners Group (WOG) has prioritized operator actions to respond to an ATWS in rev 1C of the Emergency Response Guidelines (ERGs). Control room actions are required to be initiated first. These actions are as follows (with basis for their priority):
1. Try to trip the reactor or drive rods in from control room.
Basis: Control room manually initiated actions to shutdown the reactor can be initiated without delay.

2. Ensure the turbine is tripped.
Basis: A quick trip of the turbine is required to ensure the generic ATWS analysis is met for a loss of feed ATWS. This is why we installed the AMSAC system.

3. Ensure aux feedwater is initiated.
Basis: Early start of Aux feedwater is assummed in the generic ATWS analysis.

4. Initiate emergency boration.
Basis: Because this can be quickly initiated from the control room, the WOG has placed this action (to initiate shutdown of the reactor) before local actions to initiate a reactor trip.

5. Ensure containment ventilation isolation.
Basis: Again, because this action can be quickly initiated from the control room, the WOG has placed this action (to isolate the largest offsite release path) before local actions to initiate a reactor trip.

ERG Caution related to ensuring automatic actions occur for a combined SI and ATWS event.

6. Take local actions to ensure trips have occurred.
The ERG basis document for this step states "Local actions were delayed until now because they will be more time consuming to initiate and complete, but may still be effective."

Note that if additional crew members are available to initiate step 6 earlier, WITHOUT INTERUPTING the priority of actions defined by the WOG, it is prudent to perform this local action as soon as possible. This can be justified by OMP 4-3 (Use of Abnormal and Emergency Procedures), since we would be trying to ensure an automatic action occurrs. With a 3 man crew, it would be difficult for the SRO to stop reading the EP, get on the phone or radio with another operator, and communicate step 6 while still reading steps

1-5. Note that this local action is NOT assumed in the generic ATWS analysis to be successful.

Subj: **NRC exam**
Date: 7/9/00 4:34:37 PM Eastern Daylight Time
From: [redacted]
To: [redacted]
CC: [redacted]

Throughout my license exam the examiner seemed unprepared to administer the exam. Examples of this occurred while performing the JPM "Transfer to SSF-SSF Building Actions" after several steps which the examiner failed to give me cues or I had to ask for cues, his evaluator stopped the JPM and told the examiner he needed to give proper cues and in a timely manner so that the JPM could be completed correctly. Another example took place during the Initial Notification for an NOUE. After reading the initial conditions I asked for the NOUE RP, my examiner stated he did not have it and looked to his evaluator for assistance. His evaluator gave me the Alert classification RP and told me to make the notification using it skipping the steps that did not apply. The unpreparedness of my examiner added considerable stress to the examination process and impacted my overall performance.

Feedback and ques given during NRC walkthru for JPM's.

1. During a timed JPM at the SSF, the first step of the procedure is a flowpath choice. The candidate will proceed to start the diesel or move aroud these steps to immediatly start the standby make-up pump. The evaluator trainee gave an incorrect que which led me to skip starting the diesel. As I read this step and began to move on, the evaluator trainee realized his mistake and told me to re-read the step. He then gave me the correct que, and I proceeded to start the D/G.

2. During this same timed JPM (8 min's), the evaluator trainee's que's were slow on many steps. I had to wait for the evaluator in order to recieve the correct que in order to proceed.

3. Duing another timed JPM, immediate notification to State and Counties within 15 min's, the evaluator trainee was not prepared for a ~~setp~~ step where I needed a specific RP. I prompted the evaluator trainee that I needed that procedure and he stated that I already had it. I quickly went through my handouts again and then restated that I did not have that procedure. The evaluator trainee talked with the lead evaluator who was observing him, they then located the RP and gave it to me.

4. During this same timed JPM, I had to prompt the evaluator trainee to give me que's on several occassions in order to proceed quickly through the procedure and complete the JPM within the required time.

5. After the timed portion of this JPM was complete, I was trying to perform step 4 to authenticate, and I told the evaluator trainee that I needed the enclosure with the proper codes, and agin I was told that I already had this enclosure. I had to stop performing and show the evaluator trainee that I in fact did not have the proper enclosure. He took several moments to talk to the lead evaluator, then gave me the correct enclosure so I could finish the procedure.

6. After seeing the evaluator trainee during these JPM's, I felt he needed more training and although he was adequate for upgrade candidates, I don't believe he should have been evaluating new RO's or instant SRO's. I was able to continue due to my experience with JPM's and I knew when he needed to prompt and when I needed to ask for what I did not have in order to complete the required JPM's. New RO's and instant SRO's would not have this and this would of unneccessarily added to the stress that is natural in this situation.

[redacted]

[redacted] 7-8-00

The following page contains comments associated with the D/G JPM by [redacted]

When I performed this JPM I got to the step in the procedure that has you compare DG voltage to Line voltage and I stated that I would check the DG voltmeter. The examiner used his pen to point to a reading on the voltmeter. Then I stated that I would check the line voltmeter and the examiner once again used his pen to point to a reading on the line voltmeter. It was very hard for me to determine exactly values that the examiner was pointing to. I stated that it appeared to me that the DG voltmeter was reading 4000 volts and the line voltmeter was reading 4160 volts. I then stated that I would use the DG voltage raise DG voltage to match line voltage. The examiner then corrected the readings by once again pointing to the two different voltmeters. This time he indicated that DG voltage was 4160 volts and line voltage was 4000 volts. At this point I stated that I would use the DG voltage adjust to lower DG voltage to match line voltage. The mistake made by the examiner and the difficulty that I had in determining exactly what he was trying to indicate voltage was by using his pen added some confusion to my performance of this JPM.

Later in the same procedure I came to a point that several steps must be performed quickly to prevent a reverse power trip of the DG breaker. I indicated to the examiner that I would first walk myself through these steps to ensure that I knew the location of the controls and indications that I would be using to perform these steps. I talked myself through these steps and then stated that I was ready to begin performing these steps. I went through the steps and stopped after completing these steps expecting a cue from the examiner. I did not receive any cue so I again stated that I was ready to perform these steps. I went through the steps again, as I actually would have if I had been actually performing these steps and when I completed these steps I once again looked at the examiner for a cue. Once again I did not receive any cue. I was unsure why I had not received a cue but I knew that I had to get through this procedure so I again stated that I was ready to perform these steps. This time I stopped after every step and waited for the examiner to give me a cue. This time the examiner cued me after I completed each step. I felt that the examiner was not familiar with this procedure because while I was in training I performed all the steps quickly and when I completed the series of steps the trainer gave me the cues for all the steps. I was expecting this examiner to cue me in the same way that I had been trained to perform this task. It is much more realistic when this JPM is performed in this manner.

[redacted]

The following is an account of the JPM to depressurize the NC system to 1905 using aux spray performed by [redacted]

Procedure: EP/1/A/5000/ES-0.2 (Natural Circulation Cooldown)
EP/1/A/5000/G-1 (Generic Enclosures) Enclosure 3 (Establishing NV Aux Spray)

Task: Depressurize NC System to 1905 PSIG by performing EP/1/A/5000/ES-0.2 steps 13 thru 15

Initial Conditions: Cooldown is in progress per EP/1/A/5000/ES-0.2. NC system has been cooled to less than 550°F per step 12 of EP/1/A/5000/ES-0.2. All steps of EP/1/A/5000/ES-0.2 prior to step 13 were completed.

Step 13 of EP/1/A/5000/ES-0.2 directs you to depressurize the NC system to 1905 PSIG using NV aux spray per EP/1/A/5000/G-1 Enclosure 3.

EP/1/A/5000/G-1Enclosure 3

Step 1: If S/I has occurred, then observe Caution and note prior to step 3 and go to step 3.
Operator Response: Determined that no S/I had occurred so Operator proceeded to step 2.

Step 2: Refer to OP/1/A/6200/001A (Chemical and Volume Control System Letdown), Enclosure 4.7 (Operator Actions with NV aux spray or Excess Letdown in Service)
Operator Response: Cue given that another Operator would refer to OP/1/A/6200/001A.

CAUTION Raising charging flow will raise NV aux spray water delta T and raise spray flowrate.
NOTE Pzr spray water delta T can be determined by subtracting "Regen HX Charging Temp" from "Pzr Vapor Space Temp"

Step 3: Control charging and letdown flow in subsequent steps as required to:
*Maintain Pzr spray water delta T less than 320°F.
*Maintain Regenerative HX letdown temperature less than 380°F.

Step 4: If at any time normal letdown is lost, then immediately isolate NV aux spray.

Step 5: Close normal Pzr spray valves and leave closed while NV aux spray is used:
*1NC-27 (A Loop PZR Spray Control)
*1NC-29 (B Loop PZR Spray Control)
Operator Response: Both spray valves were taken to manual and closed.

CAUTION If excessive depressurization occurs, the following step may need to be performed immediately.

Step 6: If at any time NV aux spray must be stopped or reduced, then perform the following:
*If 1NV-13B (NV Supply to A NC Loop Isol) and 1NV-16A (NV Supply To D NC Loop Isol) are closed, then open 1NV-13B (NV Supply to A NC Loop Isol).
*If completely stopping NV aux spray is desired, then close 1NV-21A (NV Spray to PZR Isol)

Step 7: Open 1NV-21A (NV Spray to PZR Isol)
Operator Response: Valve opened

CAUTION The number of times the following valves are cycled should be kept to minimum, to limit the number of thermal transients on charging nozzle.

Step 8: If required to raise NV aux spray flow, then close the following:
*1NV-13B (NV Supply to A NC Loop Isol)
*1NV-16A (NV Supply To D NC Loop Isol)
Operator Response: Valves closed

Step 9: If procedure in effect has restored Pzr heaters, then manually operate Pzr heaters as desired to adjust rate of NC system depressurization.

Operator Response: Initially I did not secure any heaters. After a couple minutes I realized that pressure was not going down at a rate that I thought was needed so I secured the Pzr heaters one bank at a time to aid in the depressurization of the NC system.

Step 10: If maximum depressurization rate is desired, then perform the following:
*Ensure Step 8 has been completed.

Operator Response: Step 8 was completed so no actions were required

*Turn off Pzr heaters as required.

Operator Response: Heaters were turned off as explained in Operator Response to step 9.

*Raise charging flow up to 175 GPM while maintaining Pzr spray water delta T less than 320°F.

Operator Response: Charging flow increased to increase the rate of depressurization

*When Maximum depressurization rate is no longer required, then:
*If procedure in effect has restored Pzr heaters then manually operate Pzr heaters as desired to control NC pressure
*Reduce charging flow to normal while maintaining Regenerative HX letdown temperature less than 380°F.
*If NV aux spray is no longer required, then observe Caution prior to Step 6 and return to Step 6.

Operator Response: Pressure was now going down at a rate that I felt comfortable with so I monitored the pressure decrease. When pressure reached 1905 PSIG I returned to Step 6 as directed by Step 10 and opened 1NV-13B and I closed 1NV21A to secure NV aux spray. I then returned to EP/1/A/5000/ES-0.2 to perform Steps 14 and 15.

EP/1/A/5000/ES-0.2

CAUTION If Pzr pressure goes above 1955 PSIG, then Pzr S/I actuation circuit and Low Pressure Steamline Isolation circuit will automatically unblock.
NOTE After the Low Pressure Steamline Isolation signal is blocked, maintaining steam pressure negative rate less than 2 PSIG per second will prevent a Main Steam Isolation.

Step 14: Block S/I actuation circuits as follows:
*Check "P-11 Pressurizer S/I Block Permissive" (1SI-18) status light –LIT.

Operator Response: I checked the status light and it was lit.

*Depress "Block" on Pzr S/I block switches

Operator Response: "Block" pushbutton for A train and B train Pzr S/I block switches depressed.

*Depress "Block" on Low Pressure Steamline Isolation block switches.

Operator Response: "Block" pushbutton for A train and B train Low Pressure Steamline Isolation block switches depressed. After completing this step I checked NC system pressure and noted that pressure was increasing and that it was now at approximatly 1940 PSIG. I knew that at 1955 PSIG the Pzr S/I and the Low Pressure Steamline Isolation actuation circuits would automatically unblock so I went back to EP/1/A/5000/G-1 Enclosure 3 and opened 1NV-21A per Step 7 to restart NV aux spray to reduce pressure. While going back to EP/1/A/5000/G-1 Enclosure 3 NC system pressure increased to greater than 1955 PSIG and the Pzr S/I and the Low Pressure Steamline Isolation actuation circuits automatically unblocked. Also during the time that I was blocking the Pzr S/I and the Low Pressure Steamline Isolation actuation circuits and then restarting

NV aux spray charging flow was greater than letdown flow so the pressurizer was filling with water. Pressurizer level was approximately 75%. When NV aux spray was restarted pressure began to decrease rapidly due to the high water level (smaller bubble) in the pressurizer). I quickly stopped NV aux spray per EP/1/A/5000/G-1 Enclosure 3 Step 6 and then repeated Step 14 of EP/1/A/5000/ES-0.2 to block the Pzr Pressure S/I and the Low Pressure Steamline Isolation. After completing this step I went back to EP/1/A/5000/G-1 Enclosure 3 and opened 1NV-21A per Step 7 to restart NV aux spray to control pressure because pressure was once again starting to increase. I also reduced charging to a point that pressure was stable at 1905 PSIG with some NV aux spray still going to the pressurizer and then I proceeded to Step 15 of EP/1/A/5000/ES-0.2.

EP/1/A/5000/ES-0.2

Step 15: Maintain following plant conditions:
*NC pressure – at 1905 PSIG
*Pzr level – at 25%
*Cooldown rate based on NC T-Colds – less than 50°F in an hour
*NC temperature and pressure – within limits of data book curve 1.6

Operator Response: I noted the following conditions
*NC system pressure at approximately 1905 PSIG
*Pzr level at approximately 85% - I stated that at this time charging flow was less than letdown flow so pressurizer level was trending to 25%
*I checked data book curve 1.6 to ensure that NC temperature and pressure were within the limits of curve 1.6
I also noted that at this time the NC system temperature was greater than it had been at the start of this JPM. This was not consistent with the procedure that I was performing in that during this procedure a cooldown of the NC system should have been occurring. If a cooldown had been in progress it would have been easier for me to do the depressurization and to maintain the conditions required by Step 15 of EP/1/A/5000/ES-0.2. Since a cooldown was not actually in progress it was more difficult to perform this task and control system parameters.

The actions taken to perform this task were evaluated as satisfactory.

After completion of this JPM another candidate told me that when he did this JPM his examiner stopped him as soon as he initially got NC system pressure decreased to 1905 PSIG. This candidate's performance was also evaluated as satisfactory.

[redacted]

ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
17. **Attempt to establish feed flow from CM System as follows:**	
__ a. Check hotwell pumps - AT LEAST 2 PUMPS ON.	__ a. Start second hotwell pump.
__ b. Check condensate booster pumps - AT LEAST 2 PUMPS ON.	__ b. Start second condensate booster pump.
NOTE If feed and bleed has not been initiated, it is preferable to depressurize 2 S/Gs in the next step in order to: • Leave 2 S/Gs levels above Feed and Bleed criteria. • Minimize NC system cooldown.	
__ c. Depressurize at least one S/G to less than 510 PSIG in following steps.	
__ d. Close MSIV on S/Gs not to be depressurized.	
e. Check condenser available:	__ e. **GO TO** RNO for Step 17.i.
__ • "C-9 COND AVAILABLE FOR STEAM DUMP" status light (1SI-18) - LIT	
__ • MSIV on S/G(s) to be depressurized - OPEN.	
__ f. Place "STM PRESS CONTROLLER" in manual.	
__ g. Check "STEAM DUMP SELECT" - IN STEAM PRESSURE MODE.	g. Perform the following to place steam dumps in steam pressure mode: __ 1) Adjust "STM PRESS CONTROLLER" output to equal "STEAM DUMP DEMAND" signal. __ 2) Place "STEAM DUMP SELECT" in steam pressure mode.
__ h. **WHEN** "P-12 LO-LO TAVG" status light (1SI-18) lit, **THEN** place steam dumps in bypass interlock.	

ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
17. (Continued)	
__ i. Dump steam from S/G(s) to be depressurized to condenser at maximum rate while attempting to avoid a Main Steam Isolation.	i. Dump steam using S/G PORV on S/G(s) to be depressurized as follows: __ 1) Ensure Main Steam Isolation reset. __ 2) Ensure S/G PORVs reset. __ 3) Dump steam using S/G(s) PORV at maximum rate while attempting to avoid a Main Steam Isolation. 4) **IF** PORV on S/G(s) to be depressurized closed, **THEN** dump steam as follows, at maximum rate: __ a) Dispatch operators to open desired S/G(s) PORV (at valve). b) **IF** S/G PORV is unavailable, **THEN** evaluate using the following to dump steam: __ • Run TD CA pump. __ • Use steam drains **PER** EP/1/A/5000/G-1 (Generic Enclosures), Enclosure 19 (S/G Depressurization Using Steam Drains).
__ j. **WHEN** S/G(s) pressure is less than 510 PSIG, **THEN** stabilize pressure less than 510 PSIG, to avoid excessive cooldown.	
k. Close the following: __ • 1CF-35AB (A S/G CF Cont Outside Isol) __ • 1CF-30AB (B S/G CF Cont Outside Isol) __ • 1CF-28AB (C S/G CF Cont Outside Isol) __ • 1CF-26AB (D S/G CF Cont Outside Isol).	

NRC Documentation

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW SUITE 23T85
ATLANTA, GEORGIA 30303-8931

June 23, 2000

Docket No. [redacted]

[redacted]

Dear [redacted]:

This is to inform you that the grading of your operating test taken May 8 - 10 and May 22 - 25, 2000, in connection with your application for a senior reactor operator license for the McGuire Nuclear Station, indicates that you did not pass that operating test. As a result, it is proposed that your application be denied. Enclosed is a copy of the operating test results indicating those areas in which you exhibited deficiencies.

If you accept the proposed denial and decline to request either an informal NRC staff review or a hearing within 20 days as discussed below, this proposed denial will become a final denial. You may then reapply for a license in accordance with 10 CFR 55.35, subject to the following conditions:

a. Because you passed a written examination on May 19, 2000, you may request a waiver of that portion.

b. Because you did not pass the operating test administered to you on May 8 - 10 and May 22 - 25, 2000, you will be required to retake an operating test.

c. You may reapply for a license two months from the date of this letter.

If you do not accept the proposed denial, you may, within 20 days of the date of this letter, take one of the following actions:

- You may request an informal NRC staff review of the grading of your examination. Your written request must be sent to the Director, Division of Inspection Program Management, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Your request must identify the portions of your examination that you believe were graded incorrectly or too severely. In addition, you must provide the basis, including supporting documentation, such as procedures, instructions, computer printouts, and chart traces, in as much detail as possible, to support your contention that certain of your responses were graded incorrectly or too severely. The NRC will review your contentions, reconsider your grading, and inform you of the results. If the proposed denial is sustained, you will have the opportunity to request a hearing pursuant to 10 CFR 2.103(b)(2) at that time.

- You may request a hearing pursuant to 10 CFR 2.103(b)(2). Submit your request, in writing, to the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, with a copy to the Associate General Counsel for Hearings, Enforcement and Administration, Office of the General Counsel, at the same address.

You may not reapply for a license, pursuant to 10 CFR 55.35, until your license has been finally denied. Failure on you part to exercise one of these options within 20 days constitutes a waiver of your opportunity for informal review and your right to demand a hearing and, for the purpose of reapplication under 10 CFR 55.35, renders this letter of final denial of your application, effective as of the date of this letter.

If you have any questions, please contact me at (404) 562-4638.

Sincerely,

Harold O. Christensen, Chief
Operator Licensing and Human
Performance Branch
Division of Reactor Safety

Enclosures:
As stated

cc w/o enclosures:
[redacted], Vice President,
McGuire Nuclear Station
[redacted], Station Manager,
McGuire Nuclear Station
[redacted], Training Manager,
McGuire Nuclear Station

CERTIFIED MAIL - RETURN
RECEIPT REQUESTED

U.S. Nuclear Regulatory Commission Individual Examination Report					
Applicant's Name: [redacted]			Docket Number: [redacted]		
I	R	Examination Type (Initial or Retake)	Facility Name: McGuire		
		Reactor Operator	X	Hot	
X		Senior Reactor Operator (SRO) Instant		Cold	Facility
		SRO Upgrade		BWR	Description
		SRO Limited to Fuel Handling	X	PWR	

Written Examination Summary	
NRC Author/Reviewer: McGuire	Total Examination Points: **100**
NRC Grader/Reviewer: B. Holbrook	Total Applicant Points: **80**
Date Administered: May 19, 2000	Applicant Grade: **80%**

Operating Test Summary	
Administered by: C. Payne	Date Administered: 5/8-10/00 & 5/22-25/00
A. Administrative Topics	S
B. Control Room Systems and Facility Walk-Through	U
C. Integrated Plant Operations (Simulator Operating Test)	U

Examiner Recommendations					
Check Blocks	Pass	Fail	Waive	Signature	Date
Written Examination	X			Bob Holbrook	6/21/00
Operating Test		X		C. Curtis Payne	6/23/00
Final Recommendation		X		Michael E. Gantt	6/23/00

License Recommendation			
	Issue License	Signature - Supervisor	Date
X	Deny License	[signature]	6/23/00

Applicant Docket Number: [redacted]		Page 2 of 31
Category	**Evaluation (S or U)**	**Comment Page Number**
A. Administrative Topics		
1. Conduct of Operations	**S**	
2. Equipment Control	**U**	**4**
3. Radiation Control	**S**	
4. Emergency Plan	**S**	
B.1. Control Room Systems		
a. Align Containment Spray to Cold Leg Recirc	**S**	
b. Respond to RHR System Malfunction at Mid Loop	**S***	**5,6**
c. Depressurize RCS During Natural Circulation	**U**	**7-9**
d. Respond to Failure of SR NI's	**S**	
e. Re-synchronize the Generator to the Grid After Full Load Rejection	**S**	
f. Calculate Potentiometer Setting and Makeup to RCS	**U**	**10-12**
g. Terminate SI (Unit 2)	**S***	**13**
B.2 Facility Walk-Through		
a. Ensure Proper Response of Diesel VI Compressors During Loss of Instrument Air	**S**	
b. Transfer ETA to Normal Power Supply and S/D EDG	**U**	**14**
c. Emergency Borate RCS Locally (Unit 2)	**S**	

Applicant Docket Number: [redacted]

C. Senior Reactor Operator Integrated Plant Operations (Simulator Operating Test) Grading Summary

Competencies/ Rating Factors	Weight	3.0	2.0	1.0	Total	Comment Page No.
1. Alarms/Annunciators						
a. Prioritize	0.30	**0.90**	0.60	0.30		
b. Interpret	0.35	**1.05**	0.70	0.35		
c. Verify	0.35	**1.05**	0.70	0.35	**3.0**	
2. Diagnosis						
a. Recognize	0.25	**0.75**	0.50	0.25		
b. Accuracy	0.25	**0.75**	0.50	0.25		
c. Diagnose	0.25	0.75	**0.50**	0.25		**15**
d. Crew Response	0.25	**0.75**	0.50	0.25	**2.75**	
3. System Response						
a. Interpret	0.35	1.05	**0.70**	0.35		**16**
b. Attentive	0.20	0.60	**0.40**	0.20		**17**
c. Plant Effects	0.45	1.35	0.90	**0.45**	**1.55**	**18-20**
4. Procedures						
a. Reference	0.25	**0.75**	0.50	0.25		
b. Correct Use	0.50	1.50	1.00	**0.50**		**21**
c. Crew Implementation	0.25	0.75	**0.50**	0.25	**1.75**	**22**
5. Control Board Operations						
a. Locate	0.25	**0.75**	0.50	0.25		
b. Manipulate	0.25	0.75	0.50	**0.25**		**23-26**
c. Response	0.25	0.75	**0.50**	0.25		**27**
d. Manual Control	0.25	0.75	0.50	**0.25**	**1.75**	**28,29**
6. Communications						
a. Clarity	0.45	**1.35**	0.90	0.45		
b. Crew Informed	0.35	**1.05**	0.70	0.35		
c. Receive Information	0.20	**0.60**	0.40	0.20	**3.0**	
7. Directing Operations						
a. Timely Action	0.20	0.60	**0.40**	0.20		**30**
b. Safe Directions	0.40	**1.20**	0.80	0.40		
c. Oversight	0.20	**0.60**	0.40	0.20		
d. Crew Feedback	0.20	**0.60**	0.40	0.20	**2.8**	
8. Technical Specifications						
a. Recognize	0.40	**1.20**	0.80	0.40		
b. Locate	0.20	0.60	**0.40**	0.20		**31**
c. Compliance	0.40	**1.20**	0.80	0.40	**2.8**	

Applicant Docket Number: [redacted]

Form ES-303-1 Cross Reference	Comments
A.2	**TASK:** At 07:00 on March 11, 1B RHR pump was declared inoperable. The next day, at 11:00, March 12, 1A RHR pump became inoperable and T.S. 3.03 was entered. Later that day at 15:00, March 12, 1B RHR pump was declared operable. Based upon Technical Specification (TS) requirements, determine the maximum time that 1A RHR pump could be out of service. **EXPECTED ACTION:** The new adjusted time that 1A RHR pump was required to be operable would be 72 hours from when 1B RHR became inoperable plus a 24 hour extension permitted by the TS two train inoperable exception rule. **APPLICANT'S ACTION:** When 1B RHR pump became operable, the applicant exited 3.0.3 and incorrectly implemented the normal 72 hour TS to the time when 1A RHR initially became inoperable. The applicant failed to apply the 24 hour extension clause to the initial time 1B RHR pump was declared inoperable **LACK OF ABILITY:** The applicant displayed an inability to properly implement the TS rules and guidelines for tracking limiting conditions for operations. **CONSEQUENCES:** The applicant demonstrated the lack of ability to properly implement McGuire TS. While the applicant's action was conservative and would have prevented exceeding TS requirements in this example, the inability to use the TS within the prescribes rules of usage creates the potential for exceeding TS Limiting Conditions for Operation (LCO) in other circumstances. **REF:** TS 1.3 **K/A:** G2.2.23 2.6/3.8 **10 CFR:** 55.45(a)(13) - Demonstrate the applicant's ability to function within the control room team as appropriate to the assigned position, in such a way that the facility licensee's procedures are adhered to and that the limitations in its license and amendments are not violated.

Form ES-303-1 Cross Reference	Comments
B.1.b	**TASK:** Unit 1 was in Mode 5 with the RCS drained to approximately 10 inches. 1A RHR pump was in service. RHR flow suddenly increases due to an air line failure. The applicant was to recover control of the RHR system. A primary function of RHR is to control RCS temperature when shutdown and cooled down. Step 4 of task directed the applicant to restore the RCS to 105 F. **EXPECTED ACTION:** After restoring an RHR flowpath, the applicant should increase cooling through the RHR heat exchanger. The RHR pump discharge temperature is used for indication of RCS "system" temperature during RHR cooling. **APPLICANT'S ACTION:** The applicant did not know which of the many RCS temperature indicators to use during RHR cooling. The examiner observed the applicant continuously cycling between computer screens, chart recorders, and control board temperature indicators in an effort to monitor RCS "system" temperature for cooldown. Following completion of the task, the examiner asked the applicant which indication she was using to determine RCS temperature, the applicant responded with Tc, Th, Tave, incore, and RHR temperature indications. When the examiner asked specifically for the one indication that the applicant had used to determe that the RCS had reached 105 F, the applicant replied "Tave." **LACK OF ABILITY:** The applicant did not know which temperature indication to use during RHR cooling that was representative of RCS temperature. The applicant displayed a lack of ability to accurately monitor and control changes in RCS temperature associated with operation of the RHR system. **CONSEQUENCES:** In this case, the consequence of the applicant's lack of ability were minimal because the various temperatures only differed slightly. However, use of incorrect indication from a nonrepresentative area of the RCS could result in undercooling of the core during mid loop operation in other circumstances. **REF:** AP/1/A/5500/19 **K/A:** 005 A1.01 3.5/3.6 002 A1.03 3.7/3.8 **10 CFR:** 55.45(a)(7) - Safely operate the facility's heat removal systems, including primary coolant, emergency coolant, and decay heat removal systems, and identify the relations of the proper operation of these systems to the operation of the facility.

Form ES-303-1 Cross Reference	Comments
B.1.b	**TASK:** Unit 1 was in Mode 5 with the RCS drained to approximately 10 inches (Mid Loop). 1A RHR pump was in service. RHR flow suddenly increases due to an air line failure. The applicant was to recover control of the RHR system. Per Step 6 of AP/1/A/5500/19, the applicant is to "Check Pzr Level - Less than 76%." This was a non-critical step. **EXPECTED ACTION:** The applicant was expected to recognize that Pressurizer level was less than 76% and continue with the ACTION steps of AP-19. **APPLICANT'S ACTION:** The RCS was drained to 10 inches (Mid Loop). The applicant incorrectly read Step 6 of AP/19, "Check Pzr Level - LESS THAN 76%" as "Pressurizer Level - *GREATER* THAN 76%." The applicant answered the question as NO and proceeded to the RESPONSE NOT OBTAINED (RNO) column of the procedure. The applicant failed to complete non-critical Step 10 of the JPM. **LACK OF ABILITY:** The applicant displayed a tendency to misread procedural steps which resulted in deviating or transitioning from intended procedural actions. **CONSEQUENCES:** Had there been a system leak, the consequences of the applicant's procedural error would have been significant. The applicant's erroneous action bypassed the step (Step 7) which attempts to isolate any potential NC system leak. Because there was no leak in this instance, there were no adverse consequences. **REF:** AP/1/A/5500/19 **K/A:** G2.1.20 4.3/4.2 **10 CFR:** 55.45 (a)(13) - Demonstrate the applicant's ability to function within the control room team as appropriate to the assigned position, in such a way that the facility licensee's procedures are adhered to and that the limitations in its license and amendments are not violated.

Form ES-303-1 Cross Reference	Comments
B.1.c	**TASK:** A plant cooldown was in progress per ES-0.2, Natural Circulation Cooldown. RCS pressure was 2100 psig and RCS temperature was 545 F. The applicant was to depressurize the RCS system to 1905 psig using auxiliary spray. Steps 4 and 15 of the JPM were Critical Steps. They directed the applicant to not exceed a Regenerative Hx letdown outlet temperature of 380 F, or a pressurizer spray water delta T of 320 F. **EXPECTED ACTION:** While decreasing charging flow less than letdown flow to lower pressurizer level, the applicant was expected to monitor and maintain the regenerative heat exchanger letdown temperature less that 380 F and pressurizer spray water delta T less than 320 F. **APPLICANT'S ACTION:** The applicant allowed pressurizer level to increase to 92 percent. On two separate occasions while attempting to lower pressurizer level, the applicant decreased charging flow to less than letdown flow and exceeded 380 F on the Regenerative Hx letdown outlet temperature. **LACK OF ABILITY:** The applicant displayed the lack of ability to predict or monitor changes in parameters associated with operating the CVCS controls. **CONSEQUENCES:** Failure to maintain the regenerative heat exchanger letdown temperature less that 380 F results in thermal cycles and steam flashing of the letdown coolant downstream of the letdown orifice valve. Coolant flashing could induce water hammer resulting in increased component stresses with possible damage including system leakage. **REF:** ES-0.2 **K/A:** 004 A1.11 3.0/3.0 004 K5.35 2.5/2.9 **10 CFR:** 55.45 (a)(6) - Perform control manipulations required to obtain desired operating results during normal, abnormal, and emergency situations.

Form ES-303-1 Cross Reference	Comments
B.1.c	**TASK:** A plant cooldown was in progress per ES-0.2, Natural Circulation Cooldown. RCS pressure was 2100 psig and RCS temperature was 545 F. The applicant was to depressurize the RCS to 1905 psig using auxiliary spray. Once the P-11 light was lit, the applicant was to block SI and block Low Steam Line Isolation. **EXPECTED ACTION:** De-energize all pressurizer heaters, open the auxiliary spray valve, depressurize the RCS to 1905 psig, observe P-11 light lite, block SI and Low Steam Line Isolation, and stabilize RCS system pressure by varying auxiliary spray flow and the use of pressurizer heaters. **APPLICANT'S ACTION:** The applicant initially opened auxiliary spray valve 1NV-21 and left all 4 banks of pressurizer heaters energized. The applicant decreased RCS pressure to 1905 psig, verified that P-11 had actuated then blocked SI and Low Steam Line Isolation. Eight minutes later, RCS pressure increased to 2020 psig because the heaters had been left energized. On three occasions during the remainder of the JPM, the applicant opened and closed 1NV-21, and energized and de-energized the pressurizer heaters in attempts to control pressure. On two occasions, the applicant opened both 1NC-27 and 1NC-29 (the normal pressurizer spray valves) in an attempt to reduce RCS pressure. This had no effect because no RCPs were operating. The applicant depressurized the RCS to 1905 psig a second time, blocked SI and Low Steam Line Isolation. Reactor pressure was then successfully controlled at 1905. **LACK OF ABILITY:** The applicant displayed a lack of ability to manipulate the controls so that RCS pressure was decreased in a controlled manner. **CONSEQUENCES:** Inability to control RCS pressure decrease with associated blocking of SI and Low Steam Line Isolation could result in an inadvertant SI actuation. **REF:** ES-0.2 **K/A:** G2.2.2 4.0/3.5 **10 CFR:** 55.45 (a)(2) - Manipulate the console controls as required to operate the facility between shutdown and designated power levels.

Form ES-303-1 Cross Reference	Comments
B.1.c	**TASK:** A plant cooldown was in progress per ES-0.2, Natural Circulation Cooldown. RCS pressure was 2100 psig and RCS temperature was 545 F. The applicant was to depressurize the RCS to 1905 psig using auxiliary spray. Once the P-11 light was lit, the applicant was to block SI and block Low Steam Line Isolation. **EXPECTED ACTION:** None. **APPLICANT'S ACTION:** Upon completion of the JPM, the applicant noted that T-Cold had not decreased. The applicant stated: "I can't understand why Tc is not going down, RCS pressure has decreased." The examiner, asked the applicant to explain her statement. The applicant stated: "As pressure decreases, saturation temperature decreases, and Tc decreases." The applicant further stated that she had followed the procedure and that she had done the procedure before where Tc had decreased. **LACK OF KNOWLEDGE:** Under these conditions, RCS temperature is not a function of RCS pressure. The applicant displayed a lack of understanding of system operation and parameter interrelationships. The applicant displayed an inability to evaluate plant performance and make operational judgements based on operating characteristics, reactor behavior, and instrument interpretation. **CONSEQUENCES:** A lack of understanding of basic thermodynamics inhibited the applicant's ability to accurately assess plant conditions and expected system response. **REF:** ES-0.2 **K/A:** G2.1.7 3.7/4.4 **10 CFR:** 55.45 (a)(12) Demonstrate the knowledge and ability as appropriate to the assigned position to assume the responsibilities associated with the safe operation of the facility

Form ES-303-1 Cross Reference	Comments
B.1.f	**TASK:** Calculate Boric Acid Potentiometer setting and begin manual makeup to the Unit 2 VCT. Critical Step 6 required the applicant to determine the Boric Acid Potentiometer setting. Plant conditions were such that a setting of 3.94 should have been determined. **EXPECTED ACTION:** Calculate the Boric Acid Potentiometer setting to be 3.94 with an error band of 3.92 to 3.96. **APPLICANT'S ACTION:** The applicant calculated the Boric Acid Potentiometer setting to be 3.90. **LACK OF ABILITY:** The applicant displayed the inability to accurately calculate the Boric Acid Potentiometer setting based on specific plant conditions. **CONSEQUENCES:** The calculation of 3.9 would have resulted in a slightly lower VCT boron concentration than planned and an associated reactor power increase. **REF:** OP/2/A/6150/009, Encl. 4.5 **K/A:** 004 A4.07 3.9/3.7 **10 CFR:** 55.45 (a)(6) - Perform control manipulations required to obtain desired operating results during normal, abnormal, and emergency situations.

Form ES-303-1 Cross Reference	Comments
B.1.f	**TASK:** Calculate Boric Acid Potentiometer setting and begin manual makeup to the Unit 2 VCT. Critical Step 9 directed the applicant to set the Boric Acid Potentiometer to the setting calculated in step 3.6 (step 6 of the JPM) . **EXPECTED ACTION:** The applicant was expected to set the Boric Acid Potentiometer at 3.90 based on the value she calculated earlier in the task. **APPLICANT'S ACTION:** The applicant set the potentiometer to 3.39. The applicant pointed and verbally stated: "The small hand would be on 3, and the big hand would be on the last tick between 3 and 4, before the 4." **LACK OF ABILITY:** The applicant displayed the lack of ability to manually operate the CVCS controls properly during a manual makeup to the Unit 2 VCT. **CONSEQUENCES:** Adjusting the pot setting to 3.39 would have resulted in a significantly lower VCT boron concentration being injected into the reactor and a subsequent reactor power increase. Rather than blending boric acid at a required rate of 15.8 gpm, the applicant would have blended at a rate of 13.5 gpm. **REF:** OP/2/A/6150/009, Encl. 4.5 **K/A:** 004 A4.07 3.9/3.7 **10 CFR:** 55.45 (a)(6) - Perform control manipulations required to obtain desired operating results during normal, abnormal, and emergency situations.

Form ES-303-1 Cross Reference	Comments
B.1.f	**TASK:** Calculate Boric Acid Potentiometer Setting and begin Manual Makeup to Unit 2 VCT. Critical Step 7 directed the applicant to place the"NC SYS M/U Controller" switch to "Manual." **EXPECTED ACTION:** Locate the NC SYS M/U Controller and place its switch to manual. **APPLICANT'S ACTION:** The applicant initially placed the NC SYS M/U Pump switch to start rather than placing the NC SYS M/U Controller switch to manual as directed by the procedure. The applicant corrected herself after the examiner asked her to repeat the statement. **LACK OF ABILITY:** This is an example of the applicant's tendency to misread procedural steps which resulted in deviating or transitioning from intended procedural actions. **CONSEQUENCES:** None. The applicant subsequently corrected her error and correctly manipulated the proper control. **REF:** OP/2/A/6150/009, Encl. 4.5 **K/A:** G2.1.20 4.3/4.2 **10 CFR:** 55.45 (a)(13) - Demonstrate the applicant's ability to function within the control room team as appropriate to the assigned position, in such a way that the facility licensee's procedures are adhered to and that the limitations in its license and amendments are not violated.

Form ES-303-1 Cross Reference	Comments
B.1.g	**TASK:** A LOCA inside containment was in progress on Unit 2. EP/2/A/5000/E-1 had been implemented. SI termination criteria had been met per step 6 (of E-1). The applicant was instructed to perform EP/2/A/5000/ES-1.1 to secure SI flow. Because Charging Pump suction was not aligned to the FWST, a transition to EP/2/A/5000/G-1, Enclosure 18, per Step 6 of ES-1.1 was required. Step 4 of procedure G-1, Enclosure 18, had the applicant "Check NC Pressure greater than 1950 psig." **EXPECTED ACTION:** Recognized that current pressure of 1800 psig was less than 1950 psig and go to the RESPONSE NOT OBTAINED column of the procedure in effect. **APPLICANT'S ACTION:** When asked by the applicant, the examiner pointed to the pressure indication and verbalized that RCS pressure was 1800 psig. The applicant repeated that she understood RCS pressure was 1800 psig and incorrectly continued down the left hand ACTION/EXPECTED RESPONSE column rather than going to the right hand RESPONSE NOT OBTAINED column. **LACK OF ABILITY:** This is an example of the applicant's tendency to misread procedural steps which resulted in deviating or transitioning from intended procedural actions. **CONSEQUENCES:** Other than not following the procedure as required, the consequences were minor in this instance. In step 4, had the applicant gone to the RNO column it would have directed her to step 6, thus skipping step 5. Instead, the applicant performed step 5 which consisted of opening 1NV-241 (Seal Injection flow controller) to 50%. Opening NV-241in step 5 ensures adequate mini-flow for the charging pumps if reactor pressure is high during an ESF actuation. **REF:** EP/2/A/5000/G-1, Enclosure 18 **K/A:** G2.1.20 4.3/4.2 **10 CFR:** 55.45 (a)(13) - Demonstrate the applicant's ability to function within the control room team as appropriate to the assigned position, in such a way that the facility licensee's procedures are adhered to and that the limitations in its license and amendments are not violated.

Form ES-303-1 Cross Reference	Comments
B.2.b	**TASK:** Unit 1 was recovering from a loss of power to 1ETA due to an inadvertent Normal breaker trip. Power had been restored to 1ETA from 1A D/G. The applicant was directed to return 1ETA to the Normal power supply and shutdown the D/G locally. Critical Step 6 of the JPM directed the applicant to "Use the 1A D/G Volts Adjust handle and match D/G voltage and line voltage." **EXPECTED ACTION:** With a line voltage of 4000V and D/G Volts meter indicating 4160V, adjust the D/G voltage to match line voltage. **APPLICANT'S ACTION:** When asked by the applicant on three separate occasions, the examiner each time indicated on the meters and verbally stated three times that line voltage meter indicated 4000V and D/G Volts meter indicated 4160V. Despite this information, the applicant failed to adjust the D/G voltage to match line voltage. The applicant explained during her performance that both voltages were within the specification band of 3960 to 4360 and thus did not need to be adjusted. **LACK OF KNOWLEDGE:** The applicant displayed a lack of knowledge in basic electricity and a weakness in procedure usage. The applicant was not aware that any difference in voltage between the two power sources would result in circulating currents between the two power sources with the potential for tripping the breaker or equipment damage. The specification band given in the procedure was provided to allow for some variability in the line voltage. There was no procedural intent to allow up to 400V difference between in-coming and line voltages during paralleling operations. In fact the opposite was true. It was preferred to parallel the two sources with as close to zero differential voltage as possible. **CONSEQUENCES:** Had the 160V difference specified in this JPM existed while actually closing the Normal feeder breaker in the plant, equipment damage could have occurred. Additionally, had someone have been in the immediate area of the Normal feeder breaker during the performance of this task, personnel injury could have occurred as well. **REF:** OP/1/A/6350/002, Encl. 4.3 **K/A:** 064 A2.03 3.1/3.1 **10 CFR:** 55.45 (a)(5) - Observe and safely control the operating behavior characteristics of the facility. 55.45 (a)(6) - Perform control manipulations required to obtain desired operating results during normal, abnormal, and emergency situations.

Form ES-303-1 Cross Reference	Comments
C.2.c	**Scenario 2, Event 4:** Main Steam Header Pressure Instrument Failure - LO **EXPECTED ACTION:** After identifying and responding to the Main Feed pump control problem, the applicant (using knowledge of system design and inputs) should quickly scan the applicable control board parameters and within 30 seconds diagnose that the Main Steam Header Pressure Instrument had failed low. **APPLICANT'S ACTION:** As RO, the applicant was quick to detect there was a feedwater problem, but failed to diagnose the problem as a Main Steam Header Pressure Instrument failure. Approximately 6 minutes after noting the feedwater problem, the applicant still had not determined the root cause. After reporting continued problems with feedwater delta P, the BOP identified the Main Steam Header Pressure Instrument failure. **LACK OF KNOWLEDGE:** The applicant displayed a lack of design knowledge of the the Feedwater Pump speed control circuitry and the inputs that affect its proper function. **CONSEQUENCES:** The consequences were minor once the Feedwater Pump controllers were placed in manual and feed flow re-established. However, due to the delay in the applicant's initial response, the S/G level transient was more severe than necessary and if not for the BOP's assistance would have resulted in a reactor trip on low S/G level. **REF:** OP-MC-CF-IWE **K/A:** 059 K4.05 2.5/2.8 **10 CFR:** 55.45 (a)(3) - Identify annunciators and condition-indicating signals and perform appropriate remedial actions where appropriate.

Form ES-303-1 Cross Reference	Comments
C.3.a	**Scenario 3a, Event 1:** Normal Operation - Load Increase **EXPECTED ACTION:** Observe the Reactor Coolant Pump (RCP) seal flow instrumentation, allow the indication to stabilize (if it was a minor fluctuation), verify that RCP seal flows had returned to normal, and adjust the parameters if they were not normal. Allow other Charging and Pressurizer system controllers to control in automatic. **APPLICANT'S ACTION:** Frequently during steady state operation, the applicant as BOP unnecessarily took manual control of Pressurizer level, Charging flow, and Seal Injection flow in response to minor fluctuations in RCP seal flow which caused momentary seal flow alarms. Most of the time, the alarm condition would clear after simply adjusting seal flow. However, the applicant would still take manual control of one or both of the Pressurizer level and Charging flow controllers and adjust the controls. **LACK OF KNOWLEDGE:** The applicant displayed a lack of knowledge in evaluating plant performance and making operational judgements based on operating characteristics and instrument interpretation. **CONSEQUENCES:** The consequences were minor in that the applicant's actions were equivalent to the automatic function of the controllers. However, the applicant's control of these controllers was more coarse than the controllers would have provided in automatic. Thus, swings in Charging flow, seal flow and Pressurizer level were more exaggerated and prolonged than necessary and, more importantly, may have initiated a more severe system transient. **REF:** OP-MC-PS-NV OP-MC-PS-NCP OP-MC-PS-IPE **K/A:** G2.1.7 3.7/4.4 **10 CFR:** 55.45 (a)(4) - Identify the instrumentation systems and the significance of facility instrument readings.

Form ES-303-1 Cross Reference	Comments
C.3.b	**Scenario 3a, Event 1**: Normal Operation - Load Increase **EXPECTED ACTION:** As BOP, the applicant was expected to monitor Regenerative Heat Exchanger outlet temperature while adjusting charging flow and control the effect of her manipulations such that normal operating parameters are maintained. (i.e., not cause an alarm). **APPLICANT'S ACTION:** While adjusting charging flow, the applicant received a Regenerative Heat Exchanger outlet temperature high alarm due to lack of attention and failure to anticipate the effect of her actions on other system components. (This same improper operator action, and resulting alarm, by the applicant was again observed during the Control Room Systems part of the examination. See comments for JPM - B.1.c above.) **LACK OF KNOWLEDGE:** The applicant demonstrated a weakness in anticipating predictable changes during control manipulations and failed to scan associated system instrumentation to confirm proper operation and to identify trends in parameters that were deviating from normal. **CONSEQUENCES:** Failure to maintain the regenerative heat exchanger letdown temperature less that 380 F results in thermal cycles and steam flashing of the letdown coolant downstream of the letdown orifice valve. Coolant flashing could induce water hammer resulting in increased component stresses with possible damage including system leakage. **REF:** OP-MC-PS-NV **K/A:** 004 A1.11 3.0/3.0 **10 CFR:** 55.45 (a)(6) - Perform control manipulations required to obtain desired operating results during normal, abnormal, and emergency situations.

Form ES-303-1 Cross Reference	Comments
C.3.c	**Scenario 3a, Event 2:** Pressurizer Pressure Channel 2 Failure HIGH with failure of a PORV (1NC-36) to re-close. **EXPECTED ACTION:** Recognize that Pressurizer Pressure Channel 2 failed high and that PORV (1NC-36) had failed to re-close. The applicant should place the Pressurizer pressure control selector switch in the 1-4 position, and manually close the PORV (1NC-36) block valve. **APPLICANT'S ACTION:** As BOP, the applicant rapidly repositioned the control and selector switches for the PORVs, PORV block valves, Pressurizer Pressure Control, and the Pressurizer Pressure Recorder in response to the failure without using any self-checking process. One PORV and its associated block valve switch remained in their normal position. The applicant incorrectly placed the PZR Press Control Switch in the 3-2 position. Placing the switch in the 3-2 position did not remove the failed detector from the circuit or close the opened PORVs. Approximately 1 minute into the event, RCS pressure continued to decrease to approximately 1960 psig. Another crew member (the RO) indicated to the applicant that one PORV was still open and unisolated, and that the Pressurizer Pressure Control Selector Switch was in the incorrect position (3-2 instead of 1-4) to select out the failed pressure channel. **LACK OF KNOWLEDGE:** During post scenario questioning, the applicant could not correctly explain which components were controlled by the first and second digit of the Pressurizer Pressure Control Selector Switch as it was rotated through the three positions (1-2, 1-4, and 2-3). The applicant displayed a lack of knowledge in evaluating plant performance and making operational judgements based on operating characteristics and instrument interpretation. **CONSEQUENCES:** Had the BOP not identified the control board problems to the applicant, the reactor would have unnecessarily tripped on low pressure followed by a Safety Injection actuation. **REF:** AP/1/A/5500/11 OP-MC-PS-IPE **K/A:** G2.1.7 3.7/4.4 **10 CFR:** 55.45 (a)(6) - Perform control manipulations required to obtain desired operating results during normal, abnormal, and emergency situations.

Form ES-303-1 Cross Reference	Comments
C.3.c	**Scenario 2, Event 4:** Main Steam Header Pressure Instrument Failure - LO **EXPECTED ACTION:** Leave the Rod Control System in automatic to respond to the secondary system transient as designed. **APPLICANT'S ACTION:** At the start of the feedwater transient, the Rod Control System was in automatic and properly inserting rods in response to the feedwater transient. As RO, the applicant inappropriately placed the Rod Control System in manual. Upon reporting her action to the SRO, the SRO stated that the Rod Control System was responding as designed and directed the applicant to return the system to automatic. **LACK OF KNOWLEDGE:** The applicant displayed a lack of knowledge in evaluating proper plant response to a loss of feedwater transient and making operational judgements based on operating characteristics and instrument interpretation. **CONSEQUENCES:** Placing the Rod Control System in manual kept reactor power at a higher level than allowed given the feedwater supply that was available and the secondary load present on the Main Turbine. This action delayed recovery of the unit from the transient. **REF:** AP/1/A/5500/06 **K/A:** G2.1.7 3.7/4.4 **10 CFR:** 55.45(a)(6) - Perform control manipulations required to obtain desired operating results during normal, abnormal, and emergency situations.

Form ES-303-1 Cross Reference	Comments
C.3.c	**Scenario 2, Event 4:** Main Steam Header Pressure Instrument Failure - LO **EXPECTED ACTION:** With the Feedwater Pumps in manual, the applicant was expected to match pump discharge flows. **APPLICANT'S ACTION:** As RO and with the Feedwater Pumps in manual, the applicant established the "A" pump discharge flow at 9E6 gpm, and "B" pump discharge flow at 12.5 E6 gpm. During the post scenario interview, the examiner asked the applicant why she ran the feedwater pumps in manual with a large (25-30%) mismatch. The applicant stated that in automatic the Feedwater Pumps normally run with a mismatch. However, the applicant failed to recognize that the mismatch is normally much smaller than what she had established. **LACK OF KNOWLEDGE:** The applicant displayed a lack of knowledge that the MFW Pumps operate with a slight mismatch in automatic to prevent the controllers from fighting each other. Consequently, because the controllers were in manual in this instance, there was no need to operate with any mismatch - particularly a mismatch as great as 25%. **CONSEQUENCES:** This performance weakness had minimal consequence on the Feedwater Pump operation except that one pump was wearing quicker than the other. **REF:** OP-MC-CF-CF **K/A:** 059 K5.05 2.0/2.2 **10 CFR:** 55.45 (a)(6) - Perform control manipulations required to obtain desired operating results during normal, abnormal, and emergency situations.

Form ES-303-1 Cross Reference	Comments
C.4.b	**Scenario 1, Event 6:** Loss of Heat Sink/ATWS **EXPECTED ACTION:** Depressurize the RCS to less than 1905 psig, when P-11 actuates, block SI and Low Steam Line Isolation. Cooldown using feedwater through the Main Feed bypass valves to the S/Gs and dumping steam to the main condenser. **APPLICANT'S ACTION:** As SRO, the applicant had difficulty working through FR-H.1, Step 15, which instructed the BOP to depressurize the RCS to less than 1905 psig. In the process of working through Step 15, the applicant skipped Step 16. Step 16 Blocked SI and Low Steam Line Isolation. **LACK OF ABILITY:** This is an example of the applicant's tendency to misread procedural steps which resulted in deviating or transitioning from intended procedural actions. The applicant displayed a lack of ability to execute specific system and integrated plant actions while implementing the Emergency Operating Procedures (EOPs). **CONSEQUENCES:** As a result of missing Step 16 of FR-H.1, the crew received an unnecessary SI as well as a MSIV and Feedwater Isolation. Instead of the scenario ending with the S/Gs being fed with the feedwater system through the Main Feedwater bypass valves and dumping steam to the condensers, the scenario ended with a low RWST level, an SI, and a eventual transition to ES-1.3, Transfer to Cold Leg Recirculation. **REF:** FR-H.1 **K/A:** G2.1.23 3.9/4.0 **10 CFR:** 55.45 (a)(12) Demonstrate the knowledge and ability as appropriate to the assigned position to assume the responsibilities associated with the safe operation of the facility.

Form ES-303-1 Cross Reference	Comments
C.4.c	**Scenario 1, Event 6:** Loss of Heat Sink/ATWS **EXPECTED ACTION:** The applicant had been previously informed that the MSIVs were shut, and should have gone to the RNO column of FR-H.1, Step 17i without being corrected by the crew. **APPLICANT'S ACTION:** As SRO while implementing Step 17i, the applicant incorrectly continued in the EXPECTED RESPONSE column which directed "Dump steam to the condenser at the max rate." The BOP questioned the applicant whether this action was appropriate since the MSIVs were shut earlier in the event thus precluding this option of removing heat from the S/Gs. The BOP then speculated that performing the RNO action steps would likely provide guidance for dumping steam to the atmosphere. **LACK OF ABILITY:** The applicant displayed a lack of ability to remain cognizant of plant conditions and to properly execute the Emergency Operating Procedures. The crew had to question the applicant on the propriety of her directives based on her failing to keep up with the status of plant conditions. **CONSEQUENCES:** The consequence of the applicant's oversight was minor in this instance. Had the BOP not noted the applicant's order as inappropriate for current plant conditions, it would have been self-identified when dumping steam to the condenser did not work. **REF:** FR-H.1 **K/A:** G2.1.23 3.9/4.0 **10 CFR:** 55.45 (a)(12) Demonstrate the knowledge and ability as appropriate to the assigned position to assume the responsibilities associated with the safe operation of the facility

Form ES-303-1 Cross Reference	Comments
C.5.b	**Scenario 3a, Event 2:** Pressurizer Pressure Channel 2 Failure HIGH with failure of a PORV (NC-36) to re-close. **EXPECTED ACTION:** Recognize that Pressurizer Pressure Channel 2 Failure HIGH with failure of a PORV (1NC-36) to re-close. The applicant should place the Pressurizer Pressure Control Selector switch in the1-4 position, and close the PORV (1NC-36) block valve. **APPLICANT'S ACTION:** The applicant rapidly repositioned the PORVs, and PORV block valves, Pressurizer Pressure Control Selector switch, and Pressurizer Pressure Recorder Selector switch. One PORV and its' associated block valve switch remained in their normal position. The applicant incorrectly placed the PZR Press Control Switch in the 3-2 position. Placing the switch in the 3-2 position did not remove the failed detector from the circuit or close the opened PORVs. Approximately 1 minute into the event, RCS pressure continued to decrease to approximately 1960 psig, at which point the RO indicated to the applicant that one PORV was still open and unisolated. The applicant closed the remaining PORV block valve. Approximately 2 minutes into the event, the applicant was trying to determine why the PORVs continued to have an open signal. For the second time during the instrument failure, the RO assisted the applicant and indicated that the Pressurizer Pressure Control Selector switch had been placed in the incorrect position. The applicant then placed the Pressurizer pressure Control Selector switch in the proper position (1-4). **LACK OF ABILITY/KNOWLEDGE:** The applicant's control board performance in response to this malfunction lacked proper self-checking skills. The applicant's action during this instrument failure displayed a tendency to hastily reposition switches that were associated with an instrument failure or system malfunction without validating the appropriateness of that manipulation. The applicant failed to evaluate plant conditions and take appropriate operator action based on those conditions. **CONSEQUENCES:** Had the RO not identified the control board mispositionings to the applicant, the reactor would have tripped on low pressure followed Safety Injection actuation. **REF:** AP/1/A/5500/11 **K/A:** G2.1.7 3.7/4.4 **10 CFR:** 55.45 (a)(6) - Perform control manipulations required to obtain desired operating results during normal, abnormal, and emergency situations.

Form ES-303-1 Cross Reference	Comments
C.5.b	**Scenario 2, Event 1:** Normal Controller for "A" S/G Fails Low **EXPECTED ACTION:** The applicant was expected to place the Feed Regulator Valve (1CF-32) in manual, select 1 A S/G 1CF-32 controller to alternate, then return the Feed Regulator Valve to automatic after restoring S/G level to normal. **APPLICANT'S ACTION:** When the failure occurred, the applicant as RO rapidly took 1 A S/G Feed Regulator Valve to manual. The applicant also took all four 1A S/G of the following control board switches to their alternate position: 1 A S/G Stm Flow Recorder — 1 A S/G Flow Recorder 1 A S/G Narrow Range Recorder — 1 A S/G 1CF-32 Normal/Alternate **LACK OF ABILITY/KNOWLEDGE:** This is an example of the applicant's lack of proper self-checking skills in response to plant malfunctions. The applicant's action during this instrument failure demonstrated a recurring tendency to hastily reposition switches without checking if she had the correct switch and verifying she was turning it to the correct position. The applicant failed to evaluate plant conditions and take appropriate operator action based on those conditions. **CONSEQUENCES:** In this instance, the consequence of the applicant's actions had no impact because three of the switches that were manipulated affected recorders only. **K/A:** G2.1.7 3.7/4.4 **10 CFR:** 55.45 (a)(6) - Perform control manipulations required to obtain desired operating results during normal, abnormal, and emergency situations.

Form ES-303-1 Cross Reference	Comments
C.5.b	**Scenario 2, Event 6:** S/G tube leak at 40 gpm that develops into a design basis tube rupture of 435 gpm. **EXPECTED ACTION:** The applicant was directed by the SRO to maintain S/G levels between 22% and 50%. While monitoring and maintaining RCS temperature, maintain a constant S/G level in the upper part of the control band to posture the plant for the upcoming cooldown as required in E-3. **APPLICANT'S ACTION:** As RO, the applicant failed to modulate auxiliary feedwater flow. The Auxiliary Feedwater valves were either full open or shut, and S/G level cycled between 22% and 50%. At one point, A & B S/G levels decreased to 20%. **LACK OF ABILITY:** The applicant displayed a lack of ability in maintaining S/G levels within operating limits during a S/G tube rupture. **CONSEQUENCES:** Failing to control S/G level less than 50% could result in overcooling the RCS while failing to control level above 22% risks losing the preferred heat sink and result in undercooling the RCS. **REF:** E-3 **K/A:** 038 EA1.44 3.4/3.4 **10 CFR:** 55.45 (a)(7) - Safely operate the facility's heat removal systems, including primary coolant, emergency coolant, and decay heat removal systems, and identify the relations of the proper operation of these systems to the operation of the facility.

Form ES-303-1 Cross Reference	Comments
C.5.b	**Scenario 3a, Event 1:** Normal Operation - Load Increase **EXPECTED ACTION:** The applicant was expected to monitor control board instrumentation (i.e. Regenerative Heat Exchanger letdown outlet temperature) while adjusting charging flow, and maintain parameters within their normal operating limits. **APPLICANT'S ACTION:** As BOP, the applicant failed to properly manipulate the charging flow controls and received a Regenerative Heat Exchanger outlet temperature high alarm. The applicant had reduced charging flow to less than letdown flow and generated a Regenerative Heat Exchanger outlet temperature high alarm. **LACK OF ABILITY:** The applicant failed to manipulate the controls in an accurate and timely manner resulting in major system perturbations resulting in operating parameters deviating outside design specifications. **CONSEQUENCE:** In this instance, the consequences were minor due to the temporary nature of the out of specification condition. Failure to maintain the regenerative heat exchanger letdown temperature less that 380 F results in thermal cycles and steam flashing of the letdown coolant downstream of the letdown orifice valve. Repeated coolant flashing could induce water hammer resulting in increased component stresses with possible damage including system leakage. **REF:** OP-MC-PS-NV **K/A:** 004 A1.11 3.0/3.0 **10 CFR:** 55.45 (a)(6) - Perform control manipulations required to obtain desired operating results during normal, abnormal, and emergency situations.

Form ES-303-1 Cross Reference	Comments
C.5.c	**Scenario 3a, Event 1:** Normal Operation - Load Increase **EXPECTED ACTION:** Observe the alarm and instrumentation associated with RCP seal flow and verify that the alarm was valid and not a system fluctuation. Then, if necessary, manually adjust the applicable controls to return parameters to normal. **APPLICANT'S ACTION:** In response to momentary alarms, the applicant unnecessarily took manual control of Pressurizer level, Charging flow, and seal injection flow. The alarm would clear, and the applicant continued to use manual control to adjust one or more of the controllers. **LACK OF ABILITY:** The applicant displayed a lack of ability to evaluate plant performance based on operating characteristics and instrument interpretation to confirm that automatic control had failed before swapping to manual control. **CONSEQUENCES:** Consequences of the applicant's actions were minor because her manipulations, while coarser than in automatic, were sufficient to maintain adequate control of the affected systems. **REF:** OP-MC-PS-NV OP-MC-PS-NCP OP-MC-PS-IPE **K/A:** G2.1.7 3.7/4.4 **10 CFR:** 55.45 (a)(4) - Identify the instrumentation systems and the significance of facility instrument readings.

Form ES-303-1 Cross Reference	Comments
C.5.d	**Scenario 2, Event 4:** Main Steam Header Pressure Instrument Failure - LO **EXPECTED ACTION:** The applicant was expected to place the Feedwater Pumps in manual and restore normal feed water flow (using Feedwater Pump speed). **APPLICANT'S ACTION:** In response to the instrument failure with the Feedwater Pumps still in automatic, the applicant as RO attempted to use the Feedwater Pump manual increase/decrease push bottons in increase the speed of both Feedwater Pumps. However, the applicant had neglected to take the Feedwater Pumps from automatic to manual. Thus her manual control attempts were ineffective. After several minutes of attempting to adjust feed pump speed without success, the BOP came over to assist and pointed out to the applicant that the both Feedwater Pump controllers were still in automatic. **LACK OF ABILITY:** This is an example of the applicant's lack of proper self-checking skills in response to plant malfunctions. Additionally, the applicant showed an inability to take manual control of the Feedwater Pump controls as needed to operate the facility at power. **CONSEQUENCES:** Had the applicant not been aided by the BOP, as Feedwater Pump speed decreased, feedwater flow would decrease and the Reactor would have tripped on low S/G level. **REF:** OP-MS-CF-CF **K/A:** G2.2.2 4.0/3.5 **10 CFR:** 55.45 (a)(6) - Perform control manipulations required to obtain desired operating results during normal, abnormal, and emergency situations.

Form ES-303-1 Cross Reference	Comments
C.5.d	**Scenario 2, Event 4:** Main Steam Header Pressure Instrument Failure - LO **EXPECTED ACTION:** Allow the Rod Control System to respond to the secondary system transient in automatic, as designed. **APPLICANT'S ACTION:** The Rod Control System was in automatic and inserting rods in response to the feedwater transient. The applicant placed the control rods in manual, stopping required rod insertion due to primary/secondary power mismatch. **LACK OF ABILITY:** This is an example of the applicant's lack of proper self-checking skills in response to plant malfunctions. The applicant inappropriately took manual control of a system that was responding correctly in automatic. **CONSEQUENCES:** Placing the Rod Control System in manual further complicated the plant transient by increasing the primary to secondary power mismatch. **REF:** AP/1/A/5500/06 **K/A:** G 2.1.7 3.7/4.4 **10 CFR:** 55.45(a)(6) - Perform control manipulations required to obtain desired operating results during normal, abnormal, and emergency situations.

Form ES-303-1 Cross Reference	Comments
C.7.a	**Scenario 1, Event 6:** Loss of Heat Sink/ATWS **EXPECTED ACTION:** Immediately after attempting to open the reactor trip breakers from the control room, and the breakers not opening, manually drive rods in and initiate emergency boration. While the RO was driving rods in, the applicant should have dispatched a NLO to locally open the reactor trip and trip bypass breakers, and the M/G set generator and motor breakers. **APPLICANT'S ACTION:** Once the plant had experienced the ATWS, 4 minutes elapsed before the applicant as SRO dispatched a NLO to manually open the reactor trip breakers. **LACK OF ABILITY:** The applicant displayed the lack of ability to evaluate plant performance and make timely operational judgements based on reactor behavior. The applicant failed to promptly dispatch a NLO to locally trip the reactor despite guidance in FR-S.1 to do so. She had no apparent urgency to get the reactor subcritical. **CONSEQUENCES:** The steam dump system is designed to handle only 40% steam flow. Delaying action to trip the reactor during a full power ATWS, causes a loss of secondary coolant through the atmospheric steam dumps (and a possible loss of primary coolant through the Pressurizer PORVs.) Therefore, delaying action to call the NLO increases the amount of time the plant exceeds normal operating limits and the total mass lost from the primary and secondary. **REF:** FR-S.1 **K/A:** G2.1.7 3.7/4.4 **10 CFR:** 55.45 (a)(12) Demonstrate the knowledge and ability as appropriate to the assigned position to assume the responsibilities associated with the safe operation of the facility.

Form ES-303-1 Cross Reference	Comments
C.8.b.	**Scenario 1, Event 2:** Pressurizer Level Channel 1 Failure LO **EXPECTED ACTION:** The applicant was expected to realize that 1NV-35 would not be covered by an individual Technical Specification (TS). Instead the applicant should conclude that the failure of the Pressurizer Level Channel, 1NCP-5160, was addressed in TS and that TS 3.3.1, Function 9 applied in this situation. **APPLICANT'S ACTION:** As SRO, the applicant used the Technical Specification Reference book in attempt to locate a TS for 1NV-35. The BOP suggested that the applicant look at TS for the Pressurizer Level Instrument, 1NCP-5160, instead of 1NV-35. **LACK OF KNOWLEDGE:** The applicant displayed the lack of familiarity with and ability to apply Technical Specifications to a component that had failed. **CONSEQUENCES:** The applicant could have failed to recognize and implement a TS Limiting Condition for Operation for the Pressurizer Level Channel 1 had the BOP not guided the applicant to the proper area of TS. **REF:** TS 3.3.1, Function 9 **K/A:** G2.1.12 2.9/4.0 **10 CFR:** 55.45 (a)(12) Demonstrate the knowledge and ability as appropriate to the assigned position to assume the responsibilities associated with the safe operation of the facility.