

United States Nuclear Regulatory Commission Official Hearing Exhibit	
Charlissa C. Smith (Denial of Senior Reactor Operator License)	
	ASLBP #: 13-925-01-SP-BD01
	Docket #: 05523694
	Exhibit #: NRC-003-00-BD01
	Admitted: 7/17/2013
	Rejected: Other:
Identified: 7/17/2013	
Withdrawn: Stricken:	

NRC-003
Submitted: May 31, 2013

May 31, 2013

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	
CHARLISSA C. SMITH)	Docket No. 55-23694-SP
)	
(Denial of Senior Reactor Operator License Application))	
)	

NRC STAFF TESTIMONY OF PHILLIP G. CAPEHART CONCERNING THE CLAIM BY
CHARLISSA C. SMITH THAT THE NRC IMPROPERLY DENIED HER SENIOR
REACTOR OPERATOR LICENSE APPLICATION

Introduction

Q.1. Please state your name, occupation, and by whom you are employed.

A.1. My name is Phillip G. Capehart. I am employed as a Senior Operations Engineer in Operations Branch 1, Division of Reactor Safety (DRS), Region II Office of the U.S. Nuclear Regulatory Commission (NRC), in Atlanta, Georgia. A statement of my professional qualifications is attached hereto, as Exhibit NRC-029.

Background

Q.2. Please describe the nature of your responsibilities on behalf of the NRC Staff (Staff).

A.2. Since 2007, I have been a principal staff member in charge of development and preparation of examinations in accordance with guides, standards, and regulations associated with the NRC operating licensing program. As chief examiner, I coordinate regional NRC staff examiners and facility personnel in the review and evaluation of facility examination products. I

administer written and practical examinations to applicants for operator and SRO licenses, test the applicants' knowledge in areas such as reactor technology and theory, facility design, operating characteristics, procedures, license conditions, instrumentation and control of reactor operations, and emergency plans. I also test their ability to safely operate the reactor plant and associated systems. For SROs, I test their ability to direct licensed activities. As chief examiner, I review results of examinations, including audit exams given by plant examiners, and recommend final action on licensing applications.

Q.3. Please explain what your duties have been in connection with the denial of the Senior Reactor Operator (SRO) license application of Charlissa C. Smith (Ms. Smith).

A.3. Ms. Smith first applied for a SRO license in 2011. I was assigned by Region II as the chief examiner for this 2011 Vogtle exam. Jay Hopkins (retired) was the examiner of record for Ms. Smith. The third assigned examiner for this exam was Michael Meeks. Mr. Meeks is a senior operations engineer in Region II and Mr. Hopkins was a senior reactor instructor at the NRC's Technical Training Center (TTC) located in Chattanooga, TN. As chief examiner, I assigned Mr. Hopkins as Ms. Smith's examiner of record for the 2011 exam.

Prior to the 2012 Vogtle exam, Malcolm Widmann (Chief Operations Branch I) asked for input as to the potential waiver status for the previous years applicants. Based on the consensus opinion of the 2011 examiner's, we were in agreement that Ms. Smith should not receive a standard waiver for passing the operating portion of the 2011 examination due to her overall poor showing. I provided this input in an email response to Malcolm Widmann and also to Michael Meeks who was acting as chief under instruction for the 2012 Vogtle examination.

Discussion

Q.4. Please describe the standards used by the Region II Staff to determine whether an applicant is eligible to request a waiver from a portion of an SRO examination.

A.4. The Region II Staff uses the standards in NUREG-1021, "Operator Licensing Examination Standards for Power Reactors."¹ NUREG-1021, ES-204-1 Section D.1.a, Routine Waivers, provides that if an applicant failed only one portion of the site-specific initial licensing examination (i.e., either the written examination overall, the SRO-only section of the written examination, the simulator operating test, the walk-through overall, or the administrative portion of the walk-through), then the region may waive those examination areas that were passed.

Q.5. Did Ms. Smith meet this eligibility standard?

A.5. Yes. Ms. Smith failed *only* the written examination portion of the 2011 NRC exam and therefore met the criteria of ES-204-1 noted above. Per ES-303-1 above she did not receive a competency grade of less than 1.8 in the 2011 simulator portion. Therefore, the facility licensee was eligible to submit a request that the NRC waive the simulator operating test for Ms. Smith's 2012 examination retake.

Q.6. To your knowledge, did the facility licensee submit a final request to waive the simulator operating test for Ms. Smith's 2012 examination retake?

A.6. The facility licensee did not submit a final request to waive the simulator operating test for Ms. Smith's 2012 examination retake.

Q.7. If the facility licensee had submitted such a request, what action would you have recommended?

A.7. I would have recommended that Ms. Smith not receive a waiver. In her performance in the six competency areas of the SRO ES-303-1 form a total of twelve competency deficiencies were identified and evaluated against the criteria of NUREG-1021 examiner's standards.² In three of the six competency areas Ms. Smith had multiple rating factor deficiencies. Of the other five applicants who received waivers for the operating exam portion for the 2012 examination two applicants had five simulator competency write-ups, two

¹ Ex. CCS-005A.

² Ex. NRC-013 at 4-25.

had three write-ups and one applicant had two write-ups. The average number of competency write-ups for this exam for the nine out of ten individuals who passed the simulator operating exam was just over three. Therefore, the weighting of her competency downgrade was more than three times that of the average of any other applicant who passed the simulator operating exam, and over twice as many deficiencies as the next highest individual applicant. The one applicant who failed the simulator portion of the exam in 2011 had eighteen competency deficiencies noted.

Q.8. What were your specific concerns regarding Ms. Smith's performance on the 2011 simulator portion?

A.8. In the simulator, Ms. Smith demonstrated deficiencies in plant diagnosis, failure to respond appropriately to automatic controller failures (Scenario No. 5 / Event No. 4: Steam Generator #4 Atmospheric Relief Valve Pressure Transmitter Fails High, pg 18 of 22),³ improperly operated controllers, and poor communication techniques which were not in accordance with the site's standards (Scenario No. 5 / Event No. 2: Nuclear Service Cooling Water (NSCW) Pump #4 Trips with NSCW Pump #6 Auto Start Failure, pg 19 of 22).⁴ Ms. Smith often chose to use the first indication available to her for diagnosis of plant issues and did not use redundant, alternate indications to back up her assessment prior to directing her crew's actions which at times were inappropriate (Scenario No. 1 / Event No. 3: Normal Charging Pump Trips, pg 10 of 22; Scenario No. 1 / Event No. 6: Ejected Rod H-8, pg 11 of 22).⁵ In both the RO and SRO roles, Ms. Smith at times needed assistance from the other applicants (Scenario No. 5 / Event No. 7: Steam Generator #4 Faulted inside Reactor Containment, pg 17 of 22)⁶ to perform activities that were under her cognizance, such as actions required for equipment that should have automatically operated but failed to do so (Scenario No. 4 / Event

³ *Id.* at 21.

⁴ *Id.* at 22.

⁵ *Id.* at 14.

⁶ *Id.* at 20.

No. 10: “A” Motor Driven Auxiliary Feedwater (MDAFW) Pump running with a sheared shaft; “B” MDAFW Pump will not start automatically or manually; and Turbine Driven AFW (TDAFW) Pump trips on overspeed when started. TDAFW pump Trip and Throttle valve must be repaired prior to restarting the TDAFW Pump, pg 18 of 22).⁷ In the SRO role several of her missteps were due to improper procedure usage and misunderstanding of the mitigating actions of the procedure (Scenario No. 4 / Event No. 3: Chemical and Volume Control System Volume Control Tank Level Transmitter LV-112 Fails High, pg 13 of 22). She directed improper steps that were subsequently corrected by her board operators (Scenario No. 4 / Event No. 10: “A” MDAFW Pump running with a sheared shaft; “B” MDAFW Pump will not start automatically or manually; and TDAFW Pump trips on overspeed when started. TDAFW pump Trip and Throttle valve must be repaired prior to restarting the TDAFW Pump, pg 15 of 22).⁸

In addition to the deficiencies noted in the above simulator scenario portion of the examination, Ms. Smith had an additional six non-critical error remarks related to her performance of Job Performance Measures (JPMs): one was an Administrative JPM, and the five other JPMs were from the system / in-plant section.⁹ While these failures on the JPMs were not critical and did not lead to any unsatisfactory grades in this area of the exam, they were revealing and they supported our overall impression of her performance as a borderline competent/non-competent operator.

The simulator operating deficiencies in conjunction with the other JPM deficiencies observed during the 2011 examination called into question Ms. Smith’s overall competency, and highlighted the need to re-evaluate her operating performance during her next examination. As chief examiner, I requested input from the examiner of record and the other examiner involved in Ms. Smith’s evaluation of their opinion of her performance on the operating exam, and whether or not a waiver for the operating portion of the exam was appropriate for Ms. Smith.

⁷ *Id.* at 21.

⁸ *Id.* at 18.

⁹ Exhibit NRC-008.

The other two examiners and I were in agreement that Ms. Smith's performance was weak and we felt it was appropriate to re-evaluate Ms. Smith's performance to validate her competency in a dynamic simulator environment. Region II determined that Ms. Smith did not meet the appropriate standards of competency to receive a waiver of the operating examination if such a request were submitted by the licensee.¹⁰

¹⁰ Ex. NRC-013 at 5.

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SMITH THAT THE NRC IMPROPERLY DENIED HER SENIOR REACTOR OPERATOR
LICENSE APPLICATION

I, Phillip G. Capehart, do hereby declare under penalty of perjury that my statements in the foregoing testimony and my statement of professional qualifications are true and correct to the best of my knowledge and belief.

Executed in Accordance with 10 C.F.R. § 2.304(d)

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Executed in Rockville, Maryland
this 31st day of May, 2013