



Point Beach Nuclear Plant  
6610 Nuclear Rd.  
Two Rivers, WI 54241  
Phone 920 755-2321

NPL 2000-0304

July 6, 2000

Mr. D. E. Hills, Chief  
Operations Branch  
U. S. NUCLEAR REGULATORY COMMISSION  
Region III  
801 Warrenville Road  
Lisle, IL 60532-4351

Dear Mr. Hills:

POINT BEACH NUCLEAR PLANT  
INITIAL OPERATOR LICENSING EXAMINATION OUTLINES

In accordance with your undated letter received at Point Beach Nuclear Plant on June 9, 2000, and telephone conversations between your staff and Mr. C. Sizemore of our staff, enclosed are the initial operator licensing examination outlines. As confirmed with your staff, the examinations are scheduled for the weeks of October 16 and 23, 2000.

Please contact Mr. Chuck Sizemore at 920/755-6123 if you have questions regarding the examination outlines or require additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'A. J. Cayia', written over a printed name and title.

A. J. Cayia  
Manager  
Site Services & Assessment

FAF/tat

Enclosures

Facility:		Date of Examination:		
Item	Task Description	Initials		
		a	b*	c
WRITTEN	1. a. Verify that the outline(s) fit(s) the appropriate model per ES-401.	☑	1/1	AMS
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all knowledge and ability categories are appropriately sampled.	☑	1/1	AMS
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	☑	1/1	AMS
	d. Assess whether the repetition from previous examination outlines is excessive.	N/A	N/A	AMS
SIM	2. a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, and major transients.	☑	1/1	AMS
	b. Assess whether there are enough scenario sets (and spares) to test the projected number and mix of applicants in accordance with the expected crew composition and rotation schedule without compromising exam integrity; ensure each applicant can be tested using at least one new or significantly modified scenario, that no scenarios are duplicated from the applicants' audit test(s)*, and scenarios will not be repeated over successive days.	☑	1/1	AMS
	c. To the extent possible, assess whether the outline(s) conform(s) with the qualitative and quantitative criteria specified on Form ES-301-4 and described in Appendix D.	☑	1/1	AMS
W/T	3. a. Verify that: (1) the outline(s) contain(s) the required number of control room and in-plant tasks, (2) no more than 30% of the test material is repeated from the last NRC examination, (3)* no tasks are duplicated from the applicants' audit test(s), and (4) no more than 80% of any operating test is taken directly from the licensee's exam banks.	☑	1/1	AMS
	b. Verify that: (1) the tasks are distributed among the safety function groupings as specified in ES-301, (2) one task is conducted in a low-power or shutdown condition, (3) 40% of the tasks require the applicant to implement an alternate path procedure, (4) one in-plant task tests the applicant's response to an emergency or abnormal condition, and (5) the in-plant walk-through requires the applicant to enter the RCA.	☑	1/1	AMS
	c. Verify that the required administrative topics are covered, with emphasis on performance-based activities.	☑	1/1	AMS
	d. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on successive days.	☑	1/1	AMS
GENERAL	4. a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam section.	☑	1/1	AMS
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	☑	1/1	AMS
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	☑	1/1	AMS
	d. Check for duplication and overlap among exam sections.	☑	1/1	AMS
	e. Check the entire exam for balance of coverage.	☑	1/1	AMS
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	☑	1/1	AMS
a. Author <u>Jan Michael Forbes</u> Printed Name / Signature <u>[Signature]</u> Date <u>7/10/00</u> b. Facility Reviewer(*) <u>CHARLES R. SIZEMORE</u> / <u>[Signature]</u> <u>2/10/00</u> c. Chief Examiner <u>Ann Marie Stone</u> / <u>[Signature]</u> <u>7/14/00</u> d. NRC Supervisor <u>Steven A Reynolds</u> / <u>[Signature]</u> <u>7/24/00</u> *				

(\*) Not applicable for NRC-developed examinations.

\*Note - Michael Bielby reviewed the outline for David Hills on 7/17/2000. I discussed the results of his review (no comments) with Steve Reynolds but was unable to obtain his signature until I returned from Fermi on 7/21/2000.

## **RANDOM SAMPLING PROCESS USED TO DEVELOP Y2K NRC EXAM**

As required by NUREG 1021, Rev 8 Supplement (ES-401 D.1.6), the licensee shall submit along with the NRC examination outline, a description of the systematic and random selection process used to develop the examination.

Attachment 1 of ES-401 was used to develop the RO exam outline. Marked poker chips were used as the random sampling methodology. To meet all of the requirements for the SRO exam in accordance with ES-401 (D.1.C), the following specific process was used:

### **TIER 1:**

- From the RO exam, all randomly selected topics & K/As from the three groups within this tier were initially transferred to the SRO exam (originally this totaled 36 K/As). We noted that as stated in ES-401, the topics and groups do not align between the RO and SRO exam.
- For Group 1, since 21 topics transferred over from the RO exam, it was necessary to select 3 additional topical K/As. Since an SRO should be tested at a broader and higher level than the RO and to meet the requirement to have 15 SRO questions spread throughout Tiers 1 & 2 with A2/G K/As, we chose to select the two unused topics (Loss of Nuclear Service Water & Large Break LOCA) and also randomly resample the remaining topics to reselect 3 topics that were sampled in the A2/G K/A categories. (There are 5 topical K/As in this group selected to be written at an SRO level from the A2/G K/A categories). This thought process was carried on throughout.
- For Group 2, since 12 topics transferred over from the RO exam, this group came up 4 questions short. To obtain the required 16 K/As, we randomly selected 4 of the unused remaining topics (Loss of Emergency Coolant Recirc., Loss of RHR, High Containment Radiation, and Loss of IA) and randomly selected K/A's at the required SRO level. (There are 4 topical K/As in this group selected to be written at an SRO level from the A2/G K/A categories).
- For Group 3, three topics transferred over from the RO exam and only 3 were required on the SRO exam. To keep things random and also spread things evenly, we randomly sampled the 3 unused topics of which, Fuel Handling was chosen. We then, randomly deselected one of the 3 topics brought over from the RO exam. (There is 1 topical K/A in this group selected to be written at an SRO level from the A2/G K/A categories).

### **TIER 2:**

- For Group 1, on the RO exam since 23 K/As are required, 10 additional K/As were randomly selected from the 13 topics. Therefore, 10 topics have 2 K/As on the RO exam. For the SRO exam, we randomly selected 1 of the 2 K/As from these 10 topics and transferred those over to the SRO exam. We then transferred the remaining 3 single topical K/As over to the SRO exam. We then randomly selected K/As in the A2/G categories for the 3 unused topics (Rod Position Indication, Containment Spray,

and DC Electrical). To obtain the remaining 3 required K/As for this group, we randomly sampled all topics, then selected 1 of these 3 to be in the A2/G category. To summarize, 19 K/As were randomly selected by transferring over 13 K/As, using the 3 unused topics on the SRO exam and then re-sampling to obtain the remaining 3. (There are 4 topical K/As in this group selected to be written at an SRO level from the A2/G K/A categories).

- For Group 2, seventeen topics transferred over from the RO exam. To be consistent with our methodology thus far, and to continue being as broad based as possible, we randomly deselected 3 of these transferred topics and replaced those with the unused topics on the SRO exam (Hydrogen Recombiner, Fuel Handling, and Containment). (There are 3 topical K/As in this group selected to be at an SRO level from the A2/G K/A categories).
- For Group 3, five topics transferred over from the RO exam which had been previously randomly sampled when selection was made on RO exam. We deselected 2 topics and randomly sampled from the unused topics and selected Component Cooling to randomly select an SRO level K/A from the A2/G categories.

### **TIER 3:**

- For this tier, we randomly sampled and selected 7 K/As that were transferred over from RO exam. This left the 10 SRO required K/As for this tier to be selected. It is these questions we will write at the 10 CFR 43 higher SRO required level to satisfy NUREG requirements.

Based on this rather tedious process, it appears that all tier total requirements are met and the exam will be well balanced. PSA, plant specific issues, and generic industry events will be incorporated into exam questions for the K/As selected as appropriate.

During the random sampling process, it should be noted that we not only randomly sampled the K/A categories, but also sampled the specific K/A statements once a K/A was selected. Additionally, there were two K/As initially selected that were not applicable in which case were-sampled. These instances are noted below. One RO K/A was selected with a value <2.5, however we felt the item was applicable to the facility and therefore was not re-sampled.

### **K/A Statements Initially Sampled that were N/A:**

1. Containment Spray (026A2.02):for SRO Exam  
N/A because PBNP does not have auto recirculation transfer.
2. Loss of Off-Site Power(056A2.11) for RO/SRO Exam  
N/A because PBNP does not have a Service Water Booster Pump.