Nuclear Operating Company
South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

Attachment 3 — Withhold from Public Disclosure Under 10 CFR 2.390

August 1, 2019
NOC-AE-19003679
10 CFR 55
10 CFR 2.390
D43.02

Clyde Osterholtz (Addressee Only)
Chief Examiner, Region IV
U.S. Nuclear Regulatory Commission
1600 E. Lamar Blvd.
Arlington, TX 76011-4511

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498, STN 50-499
Post Examination Material

This letter provides Post Examination Materials for the NRC License Examination that was administered on July 15, 2019 through July 29, 2019 at South Texas Project (STP), in accordance with NUREG 1021, Operator Licensing Examination Standards for Power Reactors.

STP Nuclear Operating Company requests that NRC consider Attachment 3 to this letter as Exempt from Public Disclosure. None of the exam materials are to go to the Public Document Room (ADAMS) for at least two years.

There are no commitments in this letter.

The following Post Examination material are being sent:

1. Form ES-403-1, Written Examination Grading Quality Checklist (Signed Paper Copy)
2. Written examination cover sheet and the original, a clean copy, and a graded copy of the answer sheet for each examinee (Paper Copy)
3. CD-ROM-1, that includes the following electronic files:
   - LOT 23 NRC JPMs
   - LOT 23 NRC Simulator Scenarios
   - LOT 23 NRC Written Exam
   - LOT 23 NRC Written Exam Analysis
   - LOT 23 NRC Written Exam Applicant Comments After Exam (NONE)
   - LOT 23 NRC Written Exam Question Challenges by STP (NONE)
   - LOT 23 NRC Written Exam Questions and Clarifications During Exam
   - LOT 23 NRC Written Exam Seating Arrangement

The completed ES-201-3, Examination Security Agreement, will be forwarded to you as soon as possible.

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If you have any questions, please contact Stan Mason at (361) 972-4356 or me at (361) 972-7327.

Henry T. Curry
Manager, Operations Training

Attachments:
1. ES-403-1, Written Examination Grading Quality Checklist
2. Written examination cover sheet and the original, a clean copy, and a graded copy of the answer sheet for each examinee
3. CD-ROM with Post-Exam Information

LOT 23 NRC EXAM ANALYSIS – 07/29/2019

Bank #	RO#	SRO#	ANSWER	A	B	C	D	Total Missed
738	1		B				1	1
2849	2		D	1				1
484	3		D					0
2838	4		A					0
2836	5		D					0
2386	6		C					0
2846	7		C	1	1		3	5
2847	8		B				3	3
2851	9		C				2	2
2850	10		B	2			1	3
2387	11		B	1				1
2848	12		D			2		2
2869	13		A		3	2	1	6
2751	14		D			2		2
2805	15		C	3	1		3	7
2806	16		D			1		1
2807	17		B	1				1
2810	18		B					0
2820	19		A			1		1
2841	20		C					0
2829	21		A		3			3
2827	22		A		3	1		4
2821	23		D	1				1
2819	24		C	1			2	3
2809	25		C	3				3
2815	26		B					0
1764	27		D	8		1		9
2072	28		C					0
2290	29		B	2			2	4
2561	30		B					0
2813	31		D			1		1
2834	32		C					0
2832	33		C	7				7
2818	34		D	2				2
2606	35		D					0
2173	36		B					0
2254	37		B					0
2477	38		C					0
2817	39		C	8	2		2	12
2844	40		B					0
2843	41		C					0
2831	42		D	1		4		5

LOT 23 NRC EXAM ANALYSIS – 07/29/2019

Bank #	RO#	SRO#	ANSWER	A	B	C	D	Total Missed
2823	43		C	2			1	3
2824	44		D		1	2		3
2833	45		A					0
2828	46		A					0
2845	47		D			2		2
2814	48		A					0
2842	49		A			1		1
1245	50		A					0
1980	51		B				1	1
2000	52		C	2	1			3
674	53		A					0
792	54		B					0
863	55		A		3	2	1	6
1833	56		C					0
1865	57		B	1				1
2183	58		A			2		2
2305	59		D					0
2414	60		C	1				1
2478	61		A		1			1
2808	62		D	1				1
2870	63		C				7	7
2816	64		A		1	2		3
2830	65		D			8		8
2840	66		C	1			2	3
2826	67		A			1	2	3
2825	68		B					0
2839	69		C					0
2822	70		A		2	1		3
2837	71		D					0
2651	72		B				1	1
2367	73		B	1			1	2
1488	74		A		1			1
2835	75		B	1				1
2857		76	A		2			2
2856		77	B					0
2782		78	D					0
2718		79	A					0
1713		80	C				2	2
2783		81	D	1				1
2855		82	B	2			1	3
2859		83	A		3			3
2865		84	B					0
1099		85	C					0
2852		86	B				4	4

LOT 23 NRC EXAM ANALYSIS – 07/29/2019

Bank #	RO#	SRO#	ANSWER	A	B	C	D	Total Missed
2853		87	C				1	1
2854		88	D	1		7		8
2863		89	A		1			1
2864		90	D					0
2519		91	A					0
2860		92	C	2			1	3
2456		93	D					0
2862		94	D	2				2
1772		95	B					0
2858		96	B					0
2861		97	B			1		1
2866		98	A					0
2867		99	D					0
2868		100	C					0

RO #27 – 8 candidates chose distracter "A", 1 candidate chose distracter "C" Correct answer is "D"

This question is based upon knowledge of RHR operations during reduced inventory and midloop operations. The stem contained an alarm (1M02-F-4, RHR PUMP 1A DISCH FLOW LO) that occurs under the same condition that causes a pump trip. Since no pumps are running, 0POP04-RH-0001, Loss of Residual Heat Removal must be entered. The distracters chosen by those who missed the question indicated a lack of knowledge of plant conditions when the alarm occurs. Pressurizer level was lowering because a draindown was in progress.

No changes to the exam are warranted.

RO #39 – 8 candidates chose distracter "A", 2 candidates chose distracter "B", 2 candidates chose distracter "D" Correct answer is "C"

This question is based upon a source range instrument failure during a reactor startup. With a failed source range instrument at 50 cps during the reactor startup, Technical Specifications requires that power is maintained below the P-6 setpoint. Technical Specification Bases state that the reason for the source range hi flux reactor trip is to protect against an uncontrolled bank withdrawal. The student choices indicate a lack of knowledge of Technical Specification actions and basis document.

No changes to the exam are warranted.

RO #65 – 8 candidates chose distracter "C" Correct answer is "B"

This question is based upon knowledge of plant response to an inadvertent MSIV closure. With this closure at 100% power, RCS pressure rises rapidly and the reactor trips on Steam Generator Lo-Lo Level. Pressurizer Pressure does rise, but not to the reactor trip setpoint. The student choices indicate a lack of knowledge of the magnitude of the pressurizer pressure increase.

No changes to the exam are warranted.

LOT 23 NRC EXAM ANALYSIS – 07/29/2019

SRO #88 – 1 candidate chose distracter "A", 7 candidates chose distracter "C" Correct answer is "D"

This question required the student to diagnose leak location and source based upon a set of symptoms and then respond accordingly. With the given conditions, the charging line is the source of the leak (Charging flow rising, pressurizer lowering, and letdown flow fluctuating). With the computer point given in the stem (a MAB location), the correct addendum can then be chosen. The student choices indicate a lack of knowledge of leak symptoms and leak locations contained in 0POP04-RC-0003, Excessive RCS Leakage.

No changes to the exam are warranted.

Knowledge deficiencies associated with this written examination have been entered into the licensee's corrective action program as CR 19-9377 to address remediation.