



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

September 19, 2001  
NOC-AE-01001184  
File No.: G30  
NUREG 1021  
STI: 31345955

Mr. Howard Bundy  
Chief Examiner  
U. S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive Suite 400  
Arlington, TX 76011-8064

South Texas Project  
Units 1 and 2  
Docket Nos. STN 50-498, STN 50-499  
9/14/01 Written Exam Results

The written portion of the NRC License exam was administered on September 14, 2001 at the South Texas Project. In accordance with NUREG 1021, Operator Licensing Examination Standards for Power Reactors, STP Nuclear Operating Company is submitting the following exam materials:

- Form ES-403-1, Written Examination Grading Quality Checklist
- Master exams and answer keys
- Applicant questions/responses
- Seating chart
- Exam analysis information
- Examination cover sheets and applicant answer sheets (including a clean copy)

The exam security agreement will be forwarded after the operational exam is complete.

Please contact me at (361) 972-7435 or Ken Struble at (361) 972-7586 if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "James A. Calvert".

James Calvert  
Manager, Operations Training

SOUTH TEXAS PROJECT  
9/14/01 WRITTEN EXAM SEATING CHART

Billy Herzog  
SRO

Arlen Gorman  
RO

Don Rohan  
SRO

Ken Cross  
RO

Bret Hutson  
SRO

Ed McConaha  
RO

Lance Sterling  
SRO

Steve Flores  
RO

Medwin Gattis  
SRO

David Clark  
RO

Tim Bryant  
SRO

Roger Shalley  
RO

Proctor's Table

# **SOUTH TEXAS PROJECT**

## **9/14/01 NRC Written Exam**

### **Examinee Questions to Proctor and Proctor Response:**

- RO/SRO #11: \* Candidate asked what was meant by “drumming station” in Choice “A”; said this was not a common term at STP. Answered that “drumming station” is the same as “ Solid Waste Processing”.
- RO/SRO #42: Candidate asked if the table column labeled “# of Fire Brigade Members” was just for the members or if the Fire Brigade Leader was included in the number. Answered that this means all Fire Brigade personnel.
- RO/SRO #45: \* Candidate asked is the breaker stated in each Choice referred to the SDG Output Breaker. Answered that the stated breaker was the SDG Output Breaker.
- RO/SRO #83: Candidate asked if the start time of each Choice is when the Main Turbine Generator trips or when the dump valves fail full open. Answered that the start time of each choice is when the dump valves fail full open.
- RO/SRO #78: Candidates (2) asked if Containment water level in Choice “A” was correctly stated as “below 69 inches”. Answered that the Containment water level in Choice “A” could be read as “below” or “ less than” 69 inches.
- RO/SRO #60: \* Candidate asked if we could assume “no operator action taken”. Answered that you could assume no operator action taken. Also, candidates (2) asked if items listed in Choices were in any particular order of occurrence. Answered that the listed items in each Choice were not in any order of occurrence.
- RO/SRO #28: Candidate asked if we could assume a Loss of Subcooling along with the stated ORANGE PATH on CORE COOLING. Answered that you can assume whatever will give an ORANGE PATH on CORE COOLING.
- RO/SRO #10: Candidate asked if the “Exhaust System Dampers” listed in each Choice referred to the same dampers. Answered that the Exhaust System Dampers in each Choice was the same dampers.
- RO #79: Candidate asked if “primary temperature” in Choice “D” referred to Th, Tc, or Tave. Answered that Tsat in S/Gs is falling faster than any indication of RCS coolant temperature.

\* Changes to Master Exam

**SOUTH TEXAS PROJECT**  
**WRITTEN EXAM (9/14/01)**

**QUESTION ANALYSIS**

RO #12 miss rate - 50%:

Knowledge deficiency concerning conditions that will generate a rod control Urgent Alarm.

RO #33 miss rate - 83%:

Knowledge deficiency concerning the interlocks associated with the Fuel Handling Machine.

RO/SRO #35 miss rate - 58%:

Knowledge deficiency concerning the Technical Specification LCO concerning Reactor Coolant System activity.

RO/SRO #37 miss rate - 83%:

Knowledge deficiency concerning the fact that offsite exposure does not count against the STP Administrative Action Level for radiation exposure.

RO/SRO #49 miss rate - 50%:

Knowledge deficiency concerning the effects of Xenon following a dropped rod incident.

RO/SRO #52 miss rate - 50%:

Knowledge deficiency concerning the operation of the Cold Overpressure Protection System (COMS) when at normal operating conditions.

RO/SRO #54 miss rate - 50%:

Knowledge deficiency concerning the bases for reactor coolant pump operation in a Pressurized Thermal Shock (PTS) condition.

RO #67 miss rate - 50%:

Knowledge deficiency concerning the operation of the Steam Dump System following a turbine trip below 50% power.

SRO #98 miss rate - 50%:

Knowledge deficiency concerning the bistables associated with Pressurizer Level Channel LT-0467.

**SOUTH TEXAS PROJECT**  
(Exam Date: September 14, 2001)

**Question Breakdown**

Exam		Ans Key	Applicant Choice				Miss Rate %
RO	SRO		A	B	C	D	
1	1	A	11		1		8
2	2	D				12	0
3	3	B		12			0
4	4	D			1	11	8
5	5	B		12			0
6	6	A	12				0
7	7	B		11	1		8
8	8	C	2	1	8	1	33
9	9	D			1	11	8
10	10	A	12				0
11	11	B		11	1		8
12		D		2	1	3	50
	12	D				6	0
13	13	A	12				0
14	14	D				12	0
15		C		1	5		17
	15	B		6			0
16	16	D	1	1		10	17
17	17	B		12			0
18	18	A	12				0
19		D			2	4	33
	19	C			6		0
20		D			1	5	17
	20	C			6		0
21	21	A	11		1		8
22		A	6				0
	22	D			1	5	17
23	23	A	12				0
24		A	6				0
	24	A	6				0
25	25	D				12	0
26	26	B		12			0
27	27	D		1		11	8
28		C			6		0
	28	A	6				0
29	29	D				12	0
30	30	D				12	0

**SOUTH TEXAS PROJECT**  
(Exam Date: September 14, 2001)

**Question Breakdown**

Exam		Ans Key	Applicant Choice				Miss Rate %
RO	SRO		A	B	C	D	
31		C			6		0
	31	D		2		4	33
32	32	C			12		0
33		B	2	1	1	2	83
	33	A	6				0
34	34	B		11		1	8
35	35	A	5	1	6		58
36		B		6			0
	36	C			6		0
37	37	D		10		2	83
38	38	C	1		11		8
39		A	6				0
	39	C			6		0
40	40	C			12		0
41	41	B		12			0
42	42	D				12	0
43		C			6		0
	43	D				6	0
44	44	C			12		0
45	45	A	12				0
46	46	C			12		0
47	47	C		1	11		8
48	48	B	1	11			8
49	49	D		6		6	50
50	50	A	9			3	25
51	51	C			11	1	8
52	52	A	6	4	2		50
53	53	D		1	1	10	17
54	54	D	4	2		6	50
55	55	B	1	9	1	1	25
56	56	C	5		7		42
57	57	C			12		0
58	58	A	11	1			8
59	59	A	12				0
60	60	B		10		2	17
61	61	C			12		0
62	62	B		11	1		8

**SOUTH TEXAS PROJECT**  
(Exam Date: September 14, 2001)

**Question Breakdown**

Exam		Ans Key	Applicant Choice				Miss Rate %
RO	SRO		A	B	C	D	
63	63	D				12	0
64	64	D		1		11	8
65	65	A	11	1			8
66	66	A	11		1		8
67		B		3	3		50
	67	A	6				0
68	68	D	1			11	8
69	69	C		1	9	2	25
70	70	C			12		0
71	71	B		12			0
72	72	B		12			0
73	73	B	1	11			8
74	74	A	10	2			17
75		A	6				0
	75	B		5	1		17
76		B	1	5			17
	76	B		6			0
77		C			6		0
	77	A	6				0
78	78	C	3		9		25
79		A	6				0
	79	B		6			0
80	80	D				12	0
81		D				6	0
	81	B		6			0
82		C			6		0
	82	D				6	0
83	83	C	2			10	17
84		D	1			5	17
	84	C			6		0
85		C		1	5		17
	85	B		6			0
86	86	B		12			0
87		C			6		0
	87	A	6				0
88		B		6			0
	88	C			6		0

**SOUTH TEXAS PROJECT**  
**(Exam Date: September 14, 2001)**

**Question Breakdown**

Exam		Ans Key	Applicant Choice				Miss Rate %
RO	SRO		A	B	C	D	
89	89	A	12				0
90	90	B		12			0
91	91	C			12		0
92		A	6				0
	92	B		6			0
93	93	B		12			0
94	94	B		12			0
95	95	B		12			0
96	96	C			12		0
97	97	C			12		0
98		C	1		5		17
	98	A	3	3			50
99	99	D				12	0
100	100	B		9		3	25