NRC COMMENTS TO THE INITIAL SUBMITTAL OF THE

OPERATING TEST AND THE WRITTEN EXAMINATION

INCLUDING NRC FORMS ES-401-9 AND ES-401-10

FOR THE LASALLE INITIAL EXAMINATION - MAY 2003

OPERATING TEST COMMENTS
2003 LASALLE EXAM

SCENARIO 1, "Low Power, ATWS / SBLOCA" not required for exam because of decreased number of applicants. Not reviewed or validated. Returned to licensee.

SCENARIO 2: 30% Power, LBLOCA, HPCS OOS

NRC General: Provide marked up copy of LGP 1-1. *LICENSEE: Done.*

NRC Event 1: Ensure Event 1 performed before Event 2. *LICENSEE: Added cue to Turnover. Also added cue to put MSRs in service after core flow at 61 mlb/hr and "B" HDP oos.*

NRC Event 2: No comment.

NRC Event 3/4:

1) Page 1 of 2, is it the BOP's responsibility to reduce "core flow?" Which "core flow" is being reduced? *LICENSEE: RR core flow, should be listed under RO actions. Will change accordingly.*

2) Combine Events 3 and 4. Both events are related to the same system and considered separately. Event 2 (take manual control of HD level) and Event 3 (start standby HD pump) do not provide a good evaluation of the BOP competencies. However, combined into a single malfunction, they provide sufficient level of difficulty and verifiable actions for evaluation of the BOP. *LICENSEE: Will combine events into one event for BOP.*

3) List the expected, required, actions for the RO and BOP, not every possible procedural action. *LICENSEE: Revised the writeups to include the expected, required actions.*

4) What is consequence of losing HD pump at this low power? Reactivity excursion, loss of FW? *LICENSEE: Will get reactivity excursion, should not lose FW.*

NRC Event 5:

1) List applicable TSs under SRO section. *LICENSEE: Done.*

NRC Event 6:

1) Currently only one action to evaluate RO competency, can we ensure a flow mismatch that would require the RO to identify and restore flow? *LICENSEE: Malfunction is set such that the FCV should move fast enough to result in flow mismatch before the applicant can lock it.*

NRC Event 7: No comment.

NRC Event 8: No comment.

NRC Event 9: No comment.

SCENARIO 3: 85% Power, SBLOCA, Ctmt Inst line

Take A or B RHR pump OOS, vice C RHR pump.

Event 1: No comment.

Event 2: No comment.

Event 3: Should be page 1 of 1.

Event 4: No comment.

Event 5: No comment.

Event 6: No comment.

Event 7/8: No comment.

SCENARIO 4: 100% Power, ATWS
NRC Event 1:
1) This scenario lacks TS requirement for SRO, and RO has opportunity to get the required reactivity manipulation in Event 4, and again in Event 6. Replace Event 1 (RO reactivity event) with an event requiring application of TS for SRO. *LICENSEE: Done.*

NRC Event 2: No comment.
NRC Event 3: No comment.
NRC Event 4:
1) Opportunity for RO to get credit for reactivity (replace Event 1). *LICENSEE: Agree.*
NRC Event 5: No comment.
NRC Event 6:
1) Who reduces "core flow," RO or BOP? *LICENSEE: Probably the RO, because the BOP will be addressing the loss of heaters.*
NRC Event 7:
1) This event is onset of the MT, will eventually get auto scram if BOP does nothing. No credit for BOP I/C failure. *LICENSEE: Agree.*
NRC Event 8: No comment.
Event 9: No comment.
Event 10: List expected, required RO EOP actions. *LICENSEE: Done.*

Administrative JPMs:
General: Include the Initiating Cue with the Initial Conditions on the sheet that is handed to the applicant.
JPM A.1.1 RO / A.1.2 SRO:
  - Typo on cover page, Offsite vs. Offset. *LICENSEE: Corrected.*
  - Identify applicant's position in the Initial Conditions. *LICENSEE: Done.*
  - Identify status of the U-2 breakers in the Initiating Cue. *LICENSEE: Done.*
  - First 4 steps incorrectly identified as critical. Steps require applicant to "verify" various breaker positions and operability, and all are in correct position and operable (ref: ES-301, D.1.k and App C, B.3). Make Step 4 critical by identification of loss of breaker indication, and verification of operability based on Unit 2 backfeed. *LICENSEE: Comment incorporated.*
JPM A.1.1 (SRO):
  - Add "No met tower data is available from Dresden or Braidwood." in the Initial Conditions. *LICENSEE: Incorporated.*
  - Step 2, delete Station Manager, same as Plant Manager. *LICENSEE: Done.*
JPM A.1.2 (RO): No comment.
JPM A.2 (RO):
  - As written, step 2 is not critical. JPM is not discriminating. Applicant is not required to evaluate or make a decision about anything of consequence. *LICENSEE: Made Timeclock incorporated into Step E.1.3.3 incorrect.*
JPM A.2 (SRO): No comment.
JPM A.3 (RO/SRO):

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- Step 5 is critical. *LICENSEE: Agree.*
- Step 7 is critical. *LICENSEE: Agree.*

JPM A.4 (RO):
- Step 8 is critical. *LICENSEE: Agree.*

JPM A.4 (SRO):
- Importance Factors on ES-301-1 sheet should be 2.2/4.0 not 2.7/3.2.
- JPM not discriminating. Reading info from a log sheet and filling in a form does not require any evaluation or decision-making. Need to incorporate something like an evaluation of conditions and event classification; PARs recommendation; or problem with normal notification that requires implementation of alternate communications. *LICENSEE: Agree. Replaced with time critical JPM for making PARS recommendation and prepare NARS.*

Walkthrough JPMs:

General: Include the Initiating Cue with the Initial Conditions on the sheet that is handed to the applicant.

JPM B.1.a, Synchronize/Load 1B DG and Loss of SAT:
- more than one KA identified. Only identify most applicable KA. *LICENSEE: Most applicable KA selected.*
- Initial Conditions, if filling out surveillance sheets is a normal task for the job, then the applicant should be filling them out. *LICENSEE: Revised Initiating Cue and will have applicant initialing surveillance sheets.*
- Step 2, add examiner cue that procedural step is desired (ie, needs to be performed). *LICENSEE: Done.*
- Step 5, specify a +/- tolerance for "slightly." *LICENSEE: Added tolerance based on Operations and Training expectations.*
- Recognize that the applicant is the only control room operator, annunciators will alarm, and applicant will be expected to diagnose the loss of SAT. The "alternate path" for setting the droop to "0" comes from one of 16 procedure limitations. Why will the applicant reference the surveillance procedure limitations when the loss of SAT occurs? *LICENSEE: Per Operations and Training, operators are expected to take actions based on actions identified in the Limitations portion of procedures.*
- Step 11 Standard requires voltage be established between 4160 and 4310 volts. However, Step D.4 of procedure requires voltage be established between 4050 and 4300 volts. Will applicant have to adjust voltage and frequency? If not, then steps are not critical. *LICENSEE: Applicants will have to adjust voltage and frequency.*

JPM B.1.b:
- Steps 5, 9, 13, and 20 critical? *LICENSEE: Per Operations and Training, Steps are not critical to completing the task.*

JPM B.1.c: No comment.

JPM B.1.d:
- want to have the applicant evaluate operability by having other LPRMs (level and channel) out of service at start of JPM (ie, part of initial conditions, identified on OD-8).

LICENSEE: Will take LPRMs at various levels and channels OOS. Simulator back panels only simulate channel C so will add cue for examiner to identify that corresponding lights for LPRMs are lit.

JPM B.1.e

does the applicant have to be in the NSO (ie, RO) position to perform the scram? Need to add this info to Initial Conditions. *LICENSEE: Incorporated.*

- cue following step 11; can not tell candidate what procedure/actions to take and get credit for alternate path JPM. Suggest changing cue to read something like "Understand both RR pumps have tripped, perform your follow up actions." or "... what do you recommend?" *LICENSEE: Incorporated examiner cue to direct applicant to carry out appropriate actions.*

JPM B.1.f:

- no knowledge or ability identified for 233000 4.5/4.5. KA 23000 is not appropriate for this JPM. Identify appropriate KA, make sure it is not in the same safety function (SF) area for one of the other control room/simulator JPMs. This JPM appears to belong in SF 2 which conflicts with JPM B.1.g. *LICENSEE: Replaced KA/JPM.*

JPM B.1.f (replacement): No comment.

JPM B.1.g:

- Would operator be doing this surveillance while the TDRFP is maintaining RWL? *LICENSEE: Operations and Training verified this surveillance would be done under the stated initial conditions.*

- Step 3 standard, procedure step 1.3 also requires operator to RELEASE trip button after verifying elements described in Step 3. *LICENSEE: Added missing step.*

JPM B.2.a:

- Steps 1 and 2 are critical. *LICENSEE: Agree, identified steps as critical.*

JPM B.2.b:

- Steps 1 and 2 are not critical. *LICENSEE: Agree.*

- Steps 3 and 5, list indications that pump is running for the cue. *LICENSEE: Done.*

- Step 4: list indications that pump is off for the cue. *LICENSEE: Done.*

JPM B.2.c:

- Steps 2 and 3 are critical. *LICENSEE: Agree.*

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only		
1	H	2												S	N NRC: Why is reference needed? LICENSEE: Reference provides max allowed scram time. **TS 3.1.3 AND 3.1.4**
5	H	2												S	N
8	H	2												S	N
15	H	3												S	N
17	H	2												S	N NRC: LOK Knowledge of ARI and SRV setpoints is fundamental memory info. LICENSEE: Agree.
22	H	2												S	N
25	H	3												S	N **DG Load Limit Table**
29	H	2												S	N

Instructions

[Refer to Section D of ES-401 and Appendix B for additional information regarding each of the following concepts.]

1. Enter the level of knowledge (LOK) of each question as either (F)undamental or (H)igher cognitive level.

2. Enter the level of difficulty (LOD) of each question using a 1 - 5 (easy - difficult) rating scale (questions in the 2 - 4 range are acceptable).

3. Check the appropriate box if a psychometric flaw is identified:
   - The stem lacks sufficient focus to elicit the correct answer (e.g., unclear intent, more information is needed, or too much needless information).
   - The stem or distractors contain cues (i.e., clues, specific determiners, phrasing, length, etc).
   - The answer choices are a collection of unrelated true/false statements.
   - More than one distractor is not credible.
   - One or more distractors is (are) partially correct (e.g., if the applicant can make unstated assumptions that are not contradicted by stem).

4. Check the appropriate box if a job content error is identified:
   - The question is not linked to the job requirements (i.e., the question has a valid K/A but, as written, is not operational in content).
   - The question requires the recall of knowledge that is too specific for the closed reference test mode (i.e., it is not required to be known from memory).
   - The question contains data with an unrealistic level of accuracy or inconsistent units (e.g., panel meter in percent with question in gallons).
   - The question requires reverse logic or application compared to the job requirements.

5. Check questions that are sampled for conformance with the approved K/A and those that are designated SRO-only (K/A and license level mismatches are unacceptable).

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only		
31	F	3												S	N
33	F	2												S	B
39	H	2												S	N
46	H	2												S	N
48	F	2												S	B
52	H	2												S	N
55	H	3												S	N NRC: Appears that applicant could argue that C is also correct because it could be below the NPSH curve for -6 feet. Is reading this EOP graph an RO function? LICENSEE: If point is within shaded area, then next parameter would be correct. **LGA Fig NR**
60	H	2												S	N **LGA -002 and LP 6**
63	H	2												S	N
66	H	2												S	N NRC: LOK This requires recall of TS required action. LICENSEE: This is one hour TS, ROs required to know. Application of operability to IRM.
75	F	3												S	B
85R	F	2												S	B
89R	F	3												S	B **LGA-012**
90R	H	3												S	M
92R	H	2						X						U	M NRC: LOK This is recall of MFLCPR bases and greater than one hour TS LCO. TS LCO requirements not appropriate for ROs. Provide LP/LO to justify RO required knowledge. LICENSEE: Based on old question, thermal limits required action within 15 minutes. The TS time has changed, but ROs are still expected to know thermal limits/actions based on procedures. Changed distractors/answer to identify appropriate RO procedural knowledge.
97R	H	2												S	M **LAP-820-11TG; LGA-002**

Q#	1. LOK (F/H)	2. LOD (1-5)	Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only	6. U/E/S	7. Explanation
107S	H	3												S	M **LGA-010**
108S	H	2												S	M **TS 3.4.3.1**
109S	H	2												S	M **LGA-001, Detail I**
114S	H	3												S	N **LGA-010**
121S	F	2												S	B
122S	F	2												U	B NRC: Reference supports answer B. LICENSEE: Incorrect answer identified as C, should be B.
2	F	2												S	B
3	H	2												S	N
4	F	2												S	B
6	E	2												S	B NRC: Knowledge of power supply is fundamental. LICENSEE: Agree.
7	H	2				X								U	M NRC: What is believable about C and D (ie, scram?) Change C or D. LICENSEE: Will change distractor D.
9	H	2												S	M
10	F	2												S	N
11	F	2												S	B
12	F	3												S	B
13	F	2												S	B
14	F	2												S	B
16	H	3												S	N
18	F	2												S	N
19	F	2												S	N

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q= K/A	SRO Only		
20	H	2												S	M
21	F	2												S	N
23	H	2												S	B
24	F	2												S	N
26	H	3												S	N
27	F	2												S	N
28	H	3												S	N
30	H	2				X								U	N NRC: What is believable about C and D? No indication of any type of rad problem in stem. LICENSEE: Will change stem to include potential source of radiation and distractors A and D accordingly to make B the only correct answer..
32	H	3												S	B
34	F	2												S	B
35	F	2												S	N
36	F	3												S	B
37	F	3												S	N NRC: Reference doesn't support answer for the RETS pressure. LICENSEE: Reference provided.
38	H	2												S	N
40	H	3												S	N
41	H	2												S	B
42	F	2												S	M
43	F	2												S	M
44	H	2												S	N
45	F	2		X										U	B NRC: Information is fundamental (memory). Second part of question answered by LGA-003 that is provided as handout. LICENSEE: Agree, information is fundamental. Will delete the information on LGA-003.
47	F	2												S	N

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only		
49	F	3												S	N
50	F	2												S	N
51	F H	X	X				X							U	M B NRC: Question is not discriminating because answer given is a simplistic concept. The concept is always true. Is there an expectation that a nuclear operator that has participated in your training program would not understand the concept? Why is A incorrect? Bases is related to scram action, nothing to do with Release Rate. LICENSEE: Replaced question, difficult to write question for selected KA, changed to AK3.04.
53	F	3												S	N
54	H	2												S	N **LGA Fig NL**
56	H	3												S	N
57	F	2												S	M NRC: This is recall of RCIC suction interlock. Requires little analysis or diagnosis to answer the question. LICENSEE: Agree.
58	H	2												U	M N NRC: Could not clearly read graph submitted with exam. Q 54 and 58 both require plotting points to identify NPSH. Replace question. LICENSEE: Replaced Q58, used same KA. **LGA Fig NH**
59	H	3												S	B **LGA Detail K**
61	F	2		X										U	N NRC: Answer D is provided in Warning Box at bottom of handout LGA-003. LICENSEE: Will delete warning box on LGA-003 handout.
62	H	2												S	N
64	H	2												S	N
65	F	3												S	N
67	F	3												S	N
68	F	2												S	B
69	F	2												S	M
70	F	3												S	B

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only		
71	H	2												S	B
72	F	2												S	N
73	F	2												S	M
74	H	2												S	M
76R	H	3								.				S	N
77R	H	2												S	N
78R	F	2												S	N
79R	H	3												S	N
80R	H	2												S	N
81R	▓	2												S	N NRC: This is recall of SDV Bypass switch BYPASS interlock which has no effect in the identified mode. Requires lilttle analysis or diagnosis to answer the question. LICENSEE: Agree.
82R	H	3												S	N NRC: Is C correct? No single failure shall prevent system actuation. LICENSEE: C is correct.
83R	F	3												S	N
84R	H	3												S	N
86R	H	3												S	B **1E-1-4203AB-AF,AU**
87R	H	3												S	N
88R	F	2												S	N
91R	F	2												S	B
93R	H	2												S	B
94R	H	3												S	N
95R	H	2												S	B
96R	F	2												S	N
98R	H	2												S	N

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/ units	Back-ward	Q= K/A	SRO Only		
99R	F	2												S	B
100R	F	3												S	B
101S	H	3												S	N LGA-010
102S	H	3												S	N
103S	H	3												S	N LS-AA-1110, p.11-28
104S	H	3												S	N
105S	F	2												S	N
106S	H	3												S	N LGA-FP-01, Tables 1-4
110S	H	2												S	N LGA-003
111S	F	2												S	N
112S	H	3												S	B
113S	H	2												S	N
115S	H	2												S	N LGA-003, SRVTPLL
116S	H													S	N EP-AA-1005, p.LS 3-6 thru 3-13; LGA-002
117S	F	2												S	N
118S	F	2												S	N
119S	F	2												S	N
120S	F	2												E	N NRC: Distractor B, replace number in parenthesis with "2". LICENSEE: Done.
123S	F	2												S	N
124S	F	2												S	N
125S	F	2												S	N NRC: This is not SRO only knowledge. LICENSEE: This is not RO required information and considered SRO only..

First 30 questions used as initial review. All 125 questions were independently reviewed and KAs verified.

REVISED

Tier/Group	Exam Outline	Randomly Selected K/A	Reason for Rejection
2/1	RO	211000 A3.06	Appears to be double jeopardy with 204000K1.08. Replaced with randomly selected KA 215004G2.4.4
2/1	SRO	211000 A3.06	Appears to be double jeopardy with 204000K1.08. Replaced with randomly selected KA 215004G2.4.4
2/1	RO	215004 G2.4.4	Only relationship would cause double jeopardy with 295037 EK1.04 Replaced with randomly selected KA 215004 k3.02
2/1	SRO	215004 G2.4.4	Only relationship would cause double jeopardy with 295037 EK1.04 Replaced with randomly selected KA 215004 k3.02
2/1	RO	211000 K5.01	Appears to be double jeopardy with 295037 EK1.04. Replaced with randomly selected KA 211000 A3.08
2/1	SRO	211000 K5.01	Appears to be double jeopardy with 295037 EK1.04. Replaced with randomly selected KA 211000 A3.08