

EXAMINATION REPORT

Facility Licensee: Arkansas Power & Light Company
P. O. Box 51
Little Rock, Arkansas 72203

Facility Docket No: 50-313

Facility License: DRP-51

Chief Examiner: R. Smith 4/25/84
R. Smith, Licensing Examiner Date

Approved By: R. A. Cooley 4/25/84
R. A. Cooley, Section Chief Date

Summary

Examinations dates were February 29, March 1, and March 27-29, 1984

Written and oral examinations were administered to ten SROs and six ROs. Partial written examinations were given to 2 SROs and 5 ROs of these 16 applicants. Fifteen applicants passed these examinations, and one SRO failed the oral examination.

REPORT DETAILS

1.0 Examination Review Meeting

A meeting was held which included the NRC examiners and A. Elliot, E. Wentz, E. Force, C. Zimmer of ANO's Training Department. The object of this meeting was to review the examinations. The following includes the license's comments and the examiners resolutions:

1. Question 1.8 and 5.1

Comment: Negatron may be answered electron.
Resolution: This is acceptable.

2. Question 1.9

Comment: Answer B. Key states "flow may go to zero May not go to zero may just decrease."
Resolution: If understanding of the pump principal is indicated, it will be acceptable.

3. Question 1.10 and 5.2

Comment: The applicants may refer to doppler as being less negative at EOL vice decrease.
Resolution: This is satisfactory.

4. Question 6.1

Comment: Reactor Building pressure actuates safeguard channels 5 and 6.
Resolution: The comment is correct.

5. Question 2.6

Comment: Justification should be degassification.
Resolution: Will be changed.

6. Question 2.9

Comment: Channel bypass can be used for failed channel also.
Resolution: This is an acceptable answer.

7. Question 2.10

Comment: SLBIC initiation will start P7A on affected Steam Generator only.

Resolution: This answer will be acceptable. Updated reference material is needed by NRC.

8. Question 6.2

Comment: Bustie open could be one of the correct answers.

Resolution: The Bustie is normally open and should be open, however it would be considered as general system knowledge rather than an answer to conditions for a diesel output circuit breaker closing on the bus during an auto-start.

9. Question 6.5

Comment: Answer B may have too much detail to evaluate the applicants answers.

Resolution: Answers will be evaluated for system understanding not specific wording in the answer key.

10. Question 6.7

Comment: Applicant may draw a diagram to indicate knowledge of pump seals.

Resolution: This is acceptable.

11. Question 3.3

Comment: Pressurizer level may be maintained at 45" to 305" for degassification venting.

Resolution: This answer will be considered.

12. Question 3.7

Comment: Question 3.7 weighted too heavy for nonsafety system.

Resolution: Believe comment is an opinion. Will consider for future use.

13. Question 3.8

Comment: Crank case pressure of about 1" H₂O can cause low lube oil pressure trip.

Resolution: This answer will be considered if given but the real trip is low pressure of 17 psig. Could give small part credit.

14. Question 3.9

Comment: This system response is not taught by training.

Resolution: Question was left in exam but evaluation based on total importance. The question should not be used in other exams.

15. Question 3.15

Comment: In answer E Pressurizer Level Compensated. Delete compensated.

Resolution: An answer of compensated level would indicate depth of knowledge, however the applicant will get most of the applicable credit with out stating compensated.

16. Question 4.3

Comment: Applicant may not give oil flow set point to prevent reverse rotation of RCP.

Resolution: The interlock listing will be acceptable.

17. Question 4.4

Comment: Reactivity anomalies may be stated as reason for performing Reactivity Balance Calculation.

Resolution: Part credit will be given.

18. Question 4.5

Comment: May not provide answer on controlling speed below a specific 3900 RPM.

Resolution: Specific RPM not required but must be aware of overspeed trip.

19. Question 4.6 and 7.17

Comment: May refer to rod patch verification procedure.
Resolution: Part credit will be given for rod patch verification.

20. Question 4.9

Comment: When referring to contamination levels, state contamination level rather than radiation emission levels.
Resolution: Believe the question is clear and correct but will do for ANO.

21. Question 4.10 and 7.8

Comment: Should accept CFR or procedure limits. Administrative procedure more limiting.
Resolution: Either acceptable.

22. Question 4.14 and 7.9

Comment: The answer for pressure in quench tank may be answered as an increase of pressure not a specific number.
Resolution: This is acceptable.

23. Question 7.3

Comment: May make statement that matching VARS on machine.
Resolution: This is acceptable if principle is explained.

24. Question 7.15

Comment: The answer will most likely be the chemistry result such as Ph or O2 control rather than the chemical added.
Resolution: The answer will be acceptable for part credit.

25. Question 7.18

Comment: Applicant may not specify type of neutron monitor.
Resolution: If neutron monitor is specified it will be acceptable.
Comment: Answers of dose rates, staytimes, and recording neutron radiation receipt is a Health Physics responsibility and may not be included in the answer.
Resolution: These answers are required. The SRO must manage the reactor building entry.

26. Question 8.1

Comment: The review of PSC and approval by General Mgr. of temporary procedures should not be a required answer.

Resolution: SRO's must be able to verify approved procedures and this is considered required knowledge.

27. Question 8.2

Comment: Recent change to procedure requirement has two SROs on shift.

Resolution: Will be graded to new procedure.

28. Question 8.7

Comment: Applicants may give general action levels for those two emergencies.

Resolution: Partial credit can be given for this answer.

29. Question 8.9

Comment: Answers may not include option of requiring full administrative controls for modification at the shift supervisor discretion even though a procedure is available for the evaluation.

Resolution: This discretion will not be weighted in the required answer. This resolution is applicable to hand held jumpers also.

30. Question 3.12

Comment: This failure high of a nuclear instrument had been set up and completed on the simulator with Arkansas initial conditions and the plant stabilized at a lower power level and feed was controlled by B.T.U. limits.

Resolution: This is an acceptable answer providing the transient assumptions are provided and the conclusions are listed.

4.0 Exit Interview

Attendees

ANO

J. Vandergrift - Training Superintendent
 E. Force - Operations Training Manager
 E. Wentz - Unit I Training Coordinator
 C. C. Zimmer - Operations

USNRC

R. A. Cooley

R. Smith

EG&G

M. King

At the conclusion of the examinations the NRC participants discussed with the ANO-1 plant training staff the results of the examinations, the number of people who were considered marginal on the oral examinations, and the following observations.

There is a general weakness in use of the plant procedures.

Time use by the applicant could be used better if they performed more functions under supervisions such as, the SRO applicants performing the actual Shift Supervisors duties.