UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

ENCLOSURE 1

REQUALIFICATION EXAMINATION REPORT - 50-348/92-300

Facility Licensee: Southern Nuclear Operating Company Inc.

Facility Name: Joseph M. Farley Nuclear Plant

Facility Docket Nos.: 50-348 and 50-364

Facility License Nos.: NPF-2 and NPF-8

Requalification written examinations and operating tests were administered at the Farley Nuclear Plant (FNP) near Dothan, Alabama.

Chief Examiner: Michael E. Ernstes for D. Charles Payne — 5/5/92 Date Signed

Approved By: Bobby L. Holbert for Charles A. Casto, Chief, Operator Licensing Section 2, Division of Reactor Safety — 5/5/92 Date Signed

SUMMARY

Examinations were administered during the weeks of March 23 and March 30, 1992.

Requalification written examinations and operating tests were administered to 13 Senior Reactor Operators (SROs) and three Reactor Operators (ROs). Of the 13 SROs tested, all passed the examination. Of the three ROs tested, all passed the examination. Four crew simulator examinations were administered; all were rated as satisfactory.

Based upon the above described results, 16 of 16 licensed operators (100 percent) passed the examination.

The following strengths were noted: written examination bank, Job Performance Measures (JPMs), simulator scenario breadth, and examination administration. The following weaknesses were noted: shift crew communications, JPM question bank, and simulator scenario depth.

REPORT DETAILS

1. Facility Employees Attending Exit Meeting

D. N. Morey, General Manager, Nuclear Plant
L. M. Stinson, Assistant General Manager, Plant Operations
C. D. Nesbitt, Manager-Operations
L. S. Williams, Manager-Training
W. R. Bayne, Safety Analysis and Engineering Review
B. W. Vanlandingham, Supervisor-Operations Training
J. L. Deavers, Senior Plant Instructor
C. I. McLean, Senior Plant Instructor
D. R. Andrews, Plant Instructor
F. K. Lero, Plant Instructor

2. Examiners

*D. C. Payne, Region II
S. J. Cahill, Region II
K. L. Parkinson, Sonalyst
+M. J. Morgan, Resident Inspector
Farley Nuclear Plant

*Chief Examiner
+Attended Exit Meeting Only

3. Exit Meeting

At the conclusion of the site visit, the examiners met with representatives of the plant staff to discuss the results of the examinations. There were no generic weaknesses noted during the operating tests.

The examiners made the following observations concerning your facility and training program:

a. Exam administration went very well. Significant time and effort was spent developing this exam, which resulted in a smoothly executed examination. A relaxed schedule was developed and adhered to for the most part. This resulted in no extended workdays and helped reduce operator stress. When changes needed to be made, the training staff exhibited creativity and flexibility in promptly proposing resolutions to the NRC exam team.

b. Communications skills among the shift crews were evaluated as weak. Often during the dynamic scenarios, the team members would speak very quietly and in groups of two. As a result, information sharing and team decision making was practically nonexistent. While this weakness did not result in any noted performance deficiencies, the potential exists for unnecessary operator mistakes due to lack of team decision making and poor crew interaction.

c. In EEP-3, "Steam Generator Tube Rupture", a caution before step 14 on page 17 (of 43) requires a ruptured S/G to be isolated and have level greater than 6 percent. However, in a faulted, ruptured S/G it is not desirable to feed the S/G above 6 percent level. Therefore, as written, the operator was in a continuous loop and unable to exit to the desired procedure - ECP-3.1, Steam Generator Tube Rupture With Loss of Reactor Coolant- Subcooled Recovery Desired. The facility corrected this problem by issuing a temporary change that moved the caution to after step 14.

d. Reactor Coolant Pump Motor-Generator switches N1C11E005A, 1A MG SET SUPP BKR and N1C11E005B, 1B MG SET SUPP BKR, are designed to have the operator turn the switches to the right in order to trip the breaker. All other switches on the Main Control Board have the operator turn the switches to the left. This is a potential human factors and operational problem that should be evaluated by the plant.

e. During the week 1 JPM walkthrough exams, it was noted that the Unit 1 Turbine Driven Auxiliary Feedwater Pump was idling at about 800 rpm for no apparent reason while the unit was at power. The operator/examinees explained that the inlet isolation valve leaked by, thus causing the turbine to be continually rotating while the unit is at power. The Senior Resident Inspector was aware of this as a continuing problem and will be following up on the matter with plant management.

f. The florescent light just inside door 223 of room 235 was flickering/dim. This light is above cabinet N1C11L007-N, ROD CONT PNL CONV CAB 1A (P/A Converter Cabinet), and made it difficult to see the P/A converter for performing a JPM.

g. The upper, right corner of DC power panel Q1R41L001E-B, 125 VDC DIST PNL 1E, Pwr Supply: LB-07 in room 233 was found to be louse during the conduct of JPMs. The panel face was properly secured by the operators/examinees upon completion of their JPM.

The cooperation given to the examiners by the training and operations staffs was also noted and appreciated.

The licensee did not identify as proprietary any of the materials provided to or reviewed by the examiners during this examination.

ENCLOSURE 2

REQUALIFICATION PROGRAM EVALUATION REPORT

Facility Generated Reference Material

The reference material supplied by the facility was reviewed to determine its adequacy for examination development and administration. The facility supplied an adequate number of open reference questions and their supporting static simulator scenarios for development of the written portion of the examination. One hundred and one JPMs (58 for inside the Control Room tasks and 43 for outside the Control Room tasks) and 30 dynamic simulator scenarios were provided for the development of the operating portion of the examination. A sufficient amount of additional reference material was provided to the examination team.

NRC examiners met with members of the facility training staff on several separate occasions for the purpose of constructing the examination. This included the week of March 9, 1992, which was devoted exclusively to examination development activities. The exam team used the licensee generated sample plan to develop this examination. The sample plan adequately identified applicable examination topics and served as the test outline.

The content and scope of the written examination was satisfactory. Some deficiencies in item construction were identified, and the facility exam team members made appropriate changes to the test items. Specific observations from this portion of the examination process include:

1. Some questions were judged to be "direct lookups" which are inappropriate for an open-reference examination. These were given to the facility exam team for correction.

2. All exam bank questions lacked direct references which are required by NUREG 1021, the Examiner Standards, ES-602.C.1.a. This makes it difficult to validate and modify the exam questions. The facility informed the NRC exam team that each question's identification number corresponded to a specific training lesson plan which could be consulted to obtain the reference. This procedure of obtaining references is cumbersome and does not meet the intent of having a direct reference. The facility agreed to incorporate direct references as part of their ongoing periodic revalidation of the examination question bank.

3. Several questions had K/A (Knowledge/Ability) values much less than the required 3.0 value. Most of these were found to have incorrect K/A values and were changed to reflect the proper number. Others were deemed to have little safety significance and were replaced with questions having a higher K/A value.

Forty JPMs and 80 associated JPM questions were reviewed during the pre-examination preparation week. Although the reviewed JPMs were found to be technically accurate, the following deficiencies were identified:

1. Fifteen JPMs were modified to accurately define the JPM task. The following example is representative of 14 other similar changes.

   JPM CRO-365C, "Perform The Required Actions To Take Local Control Of Components At The Hot Shutdown Panel." Condition "d" originally read "Directed by Shift Supervisor to shift control to the HSP starting with step 8.0 of AOP 28.0 and continuing with the procedure". This condition was changed to read "Directed by Shift Supervisor to shift control to the HSP by performing step 8.0 through step 17 of AOP 28.0" to better define the scope of the task to be performed.

2. JPM initial conditions were improved for three JPMs.

3. Three JPMs scheduled that were to be performed [illegible] e simulator did not have a simulator IC number identified. Appropri[illegible] simulator IC numbers were identified.

4. Seven JPMs were modified to provide notes for the evaluator or cues for the examinee. A total of ten such notes or cues were added.

5. Nine JPMs were modified to clarify the evaluation standards. Eleven steps identified as "critical elements" were found not to be critical for the successful completion of the appropriate JPM. The critical element designation for these steps was deleted. Additionally, several standards of performance were modified to better reflect required acceptable performance.

6. Sixteen JPM questions were changed or replaced.

7. JPM CRO-332, Monitor The Safety Injection System In The Recirculation Mode. This JPM initially required the examinee to record the indications of various main control board parameters for components operating normally. The JPM was modified to require the examinee to also analyze the recorded information to determine whether the "B" RHR Pump and "C" Charging Pump were cavitating.

Although the number of JPM deficiencies appear high, the examination team found the facility's JPMs to be above average, and they provided an excellent basis for evaluating the operators.

Simulator scenarios used during the exam were composed of related events and covered the scope of the Emergency Operating Procedures to the depth required by Examiner Standard 604. Several changes were made to the scenarios (additional equipment failures and instrument malfunctions) to better test the

operators' abilities to identify malfunctioning equipment and to evaluate the Senior Reactor Operator's ability to make key decisions and to prioritize crew responses. Individual Simulator Critical Tasks (ISCTs) were properly defined. The scenarios were written around time-critical and team-dependent tasks as discussed in Revision 6 of ES-604.

Exam Administration

The facility's administration of the examination was acceptable. Plans for maintaining examination security, while minimizing operator wait time, were thorough and well executed. Some areas of exam administration were noted which require improvement.

1. During the simulator examinations the facility evaluators would quickly caucus and then conduct a post-scenario critique with the crew. Post-scenario critiques, where weaknesses are fed back to the operators before completion of the full exam, are inappropriate during the testing portion of the requal program. Also, these critiques added unnecessarily to the overall length of the dynamic simulator exam and provided added stress to the operators. Instead, these critiques should be delayed until after the completion of all scenarios in the simulator set and when they won't impact the examination schedule. Upon discussion with the Chief Examiner, the facility readily concurred with these comments and modified this practice on their own accord.

2. FNP-1-AOP-19.0, Malfunction of Rod Control System, Revision 12, was recently revised; however, the note on page 3 of Attachment 1 was not deleted as expected. This note was no longer applicable, and its presence in the procedure confused the operators when they performed step 5.4 of this attachment. The facility has issued a temporary change to correct this problem until the procedure is revised.

3. It was noted that some operators were allowed to help reset the simulator between JPMs during week 1 until stopped by the Chief Examiner. These operators could have potentially received extra insight as to the direction of the next JPM. To assure fairness to all operators, this practice should not occur. The simulator operator was counseled in the matter.

Facility Examiner Evaluation

An evaluation of the facility's evaluators was conducted. The evaluation consisted of assessing the evaluator's skills in the following areas:

- Providing cues - Verbal and Non-verbal,

- Evaluation Skills - Probing of Operator Weaknesses, as required,

- Exam Administration,
- Judgement (Pass/Fail Decisions), and
- Interaction with the NRC Examiner.

The NRC determined that licensee's evaluators were satisfactory; evaluator performance in general was very good.

Requalification Program Evaluation

A satisfactory requalification program must meet each of the following criteria:

1. At least 75 percent of all operators must pass the examination.
2. No more than one-third of the crews evaluated fail the simulator examination.

In addition, if three or more of the following are applicable to the requalification program, then the program shall be determined to be unsatisfactory. However, even if one or two of the following are applicable, then the program may be determined to be unsatisfactory depending on the severity of the problem and the particular circumstances that exist.

1. The facility evaluators do not concur with the NRC evaluators on all UNSATISFACTORY crew evaluations.
2. The facility failed to train and evaluate operators in all positions permitted by their individual licenses.
3. More than one facility evaluator is determined to be unsatisfactory.
4. A lack of administrative controls to preclude an RO or SRO from performing licensed duties without satisfying the requirements of 10 CFR 55.53 to restore the license to active status.
5. A lack of quality control of the facility's examination bank.
6. The facility's failure rate is excessive relative to the NRC's failure rate.

Based on the information provided in the report above, the Farley Requalification Program met all evaluation criteria in an acceptable manner and therefore is rated as SATISFACTORY.

ENCLOSURE 3

SIMULATOR FIDELITY REPORT

Facility Licensee: Southern Nuclear Operating Company Inc.

Facility Name: Joseph M. Farley Nuclear Plant

Facility Docket Nos.: 50-348 and 50-364

Operating Tests Administered On: Weeks of March 23 and 30, 1992

This form is used only to report observations. These observations do not constitute, in and of themselves, audit or inspection findings and are not, without further verification or review, indicative of noncompliance with 10 CFR 55.45(b). These observations do not affect NRC certification or approval of the simulation facility other than to provide information which may be used in future evaluations. No licensee action is required solely in response to these observations.

During the conduct of the simulator portion of the operating tests, the following items were observed:

ITEM	DESCRIPTION
Core Model	During a pressurizer steam space break, the core model would fault when two out of three High Head Safety Injection (HHSI) pumps were unavailable to combat the casualty. The model had difficulty calculating superheat in this situation after subcooling was lost. As a result, the planned scenario had to be modified to ensure at least two HHSI pumps were available. The facility was in the process of correcting this problem.
RWST & CST Level Indicators	During the first day of dynamic simulator exams, train "B" of these level indicators were responding like train "A" of the other level instrument (i.e., train "A" RWST level and train "B" CST level read the same, while train "A" CST level and train "B" RWST level read the same). Train "A" was the correctly reading instrument for both level indicators. It was found that the Train "B" leads were swapped during maintenance. The facility simulator technicians corrected this problem by the next day of dynamic simulator scenarios.

RTYPE: K2.04
(Individual)

RTYPE: K2.07
(KEY)

TRAINING DEPARTMENT EXAMINATION

NAME(*RCVR): _____ GROUP: _____

*DATE: 03/25/92 EXAM NUMBER: A92C5W1A1R

EXAM TITLE: LRP-92 RO CY-5 WK-1 PART-A TOTAL POINTS: 13.00
(*XREF) NRC ABNORMAL

INSTRUCTIONS

1. This is a 1.0 hour examination.

2. Point value for each question is indicated in the question header.

3. Answer all questions:

   [ ] On a separate paper.

   [ ] On the answer sheet by circling or marking the correct response or filling in the blanks.

   [X] On the same page as the question. If extra room is needed, use the reverse side of the previous page or use extra paper.

4. CHEATING OF ANY KIND IS STRICTLY FORBIDDEN. ANY INDIVIDUAL CAUGHT CHEATING WILL AUTOMATICALLY FAIL THE EXAMINATION AND DISCIPLINARY ACTION WILL BE TAKEN.

5. ALL WORK DONE ON THIS EXAMINATION IS MY OWN. TO MY KNOWLEDGE, I HAVE NEITHER GIVEN NOR RECEIVED AID. FURTHERMORE, I WILL NOT DIVULGE THE CONTENTS OF THIS EXAMINATION TO ANYONE ELSE WHO MAY TAKE IT.

_____
EXAMINEE'S SIGNATURE

EXAM GRADED BY: _____ PREPARED BY: J. Thweaver

GRADING/MATH REVIEW BY: _____ APPROVED BY: B. W. Lentz
Training Manager/
Supervisor

*INDEXING INFORMATION
2/24/89

PART A (STATIC SIMULATOR) AND PART B (OPEN REFERENCE)
EXAMINATION GUIDELINES

The procedures, drawings, Tech Specs, and other material provided may be used as references while taking this examination. If this is a "Static Simulator-Part A" exam, the simulator may be used as a reference to gather data for answering the questions. If this is an "Open Reference-Part B" exam, the simulator may be used as a reference but no simulator data should be used to answer the questions.

The following guidelines must be followed while using these references:

- The exam may require all examinees to refer to the same control board indications. Care must be taken to maintain exam security and avoid any possibility of compromise.

- Do not leave pencil or pen marks in the reference materials.

- When you are finished with reference materials, ensure that the materials are closed and/or returned to their original location.

Keep your exam materials together. While at the control board or procedures, take your exam with you and keep your answers covered.

When you have finished and turned in your exam, you may leave the exam area and DO NOT discuss the exam with any one who has not taken it.

Do not forget to follow the basic rules of exam taking:

- Static Simulator-Part A questions are system based and apply to the static simulator conditions unless otherwise specified.

- Open Reference-Part B questions are procedure based and are not based on static simulator conditions.

- Answer all questions independently of each other unless specified by the question.

- Answer all parts of each question; do not leave any answers blank.

- If a question is unclear or you are uncertain as to the intent -- ask ONLY the proctor for help prior to stating any assumptions.

- Show all work and state any assumptions.

10190M

052101G14002 Points: 1.00 Question Number: 1

A VCT auto makeup has occurred due to the RCS leak in progress. Based on the existing RCS boron concentration, determine the effects the auto makeup will have on reactor power and Tavg. (Circle the correct response.)

	Power	Tavg
A.	Decrease	Increase
B.	Decrease	Decrease
C.	Increase	Decrease
D.	Increase	Increase

ANSWER: D. Point Value: 1.0 Answer Time: 6.0 Mins.

Static Sim Scenario Nos. 02A 22A _ _ ___ ___ ___ ___

S&K No. 249110020105 _____ ___ _____ __

K/A No. 004000K106 _____ _____

RO/SRO Impf. 3.1 /3.1 ___ /___ ___ /___

Rev. Date 10/7/91

Rev. Date 10/16/91

052201F07012 Points: 1.00 Question Number: 7

Which of the following statements explains the indications currently displayed by DRPI? (Circle the correct response.)

A. Rod F-6 has dropped.

B. Rod F-6 has been ejected.

C. Loss of both data A and data B information for rod F-6

D. Failure in a data A or data B coil for rod F-6

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	22A	___ ___ ___	___ ___ ___
S&K No.	240122020136		
K/A No.	014000-A1.02A	014000-A2.03A	01400-K4.03A
RO/SRO Impf.	3.2 /3.6	3.6 /4.1	3.2 /3.4

052201G14016 Points: 1.00 Question Number: 8

If the main turbine were to trip from the present plant conditions, which of the following statements describes the response of the steam dumps as a result of the transient? (Circle the correct response.)

A. Steam dumps will open only when the HI-1 trip-open setpoint is reached.

B. Steam dumps will open as a result of rising steam pressure.

C. Steam dumps will open and be controlled by the turbine trip controller.

D. Steam dumps will remain closed until both steam dump interlock switches are placed in BYPASS INTERLOCK.

ANSWER: B. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	22A		
S&K No.	244110020160	244102000100	
K/A No.	041020-A1.02A		041020-A4.08A
RO/SRO Impf.	3.1 /3.2	___ /___	3.0 /3.1

052201I34008 Points: 1.00 Question Number: 9

What effect does the indicated 1D inverter fault have on the solid-state protection system? (Circle the correct response.)

A. No effect.

B. "B" reactor trip breaker prevented from auto opening.

C. "A" train safeguards actuation is prevented.

D. "B" train safeguards actuation is prevented.

ANSWER: A. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	22A	___ ___ ___	___ ___ ___
S&K No.	246208026000	246245020000	
K/A No.	000057-K0.05G	_____	000057EA2.04A
RO/SRO Impf.	3.4 /3.6	___ /___	3.7 /4.0

052520M01001 Points: 1.00 Question Number: 10

A loss of main feedwater has occurred due to a failed open FRV on the C S/G causing C S/G to exceed 75% narrow range level. Which of the following is NOT correct with respect to the main turbine? (Circle your choice.)

A. It should have been manually tripped to minimize S/G mass loss.

B. It should have automatically tripped at the same time as the SGFP tripped.

C. If the turbine had tripped, the S/G mass loss would have been greater due to the shrink effect.

D. If the turbine had tripped, driving rods in will cause steam flow to decrease.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	02A	22A	___	___	___	___ ___
S&K No.	243508020235		_____	_____		
K/A No.	000054K301		_____	_____		
RO/SRO Impf.	4.1 /4.4		___ /___	___ /___		

Rev. Date 10/16/91

052520M04005 Points: 1.00 Question Number: 11

Based on the loss of feedwater that has occurred, which of the following statements is correct concerning Rx trip?

(Circle the correct response.)

A. The reactor should be manually tripped to conserve S/G inventory for adequate secondary heat sink and decay heat removal.

B. The reactor should not be manually tripped until the main turbine is tripped in order to minimize the RCS cooldown.

C. The reactor should not have automatically tripped because power is less than 35%.

D. The reactor should not have automatically tripped because the main turbine has not tripped.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	02A 22A	___ ___ ___ ___ ___	
S&K No.	240201022000	_____	_____
K/A No.	000054K304	_____	_____
RO/SRO Impf.	4.4 /4.6	___ /___	___ /___
Rev. Date 10/16/91			

052521A04001 Points: 1.00 Question Number: 13

Based on the charging system lineup, in the event an emergency boration is required: (Circle the correct response.)

A. The emergency boration will work correctly using the emergency boration procedure immediate action steps.

B. The boric acid flow will go to the VCT instead of the charging pump suction.

C. Boration can ONLY be accomplished using the reactor makeup system in the borate mode.

D. The emergency boration flow will have to flow through valve Q1E21V185 (manual emergency borate valve) to the charging pump suction.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	02A	22A	___	___	___	___ ___
S&K No.	240413024645					
K/A No.	000024A201	000024K302				
RO/SRO Impf.	3.8 /4.1	4.2 /4.4	___ /___			

Rev. Date 10/8/91
Rev. Date 10/16/91

052101K16001 Points: 1.00 Question Number: 2

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

The RCS has been taken solid. "A" train RHR is in service providing both core cooling and low pressure letdown. Due to problems maintaining stable RCS pressure, both the letdown line pressure control valve PCV-145 and the charging flow control valve FCV-122 are being operated with their respective controllers in manual. The OATC wishes to raise RCS pressure toward the high end of his operating band. Which of the following actions would result in a pressure increase?

(Circle the correct response.)

A. Increase demand towards closed on letdown line pressure controller PK-145.

B. Increase flow through the "A" RHR Hx while maintaining total RHR flow constant.

C. Fully open RHR to letdown heat exchanger HCV-142.

D. Commence a 200 gallon dilution of the RCS.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.		___	___	___	___	___	___	___
S&K No.	2-0203000220	_____				_____	
K/A No.	004020K6.02	_____				_____	
RO/SRO Impf.	3.8 /4.1	___ / ___				___ / ___	

Rev. Date 1/9/92
Rev. Date 2/22/92

052102FG6006 Points: 1.00 Question Number: 3

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

Earlier in the shift, the "C" SW pump was aligned to the "B" train and the "B" train spare pump selector switch was placed in the "D" position in preparation for some PMs on the "D" SW pump. The A, B, D, and E SW pumps are presently running. Following an SI/LOSP, which SW pumps will be running, provided the ESF sequencers run properly? (Circle the correct response.)

A. A, B, C, D, E

B. A, B, C, E

C. A, B, C, D

D. A, B, D, E

ANSWER: B. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___
S&K No.	247611025320					
K/A No.	076000K4.06	076000a2.01		076000K4.02		
RO/SRO Impf.	2.8 /3.2	3.5 /3.7		2.9 /3.2		

052102H1C016 Points: 1.00 Question Number: 4

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

Evaluate the following plant conditions:

- The A MDAFW pump is out of service.
- The condensate storage tank is ruptured and has no water in it.
- The plant has tripped.
- All SGs are below the narrow range indication and lowering in the wide range.
- It has been decided to feed the SGs from the SW system using the AFW system.

Which combination of open valves will supply service water to the suction of an operable AFW pump? (Circle the correct response.)

A. 3209A, 3209B

B. 3209A, 3210A

C. 3209B, 3216

D. 3209A, 3216

ANSWER: D. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	___ ___ ___	___ ___ ___	___
S&K No.	246111020500	_____	_____
K/A No.	061000A0.13G	_____	_____
RO/SRO Impf.	3.6 /3.8	___ /___	___ /___

G52105B18010 Points: 1.00 Question Number: 5

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

If the speed of the main turbine exceeds 103% but not 108%:

(Circle the correct response.)

A. The governor valves will close but the intercept valves will stay open.

B. The governor and intercept valves will shut.

C. The intercept valves shut and the governor valves stay open.

D. Only the governor valves shut if in speed test permis sive.

ANSWER: B. Point Value: 1.0 Answer Time: 2.0 Mins.

Static Sim Scenario Nos.	___	___	___	__	___	___	___
S&K No.	244508025720	_____		_____			
K/A No.	045050K1.01	_____		_____			
RO/SRO Impf.	3.4 /3.6	___ /___		___ /___			

052201B11011 Points: 1.00 Question Number: 6

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

While operating at 100% power, the steam pressure signal used to density compensate steam flow for the SGWLC system for steam generator B fails low. Which of the following describes the resulting secondary system transient? (Circle the correct response.)

A. S/G level decreased and SGFP speed increases.

B. S/G level decreases and SGFP speed decreases.

C. S/G level increases and SGFP speed increases.

D. S/G level increases and SGFP speed decreases.

ANSWER: B. Point Value: 1.0 Answer Time: 4.0 Min.

Static Sim Scenario Nos.	___	___	___	___	___ ___ ___
S&K No.	243513020290	243508020283			_____
K/A No.	035010A2.03	035010A3.01			_____
RO/SRO Impf.	3.4 /3.6	4.0 /3.9			___ /___

Rev. Date 10/16/91

052520T01004 Points: 1.00 Question Number: 12

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

The declaration of an Alert is required if any earthquake results in ground acceleration above the 1/2 safe shutdown limit at the site. Which of the following control room indications tell the operators that the 1/2 safe shutdown earthquake ground acceleration limit of 0.05g has been exceeded? (Circle the correct response.)

A. One red light is lit on the peak shock annunciator panel.

B. All 3 recorders are running on the SMA-3 strong motion accelerograph portion of the seismic panel.

C. Several amber lights are lit on the peak shock annun ciator panel.

D. The seismic event indicator changes from black to white.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___ ___	___ ___ ___
S&K No.	248402000100	248406000200 _____
K/A No.	_____	194001A1.02A _____
RO/SRO Impf.	___ /___	4.1 /3.9 ___ /___

Rev. Date 3/22/91

03/20/92 ALABAMA POWER COMPANY

EXAM GRADING SHEET

EXAM NAME: A92C5W1A1R CLASS NAME: LRP-92

TOTAL POINTS: 13 DATE GIVEN: 03/25/92

STUDENT ID / NAME: ** DRAFT ** / ********** DRAFT **********

QUESTION #	POINT VALUE	POINTS MISSED
1 - 052101G14002	1.00	_____
2 - 052101K16001	1.00	_____
3 - 052102F06006	1.00	_____
4 - 052102H10016	1.00	_____
5 - 052105B18010	1.00	_____
6 - 052201B11011	1.00	_____
7 - 052201F07012	1.00	_____
8 - 052201G14016	1.00	_____
9 - 052201I34008	1.00	_____
10 - 052520M01001	1.00	_____
11 - 052520M04005	1.00	_____
12 - 052520T01004	1.00	_____
13 - 052521A04001	1.00	_____

TOTAL POINTS MISSED: _____ FINAL SCORE: _____ _____ %

RTYPE: K2.04
(Individual)

RTYPE: K2.07
(KEY)

TRAINING DEPARTMENT EXAMINATION

NAME(*RCVR): _____ GROUP: _____

*DATE: 03/25/92 EXAM NUMBER: A92C5W1E1R

EXAM TITLE: LRP-92 RO CY-5 WK-1 PART-A TOTAL POINTS: 13.00
(*XREF) NRC EMERGENCY

INSTRUCTIONS

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_____
EXAMINEE'S SIGNATURE

EXAM GRADED BY: _____ PREPARED BY: J J Deavers

GRADING/MATH REVIEW BY: _____ APPROVED BY: _____
Training Manager/
Supervisor

*INDEXING INFORMATION
2/24/89

PART A (STATIC SIMULATOR) AND PART B (OPEN REFERENCE)
EXAMINATION GUIDELINES

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052102H17008 Points: 1.00 Question Number: 2

Due to the high cooldown rate, the operator decides to reduce AFW flow to reduce the cooldown rate. Which of the following methods will NOT be effective in reducing AFW flow? (Circle your choice.)

A. Reduce speed of TDAFW pump at the MCB.

B. Stop the MDAFW pumps in local at the HSD panel.

C. Reset the MDAFW FCV resets for train A & B and throttle the FCV at MCB using the pots.

D. Reset the MDAFW FCV resets for train A & B and shut the FCV by placing their MCB handswitches in close.

ANSWER: D. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos. 16E					
S&K No.	246113021300	241110205 15			
K/A No.		061000K4.06			
RO/SRO Impf.	/	4.0 /4.2		/	

052106D14002 Points: 1.00 Question Number: 3

Radiation monitors R-11 and R-12 are not in alarm while other radiation monitors indicate Hi radiation levels inside containment. The reason for this is: (Circle the correct response.)

A. R-11 and -12 are Geiger-Mueller type detectors that have saturated.

B. R-11 and -12 have obviously failed.

C. R-11 and -12 isolated when phase B occurred.

D. R-11 and -12 isolated when SI/phase A occurred.

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos. 16E	___ ___ ___	___ ___ ___	
S&K No.	247256020150	_____	_____
K/A No.	073000A1.01	_____	_____
RO/SRO Impf.	3.2 /3.5	___ /___	___ /___

052530A23015 Points: 1.00 Question Number: 9

A single accident occurred to the plant, causing a safety injection and reactor trip. Which of the following was that accident? (Circle the correct response.)

A. Steam break inside containment

B. Feed break inside containment

C. LOCA inside containment

D. A stuck-open pressurizer code safety valve

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	16E	___	___	___	___	___	___
S&K No.	240246020700	_____		_____			
K/A No.	013000A2.01	_____		_____			
PO/SRO Impf.	4.6 /4.8	__ /__		__ /__			

052530B03001 Points: 1.00 Question Number: 10

Assuming RCS pressure and LHSI flow remain constant for the next 4 hours, which of the following describes how the RHR system will respond with no operator action? (Circle the correct response.)

A. Without CCW cooling to the RHR Hxs, the system may overheat.

B. Without opening the RHR Hx bypass valves (605 A & B), the system will overheat.

C. The ONLY method that will prevent overheating of the RHR system is to trip the RHR pumps.

D. The RHR system will not overheat.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos. 16E	___	___	___	___	___	___
S&K No. 240515022790	_____			_____		
K/A No. 191004K1.04	_____			_____		
RO/SRO Impf. 3.3 /3.4	___ /___			___ /___		

Rev. Date 1/8/92

052530B11004 Points: 1.00 Question Number: 11

Which of the following statements describes the operation of the A accumulator? (Circle the correct response.)

A. The low pressure in the A accumulator indicates that it did discharge into the RCS and the level indication is faulty.

B. The low pressure in the A accumulator prevented the A accumulator from discharging into the RCS.

C. A LOCA exists in the A loop, which prevented the accumulator from discharging.

D. A check valve between the RCS and the A accumulator stuck shut, preventing the accumulator from discharging.

ANSWER: B. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos. 16E	___ ___ ___	___ ___ ___	
S&K No.	24060700100	_____	_____
K/A No.	006000K1.03	_____	_____
RO/SRO Impf.	4.2 /4.3	___ /___	___ /___
Rev. Date 1/8/92			

052530B13006 Points: 1.00 Question Number: 12

The reason for the difference in MSIV position indication is:

(Circle the correct response.)

A. The A S/G pressure is slightly lower than B and C S/G and the steam header due to a steam break upstream of A S/G MSIVs.

B. The B and C S/G pressures are slightly lower than the A S/G and steam header due to TDAFW pump operation.

C. The indication for B and C S/G MSIVs is obviously faulty and the MSIVs should indicate closed.

D. The indication for A S/G MSIVs is obviously faulty and the MSIV should indicate mid-position.

ANSWER: B. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos. 16E			___	___	___	___ ___ ___
S&K No.	243515022600		_____			_____
K/A No.	0000463A1.03		061000K1.03			_____
RO/SRO Impf.	4/3 /4.3		3.5 /3.9			___ /___
Rev. Date 1/8/92						

052530B16007 Points: 1.00 Question Number: 13

If RCS pressure continues to decrease, at what RCS pressure will the RHR system start injecting water into the RCS, assuming no instrument errors exist? (Circle the correct response.)

A. LHSI flow is in progress at current pressure.

B. LHSI flow will occur at an RCS pressure < 200 psi.

C. LHSI flow cannot occur due to instrument air alignment.

D. LHSI flow cannot occur unless both RHR pumps are running.

ANSWER: B. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos. 16E	___ ___ ___ ___ ___ ___		
S&K No.	240513022790	_____	_____
K/A No.	191004K1.04	_____	_____
RO/SRO Impf.	3.3 /3.4	___ /___	___ /___
Rev. Date 1/8/92			

10190M

052102G13003 Points: 1.00 Question Number: 1

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

Concerning design features of the CCW system which protect the system itself from the effects of leakage into or out of the CCW system, which one of the following is NOT correct?

(Circle your choice.)

A. A rupture disc is installed on the CCW surge tank, which ruptures at 100 psig and directs its discharge to the floor drain tank.

B. A relief valve is installed on the CCW surge tank, which lifts at 11.5 psig and directs its discharge to the floor drain tank.

C. CCW return from the RCP thermal barriers (HV-3184) isolates at 75 psig.

D. 2 vacuum breakers are installed on the CCW surge tank, which opens to admit air into the CCW system in the event the CCW surge tank vent (RCV-3028) was shut.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___	
S&K No.	240305020450	_____		_____				
K/A No.	008010A3.02	_____		_____				
RO/SRO Impf.	3.0 /3.1	___ /___		___ /___				

Rev. Date 11/7/91

052201H05019 Points: 1.00 Question Number: 4

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC

SIMULATOR CONDITIONS.

The following plant conditions exist:

- Spray valves closed
- PORV PCV 444B closed
- PORV PCV-445A at setpoint (cycling at setpoint)

Which one of the following PRZR pressure channel failures has

occurred? (Circle the correct response.)

A. PT-444 failed low.

B. PT-445 failed low.

C. PT-445 failed high.

D. PT-444 failed high.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___
S&K No.	241008020300	241013020120			
K/A No.	000-K6.03	000027EA1.01A			
RO/SRO Impf.	/3.6	4.0 /3.9		__ /__	

052201135012 Points: 1.00 Question Number: 5

CAUTION: THIS QUESTION DOES NOT APPLY TO THE STATIC SIMULATOR CONDITIONS.

The following plant conditions exist:

- Tavg	550°F decreasing
- Main turbine	NOT TRIPPED
- Feedwater isolation	Did not occur
- Steam dumps	Armed
- Reactor tripped from	51% power
- Cause of reactor trip	Loss of "B" RCP

The above mentioned plant response to the reactor trip suggests that a failure has occurred in permissive circuit _____. (Circle the correct response.)

A. P-13

B. P-10

C. P-8

D. P-4

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.		___	___	___	___	___	___
S&K No.	241203001500	_____	_____	___	___	___	_____
K/A No.	012000K610	_____	_____	_____	_____	_____	_____
RO/SRO Impf.	3.3 /3.5	___ /___		___ /___			

052202E21002 Points: 1.00 Question Number: 6

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

The OATC has placed the core exit temperature monitor in the "ALL" submode. Which of the following describes this sub mode? (Circle the correct response.)

A. Allows individual thermocouple temperatures and subcool ing to be displayed

B. Displays subcooling and all individual thermocouple temperatures sequentially

C. Displays the highest and next highest thermocouple temperatures per quadrant and the individual thermo couple temperatures sequentially

D. Displays only the highest thermocouple per quadrant

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___ ___ ___
SGK No.	241706000150	241706023010			_____
K/A No.	017000A0.13G	000074EA1.16A			_____
RO/SRO Impf.	2.7 /2.9	4.4 /4.6			___ /___

052520L03003 Points: 1.00 Question Number: 7

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

During a draindown of the RCS from 126'6" to 123'2" with one train of the RHR system in operation, the following indications are observed:

- RHR pump discharge pressure: low and fluctuating
- RHR flow: low and fluctuating
- RHR pump motor current: fluctuating

These indications are probably caused by: (Circle the correct response.)

A. Pump cavitation

B. Pump shaft fracture

C. Pump shaft seizure

D. Water hammer

ANSWER: A. Point Value: 1.0 Answer Time: 2.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___	
S&K No.	240511020803							
K/A No.	000025EA2.07							
RO/SRO Impf.	3.4 /3.7	___/___			___/___			

Rev. Date 11/13/91
Rev. Date 1/8/92

052520R09015 Points: 1.00 Question Number: 8

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

- Plant S/U and ramp up in power in progress
- Power level is currently 12%
- At P-10, all applicable actions were taken
- At this time, compensating voltage fails low to N35 intermediate range channel

Which one of the following will be the correct effect if power remains at 12%? (Circle the correct response.)

A. No observable effect on N35 IR amps

B. Slight increase on N35 IR amps (equivalent to 3-5% power increase)

C. Large increase on N35 IR amps (large enough to cause trip on current equivalent to 25%)

D. Slight decrease on N35 IR amps

ANSWER: A. Point Value: 1.0 Answer Time: 2.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	_____	_____	_____				
K/A No.	000033A2.11	_____	_____				
RO/SRO Impf.	3.1 /3.4	___ /___	___ /___				

Ref. Date 2/22/92

03/20/92 ALABAMA POWER COMPANY

EXAM GRADING SHEET

EXAM NAME: A92C5W1E1R CLASS NAME: LRP-92

TOTAL POINTS: 13 DATE GIVEN: 03/25/92

STUDENT ID / NAME: ** DRAFT ** / ********** DRAFT **********

QUESTION #	POINT VALUE	POINTS MISSED
1 - O52102G13003	1.00	_____
2 - O52102H17008	1.00	_____
3 - O52106D14002	1.00	_____
4 - O52201H05019	1.00	_____
5 - O52201I35012	1.00	_____
6 - O52202E21002	1.00	_____
7 - O52520L03003	1.00	_____
8 - O52520R09015	1.00	_____
9 - O52530A23015	1.00	_____
10 - O52530B03001	1.00	_____
11 - O52530B11004	1.00	_____
12 - O52530B13006	1.00	_____
13 - O52530B16007	1.00	_____

TOTAL POINTS MISSED: _____ FINAL SCORE: _____ _____ %

RTYPE: K2.04
(Individual)

RTYPE: K2.07
(KEY)

TRAINING DEPARTMENT EXAMINATION

NAME(*RCVR): _____ GROUP: _____

*DATE: 03/25/92 EXAM NUMBER: B92C5W1A1R

EXAM TITLE: LRP-92 RO CY-5 WK-1 PART-B TOTAL POINTS: 12.00
(*XREF) NRC ABNORMAL

INSTRUCTIONS

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_____
EXAMINEE'S SIGNATURE

EXAM GRADED BY: _____ PREPARED BY: J. Weaver

GRADING/MATH REVIEW BY: _____ APPROVED BY: B. W. Van Luchene
Training Manager/
Supervisor

*INDEXING INFORMATION
2/24/89

PART A (STATIC SIMULATOR) AND PART B (OPEN REFERENCE)
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10190M

052303003005 Points: 1.00 Question Number: 1

A transformer containing a 350 ppm PCB concentration would be classified as a: (Circle the correct response.)

A. Non-PCB transformer

B. PCB transformer

C. PCB-contaminated transformer

D. PCB-containing transformer

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.		___	___	___	___	___	___
S&K No.							
K/A No.	GENK1.07						
RO/SRO Impf.	3.6 /3.7	___ /___		___ /___			

052520B01003 Points: 1.00 Question Number: 2

The plant is operating at 100% power. The RADIATION MONITOR SYSTEM HI RADIATION annunciator (FH1) alarms. The control room operators determine from the radiation monitor panel that R-15 has reached an alarm condition. The PRZR level recorder indicates a slight decrease in the level trend, followed by a return to normal. An RCS leak rate calculation shows that RCS leakage is 9 gpm. Besides identifying the affected S/G, the operators should: (Circle the correct response.)

A. Commence plant shutdown, and be in hot standby (Mode 3) within 2 hours.

B. Shut the main steam isolation valves on the affected S/G, and commence plant shutdown.

C. Isolate blowdown from the affected S/G to prevent contamination, and continue power operations.

D. Increase S/G blowdown from the affected S/G to remove any radioactivity accumulation, and continue power operations.

ANSWER: A. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.		___	___	___	___	___	___
S&K No.	300903113210	_____	_____	_____	_____	_____	_____
K/A No.	000037EK3.07	_____	_____	_____	_____	_____	_____
RO/SRO Impf.	4.2 /4.4	___ /___			___ /___		

Rev. Date 10/7/91

052520C08005 Points: 1.00 Question Number: 3

The plant is at 33% power. Control bank "D" is at 65 steps and in auto, controlling RCS temperature. A DEH control system malfunction results in a turbine trip. Control rods drive into the core 14 steps prior to being taken to MANUAL. The control rods and the steam dumps are used to restore reactor power to 32%. Bank "D" control rods were raised to 54 steps. What action should be taken and why? (Circle the correct response.)

A. Drive the control rods in to shut down the reactor.

B. No action is required. All conditions are satisfactory for main turbine recovery operations.

C. Initiate a boration in order to bring the control rod height above the low rod insertion limit.

D. Initiate an emergency boration in order to bring the control rod height above the low-low rod insertion limit.

ANSWER: C. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___
S&K No.	240105020099	300903113710				
K/A No.	194001A1.08A	001000A0.13G				
RO/SRO Impf.	2.6 /3.1	3.7 /3.6	___ /___			

05z520G01002 Points: 1.00 Question Number: 4

Unit 1 is operating at steady-state full power when SW to turbine building isolation valves Q1P16V514, 515, 516, and 517 close. All attempts to open these valves are unsuccessful. Which of the following best describes the next action the operator should take? (Circle the correct response.)

A. Commence ramping main turbine as required to maintain main generator hydrogen temperatures below 40 °C.

B. Trip the main generator.

C. Trip the RCPs and refer to AOP-4.

D. Trip the reactor and refer to EEP-0.

ANSWER: D. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	240201022050						
K/A No.	000062EK3.03	000062GEN12					
RO/SRO Impf.	4.0 /4.2	3.4 /3.7	___ /___				

052520L01001 Points: 1.00 Question Number: 5

If RHR pump amps and flow start oscillating during operations at mid-loop, which one of the following actions should be taken to restore stable operation? (Circle the correct response.)

A. Increase vessel level and increase RHR system flow.

B. Increase vessel level and decrease RHR system flow.

C. Decrease vessel level and decrease RHR system flow.

D. Decrease vessel level and increase RHR system flow.

ANSWER: B. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	240511020797						
K/A No.	005000K1.09						
RO/SRO Impf.	3.6 /3.9	___ /___		___ /___			

Rev. Date 11/13/91
Rev. Date 1/9/92

052520L19016 Points: 1.00 Question Number: 6

CTMT closure is being established per SOP-14.1 due to loss of both trains of RHR. 1A SG (B and C unavailable) is intact and with 72% wide range level. 1A SG has been established as a heat sink per AOP-12 and a secondary bleed and feed is in progress to reduce the RCS pressurization rate. Per Appendix C SOP-14.1, which of the following actions should be taken? (Circle the correct response.)

A. Open AFW to SG 1B stop vlv AFW-MOV-3350B if closed.

B. Close SG blowdown line iso vlv BD-HV-7614A if open.

C. Close AFW to SG 1A stop vlv AFW-MOV-3350A if open.

D. Close MN FW to SG 1A stop vlv CFW-MOV-3232A if open.

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	243501000100						
K/A No.	035010K1.01	035010K1.09					
RO/SRO Impf.	4.2 /4.5	3.8 /4	___ /___				

Rev. Date 5/9/91
Rev. Date 11/13/91

052521E05006 Points: 1.00 Question Number: 7

A fire is in progress in Unit 1 main steam and feedwater valve room when the operator observes 1A charging pump amps, seal injection, and charging flow oscillating. Identify the correct actions. (Circle the correct response.)

A. Trip A charging pump, start B charging pump.

B. Trip A charging pump, verify VCT level > 5%, then start B charging pump.

C. Place FCV-122 in manual and closed to stop pump runout.

D. Open LCV-115B and D.

ANSWER: D. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	___	___ ___ ___	___ ___ ___
S&K No.	248605020200	248605020220	_____
K/A No.	000067EK3.04	_____	_____
RO/SRO Impf.	3.3 /4.1	___ /___	___ /___

052521J02003 Points: 1.00 Question Number: 8

An RCS crud burst has caused gross activity to increase significantly. What actions would best reduce this activity level in accordance with the high reactor coolant activity procedure? (Circle the correct response.)

A. Valve in the cation demineralizer AND reduce letdown flow rate to 45 gpm.

B. Divert letdown around the CVCS demineralizers in order to maximize the fission product input to the waste gas system via VCT purge flow.

C. High activities from crud bursts cannot be removed by ion exchange; a power reduction is required.

D. Valve in the standby mixed bed demineralizer AND increase letdown to 120 gpm.

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.			
S&K No.	240417020230	240417020150	240417020160
K/A No.	000073EK3.06A	000076EK3.06A	000076EK3.05A
RO/SRO Impf.	3.2 /3.8	3.2 /3.8	2.9 /3.6

J52531B17007 Points: 1.00 Question Number: 9

One minute ago, the reactor tripped from 100% power at 600 ppm boron. ESP-0.1, Reactor Trip Response, has just been entered. You discover that 2 rod bottom lights are not illuminated. All reactor trip and bypass breakers are open, the power range NIS channels read off-scale low, and the IR startup rate is -0.4 dpm. RCS Tavg is 520°F and stable. The FW system is functioning as intended. In response to this situation, you should: (Circle the correct response.)

A. Return to EEP-0, Step 1.

B. Immediately transition to FRP-S.1.

C. Emergency borate a minimum of 1972 gallons.

D. Emergency borate a minimum of 1697 gallons.

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.			
S&K No.	240405020301	240122020144	240122020127
K/A No.	000024F42.05A	000007EA2.02A	000007EK1.02A
RO/SRO Impf.	3.3 /3.9	4.3 /4.6	3.4 /3.8

Rev. Date 3/20/91
Rev. Date 1/23/92
Rev. Date 2/18/92
Rev. Date 2/22/92

052531E06004 Points: 1.00 Question Number: 10

The SI termination procedure has been entered following an LOSP with SI. A check of RCP support conditions is in progress to determine if RCPs can be restarted. The RCP bearing upper/lower oil reservoir Lo level annunciators are in alarm for all three RCPs. RCS Δ° is now 68°F and RCS sub-cooling is 25°F. The operator should: (Circle the correct response.)

A. Realign BIT flow and start additional charging pumps.

B. Dump steam at a faster rate to improve natural circulation.

C. Start the B RCP to reduce RCS ΔT.

D. Reduce steam dump demand to reduce RCS ΔT and improve natural circulation.

ANSWER: B. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.			
S&K No.	240206023600		
K/A No.	000038A1.34A	000074EK3.11A	013000A1.01A
RO/SRO Impt.	4.2 /4.3	4.0 /4.4	4.0 /4.2

052533A03006 Points: 1.00 Question Number: 11

While responding to a nuclear power generation ATWT event, the team has been unable to verify that the turbine is tripped as indicated by all four (4) turbine stop valves being closed. Attempts to manually trip the turbine have not been successful in closing the throttle valves. The team should: (Circle the correct response.)

A. Close the throttle valves in manual using fast action on the manual portion of the DEH panel.

B. Secure the EH fluid pumps to close the throttle valves.

C. Close the governor valves in manual using fast action on the manual portion of the DEH panel.

D. Continue with the procedure. Isolating steam flow to the turbine is not necessary during an ATWT event.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___
S&K No.	300903012100	300903012110				
K/A No.	000029A0.10G	000029A0.10G				
RO/SRO Impf.	4.5 /4.5	4.5 /4.5			___ /___	

052533C20012 Points: 1.00 Question Number: 12

Following an auto SI, a LOCA has been diagnosed and EEP-0 is exited and FRP-C.2 has been entered. The below listed conditions exist:

RCS pressure - 1200 psig.

BIT flow = 100 gpm.

Hottest CETC temperatures are 1100, 1090, 1090, 790, 790, 780, 700, 650, 650, 640.

Subcooling monitor indicates superheat in both CETC and RTD modes.

AFW flow = 400 gpm.

WR SG level in all SGs 20-25%.

All 3 RCPs are running.

RCP vibration alarm is in.

Low reservoir oil level alarm is in for A & C RCPs.

With respect to RCPs, which of the following is correct following completion of the procedural step of checking RCP support conditions? (Circle the correct response.)

A. Trip all RCPs.

B. Trip only A and B RCPs.

C. Trip only B RCP.

D. Do not trip any RCPs.

ANSWER: C. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	___	___ ___ ___	___ ___ ___
S&K No.		240311021991	
K/A No.	000074EA1.06	000074GEN12	
RO/SRO Impf.	3.6 /3.9	4.3 /4.4	___ /___

Rev. Date 2/18/92

03/20/92 ALABAMA POWER COMPANY

EXAM GRADING SHEET

EXAM NAME: B92C5W1A1R CLASS NAME: LRP-92

TOTAL POINTS: 12 DATE GIVEN: 03/25/92

STUDENT ID / NAME: ** DRAFT ** / ********** DRAFT **********

QUESTION #		POINT VALUE	POINTS MISSED
1	- 052303O03005	1.00	_____
2	- 052520B01003	1.00	_____
3	- 052520C08005	1.00	_____
4	- 052520G01002	1.00	_____
5	- 052520L01001	1.00	_____
6	- 052520L19016	1.00	_____
7	- 052521E05006	1.00	_____
8	- 052521J02003	1.00	_____
9	- 052531B17007	1.00	_____
10	- 052531E06004	1.00	_____
11	- 052533A05006	1.00	_____
12	- 052533C20012	1.00	_____

TOTAL POINTS MISSED: _____ FINAL SCORE: _____ _____ %

RTYPE: K2.04
(Individual)

RTYPE: K2.07
(KEY)

TRAINING DEPARTMENT EXAMINATION

NAME(*RCVR): _____ GROUP: _____

*DATE: 03/25/92 EXAM NUMBER: B92C5W1E1R

EXAM TITLE: LRP-92 ~~RO~~ CY-5 WK-1 PART-~~B~~ TOTAL POINTS: 12.00
(*XREF) NRC ~~EMERGENCY~~

INSTRUCTIONS

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_____
EXAMINEE'S SIGNATURE

EXAM GRADED BY: _____ PREPARED BY: J L Weaver

GRADING/MATH REVIEW BY: _____ APPROVED BY: _____
Training Manager/
Supervisor

*INDEXING INFORMATION
2/24/89

PART A (STATIC SIMULATOR) AND PART B (OPEN REFERENCE)
EXAMINATION GUIDELINES

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10190M

052303H08014 Points: 1.00 Question Number: 1

With Unit 1 in Mode 5 and Unit 2 in Mode 5, what is the minimum number of system operators required? (Circle the correct response.)

A. 2 on Unit 2 with 1 of those shared with Unit 1

B. 1 on Unit 1 and 1 on Unit 2 with both individuals shared between the units

C. 2 on Unit 1 with one of those shared with Unit 2

D. 1 on Unit 1, 1 on Unit 2, and one other shared between the units

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	_____	_____	_____	_____	_____	_____	_____
K/A No.	GENA1.03	_____	_____	_____	_____	_____	_____
RO/SRO Impf.	2.5 /3.4	___ /___		___ /___			

052520L06008 Points: 1.00 Question Number: 2

The plant is in the following conditions;

- RCS level 123'2".
- A RHR in cooldown operation.
- B RHR lined up for cooldown with the pump stopped.
- SG nozzle dam installation in progress.
- Annunciator HG4, OMS REL VLV PATH CLOSED AT LO TEMP, comes in.
- MOV-8701A, RHR pump 1A suction from RCS loop 1C, is observed going closed.

The operator should: (Circle the correct response.)

A. Trip A RHR pump and initiate actions to close containment.

B. Open MOV-8809A, RWST TO A RHR PUMP, to prevent a loss of RHR.

C. Trip A RHR pump and immediately start B RHR pump to restore flow regardless of RCS level.

D. Trip A RHR pump, verify RCS level above 123'2" then start B RHR pump, and restore flow.

ANSWER: D. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	___	___ ___ ___	___ ___ ___
S&K No.	240511020808	240511020835	_____
K/A No.	000025SG11	005000K1.09	_____
RO/SRO Impf.	3.6 /3.9	3.6 /3/9	___ /___

Rev. Date 11/13/91
Rev. Date 1/9/92
Rev. Date 1/15/92
Rev. Date 1/16/92
Rev. Date 2/28/92

052530816013 Points: 1.00 Question Number: 3

A large steam break accident has occurred inside containment, resulting in safety injection actuation. Containment pressure is presently stable at 10 psig. Which of the following sets of conditions would allow SI termination when the faulted SG boils dry? (Circle the correct response.)

A. 38° subcooling
450 gpm AFW flow
RCS pressure 1700 psig and increasing
PZR level 12% and increasing

B. 52° subcooling
450 gpm AFW flow
RCS pressure 1700 psig and increasing
PZR level 12% and increasing

C. 52° subcooling
two SGs at 25% NR, one SG at 0% WR
AFW flow 100 gpm
RCS pressure 1700 psig and increasing
PZR level at 62% and increasing

D. 52° subcooling
one SG at 50% NR, one SG at 18% NR, one SG at 0% NR
AFW flow at 100 gpm
RCS pressure at 1700 psig and increasing
PZR level at 62% and increasing

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	300903110720	_____	_____
K/A No.	000040EA2.05	_____	_____
RO/SRO Impf.	4.1 /4.5	___ /___	___ /___

052530B16032 Points: 1.00 Question Number: 4

A large break LOCA occurred on Unit 1 at 0230 this morning. Cold leg recirculation was initiated at 0415. At what time will hot leg recirculation be initiated? (Circle the correct response.)

A. 1330

B. 1515

C. 1730

D. 1915

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	240206023200	_____		_____			
K/A No.	000011EA1.11	_____		_____			
RO/SRO Impf.	4.2 /4.2	___ /___		___ /___			

052530C05008 Points: 1.00 Question Number: 5

The operating crew has indications that all 3 SGs appear to be faulted with SG B and C pressures lower than A SG pressure. Which of the following would be a correct action to take in response to these indications? (Circle the correct response.)

A. Isolate the SG with the highest pressure first.

B. Locally unlock and close isolation valves for any failed SG code safety valves.

C. If the TDAFW pump is not required, isolate the steam supplies from the hot shutdown panel.

D. Stop any RCS borations in progress to prevent further RCS cooldown.

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.		___ ___ ___ ___ ___ ___ ___	
S&K No.	300903110710	_____	_____
K/A No.	000007A010G	_____	_____
RO/SRO Impf.	4.2 /4.1	___ /___	___ /___

052530D03006 Points: 1.00 Question Number: 6

Following diagnosis of a SGTR, the team has transitioned to EEP-3. At step 3 the team has determined that all three S/Gs are ruptured by Rad Monitors and uncontrolled level rise. Which of the following actions should the team take: (Circle the correct response.)

A. Isolate the SGs with the highest level first, then cool down with the least ruptured SG and do not exit EEP-3.

B. Isolate all three SGs per EEP-3. The caution prior to step 3 does not apply if all SGs are ruptured.

C. Pick one SG to be available for cooldown. Isolate the remaining two SGs and transition to ECP-3.1 when directed.

D. Apply the caution statement just prior to step 3 and immediately transition to ECP-3.1 without performing any more steps of EEP-3.

ANSWER: C. Point Value: 1.0 Answer Time: 6.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	243515020473						
K/A No.	000038A0.12G	000038EK3.06A					
RO/SRO Impf.	3.8 /4.0	4.0 /4.3				___ /___	
Rev. Date 10/7/91							

052530D08015 Points: 1.00 Question Number: 7

EEP-3, "Steam Generator Tube Rupture," has the operator monitor ruptured SG levels. Which one of the following is an adverse effect of allowing ruptured SG levels to decrease to <6% narrow range? (Circle the correct response.)

A. A rapid rise in ruptured SG pressure if the leaking tube is uncovered during cooldown

B. A rapid rise in ruptured SG level due to "swell" when cooldown is commenced

C. Ruptured SG depressurization due to leak uncovery during cooldown

D. Ruptured SG overheating due to inleakage of RCS water

ANSWER: C. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	243515020441	_____		_____			
K/A No.	000038A1.01	_____		_____			
RO/SRO Impf.	4.5 /4.4	___ /___		___ /___			

052531F12012 Points: 1.00 Question Number: 8

It is desirable to run one RCP when performing actions in the post-LOCA cooldown and depressurization procedure. Running only one RCP limits the heat input to the RCS. The forced flow provided by the RCP: (Circle the correct response.)

A. Ensures aux spray flow is effective and improves sub cooling.

B. Allows the cooldown rate to exceed 100°F per 60 minute period without challenging RCS integrity.

C. Eliminates the need for low head SI flow and improves the effectiveness of CVCS letdown.

D. Allows for normal RCS cooldown and provides pressurizer spray flow.

ANSWER: D. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	2-0311022940	_____	_____
K/A No.	000009EK3.23A	_____	_____
RO/SRO Impf.	4.2 /4.3	___ /___	___ /___

Rev. Date 2/27/91

052531I05007 Points: 1.00 Question Number: 9

A SGTR has occurred on the 1A SG. The operating crew has correctly implemented EEP-3, SGTR, and is performing ESP-3.1, "Post-SGTR Cooldown Using Backfill." The operating team is on step 12 of ESP-3.1 and is reducing RCS pressure. The unit operator notices that the 1B SG level is increasing above 65% NR in an uncontrolled manner even after AFW and feedwater have been isolated to that SG. What action should the operating crew take to respond to the increasing level in 1B SG? (Circle the correct response.)

A. Crew should transition directly to EEP-3, SGTR, step #1 per step 7.2 RNO.

B. Crew should continue with present procedure and allow the depressurization to stop any additional leakages.

C. Crew should transition to EEP-3 per foldout page criteria.

D. Crew should ensure SG 1B is isolated as per procedure EEP-3 and then continue with procedure ESP-3.1.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___ ___ ___
S&K No.	243515020474	243515020466			_____
K/A No.	000038EK3.06A	000038EA2.02A			_____
RO/SRO Impf.	4.2 /4.5	4.5 /4.8			___ /___

Rev. Date 10/7/91

052532A06014 Points: 1.00 Question Number: 10

The Unit has experienced a loss of all AC power and the loss of all AC power procedure is in progress. Which of the following statements is correct in regard to procedural usage and actions? (Circle the correct response.)

A. Each step of the procedure must be completed prior to proceeding to the next step.

B. Do not reset any SI signals which occur to prevent LOSP loads vice ESF loads from starting upon bus re-energization.

C. Defeat the autostart of ALL large motor loads to prevent overloading the diesel generator when started.

D. Perform a secondary depressurization to inject accumulator water mass into the RCS even if pressurizer level is lost.

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.		___ ___ ___ ___ ___ ___ ___	
S&K No.	243515022340	_____	_____
K/A No.	000055EK3.02A	_____	_____
RO/SRO Impf.	4.3 /4.6	___ /___	___ /___

052033F11012 Points: 1.00 Question Number: 41

An automatic Rx trip and SI have occurred and the Rx trip or SI procedure entered. At step 32, A & B SGs are at 3% narrow range with C SG at 5% narrow range. Total AFW flow has been throttled to = 300 gpm. The STA reports a red path on heat sink with no other red or orange paths. The operator:

(Circle the correct response.)

A. Should immediately implement and remain in FRP-H.1 based on the foldout page.

B. Should not implement FRPs until EEP-0 exited.

C. Should attempt to throttle open AFW flow controllers to obtain > 395 gpm prior to implementing FRP-H.1.

D. Should not implement FRPs because AFW flow is throttled to limit cooldown.

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___ ___ ___
S&K No.		311939021110	
K/A No.	000054K304		
RO/SRO Impf.	4.4 /4.6	___ /___	___ /___
Rev. Date 11/8/91			

052533M05003 Points: 1.00 Question Number: 12

Assume that the response to high containment pressure procedure has been entered due to a red path condition. The response to high containment pressure procedure may be exited: (Circle the correct response.)

A. When all the steps are completed or are in progress

B. Whenever containment pressure is below 27 psig

C. Whenever an orange path condition occurs in any other FRP

D. Whenever containment pressure starts trending down

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.		___	___	___	___	___	___
S&K No.	311939021020	_____			_____		
K/A No.	000069EK3.01A	_____			_____		
RO/SRO Impf.	3.8 /4.2	___ /___			___ /___		

Rev. Date 3/22/91

03/20/92 ALABAMA POWER COMPANY

EXAM GRADING SHEET

EXAM NAME: B92C5W1E1R CLASS NAME: LRP-92

TOTAL POINTS: 12 DATE GIVEN: 03/25/92

STUDENT ID / NAME: ** DRAFT ** / ********** DRAFT **********

QUESTION #	POINT VALUE	POINTS MISSED
1 - O52303H08014	1.00	_____
2 - O52520L06008	1.00	_____
3 - O52530B16013	1.00	_____
4 - O52530B16032	1.00	_____
5 - O52530C05008	1.00	_____
6 - O52530D03006	1.00	_____
7 - O52530D08015	1.00	_____
8 - O52531F12012	1.00	_____
9 - O52531I05007	1.00	_____
10 - O52532A06014	1.00	_____
11 - O52533F11012	1.00	_____
12 - O52533M05003	1.00	_____

TOTAL POINTS MISSED: _____ FINAL SCORE: _____ _____ %

RTYPE: K2.04
(Individual)

RTYPE: K2.07
(KEY)

TRAINING DEPARTMENT EXAMINATION

NAME(*RCVR): _____ GROUP: _____

*DATE: 04/02/92 EXAM NUMBER: A92C5W2A1R

EXAM TITLE: LRP-92 RO CY-5 WK-2 PART-A TOTAL POINTS: 12.00
(*XREF) NRC ABNORMAL

INSTRUCTIONS

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_____
EXAMINEE'S SIGNATURE

EXAM GRADED BY: _____ PREPARED BY: J. L. Weaver

GRADING/MATH REVIEW BY: _____ APPROVED BY: B. W. Landry
Training Manager/
Supervisor

*INDEXING INFORMATION
2/24/89

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052201H12003 Points: 1.00 Question Number: 2

Due to the transient in progress, which of the following is the effect that the PRZR reference leg will have on indicated PRZR level? (Circle the correct response.)

A. Indicated PRZR level to be higher than actual level

B. Indicated PRZR level to be lower than actual level

C. An effect on indicated level only if CTMT temperature increases in conjunction with the rapid RCS depressurization

D. An effect on indicated level only if CTMT pressure increases in conjunction with the rapid RCS depressurization

ANSWER: A. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	1A	___ ___ ___	___ ___ ___
S&K No.	241101000100	_____	_____
K/A No.	011000A101	_____	_____
RO/SRO Impf.	3.5 /3.6	___ /___	___ /___

Rev. Date 1/8/92

052520A03002 Points: 1 00 Question Number: 3

Excessive RCS leakage exists as indicated by pressurizer pressure and level changes. Which one of the following statements is correct: (Circle the correct response.)

A. A loss of LTDN should have occurred.

B. Rx vessel head voiding may occur due to a loss of RCS inventory.

C. A Rx trip signal will be generated by the lowering pressurizer level.

D. A loss of backup heaters should nave occurred.

ANSWER: B. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	1A	___	___	___	___	___	___
S&K No.	241103000133	_____			_____		
K/A No.	000009K310	_____			_____		
RO/SRO Impf.	3.4 /3.6	___ /___			___ /___		
Rev. Date 3/21/91							

052520M03004 Points: 1.00 Question Number: 4

If the reactor and turbine were to trip, which one of the following describes the operation of the steam dumps:

(Circle the correct response.)

A. Steam dumps will open to 100% and close when actual Tavg decreases below 543°F.

B. Steam dumps will open to 100% and not close without operator action.

C. Steam dumps will never open.

D. Steam dumps will open to 100% and close when actual Tavg decreases to the no-load value.

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	1A	___	___	___	___	___	___
S&K No.	300903113215	_____			_____		
K/A No.	041020A3.02	_____			_____		
RO/SRO Impf.	3.3 /3.4	___	/	___	___	/	___

Rev. Date 3/21/91
Rev. Date 10/8/91

052520P02004 Points: 1.00 Question Number: 6

If 1A charging pump tripped on fault, the 1B charging pump:

(Circle the correct response.)

A. Would automatically start to maintain seal injection and charging flow.

B. Would auto start but only provide seal injection flow.

C. Could be manually started to maintain seal injection and charging flow.

D. Could be manually started but only seal injection flow would be provided.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	01A	___ ___ ___	___ ___ ___
S&K No.	300903113220	300903113715	____________
K/A No.	004000K6.04	004020A3.03	000022EA2.02
RO/SRO Impf.	2.8 /3.1	3.4 /3.1	3.2 /3.7

052520Q01001 Points: 1.00 Question Number: 7

The failure which is resulting in leakage from the RCS is:

(Circle the correct response.)

A. Isolable by closure of an MCB operated MOV

B. Adversely affecting all instrumentation in CTMT

C. Having no effect on Technical Specification RCS leakage detection systems

D. Obviously isolated based on downstream tail pipe temperature being less than PZR vapor space temperature

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	1A	___	___	___	___	___	___
S&K No.	300903113010	_____	_____				
K/A No.	001000SG13	_____	_____				
RO/SRO Impf.	3.9 /4.1	___ /___		___ /___			
Rev. Date 1/8/92							

052520Q02006 Points: 1.00 Question Number: 8

Which of the following components have not responded properly to the pressure transient? (Circle your choice.)

A. Spray valves

B. PORVs

C. PK-444A

D. B/U heaters

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	1A	___ ___ ___	___ ___ ___
S&K No.	241008020057	_____	_____
K/A No.	000027A101	_____	_____
RO/SRO Impf.	4.0 /3.9	___ /___	___ /___

052521A04005 Points: 1.00 Question Number: 10

Based on the charging system lineup, in the event an emergency boration is required: (Circle the correct response.)

A. The emergency boration will work correctly using the emergency boration valve MOV-8104.

B. The boric acid flow will go to the VCT instead of the charging pump suction.

C. Boration can ONLY be accomplished using the Rx makeup system in the borate mode.

D. The emergency boration flow will have to flow through valve Q1E21V185 (manual emergency borate valve) to the charging pump suction.

ANSWER: D. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	1A	23A	___	___	___	___ ___
S&K No.	240413024636		_____		_____	
K/A No.	000024A201		_____		_____	
RO/SRO Impf.	3.8 /4.1		___ /___		___ /___	

Rev. Date 10/8/91
Rev. Date 10/29/91
Rev. Date 11/2/91

052530A10002 Points: 1.00 Question Number: 11

The plant transient has progressed such that: (Circle the correct response.)

A. No automatic protection action is being called for.

B. An automatic Rx trip is being called for.

C. An automatic Rx trip AND SI are being called for.

D. An automatic Rx trip, SI, and MSIV isolation are being called for.

ANSWER: B. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos. 1A	___	___	___	___	___	___
S&K No. 240206021185	_____			_____		
K/A No. 000029SG11	_____			_____		
RO/SRO Impf. 4.4 /4.6	___	/	___	___	/	___

Rev. Date 1/8/92

052101D11018 Points: 1.00 Question Number: 1

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIM CONDITIONS.

Which ONE of the following statements regarding RCP seals is correct? (Circle the correct response.)

A. The floating seal ring, located between the pump radial bearing and the # 1 seal, will limit RCS leakage to 5 gpm on a # 1 seal failure.

B. If one # 1 seal leakoff bypass valve is opened at normal operating pressure, the # 1 seal will shut, causing damage to the # 2 seal because of a high ΔP across the # 2 seal.

C. The seal bypass valve can only be opened if a seal failure is indicated and the # 1 seal leakoff valve is closed.

D. The # 2 seal was designed so that in an emergency, it can operate with full system pressure across its face in either the rotating or stationary state for a limited period of time.

ANSWER: D. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.			
S&K No.	240311022330	240311020340	
K/A No.	003000A0.15G	003000A2.01A	00300K6.02
RO/SRO Impf.	3.8 /4.0	3.5 /3.9	2.7 /3.1

052520P01005 ... its: 1.00 . Question Number: 5

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

The following plant conditions exist:

- PRZR level control selector switch is in position III/II.
- The following events occur in SEQUENCE:
    - Charging flow reduces to minimum.
    - PRZR level decreases.
    - Letdown secures and PRZR heaters deenergize.
    - PRZR level increases until a high level trip occurs.

Which one of the following level instrument failures would cause the above indications? (Assume no operator action.)

A. Level channel III failed high.

B. Level channel III failed low.

C. Level channel II failed high.

D. Level channel II failed low.

ANSWER: A. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	241108020120	_____	_____
K/A No.	011000A210	_____	_____
RO/SRO Impf.	3.4 /3.6	__ /__	__ /__
Rev. Date 1/23/92			

052520Y01001 Points: 1.00 Question Number: 9

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

The shift chemist reports a condenser tube leak exists in the "A" condenser as indicated by in-line sampling. What main control room indications would you use to confirm this report? (Circle the correct response.)

A. Increased demand on hotwell fill controller CP-4C55F

B. SJAE air flow increasing

C. A lower absolute pressure in the "A" condenser

D. Cation conductivity increasing

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	245615021520						
K/A No.	056000A2.05	056020GEN15					
RO/SRO Impf.	2.1 /2.5	2.7 /2.9	___ /___				

Rev. Date 1/8/92

052531C09004 Points: 1.00 Question Number: 12

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

During natural circulation core cooling, SG temperature is lowered. Assuming all parameters are within limits, how would this lowering of SG temperature affect natural circulation flow rate? (Circle the correct response.)

A. Flow rate will decrease.

B. Flow rate will increase.

C. Flow rate will not be affected.

D. Flow will be stopped and will not recommence.

ANSWER: B. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No. 240206023575	_____	_____	_____	_____	_____	_____	_____
K/A No. 041020A408	_____	_____	_____	_____	_____	_____	_____
RO/SRO Impf. 3.0 /3.1	___ /___			___ /___			

Rev. Date 3/6/92

03/25/92 ALABAMA POWER COMPANY

EXAM GRADING SHEET

EXAM NAME: A92C5W2A1R CLASS NAME: LRP-92

TOTAL POINTS: 12 DATE GIVEN: 04/02/92

STUDENT ID / NAME: ** DRAFT ** / ********** DRAFT **********

QUESTION #		POINT VALUE	POINTS MISSED
1	052101D11018	1.00	_____
2	052201H12003	1.00	_____
3	052520A03002	1.00	_____
4	052520M03004	1.00	_____
5	052520P01005	1.00	_____
6	052520P02004	1.00	_____
7	052520Q01001	1.00	_____
8	052520Q02006	1.00	_____
9	052520Y01001	1.00	_____
10	052521A04005	1.00	_____
11	052530A10002	1.00	_____
12	052531C09004	1.00	_____

TOTAL POINTS MISSED: _____ FINAL SCORE: _____ _____ %

RTYPE: K2.04
(Individual)

RTYPE: K2.07
(KEY)

TRAINING DEPARTMENT EXAMINATION

NAME(*RCVR): _____ _____GROUP:_____

*DATE: 04/02/92 EXAM NUMBER: A92C5W2E1R

EXAM TITLE: LRP-92 RO CY-5 WK-2 PART-A TOTAL POINTS: 13.00
(*XREF) NRC EMERGENCY

INSTRUCTIONS

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   [ ] On the answer sheet by circling or marking the correct response or filling in the blanks.

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_____
EXAMINEE'S SIGNATURE

EXAM GRADED BY: _____ PREPARED BY: Jon Z Deaver

GRADING/MATH REVIEW BY: _____ APPROVED BY: _____
Training Manager/
Supervisor

*INDEXING INFORMATION
2/24/89

PART A (STATIC SIMULATOR) AND PART B (OPEN REFERENCE)
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- Show all work and state any assumptions.

052101G13007 Points: 1.00 Question Number: 1

Prior to the reactor trip/SI occurring, the operator increased charging flow to greater than 150 gpm by starting a second charging pump and manually positioning charging flow control valve FCV-122. How was VCT level affected after the SI actuation and subsequent shifting of the charging pump suction to the RWST? (Circle the correct response.)

A. Auto M/U stopped at 30% and VCT level is continuing to rise due to seal return flow.

B. Auto M/U stopped at 30% and VCT level is rising due to charging pump miniflow pump valves opened.

C. Auto M/U stopped at 40%; if the miniflows are not shut, VCT level will continue to increase.

D. Auto M/U stopped at 40% and VCT level will remain there.

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	13E	___ ___ ___	___ ___ ___
S&K No.	249102000100	_____	_____
K/A No.	000037EA1.10	_____	_____
RO/SRO Impf.	2.9 /3.1	___ /___	___ /___

052102H20010 Points: 1.00 Question Number: 2

Both MDAFW pumps tripped following the SI and will not restart. Based on the plant conditions, how should the steam flow path to the TDAFW pump be changed to limit the environmental release and allow continued TDAFW pump operation?

(Circle the correct response.)

A. An AOV should be closed from the HSD panels.

B. An AOV should be closed from the MCB.

C. A manual isolation valve in the MSVR should be shut.

D. Based on the problem(s) that exist(s), the steam flow path cannot be changed and still allow continued operation.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos. 13E

S&K No.	243515022600	246111020187	
K/A No.	061000K1.03A	000038EK3.06A	
RO/SRO Impf.	3.5 /3.9	4.2 /4.5	___ /___

Rev. Date 3/22/91

052103C10001 Points: 1.00 Question Number: 3

While performing two train verification of EEP-0 (Rx Trip or SI), breaker EE05-1 indicates open. The effect of this breaker being open: (Circle the correct response.)

A. Is minimal on loads powered from B train DC bus for approximately 2 hours.

B. Is minimal on loads powered from B train DC bus for approximately 12 hours.

C. Is minimal on loads powered from B train DC bus for approximately 24 hours.

D. Is minimal on loads powered from B train DC bus for approximately 48 hours.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos. 13E				___	___	___	___	___	___
S&K No.	246302000100								
K/A No.	000058EK3.02	0000583A2.03							
RO/SRO Impf.	4.0 /4.2	3.5 /3.4		___ /___					
Rev. Date 3/29/91									

052201G25003 Points: 1.00 Question Number: 10

RCS average temperature has stabilized above 547°F due to steam dumps being closed. The steam dumps failed to open due to: (Circle the correct response.)

A. Loop C Tave channel failure

B. Low condenser vacuum

C. Both CW pumps tripped

D. Due to Pimp PT-447 channel failed low

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos. 13E			___	___	___	___ ___ ___
S&K No.	245615020120					
K/A No.	041020K1.01	041020A3.02				
RO/SRO Impf.	2.2 /2.5	3.3 /3.4	___ /___			
Rev. Date 10/7/91						

052530A13008 Points: 1.00 Question Number: 11

Which of the following describes the minimum action the operator MUST physically perform to establish HHSI flow: (Circle the correct response.)

A. Close MOV-8107.

B. Open MOV-8803A OR MOV-8803B.

C. Close charging pump miniflow valves.

D. Both 8803A AND 8803B must be opened.

ANSWER: B. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos. 13E					
S&K No.	240616030745	241306300456			
K/A No.	006000A4.02A				
RO/SRO Impf.	4.4 /4.4	3.8 /4.1			
Rev. Date 3/22/91					

052530D05001 Points: 1.00 Question Number: 12

Which of the following indications provides the team with information to allow the determination that the steam generator tube rupture (SGTR) is in the "B" steam generator?

(Circle the correct response.)

A. R-15 upscaled

B. R-19 upscaled

C. R-23B upscaled

D. R-60B upscaled

ANSWER: D. Point Value: 1.0 Answer Time: 2.0 Mins.

Static Sim Scenario Nos.	13E	___	___	___	___	___ ___
S&K No.	243515020437					
K/A No.	000038EA1.10	000038EA1.11				
RO/SRO Imp.	3.7 /3.9	3.8 /3.9				___ /___

052530D07002 Points: 1.00 Question Number: 13

Which of the following actions will effectively isolate the ruptured steam generator? (Circle the correct response.)

A. Isolate MSIVs on ruptured SG only.

B. MSIVs on ALL SGs MUST be isolated.

C. Isolate MSIVs on intact SGs only.

D. MSIV isolation not required due to steam dump valves being closed.

ANSWER: A. Point Value: 1.0 Answer Time: 2.0 Mins.

Static Sim Scenario Nos.	13E	___	___	___	___	___	___
S&K No.	243515020440	_____			_____		
K/A No.	000038EA1.32	_____			_____		
RO/SRO Impf.	4.6 /4.7	___ / ___			___ / ___		

Rev. Date 5/22/91

05210/05012 Points: 1.00 Question Number: 4

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

During a dual Unit LOSP with an SI on Unit 2 and a failure of the 1B diesel: (Circle the correct response.)

A. The 2C diesel will supply the 1G bus by automatically closing the 1G to 1J tie breaker, while still supplying the 2J bus.

B. The 2C diesel will supply the 1G bus by automatically closing the 1G to 1J tie breaker and reduce its load by opening the 2C diesel to 2J bus breaker.

C. The 1G bus will remain deenergized; no further breaker operation will occur.

D. The 1G bus will remain deenergized but the 1-2A diesel will return to Unit 1 to ensure at least one big diesel is supplying Unit 1.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___
S&K No.	246426022250					
K/A No.	064000K4.10	064000K4.11		000056K3.01		
RO/SRO Impf.	3.5 /4.0	3.5 /4.0		3.5 /3.9		

052105B17007 Points: 1.00 Question Number: 5

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

Unit 1 is at 50% reactor power with generator load at 435 MWs. The operator receives an alarm in the three-line alarm subscreen area on the DEHC CRT informing him that the operator auto selected speed signal is failed. Which of the following best describes the effect this failure will have on the DEHC system? (Circle the correct response.)

A. The speed feedback loop will be unaffected, but the frequency compensation circuit will be lost.

B. The speed feedback loop will be out of service and DEHC will transfer to turbine manual.

C. The speed feedback loop will be out of service and the frequency compensation circuit will be lost.

D. The control of the turbine will be erratic in operator auto due to the loss of speed feedback loop.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	244808020300	_____	_____
K/A No.	045000SG15	_____	_____
RO/SRO Impf.	2.9 /3.2	___ /___	___ /___

052105C24002 Points: 1.00 Question Number: 6

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

Following a turbine trip due to low autostop oil pressure, the generator trip is delayed by 30 seconds: (Circle the correct response.)

A. To allow switchyard operator to align other breakers in the switchyard.

B. To stop the turbine from rolling faster and protect the bearings.

C. To verify that the loss of lube oil is valid and not just a spurious low pressure.

D. To keep the RCPs running for 30 seconds past the reactor trip to remove decay heat.

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	244527020820			003000K502			
K/A No.	062000K301						
RO/SRO Impf.	3.5 /3.9			2.8 /3.2		___ /___	

052108D10004 Points: 1.00 Question Number: 7

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

Which of the following is NOT a fuel transfer system interlock? (Circle your choice.)

A. The containment building control panel must give permission before the control panel in the spent fuel building can move the transfer cart to or from the containment building upender.

B. The transfer tube gate valve must be fully open (or bypassed, Unit 2 only) to allow transfer cart operation.

C. The spent fuel upender cannot be operated unless the SFP bridge is over the spent fuel racks or the hoist is in the fully retracted position.

D. The spent fuel building and containment building upender frame must be down to allow transfer cart operation.

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___	___ ___ ___ ___	___ ___ ___ ___
S&K No.	243453023800	_____	_____
K/A No.	034000SG9	034000K402	_____
RO/SRO Impf.	3.0 /3.0	2.5 /3.3	___ /___

Rev. Date 2/18/92

052201B16005 Points: 1.00 Question Number: 8

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

Assuming the Unit remains operating at 75% power, the 1A SG selected steam flow channel fails low. What would be the effect on actual SGFP speed? (Circle the correct response.)

A. SGFP speed remains unchanged.

B. SGFP speed increases due to a program ΔP increase.

C. SGFP speed decreases due to a program ΔP decrease.

D. SGFP speed decreases due to program ΔP increase.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No. 245911022220	_____			_____			
K/A No. 059000SG7	_____			_____			
RO/SRO Impf. 3.1 /3.2	___ /___			___ /___			

Rev. Date 11/2/91

052201F08008 Points: 1.00 Question Number: 9

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

Which one of the following describes the correct DRPI system alarm which would be generated by an open or shorted detector coil? (Circle the correct response.)

A. DRPI panel urgent alarm

B. COMP ALARM ROD SEQ/DEV OR PR FLUX TILT annunciator

C. DRPI panel data A (or B) failure alarm

D. ROD AT BOTTOM annunciator

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	241403000130	_____	_____
K/A No.	014000K406	_____	_____
RO/SRO Impf.	3.4 /3.7	___ /___	___ /___

Rev. Date 10/7/91

03/27/92 ALABAMA POWER COMPANY

EXAM GRADING SHEET

EXAM NAME: A92C5W2E15 CLASS NAME: LRP-92

TOTAL POINTS: 13 DATE GIVEN: 04/02/92

STUDENT ID / NAME: ** DRAFT ** / ********** DRAFT **********

QUESTION #		POINT VALUE	POINTS MISSED
1	- 052101G13007	1.00	_____
2	- 052102H20010	1.00	_____
3	- 052103C10001	1.00	_____
4	- 052103F05012	1.00	_____
5	- 052105B17007	1.00	_____
6	- 052105C24002	1.00	_____
7	- 052108D10004	1.00	_____
8	- 052201B16005	1.00	_____
9	- 052201F08008	1.00	_____
10	- 052201G25003	1.00	_____
11	- 052530A13008	1.00	_____
12	- 052530D05001	1.00	_____
13	- 052530D07002	1.00	_____

TOTAL POINTS MISSED: _____ FINAL SCORE: _____ _____ %

RTYPE: K2.04
(Individual)

RTYPE: K2.07
(KEY)

TRAINING DEPARTMENT EXAMINATION

NAME(*RCVR): _____ GROUP: _____

*DATE: 04/02/92 EXAM NUMBER: B92C5W2A1R

EXAM TITLE: LRP-92 RO CY-5 WK-2 PART-B TOTAL POINTS: 13.00
(*XREF) NRC ABNORMAL

INSTRUCTIONS

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_____
EXAMINEE'S SIGNATURE

EXAM GRADED BY: _____ PREPARED BY: Joel A Deavers

GRADING/MATH REVIEW BY: _____ APPROVED BY: B M Markert
Training Manager
Supervisor

*INDEXING INFORMATION
2/24/89

PART A (STATIC SIMULATOR) AND PART B (OPEN REFERENCE)
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052103D20005 Points: 1.00 Question Number: 1

The following conditions exist for Unit 1:

- 40% power, ramping down due to RCS leakage > Tech Spec limit.
- Rod control in automatic.
- 120V AC vital bus 1D has been deenergized (2 hrs ago) due to damage to the breaker panel.

Which of the following statements is correct? (Circle the correct response.)

A. Automatic inward rod motion will be blocked when permissive P-10 clears.

B. The "B" reactor trip breaker will not open if an automatic trip setpoint is reached.

C. An automatic reactor trip will occur when permissive P-6 clears due to loss of power to SR channel N-32.

D. The "B" train ESF components will have to be manually aligned if a safety injection is required.

ANSWER: D. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.			
S&K No.	240122020396	246245026000	246245026010
K/A No.	000057EA2.20A	000057EA2.04A	000057EA2.19A
RO/SRO Impf.	3.6 /3.9	3.7 /4.0	4.0 /4.3

052201123004 Points: 1.00 Question Number: 2

The plant is at 8% reactor power and STP-33.0A, Solid state Protection System Train Operability Test, is in progress. Which of the following statements describes the results of ignoring step 4.3 in the Precautions and Limitations of STP-33.0A? (Circle the correct response.)

A. A safety injection on low steam generator pressure

B. A safety injection on low pressurizer pressure

C. A reactor trip from PR high flux low setpoint trip

D. A reactor trip from SR high flux trip

ANSWER: D. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___	___ ___ ___	
S&K No.	241203001020	241208020259	_____
K/A No.	012000A4.03	012001I4.06	_____
RO/SRO Impf.	3.6 /3.6	3.2 /3.5	___ /___

052303G02004 Points: 1.00 Question Number: 3

Who is responsible for obtaining clearance on a job prior to allowing work to commence? (Circle the correct response.)

A. Shift foreman operating

B. Shift foreman inspecting

C. Individual in charge of task

D. Maintenance foreman

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.		___	___	___	___	___	___	___
S&K No.	311903025000	_____			_____			
K/A No.	194001K1.02A	_____			_____			
RO/SRO Impf.	3.7 /4.1	___ /___			___ /___			

052520A11013 Points: 1.00 Question Number: 4

Given the following data, determine the amount of unidentified leakage using STP-9.0: (Circle the correct response.)

	Initial Conditions	Final
Time	0737	0842
Pzr temp	648°F	648°F
Pzr Press (avg)	2241 psig	2241 psig
Tavg	574.8°	574.8°
PZR Level (avg)	50%	50%
VCT Level	37%	31.5%
RCDT Level	48%	49%
PRT Level	71%	71%
Batch Integrator	004273	004273

A. 1.13 gpm

B. 1.18 gpm

C. 1.22 gpm

D. 1.34 gpm

ANSWER: A. Point Value: 1.0 Answer Time: 6.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	240205020285	_____		_____			
K/A No.	194001A1.08A	_____		_____			
RO/SRO Impf.	2.6 /3.1	___ /___		___ /___			

Rev. Date 1/23/92
Rev. Date 1/24/92

052520B04005 Points: 1.00 Question Number: 5

The plant is operating at 100% power. A 180 gpd tube leak has been determined to exist in the A SG. The OATC recommends shutdown due to increased potential for a SGTR to occur. (Circle the correct response.)

A. Agree with both the recommendation and the reason.

B. Disagree with both the recommendation and the reason.

C. Agree with the recommendation, but disagree with the reason.

D. Disagree with the recommendation, but agree with the reason.

ANSWER: A. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___ ___ ___ ___ ___ ___	___
S&K No.	300903113720	_____	_____
K/A No.	001000,0 01G	_____	_____
RO/SRO Impf.	3.7 ,3.8	__ / __	__ / __

Rev. Date 2/18/92
Rev. Date 2/22/92

052520D01001 Points: 1.00 Question Number: 6

At 20% reactor power while ramping up following a refueling outage, the 1C reactor coolant pump (RCP) trips. The opera ..or should: (Circle the correct response)

A. Place the affected loop pressurizer spray valve in manual and close.

B. Manually trip the reactor.

C. Shut down the plant prior to attempting a restart of the RCP.

D. Continue operation with an upper limit of 35% reactor power to prevent an automatic reactor trip.

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	300707080240	300903113710	_____				
K/A No.	003000A0.13G	001000A0.13G	_____				
RO/SRO Impf.	3.6 /3.7	3.7 /3.6	___ /___				

052520L05007 Points: 1.00 Question Number: 7

During Unit 1 operation with RCS level below 126'6", the tygon tube level indication system must be continuously monitored and recorded a minimum of: (Circle the correct response.)

A. Every 12 hours when RCS level is stable

B. Every 15 minutes when RCS level is being lowered

C. Every hour when it is one of the two required independent detectors AND level is being lowered

D. Not required to be logged if the other two required independent indicators are working

ANSWER: B. Point Value: 1.0 Answer Time: 6.0 Mins.

Static Sim Scenario Nos.	___	___	__	___	___	___	___
S&K No.	_____	_____		_____	_____		
K/A No.	002000K4.02	___/___			___/___		
RO/SRO Impf.	3.5 /3.8	___/___			___/___		

Rev. Date 2/26/91
Rev. Date 11/13/91
Rev. Date 1/9/92

052520U03005 Points: 1.00 Question Number: 8

The National Weather Service has predicted winds in excess of 90 mph to hit the site any time within 2 hours. The 1B DG is being run for normal surveillance (STP-80.1) and has just been increased to full load in Mode 2. With regard to the storm, the DG: (All other systems are operational.)(Circle the correct response.)

A. Should remain at full load - its most reliable lineup.

B. Should be unloaded but left tied to the grid in Mode 2 - its most reliable lineup.

C. Should be allowed to complete the STP as "A" train is operable and will provide adequate protection.

D. Should be unloaded, secured, and aligned for auto start in accordance with SOP-38.0 - its most reliable lineup - as soon as possible.

ANSWER: D. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___	___ ___ ___
S&K No.	246426022650 246426022655	_____
K/A No.	194001A1.02A 004000K6.03A	_____
RO/SRO Impf.	4.1 /3.9 2.1 /2.3	___ /___

C*2530C03003 Points: 1.00 Question Number: 9

Faulted steam generator isolation procedure provides several steps which are required to identify and isolate any faulted SG. One of the isolation steps has the operator isolate all feedwater to the affected SG(s). What is the basis for this isolation step? (Circle the correct response.)

A. To reduce the probability of occurrence of a steam generator tube rupture in the faulted steam generator.

B. To minimize RCS cooldown and mass energy release fol lowing a steam line break.

C. To prevent all feedwater flow from entering the faulted steam generator and filling the generator, causing the atmospheric reliefs to lift.

D. To ensure the release to the environment remains below the 10CFR100 limits on a design basis event.

ANSWER: B. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___
S&K No.	300903110710	_____	_____			
K/A No.	000040K304	000007A010G	_____			
RO/SRO Impt.	4.5 /4.7	4.2 /4.1	___ /___			

052531B17008 Points: 1.00 Question Number: 10

A reactor trip has occurred; Tavg is 545° and slowly rising and RCS boron was 300 ppm at the time of the trip. Upon entering the reactor trip response procedure, the operator observes that three rods did not fully insert. The operator should: (Circle the correct response.)

A. Borate 152 gallons for each rod not fully inserted using emergency boration flow path.

B. Align the charging pump suction to the RWST until 1800 gallons have been added.

C. No action required since the reactor is verified sub critical and Tavg is rising.

D. Borate a minimum of 1774 gallons using the emergency boration flow path.

ANSWER: D. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___
S&K No.	240122020144		240405020301		240122020127	
K/A No.	000007EA2.02A		000024EA2.05A		000007EK1.02A	
RO/SRO Impf.	4.3 /4.6		3.3 /3.9		3.4 /3.8	

Rev. Date 2/5/92

052531E07005 Points: 1.00 Question Number: 11

Unit 1 has experienced a safety injection due to a steam break on the 1A SG. The break occurred outside of CTMT and upstream of the MSIVs. The operators have isolated the SG per EEP-2 and met SI termination criteria in EEP-1. RCS pressure is 2000 psig and trending u.. The operator is directed by ESP-1.1, SI Termination, to secure all but one charging pump. When the operator secures all but one charg ing pump, he observes RCS pressure trending down. What action should he take? (Circle the correct response.)

A. Fully open charging flow control valve, FCV-122, restart additional charging pumps, and continue with ESP-1.1.

B. Go to EEP-2 and verify 1A-SG isolated.

C. Go to EEP-1, Loss of Reactor or Secondary Coolant.

D. Continue with actions in ESP-1.1 to establish normal charging.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___ ___ ___
S&K No.	240206021101	240206021105			_____
K/A No.	013000A1.01A	000028EA1.06A			_____
RO/SRO Impf.	4.0 /4.2	3.3 /3.6			___ /___

Rev. Date 3/19/91

052533A04005 Points: 1.00 Question Number: 12

While performing the immediate action steps for a reactor trip, the Response to Nuclear Power Generation/ATWT procedure would be entered: (Circle the correct response.)

A. Based on foldout page red path criteria

B. Based on reactor trip not verified and manual trip ineffective

C. Based on critical safety function status tree criteria

D. Based on FRP-S.2, step 1 RNO column guidance if power range flux was greater than or equal to 5%

ANSWER: B. Point Value: 1.0 Answer Time: 3.0 Mins

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	31193902300	_____	_____
K/A No.	000029A0.11G	_____	_____
RO/SRO Impf.	4.4 /4.6	___ /___	___ /___
Rev. Date 10/7/91			

052533C04004 Points: 1.00 Question Number: 13

FRP-C.1 has been entered due to CETC temperatures of greater than 1200°F. The following conditions exist:

- Safety injection flow is NOT in progress and was unable to be established by any means.
- No RCPs are running.
- CONDENSATE STORAGE TANK LEVEL LO-LO TRAIN A (B) annunciators are in alarm.
- SG NR levels are A = 20%; B = 5%; C = 5%.
- AFW flow = 405 gpm.
- CTMT pressure = 10 psig.
- CETC sixth hottest thermocouple = 1205°F.
- All steam generators are intact.

The operator should: (Circle the correct response.)

A. Start bearing oil lift pumps and start RCPs.

B. Shift auxiliary feedwater suction to its emergency source; stay in C.1.

C. Reduce reactor coolant pressure at maximum rate to 100 psig.

D. Secondary heat sink is adequate; transition to procedure and step in effect.

ANSWER: B. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	246111021005						
K/A No.	000055GEN07	000074EA1.07					
RO/SRO Impf.	3.6 /3.7	4.2 /4.3					
Rev. Date 2/22/92							

03/27/92 ALABAMA POWER COMPANY

EXAM GRADING SHEET

EXAM NAME: B92C5W2A1R CLASS NAME: LRP-92

TOTAL POINTS: 13 DATE GIVEN: 04/02/92

STUDENT ID / NAME: ** DRAFT ** / ********** DRAFT **********

QUESTION #		POINT VALUE	POINTS MISSED
1	O52103D20005	1.00	_____
2	O52201I23004	1.00	_____
3	O52303G02004	1.00	_____
4	O52520A11013	1.00	_____
5	O52520B04005	1.00	_____
6	O52520D01001	1.00	_____
7	O52520L05007	1.00	_____
8	O52520U03005	1.00	_____
9	O52530C03003	1.00	_____
10	O52531B17008	1.00	_____
11	O52531E07005	1.00	_____
12	O52533A04005	1.00	_____
13	O52533C04004	1.00	_____

TOTAL POINTS MISSED: _____ FINAL SCORE: _____ _____ %

RTYPE: K2.04
(Individual)

RTYPE: K2.07
(KEY)

TRAINING DEPARTMENT EXAMINATION

NAME(*RCVR): _____ GROUP: _____

*DATE: 04/02/92 EXAM NUMBER: B92C5W2E1R

EXAM TITLE: LRP-92 RO CY-5 WK-2 PART-B TOTAL POINTS: 12.00
(*XREF) NRC EMERGENCY

INSTRUCTIONS

1. This is a 1.0 hour examination.

2. Point value for each question is indicated in the question header.

3. Answer all questions:

   [ ] On a separate paper.

   [ ] On the answer sheet by circling or marking the correct response or filling in the blanks.

   [X] On the same page as the question. If extra room is needed, use the reverse side of the previous page or use extra paper.

4. CHEATING OF ANY KIND IS STRICTLY FORBIDDEN. ANY INDIVIDUAL CAUGHT CHEATING WILL AUTOMATICALLY FAIL THE EXAMINATION AND DISCIPLINARY ACTION WILL BE TAKEN.

5. ALL WORK DONE ON THIS EXAMINATION IS MY OWN. TO MY KNOWLEDGE, I HAVE NEITHER GIVEN NOR RECEIVED AID. FURTHERMORE, I WILL NOT DIVULGE THE CONTENTS OF THIS EXAMINATION TO ANYONE ELSE WHO MAY TAKE IT.

_____
EXAMINEE'S SIGNATURE

EXAM GRADED BY: ____ PREPARED BY: J F Dean

GRADING/MATH REVIEW BY: _____ APPROVED BY: B M VanLandingham
Training Manager/
Supervisor

*INDEXING INFORMATION
2/24/89

PART A (STATIC SIMULATOR) AND PART B (OPEN REFERENCE)
EXAMINATION GUIDELINES

The procedures, drawings, Tech Specs, and other material provided may be used as references while taking this examination. If this is a "Static Simulator-Part A" exam, the simulator may be used as a reference to gather data for answering the questions. If this is an "Open Reference-Part B" exam, the simulator may be used as a reference but no simulator data should be used to answer the questions.

The following guidelines must be followed while using these references:

- The exam may require all examinees to refer to the same control board indications. Care must be taken to maintain exam security and avoid any possibility of compromise.

- Do not leave pencil or pen marks in the reference materials.

- When you are finished with reference materials, ensure that the materials are closed and/or returned to their original location.

Keep your exam materials together. While at the control board or procedures, take your exam with you and keep your answers covered.

When you have finished and turned in your exam, you may leave the exam area and DO NOT discuss the exam with any one who has not taken it.

Do not forget to follow the basic rules of exam taking:

- Static Simulator-Part A questions are system based and apply to the static simulator conditions unless otherwise specified.

- Open Reference-Part B questions are procedure based and are not based on static simulator conditions.

- Answer all questions independently of each other unless specified by the question.

- Answer all parts of each question; do not leave any answers blank.

- If a question is unclear or you are uncertain as to the intent -- ask ONLY the proctor for help prior to stating any assumptions.

- Show all work and state any assumptions.

052303H07011 Points: 1.00 Question Number: 1

For which of the following conditions is it permissible to go below the minimum shift crew composition? Assume both units in Mode 1. (Circle the correct response.)

A. The only UO calls in sick just prior to turnover.

B. The only STA needs to leave early to vote.

C. The only shift foreman becomes ill.

D. One of three SOs will be in late because his wife is having a baby.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	__	__	__	__	__	__	__
S&K No.	_____	_____	_____	_____	_____		
K/A No.	GENA1.03	_____	_____	_____	_____		
RO/SRO Impf.	2.5 /3.4	__ /__		__ /__			

052520B01002 Points: 1.00 Question Number: 2

Supplemental actions are being performed to recover from a 70-gpm tube leak in S/G C. RCS pressure is 1200 psig, S/G C pressure is 950 psig, and S/G C narrow-range level is greater than 100%. The RCS is being cooled down by dumping steam from the unaffected S/Gs.

Because of the level in S/G C, the highest priority should be to: (Circle the correct response.)

A. Establish maximum blowdown rate for S/G C.

B. Pin all main steamline support hangers.

C. Establish conditions such that RCS pressure is equal to S/G C

D. Dump steam from S/G C via the atmospheric relief valve

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___
S&K No.	300903113215					
K/A No.	000037EA2.14	000037EA2.16				
RO/SRO Impf.	4.0 /4.4	4.1 /4.3		___ /___		

052520S01007 Points: 1.00 Question Number: 3

The plant is at 48% power, ramping down, with rod control in manual. During the reduction, the following alarms are received:

FF1 ROD CONT SYS URGENT FAILURE
FC5 PR CH DEV
FF5 COMP ALARM ROD SEQ/DEV OR PR FLUX TILT

It is noted that one rod in bank D is indicating 18 steps above its group step counter. There are no other alarms.

Which one of the following is the proper operator response in this situation? (Circle the correct response.)

A. Place the turbine on hold and immediately withdraw the remaining bank D rods to within plus or minus 12 steps of the misaligned rod with the BSS in MANUAL since the urgent failure is obviously in a logic cabinet.

B. Place the turbine on hold and immediately withdraw the remaining bank D rods to within plus or minus 12 steps of the misaligned rod with the BSS in MANUAL since the urgent failure is obviously in a power cabinet.

C. Trip the reactor.

D. Place the turbine on hold and do not move the rods until the cabinet with the failure has been identified.

ANSWER: D. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___
S&K No.	300903113710					
K/A No.		001000A013G				
RO/SRO Impf.	___ /___	3.7 /3.6		___ /___		

Rev. Date 11/27/91

052530D10018 Points: 1.00 Question Number: 4

During a cooldown, the team is directed per EEP-3 to block the low steam line pressure SI/main steam line isolation at the P-12 setpoint. Why is this action required? (Circle the correct response.)

A. The low steam line pressure SI would be "sealed in" and would prevent resetting an SI signal when procedure directs.

B. The steam dumps can not be placed in "cooldown mode" until this block occurs.

C. To prevent main steam line isolation at 585 psig.

D. To prevent auto closing the steam dumps at P-12.

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim. Scenario Nos.	___	___	___	___	___ ___ ___
S&K No.	241206000150	240201002200			_____
K/A No.	000038A1.27	039000K4.05			_____
RO/SRO Impf	3.9 /3.9	3.7 /3.7			___ /___

Rev. Date 4/25/91

052531E08007 Points: 1.00 Question Number: 5

An inadvertent train A safety injection has been caused by a technician working in SSPS. The OATC manually actuated SI to establish two trains of ESF equipment. The crew has met SI termination criteria and has transitioned out of EEP-0. While in the process of establishing normal charging, the OATC observes that seal leakoff flow is at or near zero gpm for all 3 RCPs. Which of the following actions should restore seal leakoff flow? (Circle the correct response.)

A. Complete alignment for normal charging; seal leakoff flow will be established when MOV-8107 and 8108, CHG. PUMP TO REGEN HX, are opened.

B. Open RCP seal water return isolation valves, MOV-8100 and 8112, which automatically isolated when the safety injection occurred.

C. Open seal water injection filter isolation valve, MOV-8105, which was verified closed as part of the immediate operator actions of EEP-0.

D. The RCP seal leakoff isolation valves, MOV-8141A, 8141B, 8141C, must be reopened following their automatic isolation due to the phase "A" signal.

ANSWER: B. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.			
S&K No.	240311021115	240220020800	240220020820
K/A No.	000038EA2.17A	013000K1.02A	
RO/SRO Impf.	3.8 /4.4	3.2 /3.6	__ /__

052531F10009 Points: 1.00 Question Number: 6

A small break loss of coolant accident has occurred and the team has transitioned to the post-LOCA cooldown and depressurization procedure. The RCS is depressurized in this procedure in order to: (Circle the correct response.)

A. Refill the pressurizer and then to reduce subcooling to minimize breakflow.

B. Fill the pressurizer and then to inject the contents of the accumulators.

C. Inject the contents of the accumulators in order to minimize the RCS to SG differential pressure.

D. Minimize the RCS to SG differential pressure and then refill the pressurizer.

ANSWER. A. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	2402010213?0	_____	_____
K/A No.	00009EK3.21A	_____	_____
RO/SRO Impf.	4.2 /4.5	___ /___	___ /___

052531G09004 Points: 1.00 Question Number: 7

A LOCA has occurred, resulting in actuation of the containment spray system. Once the containment spray pumps are aligned for recirculation, they: (Circle the correct response.)

A. Should be secured as long as containment pressure is less than 16 psig

B. Should be secured as long as containment pressure is less than 16 psig and spray add tank level < 10%.

C. Should remain operating for 2 hours regardless of containment pressure to ensure addition of the entire contents of the spray add tank.

D. Should remain operating for 2 hours regardless of containment pressure to ensure proper mixing of the spray add tank volume with the ECCS sump contents.

ANSWER: D. Point Value: 1.0 Answer Time: 3.0 Mins

Static Sim Scenario Nos.	___	___ ___	___ ___ ___ ___
S&K No.	300903110710	_____	_____
K/A No.	000011K312	_____	_____
RO/SRO Impf.	4.4 /4.6	___ /___	___ /___

Rev. Date 3/22/91

052531I02002 Points: 1.00 Question Number: 8

While performing a post-SGTR cooldown using the preferred procedural method with normal CTMT conditions, the team has reached the procedural step for controlling ruptured SG level. Ruptured SG narrow range level is presently 32%.

(Circle the correct response.)

A. Ruptured SG level should be filled from 32% to 75%.

B. Ruptured SG level should be allowed to decrease to 6%, then MUST be filled to 75% level regardless of effects on ruptured SG pressure.

C. Ruptured SG level should be allowed to decrease to 6%, then filled to 75% level unless SG pressure increases too much or is dropping uncontrolled.

D. Ruptured SG level should be filled to 34% and allowed to cool down due to losses to ambient.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___ ___ ___ ___ ___ ___	
S&K No.	243515020441	_____	_____
K/A No.	000038EA1.01A	_____	_____
RO/SRO Impf.	4.5 /4.4	___ /___	___ /___

Rev. Date 10/7/91

052532A04011 Points: 1.00 Question Number: 9

You have entered ECP-0.0, "Loss of All AC Power." The turbine-driven AFW pump will not start and all SG WR levels are <50%. Reactor power is < 10-8 amps on both intermediate range channels and trending dowr. The fifth hottest core exit TC is 732°F, subcooling is indicating -28°F, and RVLIS is not functional. At this point you should: (Circle the correct response.)

A. Exit to FRP-C.2, "Degraded Core Cooling."

B. Exit to FRP-H.1, "Loss of Secondary Heat Sink."

C. Remain in ECP-0.0 "Loss of All AC Power."

D. Exit to ECP-0.2 "Loss of All AC Power Recovery with SI Required."

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___
S&K No.	246205023020	246206000300				
K/A No.	000055A0.11G	000029EK3.12A	000074A0.12G			
RO/SRO Impf.	4.1 /4.1	4.4 /4.7	4.3 /4.4			

052533C12010 Points: 1.00 Question Number: 10

Which one of the following correctly describes why SGs are depressurized at the maximum rate to (ultimately) atmospheric pressure during the execution of FNP-1-FRP-C.1, "Response to Inadequate Core Cooling"? (Circle the correct response.)

A. To reduce RCS pressure to allow the ECCS accumulators and low pressure SI pumps to inject water

B. To reduce RCS pressure to prevent the formation of superheated steam in the core

C. To reduce RCS temperature to increase thermal driving head for natural circulation

D. To reduce RCS pressure in order to collapse any steam void in the upper part of the reactor vessel

ANSWER: A. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___ ___ ___	___ ___ ___
S&K No.	_____	243515022359	_____
K/A No.	000074K311	_____	_____
RO/SRO Impf.	4.0 /4.4	___ / ___	___ / ___

Rev. Date 3/22/91

052533F15016 Points: 1.00 Question Number: 11

The control room operators are responding to a loss of secondary heat sink and have initiated RCS bleed-and-feed. The SS directs the STA to determine if bleed-and-feed is adequate and to make recommendations. The STA observes that SI train A is in service and that train B is not. All PZR PORVs have been opened manually. AFW to all SGs has been established. The level in S/G A is presently at 2% narrow range; the level in the other S/Gs is 41% wide range. Based on these indications, which of the following should the STA report? (Circle the correct response.)

	FEED PATH	BLEED PATH	RECOMMENDATION
A.	Adequate	Adequate	SI train B should be placed into service if possible to maximize RCS feed flow.
B.	Adequate	Adequate	Bleed-and-feed can be terminated because adequate secondary heat sink is present.
C.	Inadequate	Adequate	SI train B must be placed into service to provide adequate feed flow.
D.	Inadequate	Inadequate	The PORVs should be in auto, cycling open at their pressure setpoints.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___	240601000502	___ ___ ___
S&K No.			
K/A No.	000054EK304	000054SG12	
RO/SRO Impf.	4.4 /4.6	3.2 /3.2	___ /___

052533M01001 Points: 1.00 Question Number: 12

A LOCA has occurred. While the operators are performing EEP-1, Loss or Reactor or Secondary Coolant, an orange priority is received on the containment status tree. The control room operators enter FRP-Z.1, Response to High Containment Pressure. They successfully complete all of the actions of FRP-Z.1 and return to EEP-1. When they return to EEP-1, they observe that the containment critical safety function has not been restored. The containment status tree continues to display an orange priority. With these conditions, the operators should: (Circle the correct response.)

A. Continue with the actions of EEP-1 with no need to re-perform the steps of FRP-Z-1.

B. Implement FRP-Z.1 again, and repeat the actions to clear the orange priority.

C. Return to the last step of FRP-Z.1 and hold until the orange priority is cleared.

D. Stay on the step-in-effect in EEP-1 until the emergency director determines if FRP-Z.1 should be performed again.

ANSWER: A. Point Value: 1.0 Answer Time: 2.0 Mins.

Static Sim Scenario Nos.		___	___	___	___	___	___	___
S&K No.	311939021020	_____			_____			
K/A No.	000069EK3.01A	_____			_____			
RO/SRO Impf.	3.8 /4.2	___ /___			___ /___			

03/27/92 ALABAMA POWER COMPANY

EXAM GRADING SHEET

EXAM NAME: B92C5W2E1R CLASS NAME: LRP-92

TOTAL POINTS: 12 DATE GIVEN: 04/02/92

STUDENT ID / NAME: ** DRAFT ** / ********** DRAFT **********

QUESTION #		POINT VALUE	POINTS MISSED
1	- O52303H07011	1.00	_____
2	- O52520B01002	1.00	_____
3	- O52520S01007	1.00	_____
4	- O52530D10018	1.00	_____
5	- O52531E08007	1.00	_____
6	- O52531F10009	1.00	_____
7	- O52531G09004	1.00	_____
8	- O52531J02002	1.00	_____
9	- O52532A04011	1.00	_____
10	- O52533C12010	1.00	_____
11	- O52533F15016	1.00	_____
12	- O52533M01001	1.00	_____

TOTAL POINTS MISSED: _____ FINAL SCORE: _____ _____ %

RTYPE: K2.04
(Individual)

RTYPE: K2.07
(KEY)

TRAINING DEPARTMENT EXAMINATION

NAME(*RCVR): _____ GROUP: _____

*DATE: 03/25/92 EXAM NUMBER: A92C5W1A1S

EXAM TITLE: LRP-92 SRO CY-5 WK-1 PART A TOTAL POINTS: 13.00
(*XREF) NRC ABNORMAL

INSTRUCTIONS

1. This is a 1.0 hour examination.

2. Point value for each question is indicated in the question header.

3. Answer all questions:

   [ ] On a separate paper.

   [ ] On the answer sheet by circling or marking the correct response or filling in the blanks.

   [X] On the same page as the question. If extra room is needed, use the reverse side of the previous page or use extra paper.

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_____
EXAMINEE'S SIGNATURE

EXAM GRADED BY: _____ PREPARED BY: J J Deaver

GRADING/MATH REVIEW BY: _____ APPROVED BY: _____
Training Manager/
Supervisor

*INDEXING INFORMATION
2/24/89

PART A (STATIC SIMULATOR) AND PART B (OPEN REFERENCE)
EXAMINATION GUIDELINES

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- Show all work and state any assumptions.

10190M

052101G14002 Points: 1.00 Question Number: 1

A VCT auto makeup has occurred due to the RCS leak in progress. Based on the existing RCS boron concentration, determine the effects the auto makeup will have on reactor power and Tavg. (Circle the correct response.)

	Power	Tavg
A.	Decrease	Increase
B.	Decrease	Decrease
C.	Increase	Decrease
D.	Increase	Increase

ANSWER: D. Point Value: 1.0 Answer Time: 6.0 Mins.

Static Sim Scenario Nos.	02A	22A	___	___	___	___ ___
S&K No.	249110020105		_____	_____		
K/A No.	004000K106		_____	_____		
RO/SRO Impf.	3.1 /3.1		__ /__	__ /__		

Rev. Date 10/7/91
Rev. Date 10/16/91

052201F07012 Points: 1.00 Question Number: 6

Which of the following statements explains the indications currently displayed by DRPI? (Circle the correct response.)

A. Rod F-6 has dropped.

B. Rod F-6 has been ejected.

C. Loss of both data A and data B information for rod F-6

D. Failure in a data A or data B coil for rod F-6

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	22A	___ ___ ___ ___ ___ ___	
S&K No.	240122020136		
K/A No.	014000-A1.02A	014000-A2.03A	01400-K4.03A
RO/SRO Impf.	3.2 /3.6	3.6 /4.1	3.2 /3.4

052201G14016 Points: 1.00 Question Number: 7

If the main turbine were to trip from the present plant conditions, which of the following statements describes the response of the steam dumps as a result of the transient? (Circle the correct response.)

A. Steam dumps will open only when the HI-1 trip-open setpoint is reached.

B. Steam dumps will open as a result of rising steam pressure.

C. Steam dumps will open and be controlled by the turbine trip controller.

D. Steam dumps will remain closed until both steam dump interlock switches are placed in BYPASS INTERLOCK.

ANSWER: B. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	22A	___ ___ ___	--- --- ---
S&K No.	244110020160	244102000100	_____
K/A No.	041020-A1.02A	_____	041020-A4.08A
RO/SRO Impf.	3.1 /3.2	___ /___	3.0 /3.1

052201I34008 Points: 1.00 Question Number: 8

What effect does the indicated 1D inverter fault have on the solid-state protection system? (Circle the correct response.)

A. No effect.

B. "B" reactor trip breaker prevented from auto opening.

C. "A" train safeguards actuation is prevented.

D. "B" train safeguards actuation is prevented.

ANSWER: A. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos. 22A			
SAK No.	246?08026000	246245026000	
K/A No.	000057-K0.05G		000057EA2.04A
RO/SRO Impf.	3.4 /3.6	/	3.7 /4.0

052520M01001 Points: 1.00 Question Number: 10

A loss of main feedwater has occurred due to a failed open FRV on the C S/G causing C S/G to exceed 75% narrow range level. Which of the following is NOT correct with respect to the main turbine? (Circle your choice.)

A. It should have been manually tripped to minimize S/G mass loss.

B. It should have automatically tripped at the same time as the SGFP tripped.

C. If the turbine had tripped, the S/G mass loss would have been greater due to the shrink effect

D. If the turbine had tripped, driving rods in will cause steam flow to decrease.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	02A	22A	___	___	___	___	___
S&K No.	243502020235		_____		_____		
K/A No.	000054K301		_____		_____		
RO/SRO Impf.	4.1 /4.4		___ /___		___ /___		

Rev. Date 10/16/91

052520M04005 Points: 1.00 Question Number: 11

Based on the loss of feedwater that has occurred, which of the following statements is correct concerning Rx trip?

(Circle the correct response.)

A. The reactor should be manually tripped to conserve S/G inventory for adequate secondary heat sink and decay heat removal.

B. The reactor should not be manually tripped until the main turbine is tripped in order to minimize the RCS cooldown.

C. The reactor should not have automatically tripped because power is less than 35%.

D. The reactor should not have automatically tripped because the main turbine has not tripped.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	02A 22A	___ ___	___ ___
S&K No.	240201022000	_____	_____
K/A No.	000054K304	_____	_____
RO/SRO Impf.	4.4 /4.6	___ /___	___ /___

Rev. Date 10/16/91

052521A04001 Points: 1.00 Question Number: 13

Based on the charging system lineup, in the event an emergency boration is required: (Circle the correct response.)

A. The emergency boration will work correctly using the emergency boration procedure immediate action steps.

B. The boric acid flow will go to the VCT instead of the charging pump suction.

C. Boration can ONLY be accomplished using the reactor makeup system in the borate mode.

D. The emergency boration flow will have to flow through valve Q1E21V185 (manual emergency borate valve) to the charging pump suction.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	02A	22A	___	___	___	___ ___
S&K No.	240413024645					
K/A No.	000024A201	000024K302				
RO/SRO Impf.	3.8 /4.1	4.2 /4.4	___ /___			

Rev. Date 10/8/91
Rev. Date 10/16/91

052101K16C01 Points: 1.00 Question Number: 2

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

The RCS has been taken solid. "A" train RHR is in service providing both core cooling and low pressure letdown. Due to problems maintaining stable RCS pressure, both the letdown line pressure control valve PCV-145 and the charging flow control valve FCV-122 are being operated with their respective controllers in manual. The OATC wishes to raise RCS pressure toward the high end of his operating band. Which of the following actions would result in a pressure increase? (Circle the correct response.)

A. Increase demand towards closed on letdown line pressure controller PK-145.

B. Increase flow through the "A" RHR Hx while maintaining total RHR flow constant.

C. Fully open RHR to letdown heat exchanger HCV-142.

D. Commence a 200 gallon dilution of the RCS.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	240203000220	_____	_____
K/A No.	004020K6.02	_____	_____
RO/SRO Impf.	3.8 /4.1	___ /___	___ /___

Rev. Date 1/9/92
Rev. Date 2/22/92

052102F06006 Points: 1.00 Question Number: 3

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

Earlier in the shift, the "C" SW pump was aligned to the "B" train and the "B" train spare pump selector switch was placed in the "D" position in preparation for some PMs on the "D" SW pump. The A, B, D, and E SW pumps are presently running. Following an SI/LOSP, which SW pumps will be running, provided the ESF sequencers run properly? (Circle the correct response.)

A. A, B, C, D, E

B. A, B, C, E

C. A, B, C, D

D. A, B, D, E

ANSWER: B. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.			
S&K No.	247611025320		
K/A No.	076000K4.06	076000a2.01	076000K4.02
RO/SRO Impf.	2.8 /3.2	3.5 /3.7	2.9 /3.2

052102H10016 Points: 1.00 Question Number: 4

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

Evaluate the following plant conditions:

- The A MDAFW pump is out of service.
- The condensate storage tank is ruptured and has no water in it.
- The plant has tripped.
- All SGs are on the narrow range indication and lowering in that range.
- It has been decided to feed the SGs from the SW system using the AFW system.

Which combination of open valves will supply service water to the suction of an operable AFW pump? (Circle the correct response.)

A. 3209A, 3209B

B. 3209A, 3210A

C. 3209B, 3216

D. 3209A, 3216

ANSWER: D. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.		___	___	___	___	___	___	___
S&K No.	246111020500	_____			_____			
K/A No.	061000A0 13G	_____			_____			
RO/SRO Impf.	3.6 /3.8	___ /___			___ /___			

052105B18010 Points: 1.00 Question Number: 5

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

If the speed of the main turbine exceeds 103% but not 108%:

(Circle the correct response.)

A. The governor valves will close but the intercept valves will stay open.

B. The governor and intercept valves will shut.

C. The intercept valves shut and the governor valves stay open.

D. Only the governor valves shut if in speed test permissive.

ANSWER: B. Point Value: 1.0 Answer Time: 2.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	244508025720	_____	_____
K/A No.	045050K1.01	_____	_____
RO/SRO Impf.	3.4 /3.6	___ /___	___ /___

052302I02007 Points: 1.00 Question Number: 9

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

While the plant is still in COLD SHUTDOWN following an extended outage, the screened cover around the A train RHR containment ESF/recirculation sump suction is found to be torn open. This train of the ECCS is: (Circle the correct response.)

A Operable because the cover is used only to keep out foreign material during maintenance work in the containment.

B. Operable because sufficient water is available in the RWST to provide the required ECCS flow.

C. Inoperable because debris generated during an accident could damage ECCS pumps.

D. Inoperable because backflow through the screen during hot leg recirculation could cause further damage to the screen and cause it to become dislodged.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___
S&K No.	311909023043	_____		_____		
K/A No.	006020K403	006SG5		_____		
RO/SRO Impf.	3.2 /3.6	3.5 /4.2		___ /___		

Rev. Date 11/9/91
Rev. Date 1/9/92

052520T01004 Points: 1.00 Question Number: 12

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

The declaration of an Alert is required if any earthquake results in ground acceleration above the 1/2 safe shutdown limit at the site. Which of the following control room indications tell the operators that the 1/2 safe shutdown earthquake ground acceleration limit of 0.05g has been exceeded? (Circle the correct response.)

A. One red light is lit on the peak shock annunciator panel.

B. All 3 recorders are running on the SMA-3 strong motion accelerograph portion of the seismic panel.

C. Several amber lights are lit on the peak shock annunciator panel.

D. The seismic event indicator changes from black to white.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___ ___ ___	___ ___ ___	___ ___ ___
S&K No.	248402000100	248406000200	_____
L/A No.	_____	194001A1.02A	_____ ___
RO/SRO Impf.	___ /___	4.1 /3.9	___ /___
Rev. Date 3/22/91			

03/20/92 ALABAMA POWER COMPANY

EXAM GRADING SHEET

EXAM NAME: A92C5W1A1S CLASS NAME: LRP-92

TOTAL POINTS: 13 DATE GIVEN: 03/25/92

STUDENT ID / NAME: ** DRAFT ** / ********** DRAFT **********

QUESTION #	POINT VALUE	POINTS MISSED
1 - O52101G14002	1.00	_____
2 - O52101K16001	1.00	_____
3 - O52102F06006	1.00	_____
4 - O52102H10016	1.00	_____
5 - O52105B18010	1.00	_____
6 - O52201F07012	1.00	_____
7 - O52201G14016	1.00	_____
8 - O52201I34008	1.00	_____
9 - O52302I02007	1.00	_____
10 - O52520M01001	1.00	_____
11 - O52520M04005	1.00	_____
12 - O52520T01004	1.00	_____
13 - O52521A04001	1.00	_____

TOTAL POINTS MISSED: _____ FINAL SCORE: _____ _____ %

RTYPE: K2.04
(Individual)

RTYPE: K2.07
(KEY)

TRAINING DEPARTMENT EXAMINATION

NAME(*RCVR): _____ GROUP: _____

*DATE: 03/25/92 EXAM NUMBER: A92C5W1E1S

EXAM TITLE: LRP-92 SRO CY-5 WK-1 PART-A TOTAL POINTS: 13.00
(*XREF) NRC EMERGENCY

INSTRUCTIONS

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_____
EXAMINEE'S SIGNATURE

EXAM GRADED BY: CM PREPARED BY: J J Dearen

GRADING/MATH REVIEW BY: _____ APPROVED BY: B W Wanless
Training Manager/
Supervisor

*INDEXING INFORMATION
2/24/89

PART A (STATIC SIMULATOR) AND PART B (OPEN REFERENCE)
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10190M

052102H17008 Points: 1.00 Question Number: 1

Due to the high cooldown rate, the operator decides to reduce AFW flow to reduce the cooldown rate. Which of the following methods will NOT be effective in reducing AFW flow? (Circle your choice.)

A. Reduce speed of TDAFW pump at the MCB.

B. Stop the MDAFW pumps in local at the HSD panel.

C. Reset the MDAFW FCV resets for train A & B and throttle the FCV at MCB using the pots.

D. Reset the MDAFW FCV resets for train A & B and shut the FCV by placing their MCB handswitches in close.

ANSWER: D. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	16E		
S&K No.	246113021300	241110205I5	
K/A No.		061000K4.06	
RO/SRO Impf.	/	4.0 /4.2	/

052106D14002 Points: 1.00 Question Number: 2

Radiation monitors R-11 and R-12 are not in alarm while other radiation monitors indicate Hi radiation levels inside containment. The reason for this is: (Circle the correct response.)

A. R-11 and -12 are Geiger-Mueller type detectors that have saturated.

B. R-11 and -12 have obviously failed.

C. R-11 and -12 isolated when phase B occurred.

D. R-11 and -12 isolated when SI/phase A occurred.

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	16E	___	___	___	___	___	___
S&K No.	247256020150	_____		_____			
K/A No.	073000A1.01	_____		_____			
RO/SRO Impf.	3.2 /3.5	___ /___		___ /___			

052530A23015 Points: 1.00 Question Number: 8

A single accident occurred to the plant, causing a safety injection and reactor trip. Which of the following was that accident? (Circle the correct response.)

A. Steam break inside containment

B. Feed break inside containment

C. LOCA inside containment

D. A stuck open pressurizer or safety valve

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Min.
Static Sim Scenario No. 16E
JTA No. 240246020700
K/A No. 055000A2.02
RO/SRO Impf. 4.6 /4.8

052530B03001 Points: 1.00 Question Number: 9

Assuming RCS pressure and LHSI flow remain constant for the next 4 hours, which of the following describes how the RHR system will respond with no operator action? (Circle the correct response.)

A. Without CCW cooling to the RHR Hxs, the system may overheat.

B. Without opening the RHR Hx bypass valves (605 A & B), the system will overheat.

C. The ONLY method that will prevent overheating of the RHR system is to trip the RHR pumps.

D. The RHR system will not overheat.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	16E	___	___	___	___	___	___
S&K No.	240515022790	_____	_____				
K/A No.	191004K1.04	_____	_____				
RO/SRO Impf.	3.3 /3.4	___ / ___		___ / ___			

Rev. Date 1/8/92

052530B11004 Points: 1.00 Question Number: 10

Which of the following statements describes the operation of the A accumulator? (Circle the correct response.)

A. The low pressure in the A accumulator indicates that it did discharge into the RCS and the level indication is faulty.

B. The low pressure in the A accumulator prevented the A accumulator from discharging into the RCS.

C. A LOCA exists in the A loop, which prevented the accumulator from discharging.

D. A check valve between the RCS and the A accumulator stuck shut, preventing the accumulator from discharging.

ANSWER: B. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos. 16E

S&K No. 24060700100

K/A No. 006000K1.03

RO/SRO Impf. 4.2 /4.3

Rev. Date 1/8/92

052530B13006 Points: 1.00 Question Number: 11

The reason for the difference in MSIV position indication is:

(Circle the correct response.)

A. The A S/G pressure is slightly lower than B and C S/G and the steam header due to a steam break upstream of A S/G MSIVs.

B. The B and C S/G pressures are slightly lower than the A S/G and steam header due to TDAFW pump operation.

C. The indication for B and C S/G MSIVs is obviously faulty and the MSIVs should indicate closed.

D. The indication for A S/G MSIVs is obviously faulty and the MSIV should indicate mid-position.

ANSWER: B. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos. 16E				___	___	___	___	___	___
S&K No.	243515022600			_____	_____
K/A No.	0000463A1.03	061000K1.03		_____	_____
RO/SRO Impf.	4/3 /4.3	3.5 /3.9		___ /___	
Rev. Date 1/8/92					

052530B16007 Points: 1.00 Question Number: 12

If RCS pressure continues to decrease, at what RCS pressure will the RHR system start injecting water into the RCS, assuming no instrument errors exist? (Circle the correct response.)

A. LHSI flow is in progress at current pressure.

B. LHSI flow will occur at an RCS pressure < 200 psi.

C. LHSI flow cannot occur due to instrument air alignment.

D. LHSI flow cannot occur unless both RHR pumps are running.

ANSWER: B. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos. 16E	___ ___ ___	___ ___ ___	
S&K No.	240515022790	_____	_____
K/A No.	191004K1.04	_____	_____
RO/SRO Impf.	3.3 /3.4	___ /___	___ /___
Rev. Date 1/8/92			

053002J15009 Points: 1.00 Question Number: 13

Based on present static plant conditions, state the MINIMUM notification/classification requirements. (Circle the correct response.)

A. NOUE

B. Alert

C. Site area emergency

D. General emergency

ANSWER: B
C. Point Value: 1.0 Answer Time: Mins.

Static Sim Scenario Nos.	16E										
S&K No.	311934020836										
K/A No.	194001A1.16										
RO/SRO Impf.	3.1 /4.4										

BW

Due to the simulator not being ~~from~~ run long enough to ensure Containment Pressure exceeded 27 psig (pressure only reached 23 psig) then the correct answer should be B vice C since S.E. Area criteria is 27 psig.

052201H05019 Points: 1.00 Question Number: 3

CAUTION: TI QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

The following plant conditions exist:

- Spray valves closed
- PORV PCV-444B closed
- PORV PCV-445A at setpoint (cycling at setpoint)

Which one of the following PRZR pressure channel failures has occurred? (Circle the correct response.)

A. PT-444 failed low.

B. PT-445 failed low.

C. PT-445 failed high.

D. PT-444 failed high.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___	___ ___ ___
S&K No.	241008020300	241013020120
K/A No.	010000-K6.03	000027EA1.01A
RO/SRO Impf.	3.2 /3.6	4.0 /3.9

052201I35012 Points: 1.00 Question Number: 4

CAUTION: THIS QUESTION DOES NOT APPLY TO THE STATIC SIMULATOR CONDITIONS.

The following plant conditions exist:

- Tavg	550°F decreasing
- Main turbine	NOT TRIPPED
- Feedwater isolation	Did not occur
- Steam dumps	Armed
- Reactor tripped from	51% power
- Cause of reactor trip	Loss of "B" RCP

The above mentioned plant response to the reactor trip suggests that a failure has occurred in permissive circuit _____. (Circle the correct response.)

A. P-13

B. P-10

C. P-8

D. P-4

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___ ___ ___ ___ ___ ___	___
S&K No.	241203001500	_____	_____
K/A No.	012000K610	_____	_____
RO/SRO Impf.	3.3 /3.5	___ /___	___ /___

052202E21002 Points: 1.00 Question Number: 5

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

The OATC has placed the core exit temperature monitor in the "ALL" submode. Which of the following describes this sub mode? (Circle the correct response.)

A. Allows individual thermocouple temperatures and subcool ing to be displayed

B. Displays subcooling and all individual thermocouple temperatures sequentially

C. Displays the highest and next highest thermocouple temperatures per quadrant and the individual thermo couple temperatures sequentially

D. Displays only the highest thermocouple r quadrant

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___ ___	___ ___	-- -- --
S&K No.	241706000150	241706023010	_____
K/A No.	017000A0.13G	000074EA1.16A	_____
RO/SRO Impf.	2.7 /2.9	4.4 /4.6	___ /___

052302H03010 Points: 1.00 Question Number: 6

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

The unit is operating at 100% power when the electrical maintenance foreman reports that the B and D PRZR heater groups have just failed the surveillance that checks their power output. Which of the following actions is correct? (Circle the correct response.)

A. Restore B heater group to operable status within 72 hours or be in at least HOT STANDBY within next six hours and in HOT SHUTDOWN within the following six hours.

B. Be in at least HOT STANDBY with the reactor trip breakers open within six hours and in HOT SHUTDOWN within the following six hours.

C. No action required since heater groups A and E are operable.

D. Generate an Administrative LCO.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No. 241003000100	_____				_____		
K/A No. 010000G.005	_____				_____		
RO/URO Impf. 3.2 /3.8	___/___				___/___		

Rev. Date 3/19/91
Rev. Date 1/8/92

052302H14034 Points: 1.00 Question Number: 7

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

An RCS cooldown using one train of RHR is in progress with one RCP running. At 300°F, the operating RHR pump trips and can not be restarted. According to the Technical Specifications, which of the following is the REQUIRED action?

(Circle the correct response.)

A. Proceed to establish a boron concentration in the RCS greater than or equal to that concentration needed to maintain a shutdown margin of 1000 pcm at 200°F.

B. Start all RCPs within one hour.

C. Establish the other train of RHR running within one hour.

D. No action is required as long as the RCP continues to operate.

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___	
S&K No.	240204020100							
K/A No.	005000K3.01							
RO/SRO Impf.	3.9 /4.0	___ /___			___ /___			

Rev. Date 11/8/91
Rev. Date 1/8/92

03/20/92 ALABAMA POWER COMPANY

EXAM GRADING SHEET

EXAM NAME: A92C5W1E1S CLASS NAME: (

TOTAL POINTS: 13 DATE GIVEN: 03/25/92

STUDENT ID / NAME: ** DRAFT ** / ********** DRAFT **********

QUESTION #		POINT VALUE	POINTS MISSED
1	- O52102H17008	1.00	_____
2	- O52106D14002	1.00	_____
3	- O52201H05019	1.00	_____
4	- O52201I35012	1.00	_____
5	- O52202E21002	1.00	_____
6	- O52302H03010	1.00	_____
7	- O52302H14034	1.00	_____
8	- O52530A23015	1.00	_____
9	- O52530B03001	1.00	_____
10	- O52530B11004	1.00	_____
11	- O52530B13006	1.00	_____
12	- O52530B16007	1.00	_____
13	- O53002J15009	1.00	_____

TOTAL POINTS MISSED: _____ FINAL SCORE: _____ _____ %

RTYPE: K2.04
(Individual)

RTYPE: K2.07
(KEY)

TRAINING DEPARTMENT EXAMINATION

NAME(*RCVR): _____ GROUP: _____

*DATE: 03/25/92 EXAM NUMBER: B92C5W1A1S

EXAM TITLE: LRP-92 SRO CY-5 WK-1 PART-B TOTAL POINTS: 12.00
(*XREF) NRC ABNORMAL

INSTRUCTIONS

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   [ ] On a separate paper.

   [ ] On the answer sheet by circling or marking the correct response or filling in the blanks.

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_____
EXAMINEE'S SIGNATURE

EXAM GRADED BY: _____ PREPARED BY: J T Deane

GRADING/MATH REVIEW BY: _____ APPROVED BY: B K Von Suskil
Training Manager/
Supervisor

*INDEXING INFORMATION
2/24/89

PART A (STATIC SIMULATOR) AND PART B (OPEN REFERENCE)
EXAMINATION GUIDELINES

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- Show all work and state any assumptions.

10190M

052303H10016 Points: 1.00 Question Number: 1

The _____ must give permission prior to returning the reactor to criticality following a reactor trip. (Circle the correct response.)

A. General manager - nuclear plant

B. Operations manager

C. On call emergency director

D. Operations unit superintendent

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	_____	_____	_____		_____		
K/A No.	GENA1.03	_____	_____		_____		
RO/SRO Impf.	2.5 /3.4	___ /___			___ /___		

052303003005 Points: 1.00 Question Number: 2

A transformer containing a 350 ppm PCB concentration would be classified as a: (Circle the correct response.

A. Non-PCB transformer

B. PCB transformer

C. PCB-contaminated transformer

D. PCB-containing transformer

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	____	___	_____	_____			
K/A No.	GENK1.07		_____	_____			
RO/SRO Impf.	3.6 /3.7		__/__	__/__			

052520C0800J Points: 1.00 Question Number: 3

The plant is at 33% power. Control bank "D" is at 65 steps and in auto, controlling RCS temperature. A DEH control system malfunction results in a turbine trip. Control rods drive into the core 14 steps prior to being taken to MANUAL. The control rods and the steam dumps are used to restore reactor power to 32%. Bank "D" control rods were raised to 54 steps. What action should be taken and why? (Circle the correct response.)

A. Drive the control rods in to shut down the reactor.

B. No action is required. All conditions are satisfactory for main turbine recovery operations.

C. Initiate a boration in order to bring the control rod height above the low rod insertion limit.

D. Initiate an emergency boration in order to bring the control rod height above the low-low rod insertion limit.

ANSWER: C. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	240105020099	300903113710					
K/A No.	194001A1.06A	001000A0.13G					
RO/SRO Impf.	2.6 /3.1	3.7 /3.6	___ /___				

052520G01002 Points: 1.00 Question Number: 4

Unit 1 is operating at steady-state full power when SW to turbine building isolation valves Q1P16V514, 515, 516, and 517 close. All attempts to open these valves are unsuccessful. Which of the following best describes the next action the operator should take? (Circle the correct response.)

A. Commence ramping main turbine as required to maintain main generator hydrogen temperatures below 40 °C.

B. Trip the main generator.

C. Trip the RCPs and refer to AOP-4.

D. Trip the reactor and refer to EEP-0.

ANSWER: D. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___
S&K No.	240201022050	_____		_____		
K/A No.	000062EK3.03	000062GEN12		_____		
RO/SRO Impf.	4.0 /4.2	3.4 /3.7		___ /___		

052520L01001 Points: 1.00 Question Number: 5

If RHR pump amps and flow start oscillating during operations at mid-loop, which one of the following actions should be taken to restore stable operation? (Circle the correct response.)

A. Increase vessel level and increase RHR system flow.

B. Increase vessel level and decrease RHR system flow.

C. Decrease vessel level and decrease RHR system flow.

D. Decrease vessel level and increase RHR system flow.

ANSWER: B. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	240511020797	_____	_____
K/A No.	005000K1.09	_____	_____
RO/SRO Impf.	3.6 /3 9	___ /___	___ /___

Rev. Date 11/13/91
Rev. Date 1/9/92

052521E05006 Points: 1.00 Question Number: 6

A fire is in progress in Unit 1 main steam and feedwater valve room when the operator observes 1A charging pump amps, seal injection, and charging flow oscillating. Identify the correct actions. (Circle the correct response.)

A. Trip A charging pump, start B charging pump.

B. Trip A charging pump, verify VCT level > 5%, then start B charging pump.

C. Place FCV-122 in manual and closed to stop pump runout.

D. Open LCV-115B and D.

ANSWER: D. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___
S&K No.	248605020200	248605020220			
K/A No.	000067EK3.04				
RO/SRO Impf.	3.3 /4.1	__ /__		__ /__	

052521J02003 Points: 1.00 Question Number: 7

An RCS crud burst has caused gross activity to increase significantly. What actions would best reduce this activity level in accordance with the high reactor coolant activity procedure? (Circle the correct response.)

A. Valve in the cation demineralizer AND reduce letdown flow rate to 45 gpm.

B. Divert letdown around the CVCS demineralizers in order to maximize the fission product input to the waste gas system via VCT purge flow.

C. High activities from crud bursts cannot be removed by ion exchange; a power reduction is required.

D. Valve in the standby mixed bed demineralizer AND increase letdown to 120 gpm.

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.			
S&K No.	240417020230	240417020150	240417020160
K/A No.	000073EK3.06A	000076EK3.06A	000076EK3.05A
RO/SRO Impf.	3.2 /3.8	3.2 /3.8	2.9 /3.6

052531B17007 Points: 1.00 Question Number: 8

One minute ago, the reactor tripped from 100% power at 600 ppm boron. ESP-0.1, Reactor Trip Response, has just been entered. You discover that 2 rod bottom lights are not illuminated. All reactor trip and bypass breakers are open, the power range NIS channels read off-scale low, and the IR startup rate is -0.4 dpm. RCS Tavg is 520°F and stable. The FW system is functioning as intended. In response to this situation, you should: (Circle the correct response.)

A. Return to EEP-0, Step 1.

B. Immediately transition to FRP-S.1.

C. Emergency borate a minimum of 1972 gallons.

D. Emergency borate a minimum of 1697 gallons.

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.			
S&K No.	240405020301	240122020144	240122020127
K/A No.	000024EA2.05A	000007EA2.02A	000007EK1.02A
RO/SRO Impf.	3.3 /3.9	4.3 /4.6	3.4 /3.8

Rev. Date 3/20/91
Rev. Date 1/23/92
Rev. Date 2/12/92

052531E06004 Points: 1.00 Question Number: 9

The SI termination procedure has been entered following an LOSP with SI. A check of RCP support conditions is in progress to determine if RCPs can be restarted. The RCP bearing upper/lower oil reservoir Lo level annunciators are in alarm for all three RCPs. RCS ΔT is now 68°F and RCS sub-cooling is 25°F. The operator should: (Circle the correct response.)

A. Realign BIT flow and start additional charging pumps.

B. Dump steam at a faster rate to improve natural circulation.

C. Start the B RCP to reduce RCS ΔT.

D. Reduce steam dump demand to reduce RCS ΔT and improve natural circulation.

ANSWER: B. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	--	___	___	___
S&K No.	240206023600						
K/A No.	000038A1.34A	000074EK3.11A			013000A1.01A		
RO/SRO Impf.	4.2 /4.3	4.0 /4.4			4.0 /4.2		

052533A05006 Points: 1.00 Question Number: 10

While responding to a nuclear power generation ATWT event, the team has been unable to verify that the turbine is tripped as indicated by all four (4) turbine stop valves being closed. Attempts to manually trip the turbine have not been successful in closing the throttle valves. The team should: (Circle the correct response.)

A. Close the throttle valves in manual using fast action on the manual portion of the DEH panel.

B. Secure the EH fluid pumps to close the throttle valves.

C. Close the governor valves in manual using fast action on the manual portion of the DEH panel.

D. Continue with the procedure. Isolating steam flow to the turbine is not necessary during an ATWT event.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___ ___ ___
S&K No.	300903012100	300903012110	_____
K/A No.	000029A0.10G	000029A0.10G	_____
RO/SRO Impf.	4.5 /4.5	4.5 /4.5	___ /___

052533C20012 Points: 1.00 Question Number: 11

Following an auto SI, a LOCA has been diagnosed and EEP-0 is exited and FRP-C.2 has been entered. The below listed conditions exist:

RCS pressure - 1200 psig.

BIT flow = 100 gpm.

Hottest CETC temperatures are 1100, 1090, 1090, 790, 790, 720, 700, 650, 650, 640.

Subcooling monitor indicates superheat in both CETC and RTD modes.

AFW flow = 400 gpm.

WR SG level in all SGs 20-25%.

All 3 RCPs are running.

RCP vibration alarm is in.

Low reservoir oil level alarm is in for A & C RCPs.

With respect to RCPs, which of the following is correct following completion of the procedural step of checking RCP support conditions? (Circle the correct response.)

A. Trip all RCPs.

B. Trip only A and B RCPs.

C. Trip only B RCP.

D. Do not trip any RCPs.

ANSWER: C. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___
S&K No.		240311021991			
K/A No.	000074EA1.06	000074GEN12			
RO/SRO Impf.	3.6 /3.9	4.3 /4.4	___ /___		

Rev. Date 2/18/92

053002W03003 Points: 1.00 Question Number: 12

Eight hours after a reactor trip/SI due to a LOCA, R-27A and B are indicating 2R/hr. The core damage state is: (Circle the correct response.)

A. No clad damage

B. 0-20% clad damage

C. 20-50% clad damage

D. 50-100% clad damage

ANSWER: B. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.		___	___	___	___	___	___
S&K No.	311934020832	_____			_____		
K/A No.	194001A1.16	_____			_____		
RO/SRO Impf.	3.1 /4.4	__ /__			__ /__		

03/20/92 ALABAMA POWER COMPANY

EXAM GRADING SHEET

EXAM NAME: B92C5W1A1S CLASS NAME: LRP-92

TOTAL POINTS: 12 DATE GIVEN: 03/25/92

STUDENT ID / NAME: ** DRAFT ** / ********** DRAFT **********

QUESTION #	POINT VALUE	POINTS MISSED
1 - O52303H10016	1.00	_____
2 - O52303O03005	1.00	_____
3 - O52520C08005	1.00	_____
4 - O52520G01002	1.00	_____
5 - O52520L01001	1.00	_____
6 - O52521E05006	1.00	_____
7 - O52521J02003	1.00	_____
8 - O52531B17007	1.00	_____
9 - O52531E06004	1.00	_____
10 - O52533A05006	1.00	_____
11 - O52533C20012	1.00	_____
12 - O53002W03003	1.00	_____

TOTAL POINTS MISSED: _____ FINAL SCORE: _____ _____ %

RTYPE: K2.04
(Individual)

RTYPE: K2.07
(KEY)

TRAINING DEPARTMENT EXAMINATION

NAME(*RCVR): _____ GROUP: _____

*DATE: 03/25/92 EXAM NUMBER: B92C5W1E1S

EXAM TITLE: LRP-92/SRO CY-5/~~17~~-1 PART-~~B~~ TOTAL POINTS: 12.00
(*XREF) NRC EMERGENCY

INSTRUCTIONS

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_____
EXAMINEE'S SIGNATURE

EXAM GRADED BY: _____ PREPARED BY: J T Deaver

GRADING/MATH REVIEW BY: _____ APPROVED BY: B W Hamilton
Training Manager/
Supervisor

*INDEXING INFORMATION
2/24/89

PART A (STATIC SIMULATOR) AND PART B (OPEN REFERENCE)
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052303H08014 Points: 1.00 Question Number: 1

With Unit 1 in Mode 5 and Unit 2 in Mode 5, what is the minimum number of system operators required? (Circle the correct response.)

A. 2 on Unit 2 with 1 of those shared with Unit 1

B. 1 on Unit 1 and 1 on Unit 2 with both individuals shared between the units

C. 2 on Unit 1 with one of those shared with Unit 2

D. 1 on Unit 1, 1 on Unit 2, and one other shared between the units

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Si' Scenario Nos.	___	___	___	___	___	___	___
S&K No.	_____	_____	_____				
F/A No.	GENA1.03	_____	_____				
RO/SRO Impf.	2.5 /3.4	___ /___		___ /___			

052520L06008 Points: 1.00 Question Number: 2

The plant is in the following conditions;

- RCS level 123'2".
- A RHR in cooldown operation.
- B RHR lined up for cooldown with the pump stopped.
- SG nozzle dam installation in progress.
- Annunciator HG4, OMS REL VLV PATH CLOSED AT LO TEMP, comes in.
- MOV-8701A, RHR pump 1A suction from RCS loop 1C, is observed going closed.

The operator should: (Circle the correct response.)

A. Trip A RHR pump and initiate actions to close containment.

B. Open MOV-8809A, RWST TO A RHR PUMP, to prevent a loss of RHR.

C. Trip A RHR pump and immediately start B RHR pump to restore flow regardless of RCS level.

D. Trip A RHR pump, verify RCS level above 123'2", then start B RHR pump, and restore flow.

ANSWER: D. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___	___ ___ ___	
S&K No.	240511020808	240511020835	_____
K/A No.	000025SG11	005000K1.09	_____
RO/SRO Impf.	3.6 /3.9	3.6 /3/9	___ /___

Rev. Date 11/13/91
Rev. Date 1/9/92
Rev. Date 1/15/92
Rev. Date 1/16/92
Rev. Date 2/28/92

052530B16013 Points: 1.00 Question Number: 3

A large steam break accident has occurred inside containment, resulting in safety injection actuation. Containment pres sure is presently stable at 10 psig. Which of the following sets of conditions would allow SI termination when the faulted SG boils dry? (Circle the correct response.)

A. 38° subcooling
450 gpm AFW flow
RCS pressure 1700 psig and increasing
PZR level 12% and increasing

B. 52° subcooling
450 gpm AFW flow
RCS pressure 1700 psig and increasing
PZR level 12% and increasing

C. 52° subcooling
two SGs at 25% NR, one SG at 0% WR
AFW flow 100 gpm
RCS pressure 1700 psig and increasing
PZR level at 62% and increasing

D. 52° subcooling
one SG at 50% NR, one SG at 18% NR, one SG at 0% NR
AFW flow at 100 gpm
RCS pressure at 1700 psig and increasing
PZR level at 62% and increasing

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	300903110720	_____	_____
K/A No.	000040EA2.05	_____	_____
RO/SRO Impf.	4.1 /4.5	___ /___	___ /___

052530B16032 Points: 1.00 Question Number: 4

A large break LOCA occurred on Unit 1 at 0230 this morning. Cold leg recirculation was initiated at 0415. At what time will hot leg recirculation be initiated? (Circle the correct response.)

A. 1330

B. 1515

C. 1730

D. 1915

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	240206023200	_____		_____			
K/A No.	000011EA1.11	_____		_____			
RO/SRO Impf.	4.2 /4.2	__ /__		__ /__			

052530C05008 Points: 1.00 Question Number: 5

The operating crew has indications that all 3 SGs appear to be faulted with SG B and C pressures lower than A SG pressure. Which of the following would be a correct action to take in response to these indications? (Circle the correct response.)

A. Isolate the SG with the highest pressure first.

B. Locally unlock and close isolation valves for any failed SG code safety valves.

C. If the TDAFW pump is not required, isolate the steam supplies from the hot shutdown panel.

D. Stop any RCS borations in progress to prevent further RCS cooldown.

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	300903110710	_____	_____
K/A No.	000007A010G	_____	_____
RO/SRO Impf.	4.2 /4.1	___ /___	___ /___

052530D03006 Points: 1.00 Question Number: 6

Following diagnosis of a SGTR, the team has transitioned to EEP-3. At step 3 the team has determined that all three S/Gs are ruptured by Rad Monitors and uncontrolled level rise. Which of the following actions should the team take: (Circle the correct response.)

A. Isolate the SGs with the highest level first, then cool down with the least ruptured SG and do not exit EEP-3.

B. Isolate all three SGs per EEP-3. The caution prior to step 3 does not apply if all SGs are ruptured.

C. Pick one SG to be available for cooldown. Isolate the remaining two SGs and transition to ECP-3.1 when directed.

D. Apply the caution statement just prior to step 3 and immediately transition to ECP-3.1 without performing any more steps of EEP-3.

ANSWER: C. Point Value: 1.0 Answer Time: 6.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	243515020473						
K/A No.	000038A0.12G	000038EK3.06A					
RO/SRO Impf.	3.8 /4.0	4.0 /4.3	___ /___				

Rev. Date 10/7/91

052530D08015 Points: 1.00 Question Number: 7

EEP-3, "Steam Generator Tube Rupture," has the operator monitor ruptured SG levels. Which one of the following is an adverse effect of allowing ruptured SG levels to decrease to <6% narrow range? (Circle the correct response.)

A. A rapid rise in ruptured SG pressure if the leaking tube is uncovered during cooldown

B. A rapid rise in ruptured SG level due to "swell" when cooldown is commenced

C. Ruptured SG depressurization due to leak uncovery during cooldown

D. Ruptured SG overheating due to [illegible]leakage of RCS water

ANSWER: C. Point Value: 1.0 [illegible]swer Time: 5.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	243515020441	_____	_____				
K/A No.	000038A1.01	_____	_____				
RO/SRO Impf.	4.5 /4.6	___/___	___/___				

052531F12012 Points: 1.00 Question Number: 8

It is desirable to run one RCP when performing actions in the post-LOCA cooldown and depressurization procedure. Running only one RCP limits the heat input to the RCS. The forced flow provided by the RCP: (Circle the correct response.)

A. Ensures aux spray flow is effective and improves sub cooling.

B. Allows the cooldown rate to exceed 100°F per 60 minute period without challenging RCS integrity.

C. Eliminates the need for low head SI flow and improves the effectiveness of CVCS letdown.

D. Allows for normal RCS cooldown and provides pressurizer spray flow.

ANSWER: D. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	240311022940	_____		_____			
K/A No.	000009EK3.23A	_____		_____			
RO/SRO Impf.	4.2 /4.3	___ /___		___ /___			

Rev. Date 2/27/91

052531I05007 Points: 1.00 Question Number: 9

A SGTR has occurred on the 1A SG. The operating crew has correctly implemented EEP-3, SGTR, and is performing ESP-3.1, "Post-SGTR Cooldown Using Backfill." The operating team is on step 12 of ESP-3.1 and is reducing RCS pressure. The unit operator notices that the 1B SG level is increasing above 65% NR in an uncontrolled manner even after AFW and feedwater have been isolated to that SG. What action should the operating crew take to respond to the increasing level in 1B SG? (Circle the correct response.)

A. Crew should transition directly to EEP-3, SGTR, step #1 per step 7.2 RNO.

B. Crew should continue with present procedure and allow the depressurization to stop any additional leakages.

C. Crew should transition to EEP-3 per foldout page criteria.

D. Crew should ensure SG 1B is isolated as per procedure EEP-3 and then continue with procedure ESP-3.1.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	243515020474	243515020466					
K/A No.	000038EK3.06A	000038EA2.02A					
RO/SRO Impf.	4.2 /4.5	4.5 /4.8	___ /___				

Rev. Date 10/7/91

052532A06014 Points: 1.00 Question Number: 10

The Unit has experienced a loss of all AC power and the loss of all AC power procedure is in progress. Which of the following statements is correct in regard to procedural usage and actions? (Circle the correct response.)

A. Each step of the procedure must be completed prior to proceeding to the next step.

B. Do not reset any SI signals which occur to prevent LOSP loads vice ESF loads from starting upon bus re-energization.

C. Defeat the autostart of ALL large motor loads to prevent overloading the diesel generator when started.

D. Perform a secondary depressurization to inject accumulator water mass into the RCS even if pressurizer level is lost.

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.		___	___	___	___	___	___	___
S&K No.	243515022340	_____			_____			
K/A No.	000055EK3.02A	_____			_____			
RO/SRO Impf.	4.3 /4.6	___ /___			___ /___			

052533F11012 Points: 1.00 Question Number: 11

An automatic Rx trip and SI have occurred and the Rx trip or SI procedure entered. At step 32, A & B SGs are at 3% narrow range with C SG at 5% narrow range. Total AFW flow has been throttled to = 300 gpm. The STA reports a red path on heat sink with no other red or orange paths. The operator:

(Circle the correct response.)

A. Should immediately implement and remain in FRP-H.1 based on the foldout page.

B. Should not implement FRPs until EEP-0 exited.

C. Should attempt to throttle open AFW flow controllers to obtain > 395 gpm prior to implementing FRP-H.1.

D. Should not implement FRPs because AFW flow is throttled to limit cooldown.

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___ ___ ___	___ ___ ___
S&K No.	_____	311939021110	_____
K/A No.	000054K304	_____	_____
RO/SRO Impf.	4.4 /4.6	___ /___	___ /___

Rev. Date 11/8/91

052533M05003 Points: 1.00 Question Number: 12

Assume that the response to high containment pressure procedure has been entered due to a red path condition. The response to high containment pressure procedure may be exited: (Circle the correct response.)

A. When all the steps are completed or are in progress

B. Whenever containment pressure is below 27 psig

C. Whenever an orange path condition occurs in any other FRP

D. Whenever containment pressure starts trending down

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	311939021020						
K/A No.	000069EK3.01A						
RO/SRO Impf.	3.8 /4.2	___ /___			___ /___		
Rev. Date 3/22/91							

03/20/92 ALABAMA POWER COMPANY

EXAM GRADING SHEET

EXAM NAME: B92C[illegible] E1S CLASS NAME: LRP-92

TOTAL POINTS: 12 DATE GIVEN: 03/25/92

STUDENT ID / NAME: ** DRAFT ** / ********** DRAFT **********

QUESTION #		POINT VALUE	POINTS MISSED
1	- O52303H08014	1.00	_____
2	- O52520L06008	1.00	_____
3	- O52530B16013	1.00	_____
4	- O52530B16032	1.00	_____
5	- O52530C05008	1.00	_____
6	- O52530D03006	1.00	_____
7	- O52530D08015	1.00	_____
8	- O52531F12012	1.00	_____
9	- O52531I05007	1.00	_____
10	- O52532A06014	1.00	_____
11	- O52533F11012	1.00	_____
12	- O52533M05003	1.00	_____

TOTAL POINTS MISSED: _____ FINAL SCORE _____ _____ %

RTYPE: K2.04
(Individual)

RTYPE: K2.07
(KEY)

TRAINING DEPARTMENT EXAMINATION

NAME(*RCVR): _____ GROUP: _____

*DATE: 04/02/92 EXAM NUMBER: A92C5W2A1S

EXAM TITLE: LRP-92 SRO CY-5 WK-2 PART A TOTAL POINTS: 12.00
(*XREF) NRC ABNORMAL

INSTRUCTIONS

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3. Answer all questions:

   [ ] On a separate paper.

   [ ] On the answer sheet by circling or marking the correct response or filling in the blanks.

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_____
EXAMINEE'S SIGNATURE

EXAM GRADED BY: _____ PREPARED BY: Jay J Deavers

GRADING/MATH REVIEW BY: _____ APPROVED BY: B W Landis
Training Manager/
Supervisor

*INDEXING INFORMATION
2/24/89

PART A (STATIC SIMULATOR) AND PART B (OPEN REFERENCE)
EXAMINATION GUIDELINES

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- Show all work and state any assumptions.

052201H:2003 Points: 1.00 Question Number: 1

Due to the transient in progress, which of th following is the effect that the PRZR reference leg will have on indicated PRZR level? (Circle the correct response.)

A. Indicated PRZR level to be higher than actual level

B. Indicated PRZR level to be lower than actual level

C. An effect on indicated lev , only if CTMT temperature increases in conjunction with the rapid RCS depressurization

D. An effect on indicated level only if CTMT pressure increases in conjunction with the rapid RCS depressurization

ANSWER: A. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	1A	___	___	___	___	___	___
S&K No.	241101000100	_____	_____				
K/A No.	011000A101	_____	_____				
RO/SRO Impf.	3.5 /3.6	___ /___		___ /___			

Rev. Date 1/8/92

052302H02001 Points: 1.00 Question Number: 3

Considering only the effects on PZR pressure control and related equipment, PZR level control and related equipment, and the charging pump lineup, which one of the following is a required Technical Specification action statement? (Circle the correct response.)

A. Within one hour, restore to operable status or close the associated block valve and remove power from the block valve.

B. Restore to operable status within 15 minutes or be in at least HOT STANDBY within six hours and in at least HOT SHUTDOWN within the following six hours.

C. Restore the parameters to within their limit within one hour or reduce thermal power to less than 5% of rated thermal power within next four hours.

D. With one group of pressurizer heaters inoperable, restore at least two groups to operable status within 72 hours or be in at least HOT STANDBY within the next six hours and in HOT SHUTDOWN within the following six hours.

ANSWER: B. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	1A	___	___	___	___	___	___
S&K No	241013020070	_____		_____			
K/A No.	000027SG8	_____		_____			
RO/SRO Impf.	3.1 /3.6	___ /___		___ /___			

Rev. Date 3/21/91
Rev. Date 11/8/91

052520P02004 Points: 1.00 Question Number: 5

If 1A charging pump tripped on fault, the 1B charging pump:

(Circle the correct response.)

A. Would automatically start to maintain seal injection and charging flow.

B. Would auto start but only provide seal injection flow.

C. Could be manually started to maintain seal injection and charging flow.

D. Could be manually started but only seal injection flow would be provided.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos. 01A			
S&K No.	300903113220	300903113715	
K/A No.	004000K6.04	004020A3.03	000022EA2.02
RO/SRO Impf.	2.8 /3.1	3.4 /3.1	3.2 /3.7

052520Q01001 Points: 1.00 Question Number: 6

The failure which is resulting in leakage from the RCS is:

(Circle the correct response.)

A. Isolable by closure of an MCB operated MOV

B. Adversely affecting all instrumentation in CTMT

C. Having no effect on Technical Specification RCS leakage detection systems

D. Obviously isolated based on downstream tail pipe temperature being less than PZR vapor space temperature

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	1A	___	___	___	___	___ ___
S&K No.	300903113010	_____		_____		
K/A No.	001000SG15	_____		_____		
RO/SRO Impf.	3.9 /4.1	___ /___		___ /___		
Rev. Date 1/8/92						

052520Q02006 Points: 1.00 Question Number: 7

Which of the following components have not responded properly to the pressure transient? (Circle your choice.)

A. Spray valves

B. PORVs

C. PK-444A

D. B/U heaters

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	1A	___ ___ ___ ___ __ ___	
S&K No.	241008020057	_____	_____
K/A No.	000027A101	_____ _____	_____
RO/SRO Impf.	4.0 /3.9	___ /___	___ /___

052521A04005 Points: 1.00 Question Number: 9

Based on the charging system lineup, in the event an emergency boration is required: (Circle the correct response.)

A. The emergency boration will work correctly using the emergency boration valve MOV-8104.

B. The boric acid flow will go to the VCT instead of the charging pump suction.

C. Boration can ONLY be accomplished using the Rx makeup system in the borate mode.

D. The emergency boration flow will have to flow through valve Q1E21V185 (manual emergency borate valve) to the charging pump suction.

ANSWER: D. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	1A	23A	___	___	___	___	___		
S&K No.	240413024636		_____		_____				
K/A No.	000024A201		_____		_____				
RO/SRO Impf.	3.8 /4.1		___ /___		___ /___				

Rev. Date 10/8/91
Rev. Date 10/29/91
Rev. Date 11/2/91

052530A10002 Points: 1.00 Question Number: 10

The plant transient has progressed such that: (Circle the correct response.)

A. No automatic protection action is being called for.

B. An automatic Rx trip is being called for.

C. An automatic Rx trip AND SI are being called for.

D. An automatic Rx trip, SI, and MSIV isolation are being called for.

ANSWER: B. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	1A	___	___	___	___	___	___				
S&K No.	240206021185	_____						_____			
K/A No.	000029SG11	_____						_____			
RO/SRO Impf.	4.4 /4.6	___	/	___				___	/	___	
Rev. Date 1/8/92											

053002J14001 Points: 1.00 Question Number: 12

Based on the stuck open valve on the PZR, the highest level of notification required is a: (Circle the correct response.)(*Note: Disregard resultant RCS leakage.)

A. No notification required

B. 4 hour non-emergency report

C. 1 hour non-emergency report

D. Notification of Unusual Event (NOUE)

ANSWER: D. Point Value: 1.0 Answer Time: 5.0 Minc.

Static Sim Scenario Nos.	1A	___ ___ ___ ___ ___ ___	
S&K No.	311934020836	_____	_____
K/A No.	194001A116	_____	_____
RO/SRO Impf.	3.1 /4.4	__ /__	__ /__

052302G01012 Points: 1.00 Question Number: 2

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

The plant is operating at 100% RTP. Ten hours ago, PRZR level channel LT-460 failed off-scale low. All actions that are required to allow continued plant operations have been completed. Now level channel LT-459 also fails off-scale low. The operators should: (Circle the correct response.)

A. Select LT-461 as the controlling channel, and continue at-power operations indefinitely.

B. Take manual control of charging flow, and continue 100% power operation indefinitely.

C. Reduce power to below 5% power, establishing the plant in Mode 2.

D. Immediately trip the reactor.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___
S&K No.	311909020500	311909023030				
K/A No.	000028SG08	000028EA210				
RO/SRO Impf.	3.1 /3.6	3.6 /3.7			___ /___	

Rev. Date 1/8/92

052520P01005 Points: 1.00 Question Number: 4

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

The following plant conditions exist:

- PRZR level control selector switch is in position III/II.
- The following events occur in SEQUENCE:
  - Charging flow reduces to minimum.
  - PRZR level decreases.
  - Letdown secures and PRZR heaters deenergize.
  - PRZR level increases until a high level trip occurs.

Which one of the following level instrument failures would cause the above indications? (Assume no operator action.)

A. Level channel III failed high.

B. Level channel III failed low.

C. Level channel II failed high.

D. Level channel II failed low.

ANSWER: A. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No. 241108020120	_____	_____					
K/A No. 011000A210	_____	_____					
RO/SRO Impf. 3.4 /3.6	___/___	___/___					

Rev. Date 1/23/92

052520Y01001 Points: 1.00 Question Number: 8

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

The shift chemist reports a condenser tube leak exists in the "A" condenser as indicated by in-line sampling. What main control room indications would you use to confirm this report? (Circle the correct response.)

A. Increased demand on hotwell fill controller CP-4055F

B. SJAE air flow increasing

C. A lower absolute pressure in the "A" condenser

D. Cation conductivity increasing

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___ ___ ___	___ ___ ___
S&K No.	245615021520		
K/A No.	056000A2.05	056020GEN15	___ - ___
RO/SRO Impf.	2.1 /2.5	2.7 /2.9	___ /__.
Rev. Date 1/8/92			

05253.C09004 Points: 1.00 Question Number: 11

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

During natural circulation core cooling, SG temperature is lowered. Assuming all parameters are within limits, how would this lowering of SG temperature affect natural circulation flow rate? (Circle the correct response.)

A. Flow rate will decrease.

B. Flow rate will increase.

C. Flow rate will not be affected.

D. Flow will be stopped and will not recommence.

ANSWER: B. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.		___ ___ ___ ___ ___ ___ ___	
S&K No.	240206023575	_____	_____
K/A No.	041020A408	_____	_____
RO/SRO Impf.	3.0 /3.1	___ /___	___ /___

Rev. Date 3/6/92

03/27/92 ALABAMA POWER COMPANY

EXAM GRADING SHEET

EXAM NAME: A92C5W2A1S CLASS NAME: LRP-92

TOTAL POINTS: 12 DATE GIVEN: 04/02/92

STUDENT ID / NAME: ** DRAFT ** / ********** DRAFT **********

QUESTION #	POINT VALUE	POINTS MISSED
1 - O52201H12003	1.00	_____
2 - O52302G01012	1.00	_____
3 - O52302H02001	1.00	_____
4 - O52520P01003	1.00	_____
5 - O52520P02004	1.00	_____
6 - O52520Q01001	1.00	_____
7 - O52520Q02006	1.00	_____
8 - O52520Y01001	1.00	_____
9 - O52521A04005	1.00	_____
10 - O52530A10002	1.00	_____
11 - O52531C09004	1.00	_____
12 - O53002J14001	1.00	_____

TOTAL POINTS MISSED: _____ FINAL SCORE: _____ _____ %

RTYPE: K2.04
(Individual)

RTYPE: K2.07
(KEY)

TRAINING DEPARTMENT EXAMINATION

NAME(*RCVR): _____ GROUP: _____

*DATE: 04/02/92 EXAM NUMBER: A92C5W2E1S

EXAM TITLE: LRP-92 SRO CY-5 WK-2 PART-A TOTAL POINTS: 13.00
(*XREF) NRC EMERGENCY

INSTRUCTIONS

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_____
EXAMINEE'S SIGNATURE

EXAM GRADED BY: _____ PREPARED BY: Jan L Heavers

GRADING/MATH REVIEW BY: _____ APPROVED BY: B W Lawless
Training Manager/
Supervisor

*INDEXING INFORMATION
2/24/89

PART A (STATIC SIMULATOR) AND PART B (OPEN REFERENCE)
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10190M

052101G13007 Points: 1.00 Question Number: 1

Prior to the reactor trip/SI occurring, the operator increased charging flow to greater than 150 gpm by starting a second charging pump and manually positioning charging flow control valve FCV-122. How was VCT level affected after the SI actuation and subsequent shifting of the charging pump suction to the RWST? (Circle the correct response.)

A. Auto M/U stopped at 30% and VCT level is continuing to rise due to seal return flow.

B. Auto M/U stopped at 30% and VCT level is rising due to charging pump miniflow pump valves opened.

C. Auto M/U stopped at 40%; if the miniflows are not shut, VCT level will continue to increase.

D. Auto M/U stopped at 40% and VCT level will remain there.

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	13E	___	___	___	___	___	___
S&K No.	249102000100	_____	_____		_____	_____	
K/A No.	000037EA1.10	_____	_____		_____	_____	
RO/SRO Impf.	2.9 /3.1	___/___			___/___		

052102H20010 Points: 1.00 Question Number: 2

Both MDAFW pumps tripped following the SI and will not restart. Based on the plant conditions, how should the steam flow path to the TDAFW pump be changed to limit the environ mental release and allow continued TDAFW pump operation? (Circle the correct response.)

A. An AOV should be closed from the HSD panels.

B. An AOV should be closed from the MCB.

C. A manual isolation valve in the MSVR should be shut.

D. Based on the problem(s) that exist(s), the steam flow path cannot be changed and still allow continued oper ation.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos. 13E	___ ___ ___	___ ___ ___	
S&K No.	243515022600	246111020187	_____
K/A No.	061000K1.03A	000038EK3.06A	_____
RO/SRO Impf.	3.5 /3.9	4.2 /4.5	___ /___
Rev. Date 3/22/91			

052103C10001 Points: 1.00 Question Number: 3

While performing two train verification of EEP-0 (Rx Trip or SI), breaker EE05-1 indicates open. The effect of this breaker being open: (Circle the correct response.)

A. Is minimal on loads powered from B train DC bus for approximately 2 hours.

B. Is minimal on loads powered from B train DC bus for approximately 12 hours.

C. Is minimal on loads powered from B train DC bus for approximately 24 hours.

D. Is minimal on loads powered from B train DC bus for approximately 48 hours.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	13E	___	___	___	___	___	___
S&K No.	246302000100						
K/A No.	000058EK3.02	0000583A2.03					
RO/SRO Impf.	4.0 /4.2	3.5 /3.4				___ /___	

Rev. Date 3/29/91

052201G25003 Points: 1.00 Question Number: 9

RCS average temperature has stabilized above 547°F due to steam dumps being closed. The steam dumps failed to open due to: (Circle the correct response.)

A. Loop C Tave channel failure

B. Low condenser vacuum

C. Both CW pumps tripped

D. Due to Pimp PT-447 channel failed low

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	13E	___	___	___	___	___	___
S&K No.	245615020120	_____	_____				
K/A No.	041020K1.01	041020A3.02	_____				
RO/SRO Impf.	2.2 /2.5	3.3 /3.4	___ /___				
Rev. Date 10/7/91							

052530A13008 Points: 1.00 Question Number: 10

Which of the following describes the minimum action the operator MUST physically perform to establish HHSI flow: (Circle the correct response.)

A. Close MOV-8107.

B. Open MOV-8803A OR MOV-8803B.

C. Close charging pump miniflow valves.

D. Both 8803A AND 8803B must be opened.

ANSWER: B. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	13E	___ ___ ___	___ ___ ___
S&K No.	240616030745	241306000456	_____
K/A No.	006030A4.02A	_____ ___	_____
RO/SRO Impf.	4.4 /4.4	3.8 /4.1	___ /___
Rev. Date 3/22/91			

052530D05001 Points: 1.00 Question Number: 11

Whiih of the following indications provides the team with information to allow the determination that the steam genera tor tube rupture (SGTR) is in the "B" steam generator? (Circle the correct response.)

A. R-15 upscaled

B. R-19 upscaled

C. R-23B upscaled

D. R-60B upscaled

ANSWER: D. Point Value: 1.0 Answer Time: 2.0 Mins.

Static Sim Scenario Nos. 13E			___	___	___	___ ___ ___
S&K No.	243515020437		_____			_____
K/A No.	000038EA1.10	000038EA1.11				_____
RO/SRO Impf.	3.7 /3.9	3.8 /3.9				___ /___

052530D07002 Points: 1.00 Question Number: 12

Which of the following actions will effectively isolate the ruptured steam generator? (Circle the correct response.)

A. Isolate MSIVs on ruptured SG only.

B. MSIVs on ALL SGs MUST be isolated.

C. Isolate MSIVs on intact SGs only.

D. MSIV isolation not required due to steam dump valves being closed.

ANSWER: A. Point Value: 1.0 Answer Time: 2.0 Mins.

Static Sim Scenario Nos. 13E		___	___	___	___	___	___
S&K No.	243515020440	_____		_____			
K/A No.	000038EA1.32	_____		____	_____		
RO/SRO Impf.	4.6 /4.7	___ /___		___ /___			
Rev. Date 3/22/91							

053002J16010 Points: 1.00 Question Number: 13

State the minimum notification/classification required based on current static plant conditions. (Circle the correct response.)

A. 4 hour non-emergency report

B. NOUE

C. Alert

D. Site Area emergency

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos. 13E		___	___	___	___	___	___
S&K No.	311934020836	_____		_____		
K/A No.	194001A116	_____		_____		
RO/SRO Impf.	3.1 /4.4	___ /___		___ /___		

Rev. Date 3/22/91

052103F05012 Points: 1.00 Question Number: 4

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

During a dual Unit LOSP with an SI on Unit 2 and a failure of the 1B diesel: (Circle the correct response.)

A. The 2C diesel will supply the 1G bus by automatically closing the 1G to 1J tie breaker, while still supplying the 2J bus.

B. The 2C diesel will supply the 1G bus by automatically closing the 1G to 1J tie breaker and reduce its load by opening the 2C diesel to 2J bus breaker.

C. The 1G bus will remain deenergized; no further breaker operation will occur.

D. The 1G bus will remain deenergized but the 1-2A diesel will return to Unit 1 to ensure at least one big diesel is supplying Unit 1.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___
S&K No.	246426022250					
K/A No.	064000K4.10	064000K4.11		000056K3.01		
RO/SRO Impf.	3.5 /4.0	3.5 /4.0		3.5 /3.9		

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

Unit 1 is at 50% reactor power with generator load at 435 MWs. The operator receives an alarm in the three-line alarm subscreen area on the DEHC CRT informing him that the operator auto selected speed signal is failed. Which of the following best describes the effect this failure will have on the DEHC system? (Circle the correct response.)

A. The speed feedback loop will be unaffected, but the frequency compensation circuit will be lost.

B. The speed feedback loop will be out of service and DEHC will transfer to turbine manual.

C. The speed feedback loop will be out of service and the frequency compensation circuit will be lost.

D. The control of the turbine will be erratic in operator auto due to the loss of speed feedback loop.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	244808020300	_____	_____
K/A No.	045000SG15	_____	_____
RO/SRO Impf.	2.9 /3.2	___ /___	___ /___

052105C24002 Points: 1.00 Question Number: 6

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

Following a turbine trip due to low autostop oil pressure, the generator trip is delayed by 30 seconds: (Circle the correct response.)

A. To allow switchyard operator to align other breakers in the switchyard.

B. To stop the turbine from rolling faster and protect the bearings.

C. To verify that the loss of lube oil is valid and not just a spurious low pressure.

D. To keep the RCPs running for 30 seconds past the reactor trip to remove decay heat.

ANSWER: D. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	244527020820						
K/A No.	062000K301	003000K502					
RO/SRO Impf.	3.5 /3.9	2.8 /3.2	___ /___				

052108D10004 Points: 1.00 Question Number: 7

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

Which of the following is NOT a fuel transfer system interlock? (Circle your choice.)

A. The containment building control panel must give permission before the control panel in the spent fuel building can move the transfer cart to or from the containment building upender.

B. The transfer tube gate valve must be fully open (or bypassed, Unit 2 only) to allow transfer cart operation.

C. The spent fuel upender cannot be operated unless the SFP bridge is over the spent fuel racks or the hoist is in the fully retracted position.

D. The spent fuel building and containment building upender frame must be down to allow transfer cart operation.

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	243453023800						
K/A No.	034000SG9	034000K402					
RO/SRO Impf.	3.0 /3.0	2.5 /3.3					
Rev. Date 2/18/92							

C52201B16005 Points: 1.00 Question Number: 8

CAUTION: THIS QUESTION IS NOT RELATED TO THE STATIC SIMULATOR CONDITIONS.

Assuming the Unit remai. operating at 75% power, the 1A SG selected steam flow channel fails low. What would be the effect on actual SGFP speed? (Circle the correct response.)

A. SGFP speed remains unchanged.

B. SGFP speed increases due to a program ΔP increase.

C. SGFP speed decreases due to a program ΔP decrease.

D. SGFP speed decreases due to program ΔP increase.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___ ___ ___	___ ___ ___
S&K No.	245911022250	___ . _____	_____
K/A No.	059000SG7	_____	_____
RO/SRO Impf.	3.1 /3.2	___ /___	___ /___

Rev. Date 11/2/91

03/27/92 ALABAMA POWER COMPANY

EXAM GRADING SHEET

EXAM NAME: A92C5W2E1S CLASS NAME: LRP-92

TOTAL POINTS: 13 DATE GIVEN: 04/02/92

STUDENT ID / NAME: ** DRAFT ** / ********** DRAFT **********

QUESTION #		POINT VALUE	POINTS MISSED
1	O52101G13007	1.00	_____
2	O52102H20010	1.00	_____
3	O52103C10001	1.00	_____
4	O52103F[illegible]012	1.00	_____
5	O52105B17007	1.00	_____
6	O52105C24002	1.00	_____
7	O52108D10004	1.00	_____
8	O52201B16005	1.00	_____
9	O52201G25003	1.00	_____
10	O52530A13008	1.00	_____
11	O52530D05001	1.00	_____
12	O52530D07002	1.00	_____
13	O53002J16010	1.00	_____

TOTAL POINTS MISSED: _____ FINAL SCORE: _____ _____ %

RTYPE: K2.04
(Individual)

RTYPE: K2.07
(KEY)

TRAINING DEPARTMENT EXAMINATION

NAME(*RCVR): _____ GROUP: _____

*DATE: 04/02/92 EXAM NUMBER: B92C5W2A1S

EXAM TITLE: LRP-92 SRO CY-5 WK-2 PART B TOTAL POINTS: 13.00
(*XREF) NRC ABNORMAL

INSTRUCTIONS

1. This is a 1.0 hour examination.

2. Point value for each question is indicated in the question header.

3. Answer all questions:

   [ ] On a separate paper.

   [ ] On the answer sheet by circling or marking the correct response or filling in the blanks.

   [X] On the same page as the question. If extra room is needed, use the reverse side of the previous page or use extra paper.

4. CHEATING OF ANY KIND IS STRICTLY FORBIDDEN. ANY INDIVIDUAL CAUGHT CHEATING WILL AUTOMATICALLY FAIL THE EXAMINATION AND DISCIPLINARY ACTION WILL BE TAKEN.

5. ALL WORK DONE ON THIS EXAMINATION IS MY OWN. TO MY KNOWLEDGE, I HAVE NEITHER GIVEN NOR RECEIVED AID. FURTHERMORE, I WILL NOT DIVULGE THE CONTENTS OF THIS EXAMINATION TO ANYONE ELSE WHO MAY TAKE IT.

_____
EXAMINEE'S SIGNATURE

EXAM GRADED BY: _____ PREPARED BY: _____

GRADING/MATH REVIEW BY: _____ APPROVED BY: _____
Training Manager
Supervisor

*INDEXING INFORMATION
2/24/89

PART A (STATIC SIMULATOR) AND PART B (OPEN REFERENCE)
EXAMINATION GUIDELINES

The procedures, drawings, Tech Specs, and other material provided may be used as references while taking this examination. If this is a "Static Simulator-Part A" exam, the simulator may be used as a reference to gather data for answering the questions. If this is an "Open Reference-Part B" exam, the simulator may be used as a reference but no simulator data should be used to answer the questions.

The following guidelines must be followed while using these references:

- The exam may require all examinees to refer to the same control board indications. Care must be taken to maintain exam security and avoid any possibility of compromise.

- Do not leave pencil or pen marks in the reference materials.

- When you are finished with reference materials, ensure that the materials are closed and/or returned to their original location.

Keep your exam materials together. While at the control board or procedures, take your exam with you and keep your answers covered.

When you have finished and turned in your exam, you may leave the exam area and DO NOT discuss the exam with any one who has not taken it.

Do not forget to follow the basic rules of exam taking:

- Static Simulator-Part A questions are system based and apply to the static simulator conditions unless otherwise specified.

- Open Reference-Part B questions are procedure based and are not based on static simulator conditions.

- Answer all questions independently of each other unless specified by the question.

- Answer all parts of each question; do not leave any answers blank.

- If a question is unclear or you are uncertain as to the intent -- ask ONLY the proctor for help prior to stating any assumptions.

- Show all work and state any assumptions.

052201I23004 Points: 1.00 Question Number: 1

The plant is at 8% reactor power and STP-33.0A, Solid State Protection System Train Operability Test, is in progress. Which of the following statements describes the results of ignoring step 4.3 in the Precautions and Limitations of STP-33.0A? (Circle the correct response.)

A. A safety injection on low steam generator pressure

B. A safety injection on low pressurizer pressure

C. A reactor trip from PR high flux low setpoint trip

D. A reactor trip from SR high flux trip

ANSWER: D. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	241203001020	241208020259					
K/A No.	012000A4.03	012001I4.06					
RO/SRO Impf.	3.6 /3.6	3.2 /3.5			___ /___		

052303G02004 Points: 1.00 Question Number: 2

Who is responsible for obtaining clearance on a job prior to allowing work to commence? (Circle the correct response.)

A. Shift foreman operating

B. Shift foreman inspecting

C. Individual in charge of task

D. Maintenance foreman

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.		___ ___ ___ ___ ___ ___ ___	
S&K No.	311903025000	_____	_____
K/A No.	194001K1.02A	_____	_____
RO/SRO Impf.	3.7 /4.1	___ /___	___ /___

052520A11013 Points: 1.00 Question Number: 3

Given the following data, determine the amount of unidentified leakage using STP-9.0: (Circle the correct response.)

	Initial Conditions	Final
Time	0737	0842
Pzr temp	648°F	648°F
Pzr Press (avg)	2241 psig	2241 psig
Tavg	574.8°	574.8°
PZR Level (avg)	50%	50%
VCT Level	37%	31.5%
RCDT Level	48%	49%
PRT Level	71%	71%
Batch Integrator	004273	004273

A. 1.13 gpm

B. 1.18 gpm

C. 1.22 gpm

D. 1.34 gpm

ANSWER: A. Point Value: 1.0 Answer Time: 6.0 Mins.

Static Sim Scenario Nos. ___ ___ ___ ___ ___ ___ ___

S&K No. 240205020285

K/A No. 194001A1.08A

RO/SRO Impf. 2.6 /3.1

Rev. Date 1/23/92 ___/___ ___/___

Rev. Date 1/24/92

052520D01001 Points: 1.00 Question Number: 4

At 20% reactor power while ramping up following a refueling outage, the 1C reactor coolant pump (RCP) trips. The operator should: (Circle the correct response.)

A. Place the affected loop pressurizer spray valve in manual and close.

B. Manually trip the reactor.

C. Shut down the plant prior to attempting a restart of the RCP.

D. Continue operation with an upper limit of 35% reactor power to prevent an automatic reactor trip.

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___
S&K No.	300707080240	300903113710				
K/A No.	003000A0.13G	001000A0 13G				
RO/SRO Impf.	3.6 /3.7	3.7 /3	___ /___			

052520L05007 Points: 1.00 Question Number: 5

During Unit 1 operation with RCS level below 126'6", the tygon tube level indication system must be continuously monitored and recorded a minimum of: (Circle the correct response.)

A. Every 12 hours when RCS level is stable

B. Every 15 minutes when RCS level is being lowered

C. Every hour when it is one of the two required independent detectors AND level is being lowered

D. Not required to be logged if the other two required independent indicators are working

ANSWER: B. Point Value: 1.0 Answer Time: 6.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	_____	_____	_____				
K/A No.	002000K4.02	_____	_____				
RO/SRO Impf.	3.5 /3.8	__ /__	__ /__				

Rev. Date 2/26/91
Rev. Date 11/13/91
Rev. Date 1/9/92

052520U03005 Points: 1.00 Question Number: 6

The National Weather Service has predicted winds in excess of 90 mph to hit the site any time within 2 hours. The 1B DG is being run for normal surveillance (STP-80.1) and has just been increased to full load in Mode 2. With regard to the storm, the DG: (All other systems are operational.)(Circle the correct response.)

A. Should remain at full load - its most reliable lineup.

B. Should be unloaded but left tied to the grid in Mode 2 - its most reliable lineup.

C. Should be allowed to complete the STP as "A" train is operable and will provide adequate protection.

D. Should be unloaded, secured, and aligned for auto start in accordance with SOP-38.0 - its most reliable lineup - as soon as possible.

ANSWER: D. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___	___ ___ ___
S&K No.	246426022650 246426022655	_____
K/A No.	194001A1.02A 004000K6.03A	_____
RO/SRO Impf.	4.1 /3.9 2.1 /2.3	___ /___

052521E01001 Points: 1.00 Question Number: 7

The roving fire watch reports door 208, the Unit 1 computer room door, will not latch. Identify the MINIMUM actions required. (Circle the correct response.)

A. Declare the CO2 system inoperable and establish a continuous fire watch.

B. Determine that 1A-33 or 1A-36 smoke detectors are operable and establish an hourly fire watch.

C. Declare the halon system inoperable and establish an hourly fire watch.

D. Determine if 1A-33 and 1A-36 smoke detectors are both operable. If both zones operable, no fire watch required.

ANSWER: B. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	___	___	___ ___ ___ ___ ___
S&K No.	311909023043		
K/A No.	086000SG5	086000A1.03	086000K4.05
RO/SRO Impf.	3.0 /3.6	2.7 /3.2	3.0 /3.4

Rev. 2/18/92

052530C03003 Points: 1.00 Question Number: 8

Faulted steam generator isolation procedure provides several steps which are required to identify and isolate any faulted SG. One of the isolation steps has the operator isolate all feedwater to the affected SG(s). What is the basis for this isolation step? (Circle the correct response.)

A. To reduce the probability of occurrence of a steam generator tube rupture in the faulted steam generator.

B. To minimize RCS cooldown and mass energy release following a steam line break.

C. To prevent all feedwater flow from entering the faulted steam generator and filling the generator, causing the atmospheric reliefs to lift.

D. To ensure the release to the environment remains below the 10CFR100 limits on a design basis event.

ANSWER: B. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___
S&K No.	300903110710					
K/A No.	000040K304	000007A010G				
RO/SRO Impf.	4.5 /4.7	4.2 /4.1	___ /___			

052531B09003 Points: 1.00 Question Number: 9

Unit 1 is in Mode 3 with the shutdown banks withdrawn, preparing to cool down per the action statement of Technical Specification 3.4.3 due to an inoperable PZR code safety valve. An LOSP occurs and the operators stabilize the plant on natural circul:tion per the reactor trip response proce dure. The switchboard operator reports it will be 8 hours before off-site power will be restored. What is the correct course of action at this point? (Circle the correct response.)

A. Transfer to UOP-2.1, start an RCP as soon as possible, and maintain hot standby conditions.

B. Transfer to UOP-2.2, start an RCP as soon as possible, and conduct a normal plant cooldown.

C. Maintain the plant in a stable condition per ESP-0.1, while continuing actempts to start an RCP. When an RCP is started, transfer to UOP-2.1.

D. Transfer to ESP-0.2, commence a cooldown on natural circulation, restart a RCP when power is available.

ANSWER: D. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.		___	___	___	___	___	___
S&K Nc.	240205021204	_____			_____		
K/A No.	000007A0.12G	_____			_____		
RO/SRO Impf.	3.8 /3.9	__ /__			__ /__		

052531E07005 Points: 1.00 Question Number: 10

Unit 1 has experienced a safety injection due to a steam break on the 1A SG. The break occurred outside of CTMT and upstream of the MSIVs. The operators have isolated the SG per EEP-2 and met SI termination criteria in EEP-1. RCS pressure is 2000 psig and trending up. The operator is directed by ESP-1.1, SI Termination, to secure all but one charging pump. When the operator secures all but one charging pump, he observes RCS pressure trending down. What action should he take? (Circle the correct response.)

A. Fully open charging flow control valve, FCV-122, restart additional charging pumps, and continue with ESP-1.1.

B Go to EEP-2 and verify 1A-SG isolated.

C. Go to EEP-1, Loss of Reactor or Secondary Coolant.

D. Continue with actions in ESP-1.1 to establish normal charging.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___	___ ___ ___	
S&K No.	240206021101	240206021105	_____
K/A No.	013000A1.01A	000028EA1.06A	_____
RO/SRO Impf.	4.0 /4.2	3.3 /3.6	___ /___

Rev. Date 3/19/91

052533A04005 Points: 1.00 Question Number: 11

While performing the immediate action steps for a reactor trip, the Response to Nuclear Power Generation/ATWT procedure would be entered: (Circle the correct response.)

A. Based on foldout page red path criteria

B. Based on reactor trip not verified and manual trip ineffective

C. Based on critical safety function status tree criteria

D. Based on FRP-S.2, step 1 RNO column guidance if power range flux was greater than or equal to 5%

ANSWER: B. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___ ___ ___	___ ___ ___
S&K No.	31193902300	_____	_____
K/A No.	000029A0.11G	_____	_____
RO/SRO Impf.	4.4 /4.6	___ /___	___ /___

Rev. Date 10/7/91

052533C04004 Points: 1.00 Question Number: 12

FRP-C.1 has been entered due to CETC temperatures of greater than 1200°F. The following conditions exist:

- Safety injection flow is NOT in progress and was unable to be established by any means.
- No RCPs are running.
- CONDENSATE STORAGE TANK LEVEL LO-LO TRAIN A (B) annunciators are in alarm.
- SG NR levels are A = 20%; B = 5%; C = 5%.
- AFW flow = 405 gpm.
- CTMT pressure = 10 psig.
- CETC sixth hottest thermocouple = 1205°F.
- All steam generators are intact.

The operator should: (Circle the correct response.)

A. Start bearing oil lift pumps and start RCPs.

B. Shift auxiliary feedwater suction to its emergency source; stay in C.1.

C. Reduce reactor coolant pressure at maximum rate to 100 psig.

D. Secondary heat sink is adequate; transition to procedure and step in effect.

ANSWER: B. Point Value: 1.0 Answer Time: 5.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	246111021005						
K/A No.	000055GEN07	000074EA1.07					
RO/SRO Impf.	3.6 /3.7	4.2 /4.3		___ /___			

Rev. Date 2/22/92

053002U01002 Points: 1.00 Question Number: 13

Once an emergency classification above the emergency clas si.ication level of notifıcation of unusual event (NOUE) has been made by the emergency director: (Circle the correct response.)

A. The NRC must be notified within four hours.

B. State and local authorities must be notified within 15 minutes.

C. The shift supervisor relinquishes his responsibility for plant safety to the emergency director.

D. The NRC region II must be notified before state and local authorities.

ANSWER: B. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	311934020528	_____	_____
K/A No.	194001A1.16	_____	_____
RO/SRO Impf.	3.1 /4.4	__ /__	__ /__

03/27/92 ALABAMA POWER COMPANY

EXAM GRADING SHEET

EXAM NAME: B92C5W2A1S CLASS NAME: LRP-92

TOTAL POINTS: 13 DATE GIVEN: 04/02/92

STUDENT ID / NAME: ** DRAFT ** / ********** DRAFT **********

QUESTION #		POINT VALUE	POINTS MISSED
1	O52201I23004	1.00	_____
2	O52303G02004	1.00	_____
3	O52520A11013	1.00	_____
4	O52520D01001	1.00	_____
5	O52520L05007	1.00	_____
6	O52520U03005	1.00	_____
7	O52521E01001	1.00	_____
8	O52530C03003	1.00	_____
9	O52531B09003	1.00	_____
10	O52531E07005	1.00	_____
11	O52533A04005	1.00	_____
12	O52533C04004	1.00	_____
13	O53002U01002	1.00	_____

TOTAL POINTS MISSED: _____ FINAL SCORE: _____ _____ %

RTYPE: K2.04
(Individual)

RTYPE: K2.07
(KEY)

TRAINING DEPARTMENT EXAMINATION

NAME(*RCVR): _____ GROUP: _____

*DATE: 04/02/92 EXAM NUMBER: B92C5W2E1S

EXAM TITLE: LRP-92 SRO CY-5 WK-2 PART-B TOTAL POINTS: 12.00
(*XREF) NRC EMERGENCY

INSTRUCTIONS

1. This is a 1.0 hour examination.

2. Point value for each question is indicated in the question header.

3. Answer all questions:

   [ ] On a separate paper.

   [ ] On the answer sheet by circling or marking the correct response or filling in the blanks.

   [X] On the same page as the question. If extra room is needed, use the reverse side of the previous page or use extra paper.

4. CHEATING OF ANY KIND IS STRICTLY FORBIDDEN. ANY INDIVIDUAL CAUGHT CHEATING WILL AUTOMATICALLY FAIL THE EXAMINATION AND DISCIPLINARY ACTION WILL BE TAKEN.

5. ALL WORK DONE ON THIS EXAMINATION IS MY OWN. TO MY KNOWLEDGE, I HAVE NEITHER GIVEN NOR RECEIVED AID. FURTHERMORE, I WILL NOT DIVULGE THE CONTENTS OF THIS EXAMINATION TO ANYONE ELSE WHO MAY TAKE IT.

_____
EXAMINEE'S SIGNATURE

EXAM GRADED BY: _____ PREPARED BY: Jack Weaver

GRADING/MATH REVIEW BY: _____ APPROVED BY: _____
Training Manager/
Supervisor

*INDEXING INFORMATION
2/24/89

PART A (STATIC SIMULATOR) AND PART B (OPEN REFERENCE) EXAMINATION GUIDELINES

The procedures, drawings, Tech Specs, and other material provided may be used as references while taking this examination. If this is a "Static Simulator-Part A" exam, the simulator may be used as a reference to gather data for answering the questions. If this is an "Open Reference-Part B" exam, the simulator may be used as a reference but no simulator data should be used to answer the questions.

The following guidelines must be followed while using these references:

- The exam may require all examinees to refer to the same control board indications. Care must be taken to maintain exam security and avoid any possibility of compromise.

- Do not leave pencil or pen marks in the reference materials.

- When you are finished with reference materials, ensure that the materials are closed and/or returned to their original location.

Keep your exam materials together. While at the control board or procedures, take your exam with you and keep your answers covered.

When you have finished and turned in your exam, you may leave the exam area and DO NOT discuss the exam with any one who has not taken it.

Do not forget to follow the basic rules of exam taking:

- Static Simulator-Part A questions are system based and apply to the static simulator conditions unless otherwise specified.

- Open Reference-Part B questions are procedure based and are not based on static simulator conditions.

- Answer all questions independently of each other unless specified by the question.

- Answer all parts of each question; do not leave any answers blank.

- If a question is unclear or you are uncertain as to the intent -- ask ONLY the proctor for help prior to stating any assumptions.

- Show all work and state any assumptions.

052303H07011 Points: 1.00 Question Number: 1

For which of the following conditions is it permissible to go below the minimum shift crew composition? Assume both units in Mode 1. (Circle the correct response.)

A. The only UO calls in sick just prior to turnover.

B. The only STA needs to leave early to vote.

C. The only shift foreman becomes ill.

D. One of three SOs will be in late because his wife is having a baby.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	_____	_____	_____
K/A No.	GEN A1.03	_____	_____
RO/SRO Impf.	2.5 /3.4	___ /___	___ /___

052520S01007 Points: 1.00 Question Number: 2

The plant is at 48% power, ramping down, with rod control in manual. During the reduction, the following alarms are received:

FF1 ROD CONT SYS URGENT FAILURE
FC5 PR CH DEV
FF5 COMP ALARM ROD SEQ/DEV OR PR FLUX TILT

It is noted that one rod in bank D is indicating 18 steps above its group step counter. There are no other alarms.

Which one of the following is the proper operator response in this situation? (Circle the correct response.)

A. Place the turbine on hold and immediately withdraw the remaining bank D rods to within plus or minus 12 steps of the misaligned rod with the BSS in MANUAL since the urgent failure is obviously in a logic cabinet.

B. Place the turbine on hold and immediately withdraw the remaining bank D rods to within plus or minus 12 steps of the misaligned rod with the BSS in MANUAL since the urgent failure is obviously in a power cabinet.

C. Trip the reactor.

D. Place the turbine on hold and do not move the rods until the cabinet with the failure has been identified.

ANSWER: D. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	300903113710						
K/A No.		001000A013G					
RO/SRO Impf.	___ /___	3.7 /3.6		___ /___			

Rev. Date 11/27/91

052530D10018 Points: 1.00 Question Number: 3

During a cooldown, the team is directed per EEP-3 to block the low steam line pressure SI/main steam line isolation at the P-12 setpoint. Why is this action required? (Circle the correct response.)

A. The low steam line pressure SI would be "sealed in" and would prevent resetting an SI signal when procedure directs.

B. The steam dumps can not be placed in "cooldown mode" until this block occurs.

C. To prevent main steam line isolation at 585 psig.

D. To prevent auto closing the steam dumps at P-12.

ANSWER: C. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___	___ ___ ___	
S&K No.	241206000150	240201002200	_____
K/A No.	000038A1.27	039000K4.05	_____
RO/SRO Impf.	3.9 /3.9	3.7 /3.7	___ /___

Rev. Date 4/25/91

052531E08007 Points: 1.00 Question Number: 4

An inadvertent train A safety injection has been caused by a technician working in SSPS. The OATC manually actuated SI to establish two trains of ESF equipment. The crew has met SI termination criteria and has transitioned out of EEP-0. While in the process of establishing normal charging, the OATC observes that seal leakoff flow is at or near zero gpm for all 3 RCPs. Which of the following actions should restore seal leakoff flow? (Circle the correct response.)

A. Complete alignment for normal charging; seal leakoff flow will be established when MOV-8107 and 8108, CHG. PUMPS TO REGEN HX, are opened.

B. Open RCP seal water return isolation valves, MOV-8100 and 8112, which automatically isolated when the safety injection occurred.

C. Open seal water injection filter isolation valve, MOV-8105, which was verified closed as part of the immediate operator actions of EEP-0.

D. The RCP seal leakoff isolation valves, MOV-8141A, 8141B, 8141C, must be reopened following their automatic isolation due to the phase "A" signal.

ANSWER: B. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___ ___ ___	___ ___ ___
S&K No.	240311021115	240220020800	240220020820
K/A No.	000038EA2.17A	013000K1.02A	_____
RO/SRO Impf.	3.8 /4.4	3.2 /3.6	___ /___

052531F10009 Points: 1.00 Question Number: 5

A small break loss of coolant accident has occurred and the team has transitioned to the post-LOCA cooldown and depressurization procedure. The RCS is depressurized in this procedure in order to: (Circle the correct response.)

A. Refill the pressurizer and then to reduce subcooling to minimize breakflow.

B. Fill the pressurizer and then to inject the contents of the accumulators.

C. Inject the contents of the accumulators in order to minimize the RCS to SG differential pressure.

D. Minimize the RCS to SG differential pressure and then refill the pressurizer.

ANSWER: A. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___
S&K No.	240201021370	_____		_____			
K/A No.	00009EK3.21A	_____		_____			
RO/SRO Impf.	4.2 /4.5	___ /___		___ /___			

052531G09004 Points: 1.00 Question Number: 6

A LOCA has occurred, resulting in actuation of the containment spray system. Once the containment spray pumps are aligned for recirculation, they: (Circle the correct response.)

A. Should be secured as long as containment pressure is less than 16 psig

B. Should be secured as long as containment pressure is less than 16 psig and spray add tank level < 10%.

C. Should remain operating for 2 hours regardless of containment pressure to ensure addition of the entire contents of the spray add tank.

D. Should remain operating for 2 hours regardless of containment pressure to ensure proper mixing of the spray add tank volume with the ECCS sump contents.

ANSWER: D. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	300903110710	_____	_____
K/A No.	000011K312	_____	_____
RO/SRO Impf.	4.4 /4.6	___ /___	___ /___

Rev. Date 3/22/91

052531I02002 Points: 1.00 Question Number: 7

While performing a post-SGTR cooldown using the preferred procedural method with normal CTMT conditions, the team has reached the procedural step for controlling ruptured SG level. Ruptured SG narrow range level is presently 32%.

(Circle the correct response.)

A. Ruptured SG level should be filled from 32% to 75%.

B. Ruptured SG level should be allowed to decrease to 6%, then MUST be filled to 75% level regardless of effects on ruptured SG pressure.

C. Ruptured SG level should be allowed to decrease to 6%, then filled to 75% level unless SG pressure increases too much or is dropping uncontrolled.

D. Ruptured SG level should be filled to 34% and allowed to cool down due to losses to ambient.

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	243515020441	_____	_____
K/A No.	000038EA1.01A	_____	_____
RO/SRO Impf.	4.5 /4.4	___ /___	___ /___

Rev. Date 10/7/91

C32533C12010 Points: 1.00 Question Number: 8

Which one of the following correctly describes why SGs are depressurized at the maximum rate to (ultimately) atmospheric pressure during the execution of FNP-1-FRP-C.1, "Response to Inadequate Core Cooling"? (Circle the correct response.)

A. To reduce RCS pressure to allow the ECCS accumulators and low pressure SI pumps to inject water

B. To reduce RCS pressure to prevent the formation of superheated steam in the core

C. To reduce RCS temperature to increase thermal driving head for natural circulation

D. To reduce RCS pressure in order to collapse any steam void in the upper part of the reactor vessel

ANSWER: A. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___	___ ___	___ ___ ___
S&K No.		243s15022359	
K/A No.	000074K311		
RO/SRO Impf.	4.0 /4.4	___ /___	___ /___
Rev. Date 3/22/91			

The control room operators are responding to a loss of secondary heat sink and have initiated RCS bleed-and-feed. The SS directs the STA to determine if bleed-and-feed is adequate and to make recommendations. The STA observes that SI train A is in service and that train B is not. All PZR PORV's have been opened manually. AFW to all SGs has been established. The level in S/G A is presently at 2% narrow range; the level in the other S/Gs is 41% wide range. Based on these indications, which of the following should the STA report? (Circle the correct response.)

	FEED PATH	BLEED PATH	RECOMMENDATION
A.	Adequate	Adequate	SI train B should be placed into service if possible to maximize RCS feed flow.
B.	Adequate	Adequate	Bleed-and-feed can be terminated because adequate secondary heat sink is present.
C.	Inadequate	Adequate	SI train B must be placed into service to provide adequate feed flow.
D.	Inadequate	Inadequate	The PORVs should be in auto, cycling open at their pressure setpoints.

ANSWER: A. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___	___ ___ ___	___ ___ ___
S&K No.	_____	240601000302	_____
K/A No.	000054EK3C4	000054SG12	_____
RO/SRO Impf.	4.4 /4.6	3.2 /3.2	___ /___

052533M01001 Points: 1.00 Question Number: 10

A LOCA has occurred. While the operators are performing EEP-1, Loss or Reactor or Secondary Coolant, an orange priority is received on the containment status tree. The control room operators enter FRP-Z.1, Response to High Containment Pressure. They successfully complete all of the actions of FRP-Z.1 and return to EEP-1. When they return to EEP-1, they observe that the containment critical safety function has not been restored. The containment status tree continues to display an orange priority. With these conditions, the operators should: (Circle the correct response.)

A. Continue with the actions of EEP-1 with no need to re-perform the steps of FRP-Z-1.

B. Implement FRP-Z.1 again, and repeat the actions to clear the orange priority.

C. Return to the last step of FRP-Z.1 and hold until the orange priority is cleared.

D. Stay on the step-in-effect in EEP-1 until the emergency director determines if FRP-Z.1 should be performed again.

ANSWER: A. Point Value: 1.0 Answer Time: 2.0 Mins.

Static Sim Scenario Nos.	___	___	___	___	___	___	___	
S&K No.	311939021020	_____	_____					
K/A No.	000069EK3.01A	_____	_____					
RO/SRO Imp.	3.8 /4.2	___ /___	___ /___					

053002J09033 Points: 1.00 Question Number: 11

The on-call ED is en route to the plant because a site area emergency has been declared. The shift supervisor is acting as ED. Plant conditions just changed, requiring an upgrade to general emergency. The shift supervisor should: (Circle the correct response.)

A. Declare the general emergency and make notifications and protective action recommendations.

B. Declare the general emergency and make notifications, wait for the on-call ED to make protective action recommendations.

C. Declare the general emergency, but wait for the on-call ED for any further actions.

D. Wait for the on-call ED to make any further decisions or actions.

ANSWER: A. Point Value: 1.0 Answer Time: 3.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	311934021520	_____	_____
K/A No.	194001A1.16	_____	_____
RO/SRO Impf.	3.1 /4.4	___ /___	___ /___

053201A04011 Points: 1.00 Question Number: 12

A LOCA has occurred. Given the following indications:

- All PZR pressure instruments indicate 1700 psig.
- PT-402 and PT-403 narrow range instruments indicate 600 psig.
- PT-402 wide range instrument indicates 1500 psig.
- PT-403 wide range instrument indicates 400 psig.
- Three (3) charging pumps are running.
- BIT flow indicates 600 gpm.

RCS pressure is determined to be: (Circle the correct response.)

A. 400 psig

B. 600 psig

C. 1500 psig

D 1700 psig

ANSWER: C. Point Value: 1.0 Answer Time: 4.0 Mins.

Static Sim Scenario Nos.	___ ___ ___ ___ ___ ___ ___		
S&K No.	240210020670	_____	_____
K/A No.	006000K5.06	_____	_____
RO/SRO Impf.	3.5 /3.9	___ /___	___ /___

03/27/92 ALABAMA POWER COMPANY

EXAM GRADING SHEET

EXAM NAME: B92C5W2E1S CLASS NAME: LRP-92

TOTAL POINTS: 12 DATE GIVEN: 04/02/92

STUDENT ID / NAME: ** DRAFT ** / ********** DRAFT **********

QUESTION #		POINT VALUE	POINTS MISSED
1	- 052303H07011	1.00	_____
2	- 052520S01007	1.00	_____
3	- 052530D10018	1.00	_____
4	- 052531E08007	1.00	_____
5	- 052531F10009	1.00	_____
6	- 052531G09004	1.00	_____
7	- 052531I02002	1.00	_____
8	- 052533C12010	1.00	_____
9	- 052533F15016	1.00	_____
10	- 052533M01001	1.00	_____
11	- 053002J09033	1.00	_____
12	- 053201A04011	1.00	_____

TOTAL POINTS MISSED: _____ FINAL SCORE: _____ _____ %