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

ENCLOSURE 1

EXAMINATION REPORT - 50-335/91-300

Facility Licensee:	Florida Power and Light Company P. O. Box 14000 Juno Beach, FL 33408-0420
Facility Name:	St. Lucie Nuclear Plant
Facility Docket Nos.:	50-335 and 50-389
Facility License Nos.:	DPR-67 and NPF-16

Examinations were administered at the St. Lucie Nuclear Plant near Jensen Beach, Florida.

Chief Examiner: James H. Moorman, III — Date Signed: 5.24.91

Approved By: Charles A. Casto, Chief, Operator Licensing Section 2, Division of Reactor Safety — Date Signed: 5/24/91

SUMMARY

Operating examinations were administered on April 30 - May 2, 1991. The written examination was administered on April 29, 1991.

Written examinations and operating tests were administered to six SRO applicants. All passed.

REPORT DETAILS

1. Facility Employees Attending Exit:

   P. Fincher, Training Superintendent
   G. Madden, Plant Supervising Engineer - Licensing
   J. Martin, Simulator Engineer
   P. McCullough, Manager, Nuclear Training
   L. Rich, SRO Upgrade Instructor
   D. Sagar, Site Vice President
   M. Shephard, Operations Training Supervisor
   J. Spodick, Licensed Training Coordinator
   C. Wood, Assistant Operations Supervisor

2. Examiners:

   M. Jones, EG&G Idaho, Inc.
   L. Lawyer, Chief, Operator Licensing Section 1
   R. McWhorter, Region II
   *J. Moorman, Region II

   *Chief Examiner

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. The examiners made the following observations concerning operator performance:

   a. During the initial diagnosis of a problem in the simulator exams, Senior Operators became involved in minor details along with the Reactor Operators. This causes the Senior Operators to lose their objectivity when making the final diagnosis by becoming biased towards the reactor operators's assessment. By doing this, they also tended to lose the overall big picture of plant operations momentarily.

   b. One of the simulator scenarios used to evaluate both groups of operators involved a spurious turbine/reactor trip followed immediately by a tube rupture and stuck open safety valve on Steam Generator A. Both crews noted the indications of the tube rupture and went into EOP-4, Steam Generator Tube Rupture. (They did not note the subtle indications of the stuck open safety, which would have immediately sent them to EOP-15, Functional Recovery.) Step 14 of EOP-4 directs the crew to lower plant temperature to less than 525 Degrees F using the Steam Bypass Control System, which was available during the scenario. If the SBCS is

not available, the step 14 Contingency Action instructs the crew to use the Atmospheric Dump Valves (ADVs) to lower plant temperature. Instead of using the available SBCS, the crew used the ADVs. This resulted in an unmonitored release to the environment. If steam dumps had been used, the condenser air ejector exhaust could have been lined up to the plant vent stack to provide a monitored release. In this scenario, there was an uncontrolled, unmonitored release through the stuck open SG safety valve. However, at the time that the operators made the decision to use the ADVs for cooldown, they were not aware of this. Additionally, plant temperature was less than 515 Degrees F at the time the crews were at step 14 and decided to use the ADVs.

4. NRC concerns involving operator performance during these exams were discussed on May 20, 1991, in a telephone conversation initiated by the St. Lucie operations and training staff. The licensee informed the NRC that, as a result of comments made during the exit meeting, they had reviewed EOP-4, Steam Generator Tube Rupture, to determine if a more aggressive approach to post-SGTR cooldown and depressurization was needed. This review resulted in a decision to change EOP-4 to address Reactor Coolant System depressurization earlier in the procedure, which will result in this activity receiving higher consideration during implementation of the procedure. This is within the scope of the Combustion Engineering Emergency Procedure Guidance document, CEN-152. The licensee has contacted Combustion Engineering to discuss the generic implications for other operating CE units.

The licensee stated that future training will emphasize the need for aggressive depressurization of the RCS during a SGTR. They also stated that they will address with the operators who took this exam the use of ADVs for plant cooldown on a ruptured and/or faulted steam generator.

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ENCLOSURE 2

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Nuclear Regulatory Commission
Operator Licensing
Examination

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date of examination.

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Knowledge and Ability Record Form
COUNT MATRIX

Summarizing Counts by K/A Group
for
PWR - Senior Reactor Operator

	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	SG	Total
Plant Wide Generics												17
Plant Systems I	3	2	1	1	1	0	2	2	1	3	3	19
Plant Systems II	2	1	1	2	2	1	2	1	1	2	2	17
Plant Systems III	2	0	0	1	0	0	0	0	0	1	0	4
Emergency/Abn I	2	1	8	.....			4	6	.....		3	24
Emergency/Abn II	2	0	3	.....			1	7	.....		3	16
Emergency/Abn III	1	1	0	.....			0	1	.....		0	3
Totals	12	5	13	4	3	1	9	17	2	6	11	=====
Model Total												100

Knowledge and Ability Record Form
PLANT-WIDE GENERIC RESPONSIBILITIES

PWR - Senior Reactor Operator Target: 17 % Actual: 17.0 %

K/A	Rep	Topic	Rating R/S
194001A101		Ability to obtain and verify control procedure copy	3.3/3.4
194001A103		Ability to locate and use procedures and station directives related to shift staffing and activities	2.5/3.4
194001A106		Ability to maintain accurate, clear and concise logs, records, status boards and reports	3.4/3.4
194001A109		Ability to coordinate personnel activities inside the control room	2.7/3.9
194001A111		Ability to direct personnel activities inside the control room	2.8/4.1
194001A112		Ability to direct personnel activities outside the control room	3.1/4.1
194001A113		Ability to locate control room switches, controls, and indications, and to determine that they are correctly reflecting the desired plant lineup	4.3/4.1
194001A116	4	Ability to take actions called for in the Facility Emergency Plan, including (if required) supporting or acting as the Emergency Coordinator	3.1/4.4
194001K102		Knowledge of tagging and clearance procedures	3.7/4.1
194001K103	2	Knowledge of 10 CFR 20 and related facility radiation control requirements	2.8/3.4
194001K105		Knowledge of facility requirements for controlling access to vital/control areas	3.1/3.4
194001K107		Knowledge of safety procedures related to electrical equipment	3.6/3.7
194001K116		Knowledge of facility protection requirements, including fire brigade and portable fire-fighting equipment usage	3.5/4.2

Knowledge and Ability Record Form
PLANT SYSTEMS
PWR - Senior Reactor Operator - 40 %

Group I Plant Systems Target: 19 % Actual: 19.0 %

001 Control Rod Drive	017 In-Core Temperature	061 Aux./Emer. Feedwater
003 Reactor Coolant Pump	022 Containment Cooling	063 DC Electrical Dist.
004 Chemical & Volume	025 Ice Condenser	068 Liquid Radwaste
013 E. Saftey Actuation	026 Containment Spray	071 Wast Gas Disposal
014 Rod Position Indic.	056 Condensate System	072 Area Radiation Mon.
015 Nuclear Instrument.	059 Main Feedwater System	

K/A	Rep	Topic	Rating R/S
001000K103		CRDM	3.4/3.6
001000K407		Rod stops	3.7/3.8
003000K103		RCP seal system	3.3/3.6
003000K501		The relationship between the RCPS flow rate and the nuclear reactor core operating parameters (quadrant power tilt, imbalance, DNB rate, local power density, difference in loop T-hot pressure)	3.3/3.9
004000K202		Makeup pumps	2.9/3.1
004010A205		CIAS, SIAS	4.1/4.3
013000A403		ESFAS initiation	4.5/4.7
013000K104		RPS injection	3.9/4.3
014000A402	2	Control rod mode-select switch	3.4/3.2
015000A107		Changes in boron concentration	3.3/3.4
015000A303		Verification of proper functioning/operability	3.9/3.9
017000G008		Knowledge of the annunciator alarms and indications, and use of the response instructions	3.1/3.2
022000G005		Knowledge of limiting conditions for operations and safety limits	3.0/3.7
026020A102		Containment spray pump cooling	2.7/3.0
059000A211		Failure of feedwater control system	3.0/3.3
061000G006		Knowledge of bases in technical specifications for limiting conditions for operations and safety limits	2.7/3.8
061000K201		AFW system MOVs	3.2/3.3
063000K302		Components using dc control power	3.5/3.7

Knowledge and Ability Record Form
PLANT SYSTEMS
PWR - Senior Reactor Operator - 40 %

Group II Plant Systems Target: 17 % Actual: 17.0 %

002 RCS	012 RPS	029 CPS	039 MRSS	073 PRM
006 ECCS	016 NNIS	033 SFPCS	055 CARS	075 CIRC
010 PZRPRS	027 CIRS	034 FHES	062 AC	079 SAS
011 PZRLCS	028 HRPS	035 S/GS	064 ED/G	086 FPS
				103 Containment

K/A	Rep	Topic	Rating R/S
002000A104		Subcooling margin	3.9/4.1
002000K410		Overpressure protection	4.2/4.4
006000K201		ECCS pumps	3.6/3.9
006000K506		Relationship between ECCS flow and RCS pressure	3.5/3.9
010000A403		PORV and block valves	4.0/3.8
010000K603		PZR sprays and heaters	3.2/3.6
011000A205		Loss of PZR heaters	3.3/3.7
012000A101		Trip setpoint adjustment	2.9/3.4
012000A403		Channel blocks and bypasses	3.6/3.6
012000K402		Automatic reactor trip when RPS setpoints are exceeded for each RPS function; basis for each	3.9/4.3
016000K102		PZR LCS	3.4/3.3
027000K101		CSS	3.4/3.7
028000K502		Flammable hydrogen concentration	3.4/3.9
029000G006		Knowledge of bases in technical specifications for limiting conditions for operations and safety limits	2.3/3.4
062000K301		Major system loads	3.5/3.9
064000A301		Automatic start of compressor and ED/G	4.1/4.0
086000G005		Knowledge of limiting conditions for operations and safety limits	3.0/3.6

Knowledge and Ability Record Form
PLANT SYSTEMS
PWR - Senior Reactor Operator - 40 %

Group III Plant Systems Target: 4 % Actual: 4.0 %

005 Residual Heat Removal System
007 PZR Relief Tank/Quench
008 Component Cooling Water System
041 Steam Dump System Bypass Control
045 Main Turbine Generator
076 Service Water System
078 Instrument Air System

K/A	Rep	Topic	Rating R/S
008000K102		Loads cooled by CCWS	3.3/3.4
041020A408		Steam dump valves	3.0/3.1
045000K412		Automatic turbine runback	3.3/3.6
078000K105		MSIV air	3.4/3.5

Knowledge and Ability Record Form
EMERGENCY PLANT EVOLUTIONS
PWR - Senior Reactor Operator - 43 %

Group I Emergency and Abnormal Plant Evolutions Target: 24 % Actual: 24.0 %

000001 Continuous Rod With.	000026 Loss of CCW	000059 LRW Release
000003 Dropped Control Rod	000029 ATWS	000067 Plant Fire Onsite
000005 Inoperable/Stuck Rod	000040 Steam Line Rupture	000068 CR Evacuation
000011 Large Break LOCA	000051 Loss of Vacuum	000069 Loss Containment
000015 RCP Motor Malfunction	000055 Blackout	000074 Inadeq. Core Cool
000024 Emergency Boration	000057 Loss of AC Elec. Instrument Bus	000076 High RCS Activity

K/A	Rep	Topic	Rating R/S
000003A105		Reactor power-turbine power	4.1/4.1
000005K303		Tech-Spec limits for rod mismatch	3.6/4.1
000011A213		Difference between overcooling and LOCA indications	3.7/3.7
000011K313		Hot-leg injection/recirculation	3.8/4.2
000011K314		RCP tripping requirement	4.1/4.2
000015A122		RCP seal failure/malfunction	4.0/4.2
000015A208		When to secure RCPs on high bearing temperature	3.4/3.5
000024A104		Manual boration valve	3.6/3.7
000026K302		The automatic actions (alignments) within the CCWS/nuclear service water resulting from the actuation of the ESFAS	3.6/3.9
000029K310		Manual rod insertion	4.1/4.1
000029K312		Actions contained in EOP for ATWS	4.4/4.7
000040K101		Consequences of PTS	4.1/4.4
000040K107		Effects of feedwater introduction on dry S/G	3.4/4.2
000051A202		Conditions requiring reactor and/or turbine trip	3.9/4.1
000055A204		Instruments and controls operable with only dc battery power available	3.7/4.1
000055K302		Actions contained in EOP for loss of offsite and onsite power	4.3/4.6
000057G011		Ability to recognize abnormal indications for system operating parameters which are entry-level conditions for emergency and abnormal operating procedures	3.8/3.8
000059A202		The permit for liquid radioactive-waste release	2.9/3.9
000059G003		Knowledge of limiting conditions for operations and safety limits	2.9/3.8
000067A204		The fire's extent of potential operational damage to plant equipment	3.1/4.3
000068K201		Auxiliary shutdown panel layout	3.9/4.0
000069K301		Guidance contained in EOP for loss of containment integrity	3.8/4.2
000074A101		RCS water inventory	4.2/4.4
000076G007		Ability to explain and apply all system limits and precautions	2.9/3.4

Knowledge and Ability Record Form
EMERGENCY PLANT EVOLUTIONS
PWR - Senior Reactor Operator - 43 %

Group II Emergency and Abnormal Plant Evolutions Target: 16 % Actual: 16.0 %

000007 Reactor Trip	000027 PZR PCS Malfunction	000054 Loss of MFW
000008 Stuck Relief Value	000032 Loss of SRNI	000058 Loss of DC
000009 Small Break LOCA	000033 Loss of IRNI	000060 GRW Release
000022 Loss of RCS Makeup	000037 SG Tube Leak	000061 ARMS Alarm
000025 Loss of Residual Heat	000038 SG Tube Rupture	000065 Loss of IAS

K/A	Rep	Topic	Rating R/S
000007A204		If reactor should have tripped but has not done so, manually trip the reactor and carry out actions in ATWS EOP	4.4/4.6
000007G010		Ability to perform without reference to procedures those actions that require immediate operation of system components or controls	4.2/4.1
000009A234		Conditions for throttling or stopping HPI	3.6/4.2
000009G012		Ability to utilize symptom based procedures	4.1/4.3
000009K317		Automatic isolation of containment	4.0/4.3
000022A202		Charging pump problems	3.2/3.7
000025A207		Pump cavitation	3.4/3.7
000025K101		Loss of RHRS during all modes of operation	3.9/4.3
000027A203		Effects of RCS pressure changes on key components in plant	3.3/3.4
000037G003		Knowledge of limiting conditions for operations and safety limits	3.2/3.9
000038A101		S/G levels, for abnormal increase in any S/G	4.5/4.4
000038K103		Natural circulation	3.9/4.2
000054K304		Actions contained in EOPs for loss of MFW	4.4/4.6
000058A203		DC loads lost; impact on ability to operate and monitor plant systems	3.5/3.9
000061A201		ARM panel displays	3.5/3.7
000065K303		Knowing effects on plant operation of isolating certain equipment from instrument air	2.9/3.4

Knowledge and Ability Record Form
EMERGENCY PLANT EVOLUTIONS
PWR - Senior Reactor Operator - 43 %

Group III Emergency and Abnormal Plant Evolutions Target: 3 % Actual: 3.0 %

000028 Pressure Level Malfunction
000036 Fuel Handling Accident
000056 Loss of OffSite Power

K/A	Rep	Topic	Rating R/S
000028K101		PZR reference leak abnormalities	2.8/3.1
000036K202		Radiation monitoring equipment (portable and installed)	3.4/3.9
000056A251		▒T, (core, heat exchanger, etc.)	3.3/3.4

U. S. NUCLEAR REGULATORY COMMISSION
SITE SPECIFIC EXAMINATION
SENIOR OPERATOR LICENSE
REGION 2

CANDIDATE'S NAME: _____

FACILITY: St Lucie 1 & 2

REACTOR TYPE: PWR-CE

DATE ADMINISTERED: 91/04/29

INSTRUCTIONS TO CANDIDATE:

Use the answer sheets provided to document your answers. Staple this cover sheet on top of the answer sheets. Points for each question are indicated in parentheses after the question. The passing grade requires a final grade of at least 80%. Examination papers will be picked up four (4) hours after the examination starts.

TEST VALUE	CANDIDATE'S SCORE	%	
100.00	_____	___ %	TOTALS
	FINAL GRADE		

All work done on this examination is my own. I have neither given nor received aid.

_____
Candidate's Signature

A N S W E R S H E E T

Multiple Choice (Circle or X your choice)

If you change your answer, write your selection in the blank.

MULTIPLE CHOICE

001 a b c d ___
002 a b c d ___
003 a b c d ___
004 a b c d ___
005 a b c d ___
006 a b c d ___
007 a b c d ___
008 a b c d ___
009 a b c d ___
010 a b c d ___
011 a b c d ___
012 a b c d ___
013 a b c d ___
014 a b c d ___
015 a b c d ___
016 a b c d ___
017 a b c d ___
018 a b c d ___
019 a b c d ___
020 a b c d ___
021 a b c d ___
022 a b c d ___
023 a b c d ___
024 a b c d ___
025 a b c d ___

026 MATCHING

a ___
b ___
c ___
d ___

MULTIPLE CHOICE

027 a b c d ___
028 a b c d ___
029 a b c d ___
030 a b c d ___
031 a b c d ___
032 a b c d ___
033 a b c d ___
034 a b c d ___
035 a b c d ___
036 a b c d ___
037 a b c d ___
038 a b c d ___
039 a b c d ___
040 a b c d ___

A N S W E R S H E E T

Multiple Choice (Circle or X your choice)

If you change your answer, write your selection in the blank.

041	a	b	c	d	___	064	a	b	c	d	___
042	a	b	c	d	___	065	a	b	c	d	___
043	a	b	c	d	___	066	a	b	c	d	___
044	a	b	c	d	___	067	a	b	c	d	___
045	a	b	c	d	___	068	a	b	c	d	___
046	a	b	c	d	___	069	a	b	c	d	___
047	a	b	c	d	___	070	a	b	c	d	___
048	a	b	c	d	___	071	a	b	c	d	___
049	a	b	c	d	___	072	a	b	c	d	___
050	a	b	c	d	___	073	a	b	c	d	___
051	a	b	c	d	___	074	a	b	c	d	___
052	a	b	c	d	___	075	a	b	c	d	___
053	a	b	c	d	___	076	a	b	c	d	___
054	a	b	c	d	___	077	a	b	c	d	___
055	a	b	c	d	___	078	a	b	c	d	___
056	a	b	c	d	___	079	a	b	c	d	___
057	a	b	c	d	___	080	a	b	c	d	___
058	a	b	c	d	___	081	a	b	c	d	___
059	a	b	c	d	___	082	a	b	c	d	___
060	a	b	c	d	___	083	a	b	c	d	___
061	a	b	c	d	___	084	a	b	c	d	___
062	a	b	c	d	___	085	a	b	c	d	___
063	a	b	c	d	___	086	a	b	c	d	___

A N S W E R S H E E T

Multiple Choice (Circle or X your choice)

If you change your answer, write your selection in the blank.

087	a	b	c	d	___
088	a	b	c	d	___
089	a	b	c	d	___
090	a	b	c	d	___
091	a	b	c	d	___
092	a	b	c	d	___
093	a	b	c	d	___
094	a	b	c	d	___
095	a	b	c	d	___
096	a	b	c	d	___
097	a	b	c	d	___
098	a	b	c	d	___
099	a	b	c	d	___

(********** END OF EXAMINATION **********)

NRC RULES AND GUIDELINES FOR LICENSE EXAMINATIONS

During the administration of this examination the following rules apply:

1. Cheating on the examination means an automatic denial of your application and could result in more severe penalties.

2. After the examination has been completed, you must sign the statement on the cover sheet indicating that the work is your own and you have not received or given assistance in completing the examination. This must be done after you complete the examination.

3. Restroom trips are to be limited and only one applicant at a time may leave. You must avoid all contacts with anyone outside the examination room to avoid even the appearance or possibility of cheating.

4. Use black ink or dark pencil ONLY to facilitate legible reproductions.

5. Print your name in the blank provided in the upper right-hand corner of the examination cover sheet and each answer sheet.

6. Mark your answers on the answer sheet provided. USE ONLY THE PAPER PROVIDED AND DO NOT WRITE ON THE BACK SIDE OF THE PAGE.

7. Before you turn in your examination, consecutively number each answer sheet, including any additional pages inserted when writing your answers on the examination question page.

8. Use abbreviations only if they are commonly used in facility literature. Avoid using symbols such as < or > signs to avoid a simple transposition error resulting in an incorrect answer. Write it out.

9. The point value for each question is indicated in parentheses after the question.

10. Show all calculations, methods, or assumptions used to obtain an answer to any short answer questions.

11. Partial credit may be given except on multiple choice questions. Therefore, ANSWER ALL PARTS OF THE QUESTION AND DO NOT LEAVE ANY ANSWER BLANK.

12. Proportional grading will be applied. Any additional wrong information that is provided may count against you. For example, if a question is worth one point and asks for four responses, each of which is worth 0.25 points, and you give five responses, each of your responses will be worth 0.20 points. If one of your five responses is incorrect, 0.20 will be deducted and your total credit for that question will be 0.80 instead of 1.00 even though you got the four correct answers.

13. If the intent of a question is unclear, ask questions of the examiner only.

14. When turning in your examination, assemble the completed examination with examination questions, examination aids and answer sheets. In addition, turn in all scrap paper.

15. Ensure all information you wish to have evaluated as part of your answer is on your answer sheet. Scrap paper will be disposed of immediately following the examination.

16. To pass the examination, you must achieve a grade of 80% or greater.

17. There is a time limit of four (4) hours for completion of the examination.

18. When you are done and have turned in your examination, leave the examination area (EXAMINER WILL DEFINE THE AREA). If you are found in this area while the examination is still in progress, your license may be denied or revoked.

QUESTION: 001 (1.00)

According to procedure AP 1-0010123, "Administrative Control Of Valves, Locks And Switches", which one of the following conditions requires documentation in Appendix C, "Valve, Switch Deviation Log", assuming the component is under Administrative Control?

a. A key switch which has been left in position with the key removed.

b. A manual jacking device which has been repositioned in accordance with an approved "In Plant Clearance Order".

c. A NORMAL/ISOLATE switch which has been left in the ISOLATE position.

d. A locked valve which has been cycled in accordance with a procedure.

QUESTION: 002 (1.00)

The Technical Specification 6.2.2 allowance for the staffing on shift to be one less than the minimum required for a period of time not to exceed two hours during unexpected absences applies to all of the following positions EXCEPT:

a. Nuclear Plant Supervisor

b. Health Physics Technician

c. Fire Brigade Leader

d. Shift Technical Advisor

QUESTION: 003 (1.00)

Work inside containment must be performed to maintain the reactor at power. The radiation field in the area is 400 mRem/hr gamma and 2.0 Rem/hr fast neutron. The worker assigned is 24 years old, has a lifetime exposure through last quarter of 28 Rem on his NRC Form 4 and no recordable exposure for this quarter. The maximum time this individual can stay in this area, according to 10 CFR 20 is:

a. 40 min.

b. 50 min.

c. 60 min.

d. 75 min.

QUESTION: 004 (1.00)

According to procedure HP-1, "Radiation Work Permits", which one of the following is the NPS/ANPS responsible for with regard to processing a Radiation Work Permit (RWP)?

a. Assigning the RWP number.

b. Retaining the original (white copy) for Control Room reference.

c. Approving changes to the nature or extent of work in progress.

d. Determining the duration of the RWP.

QUESTION: 005 (1.00)

According to procedure EPIP 3100021E, "Duties And Responsibilities Of The Emergency Coordinator", when an emergency classification is declared, which one of the following notification schemes is used?

a. Notify the state agencies first, then call the NRC via the ENS within 15 minutes of the declaration.

b. Using the ENS call the NRC first, then notify the state agencies within 1 hour of the declaration.

c. Notify the state agencies first, then call the NRC via the ENS within 1 hour of the declaration.

d. Using the ENS call the NRC first to have them monitor the state agencies notification, then notify the state agencies within 15 minutes of the declaration.

QUESTION: 006 (1.00)

According to procedure EPIP 3100027E, "Re-Entry", what is the maximum dose to the whole body a person may receive for rescue of persons from a life threatening situation?

a. 25 Rem.

b. 75 Rem.

c. 125 Rem.

d. No limit.

QUESTION: 007 (1.00)

According to procedure EPIP 3100026E, "Criteria For And Conduct Of Evacuations", which one of the following is the "minimum" Emergency Plan classification at which the Owner Controlled Area shall be evacuated?

a. Unusual Event

b. Alert

c. Site Area Emergency

d. General Emergency

QUESTION: 008 (1.00)

According to procedure EPIP 3100021E, "Duties And Responsibilities Of The Emergency Coordinator", if a General Emergency is declared under Event/Class, 6.A, "Potential Core Melt", which one of the following states the minimum Protective Action Recommendation (PAR) required to be made?

a. Shelter all people within a 2 mile radius from the plant and shelter all people 5 miles in the downwind sectors.

b. Shelter all people within a 2 mile radius from the plant.

c. Evacuate all people within a 2 mile radius from the plant and evacuate all people 5 miles in the downwind sectors.

d. Evacuate all people within a 2 mile radius from the plant.

QUESTION: 009 (1.00)

According to procedure AP 0010120, "Duties And Responsibilities Of Operators On Shift", if all of the following personnel were in the Control Room, which one would have the "primary" responsibility for limiting personnel access to the Control Room?

a. Reactor Control Operator (RCO)

b. Nuclear Watch Engineer (NWE)

c. Assistant Nuclear Plant Supervisor (ANPS)

d. Nuclear Plant Supervisor (NPS)

QUESTION: 010 (1.00)

According to procedure AP 0010120, "Duties And Responsibilities Of Operators On Shift", which one of the following would require prior approval from the NPS or ANPS?

a. Skipping any two log readings.

b. Skipping two consecutive log readings.

c. Skipping any three log readings.

d. Skipping three consecutive log readings.

QUESTION: 011 (1.00)

During Mode 1 operation, while working a group of Plant Work Orders (PWO's), a mechanical maintenance department foreman requests that a mechanic be allowed to stroke test the gravity feed valve to determine if the valve is rocked up. Which one of the following states the operations department response to that request?

a. Do not stroke the valve; since it directly effects reactivity, only licensed personnel can operate it.

b. It is okay to stroke the valve as long as the licensed operator (RCO) is notified when the job is completed.

c. Do not stroke the valve; having non-operators manipulate sensitive equipment is only allowable with prior Facility Review Group (FRG) review and Plant Manager approval.

d. It is okay to stroke the valve as long as the operators are informed as to how long the valve is open so they can dilute to compensate for the boron addition.

QUESTION: 012 (1.00)

Prior to using an uncontrolled copy of the procedure OP 1-0030150, "Secondary Plant Operating Checks And Tests", the NPO compares the uncontrolled copy to the controlled copy in the Unit 1 Control Room. He finds that a Temporary Change (T.C.) affects specific pages of the procedure which he intends to use. Which one of the following states his appropriate response?

a. He takes the controlled copy of the procedure into the field to perform his test and then returns it to the Control Room binder.

b. He writes the T.C. number in the margin and, using the actual T.C. from the T.C. logbook, makes the applicable changes to his copy of the procedure.

c. He uses the uncontrolled copy in the field without changing it to reflect the T.C. unless the T.C. is greater than 90 days old.

d. He verifies his procedure copy revision with the controlled copy revision and attaches a copy of the T.C. cover sheet to his copy of the procedure.

QUESTION: 013 (1.00)

According to procedure AP 0010122, "In-Plant Equipment Clearance Orders", when placing clearance tags associated with fuses, the tag should be placed:

a. on the fuses.

b. on the supply breaker for the fused equipment.

c. near the fuse holder.

d. on the control switch for the fused equipment.

QUESTION: 014 (1.00)

Which one of the following is the system used during Emergency Operating Procedure usage to detect Inadequate Core Cooling?

a. Safety Assessment System (SAS)

b. Digital Data Processing System (DDPS)

c. Qualified Safety Parameter Display System (QSPDS)

d. Emergency Response Data Acquisition And Display System (ERDADS)

QUESTION: 016 (1.00)

Technical Specification 6.2.2 excludes certain shift personnel from being members of the site Fire Brigade. Which one of the following personnel "may" be considered for membership?

a. Nuclear Watch Engineer (NWE)

b. Nuclear Plant Supervisor (NPS)

c. Reactor Control Operator (RCO)

d. Shift Technical Operator (STA)

QUESTION: 017 (1.00)

Which one of the following conditions would require the use of procedure AP 0010124, "Control And Use Of Jumpers And Disconnected Leads"?

a. Physically removing a Sigma from repair under an approved Plant Work Order (PWO).

b. Installing a temporary power panel feed from a 480v Motor Control Center (MCC) for outage maintenance support.

c. Maintenance technicians, while troubleshooting, installing a hand held test instrument.

d. Performing a channel calibration procedure which requires installing jumpers to electrically bypass automatic actuation.

QUESTION: 018 (1.00)

If a Control Element Assembly (CEA) lift coil fails on a fully withdrawn Unit 2 CEA, then that CEA will:

a. fall into the core.

b. not fall into the core but will respond to motion commands only in the inward direction.

c. not fall into the core and will not respond to any motion commands.

d. not fall into the core but will respond to motion commands only in the Manual Individual mode.

QUESTION: 019 (1.00)

For which one of the following parameters would exceeding the setpoint on all channels directly generate a Control Element Assembly (CEA) Withdrawal Prohibit (CWP)?

a. Tavg/Tref Deviation

b. Local Power Density

c. CEA Position Deviation

d. CEA Group Sequence

QUESTION: 020 (1.00)

The Reactor Coolant System (RCS) temperature must be above 500 degrees F prior to starting the fourth Reactor Coolant Pump (RCP). Which one of the following states the basis for this requirement?

a. Thermal hydraulic forces can cause fuel assemblies to lift or become unseated.

b. Pressure surge from starting RCP can cause Pressurized Thermal Shock (PTS) to occur.

c. Allowable RCS pressure is to low for adequate RCP Net Positive Suction Head (NPSH).

d. Water density is such that the amperage drawn by the RCP can exceed the nameplate data.

QUESTION: 021 (1.00)

Which one of the following provides flow through the Reactor Coolant Pump (RCP) seal cooler?

a. Pump Delta P (differential pressure)

b. Auxiliary Impeller

c. Delta P between RCS and Volume Control Tank (VCT)

d. Recirculating Impeller

QUESTION: 022 (1.00)

How is a boration flowpath assured on a loss of the "B" 480 V bus?

a. One Charging pump and both Boric Acid Makeup pumps are powered off the "A" 480 V bus.

b. One Charging pump, one Boric Acid Makeup pump, and one Gravity Feed valve are powered off the "A" 480 V bus.

c. Two Charging pumps, one Boric Acid Makeup pump, and one Gravity Feed valve are powered off the "A" 480 V bus.

d. One Charging pump and both Gravity Feed valves are powered off the "B" 480 V bus.

QUESTION: 023 (1.00)

In addition to SIAS and CIAS, Letdown Isolation Valve, AOV-2516 will close on differential pressure across which one of the following components?

a. Letdown Ion Exchanger

b. Boronometer

c. Regenerative Heat Exchanger

d. Letdown Heat Exchanger

QUESTION: 024 (1.00)

For the Engineered Safety Features Actuation System (ESFAS), which one of the following actions will alter the normal 2-out-of-4 logic into a 2-out-of-3 logic?

a. Bypassing the bistable module.

b. Bypassing the actuation module.

c. Removing the isolation module.

d. Removing the actuation module.

QUESTION: 025 (1.00)

The Diverse Scram System (DSS) provides a reactor trip signal independent and diverse of the Reactor Protection System (RPS). This is accomplished by which one of the following?

a. DSS uses Engineered Safety Features Actuation System (ESFAS) input parameters which are independent/diverse of RPS.

b. DSS uses non-safety related control channels for inputs since RPS uses the safety related channels.

c. DSS trips the reactor by opening the CEA MG set input breaker through the Engineered Safety Features Actuation System (ASFAS).

d. DSS trips the reactor by opening line contactors upstream of the Reactor Trip breakers which RPS opens.

QUESTION: 026 (2.00)

For each one of the Control Element Drive Mechanism Control System (CEDMCS) mode selection switches listed in Column A select the appropriate function in Column B. (NOTE: The items in Column B may be used once, more than once or not at all, and only a single answer may occupy one answer space,)

COLUMN A (Rod Control Mode selected)	COLUMN B (Function)
a. Manual Individual (MI)	1. Digital Data Processing System (DDPS) selects Reg Group and direction to be moved.
b. Manual Group (MG)	
c. Manual Sequential (MS)	2. DDPS selects Reg Group to be moved but not direction.
d. Auto Sequential (AS)	3. Allows movement of selected Shutdown Bank or Reg Group.
	4. Allows movement of selected Reg Group only.
	5. Selects CEA displayed on the group digital indicator.
	6. Performs no function.

QUESTION: 027 (1.00)

Which one of the following conditions will cause the excore neutron detectors output to increase?

a. Reactor Coolant System (RCS) cooldown resulting from an unisolable steam line break.

b. Reactor core uncovery during a large break Loss Of Coolant Accident (LOCA).

c. Operating Reactor Coolant Pumps (RCPs) with the reactor vessel upper head voided.

d. Safety Injection flow into the RCS following a Steam Generator Tube Rupture (SGTR).

QUESTION: 028 (1.00)

Which one of the following is a feature of the Excore Neutron Monitoring System on Unit 1 ONLY (i.e. "not" a feature of the Excore Neutron Monitoring System on Unit 2)?

a. Boron Dilution Monitor Input

b. Source Range Indication

c. Remote Shutdown Indication

d. Post Accident Qualified

QUESTION: 029 (1.00)

Which one of the following indications would appear on the Qualified Safety Parameter Display System (QSPDS) for an "OUT-OF-RANGE/BAD DATA" alarm?

a. Parameter value displayed with a single adjacent question mark.

b. Parameter field filled with question marks.

c. Parameter value displayed with a single adjacent asterisk.

d. Parameter field filled with asterisks.

QUESTION: 030 (1.00)

Using Unit 1 Technical Specification 3.6.2.1 (enclosed), determine how many Containment Fan Coolers would have to be operable to meet the minimum action statement (i.e. "not" require implementation of Technical Specification 3.0.3) with one Containment Spray System inoperable?

a. 4

b. 3

c. 2

d. 1

3/4.6.2. DEPRESSURIZATION AND COOLING SYSTEMS

CONTAINMENT SPRAY SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.2.1 Two independent containment spray systems shall be OPERABLE with each spray system capable of taking suction from the RWT on a Containment Spray Actuation Signal and automatically transferring suction to the containment sump on a Recirculation Actuation Signal. Each spray system flow path from the containment sump shall be via an OPERABLE shutdown cooling heat exchanger.

APPLICABILITY: MODES 1, 2 and 3*.

ACTION:

a. With one containment spray system inoperable and all four containment fan coolers OPERABLE, restore the inoperable spray system to OPERABLE status within 30 days or be in HOT SHUTDOWN within the next 12 hours.

b. With one containment spray system inoperable and one containment fan cooler inoperable, restore either the inoperable spray system or the inoperable fan cooler to OPERABLE status within 72 hours or be in HOT SHUTDOWN within the next 12 hours.

SURVEILLANCE REQUIREMENTS

4.6.2.1 Each containment spray system shall be demonstrated OPERABLE:

a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is positioned to take suction from the RWT on a Containment Pressure -- High High test signal.

b. By verifying that on recirculation flow, each spray pump develops a discharge pressure of $\geq$ 200 psig, when tested pursuant to Specification 4.0.5.

*Applicable when pressurizer pressure is $\geq$ 1750 psia.

SURVEILLANCE REQUIREMENTS (Continued)

c. At least once per 18 months, during shutdown, by:

1. Verifying that each automatic valve in the flow path actuates to its correct position on a CSAS test signal.

2. Verifying that each spray pump starts automatically on a CSAS test signal.

3. Verifying that upon a recirculation actuation signal, the containment sump isolation valves open and that a recirculation mode flow path via an OPERABLE shutdown cooling heat exchanger is established.

d. At least once per 5 years by performing an air or smoke flow test through each spray header and verifying each spray nozzle is unobstructed.

QUESTION: 031 (1.00)

The Unit 2 Containment Spray pumps require more pump recirc flow than the Unit 1 pumps (150 gpm versus 50 gpm). Which one of the following states the reason for this difference?

a. Unit 2 pumps are larger and therefore have larger minimum flow requirements.

b. Unit 1 pumps have the recirc flow throttled to minimize chemical embrittlement on the Refueling Water Tank which is made of aluminum.

c. Unit 2 pumps do not have a separate seal water heat exchanger and therefore need more recirc flow for seal cooling and lubrication.

d. Unit 1 pumps are provided minimum suction flow by the chemical injection system.

QUESTION: 032 (1.00)

A failure in the Steam Generator Water Level Control system has caused the Main Feed Regulation valve to receive a constant full open demand. When Steam Generator level reaches the "High-High" level setpoint, which one of the following actions will provide a backup signal to close the Main Feed Regulation valve?

a. The Turbine trips.

b. Both Main Feed Pumps trip.

c. Both 100% Bypass Valves close.

d. Both 15% Bypass Valves go to the 5% flow position.

QUESTION: 033 (1.00)

Technical Specification 3.7.1.3, requires sufficient water volume available in the Unit 2 Condensate Storage Tank (CST) to maintain the Unit 2 RCS at HOT STANDBY conditions for:

a. 8 hours followed by an orderly cooldown to 325 degrees F.

b. 8 hours followed by an orderly cooldown to 350 degrees F.

c. 4 hours followed by an orderly cooldown to 325 degrees F.

d. 4 hours followed by an orderly cooldown to 350 degrees F.

QUESTION: 034 (1.00)

The Auxiliary Feed Water (AFW) Pump 2C Steam Valve (MV-08-3) on Unit 2 is normally locked open and does not actuate on an Auxiliary Feed Water Actuation Signal (AFAS). This is because of the valves:

a. failsafe actuator design.

b. internal pilot valve assembly.

c. power supply.

d. type of governor control.

QUESTION: 035 (1.00)

Which one of the following states the "NORMAL" lineup for one of the Units 125 V DC Swing Bus?

a. The "AB" DC Bus is powered from the "C" DC Bus on Unit 1.

b. The "AB" DC Bus is powered from the "A" DC Bus on Unit 2.

c. The "AB" DC Bus is powered from the "AB" Battery Charger on Unit 1.

d. The "AB" DC Bus is powered from the "B" DC Bus on Unit 2.

QUESTION: 036 (1.00)

The Unit 2 RCS has been cooled down using procedure OP 2-0030127, "Reactor Plant Cooldown - Hot Standby To Cold Shutdown". The Reactor Control Operator (RCO) is preparing to place LTOP in service when annunciator H-47 "LTOP CHNL B TRANSIENT" comes in. Which one of the following is the cause of this annunciator?

a. RCS temperature below setpoint and LTOP "not" selected.

b. Pressurizer pressure above setpoint and LTOP "not" selected.

c. RCS temperature below setpoint and LTOP selected.

d. Pressurizer pressure above setpoint and LTOP selected.

QUESTION: 037 (1.00)

Given the following data:

- The plant is at full power 100%
- T-hot 609 degrees F
- T-cold 554 degrees F
- Highest CET 613 degrees F
- Pressurizer temperature 652 degrees F
- Pressurizer pressure 2250 psia

Determine the most accurate value for reactor subcooling.

a. 39.0 degrees F

b. 43.0 degrees F

c. 70.5 degrees F

d. 98.0 degrees F

QUESTION: 038 (1.00)

Following a Loss Of Coolant Accident (LOCA), RCS pressure is at 350 psia and dropping.

Which ONE of the following statements describes the "NORMAL" status of Emergency Core Cooling flow?

a. Constant HPSI flow exists with no LPSI flow.

b. Increasing HPSI flow exists with no LPSI flow.

c. Constant HPSI and LPSI flow exists.

d. Increasing HPSI and LPSI flow exists.

QUESTION: 039 (1.00)

Which one of the following 4160 V buses is the power supply to the Unit 1 HPSI pump 1C?

a. 1A2

b. 1A3

c. 1AB

d. 1B3

QUESTION: 040 (1.00)

Which one of the following provides positive Control Room indication of PORV position?

a. Tail pipe temperature.

b. Quench tank parameters.

c. PORV position indication (red and green lights).

d. Acoustic monitor.

QUESTION: 041 (1.00)

With the Pressurizer Spray Valves fully closed, there is still approximately 0.26 gpm continuous flow through the valves provided by notches cut in the valve discs.

Which one of the following is the specific purpose of this flow?

a. Minimize the thermal shock to the spray nozzle.

b. Ensure pressurizer heaters remain energized.

c. Maintain spray valve inlet and outlet piping isothermal.

d. Help equalize Pressurizer and RCS loop boron concentrations.

QUESTION: 042 (1.00)

With Pressurizer Level Control selected to channel X and channel Y failed low, which one of the following positions should the "Backup Interlock Bypass" keyswitch be in for operation of the Pressurizer heaters?

a. Locked Off

b. Pressure/Level

c. Pressure

d. Level

QUESTION: 043 (1.00)

Which one of the following Reactor Trips is provided for the sole purpose of assuring that the reactor is tripped prior to or concurrent with Engineered Safety Features Actuations?

a. Thermal Margin/Low Pressure

b. Steam Generator Low Pressure

c. Containment High Pressure

d. Steam Generator Low Level

QUESTION: 044 (1.00)

Which one of the following Reactor Trips must be "BYPASSED" manually when the plant is shutdown?

a. Steam Generator Pressure

b. Local Power Density

c. Rate Of Change Of Power

d. Turbine Trip

QUESTION: 045 (1.00)

Which one of the following inputs into the Thermal Margin/Low Pressure (TM/LP) calculator is intended to result in a valid reactor trip being generated, even at NORMAL operating RCS pressure (i.e. 2250 psia)?

a. Steam Generator Pressure

b. Delta T Power

c. Neutron Power

d. Reactor Inlet Temperature

QUESTION: 046 (1.00)

The Reactor Regulating System calculates pressurizer level setpoint as a function of which one of the following?

a. Turbine first stage pressure.

b. Reactor Power (from control channel NI's).

c. RCS T-avg.

d. RCS delta T

QUESTION: 047 (1.00)

Unit 1 Containment Iodine Removal System consists of:

a. a constant metering pump, isolation valves, and a sodium hydroxide storage tank.

b. a nitrogen pressurized sodium hydroxide storage tank, isolation valves, eductor, and an orifice.

c. a constant metering pump, isolation valves, and a hydrazine storage tank.

d. a nitrogen pressurized hydrazine storage tank, isolation valves, eductor, and an orifice.

QUESTION: 048 (1.00)

Which one of the following Hydrogen concentrations, in air (measured in percent by volume), is considered to be the lower flammability limit?

a. 4

b. 18

c. 50

d. 76

QUESTION: 049 (1.00)

Unit 2 has an additional Containment Technical Specification which requires the 48 inch Containment Purge Isolation Valves to be sealed closed during Modes 1 through 4. Which one of the following is the basis of this Technical Specification?

a. To preclude having to test these valves which are not needed for use since Unit 2 has the Continuous Containment/Hydrogen Purge System for normal and accident operation.

b. These valves are larger than the Unit 1 valves which would result in larger offsite doses during an accident.

c. The differential pressure across these valves during an accident may prevent them from closing.

d. To preclude these valves from inadvertently being opened and defeating the Unit 2 Continuous Containment/Hydrogen Purge System operation during normal operation.

QUESTION: 050 (1.00)

A major bus fault occurs on the 4160 V bus 2B3 which results in a DIFFERENTIAL CURRENT LOCK-OUT of that bus. Which one of the following would occur as a result of this condition?

a. All "major" breakers on the 2B3 bus open. The Diesel starts but does not attempt to close in on the bus due to the lockout.

b. Most "major" breakers on the 2B3 bus open. The Diesel starts but does not attempt to close in on the bus due to the lockout.

c. All "major" breakers on the 2B3 bus open. The Diesel does not start due to the lockout.

d. Most "major" breakers on the 2B3 bus open. The Diesel does not start due to the lockout.

QUESTION: 051 (1.00)

If while starting the Unit 1 Diesel Generator the "OVERCRANK" alarm comes in, this means:

a. the air pressure is to high and the Diesel is cranking to fast.

b. the Diesel failed to start within a specified time frame and therefore has been locked out.

c. the air pressure is now too low to crank the Diesel due to prolonged continuous cranking.

d. the Diesel has unsuccessfully completed five (5) start attempts.

QUESTION: 052 (1.00)

FAILURE of which one of the following Fire Protection Sprinkler Systems would require entering the Technical Specification Action Statement on Unit 1?

a. Cable Spreading Room

b. Electrical Penetration Area

c. Diesel Generator Building

d. HVAC Equipment Room

QUESTION: 053 (1.00)

Which one of the following components is cooled by Component Cooling Water (CCW) on Unit 1 only (i.e. "not" cooled by CCW on Unit 2)?

a. Shutdown Heat Exchangers

b. Containment Fan Coolers

c. Low Pressure Safety Injection Pumps

d. High Pressure Safety Injection Pumps

QUESTION: 054 (1.00)

Following a Reactor Trip from full power, the Steam Bypass Control System (SBCS) generates a QUICK OPEN signal if predetermined thresholds are exceeded for secondary main steam header pressure:

a. "and" steam flow (simultaneously).

b. "or" steam flow (either one).

c. "and" RCS Tavg (simultaneously).

d. "or" RCS Tavg (either one).

QUESTION: 055 (1.00)

While operating at full power (100%), a LOW-LOW LEVEL occurs in both the 4A and 4B feedwater heaters. Following any automatic actuations, what should plant power be?

a. 100%

b. 92%

c. 60%

d. 0%

QUESTION: 056 (1.00)

Besides having backup Instrument Air (IA) accumulators, which one of the following valves have additional backup in the form of high pressure air flasks and a portable air compressor?

a. Unit 1 MSIVs

b. Unit 1 Containment Vacuum Relief Valves

c. Unit 2 MSIVs

d. Unit 2 Containment Vacuum Relief Valves

QUESTION: 057 (1.00)

ONOP 2-0110030, "CEA Off-Normal Operation And Realignment", requires Reactor power to be maintained constant during the recovery of a single dropped CEA. Which one of the following is used to maintain Reactor power?

a. Turbine Load

b. Boration

c. Group 5 CEAs

d. Dilution

QUESTION: 058 (1.00)

Using Unit 2 Technical Specification 3.1.3.1 (enclosed), determine which one of the following "single" CEA misalignments requires plant power to be reduced to less than or equal to 70% if the time constraints of Figure 3.1-1a are exceeded?

a. greater than 7 inches.

b. greater than or equal to 7 inches.

c. greater than 15 inches.

d. greater than or equal to 15 inches.

3/4.1.3 MOVABLE CONTROL ASSEMBLIES

CEA POSITION

LIMITING CONDITION FOR OPERATION

3.1.3.1 The CEA Block Circuit and all full-length (shutdown and regulating) CEAs which are inserted in the core, shall be OPERABLE with each CEA of a given group positioned within 7.0 inches (indicated position) of all other CEAs in its group.

APPLICABILITY: MODES 1* and 2*.

ACTION:

a. With one or more full-length CEAs inoperable due to being immovable as a result of excessive friction or mechanical interference or known to be untrippable, determine that the SHUTDOWN MARGIN requirement of Specification 3.1.1.1 is satisfied within 1 hour and be in at least HOT STANDBY within 6 hours.

b. With the CEA Block Circuit inoperable, within 6 hours either:

   1. With one CEA position indicator per group inoperable take action per Specification 3.1.3.2, or

   2. With the group overlap and/or sequencing interlocks inoperable maintain CEA groups 1, 2, 3 and 4 fully withdrawn and the CEAs in group 5 to less than 15% insertion and place and maintain CEA drive system in either the "Manual" or "Off" position, or

   3. Be in at least HOT STANDBY.

c. With more than one full-length CEA inoperable or misaligned from any other CEA in its group by more than 15 inches (indicated position), be in at least HOT STANDBY within 6 hours.

d. With one full-length CEA misaligned from any other CEA in its group by more than 15 inches, operation in MODES 1 and 2 may continue, provided that the misaligned CEA is positioned within 15 inches of the other CEAs in its group in accordance with the time constraints shown in Figure 3.1-1a.

*See Special Test Exceptions 3.10.2, 3.10.4, and 3.10.5.

ACTION: (Continued)

e. With one full-length CEA misaligned from any other CEA in its group by more than 15 inches beyond the time constraints shown in Figure 3.1-1a, reduce power to ≤ 70% of RATED THERMAL POWER prior to completing ACTION e.1 or e.2.

1. Restore the CEA to OPERABLE status within its specified alignment requirements, or

2. Declare the CEA inoperable and satisfy SHUTDOWN MARGIN requirement of Specification 3.1.1.1. After declaring the CEA inoperable, operation in MODES 1 and 2 may continue pursuant to the requirements of Specification 3.1.3.6 provided:*

a) Within 1 hour the remainder of the CEAs in the group with the inoperable CEA shall be aligned to within 7.0 inches of the inoperable CEA while maintaining the allowable CEA sequence and insertion limits shown on Figure 3.1-2; the THERMAL POWER level shall be restricted pursuant to Specification 3.1.3.6 during subsequent operation.

b) The SHUTDOWN MARGIN requirement of Specification 3.1.1.1 is determined at least once per 12 hours.

f. With one or more full-length CEA(s) misaligned from any other CEAs in its group by more than 7.0 inches but less than or equal to 15 inches, operation in MODES 1 and 2 may continue, provided that within 1 hour the misaligned CEA(s) is either:

1. Restored to OPERABLE status within its above specified alignment requirements, or

2. Declared inoperable and the SHUTDOWN MARGIN requirement of Specification 3.1.1.1 is satisfied. After declaring the CEA inoperable, operation in MODES 1 and 2 may continue pursuant to the requirements of Specification 3.1.3.6 provided:

a) Within 1 hour the remainder of the CEAs in the group with the inoperable CEA shall be aligned to within 7.0 inches of the inoperable CEA while maintaining the allowable CEA sequence and insertion limits shown on Figure 3.1-2; the THERMAL POWER level shall be restricted pursuant to Specification 3.1.3.6 during subsequent operation.

b) The SHUTDOWN MARGIN requirement of Specification 3.1.1.1 is determined at least once per 12 hours.

Otherwise, be in at least HOT STANDBY within 6 hours.

g. With one full-length CEA inoperable due to causes other than addressed by ACTION a., above, and inserted beyond the Long Term Steady State Insertion Limits but within its above specified alignment requirements, operation in MODES 1 and 2 may continue pursuant to the requirements of Specification 3.1.3.6.

*If the pre-misalignment ASI was more negative than -0.15, reduce power to <70% of RATED THERMAL POWER or 70% of the THERMAL POWER level prior to the misalignment, whichever is less, prior to completing ACTION e.2.a) and e.2.b).

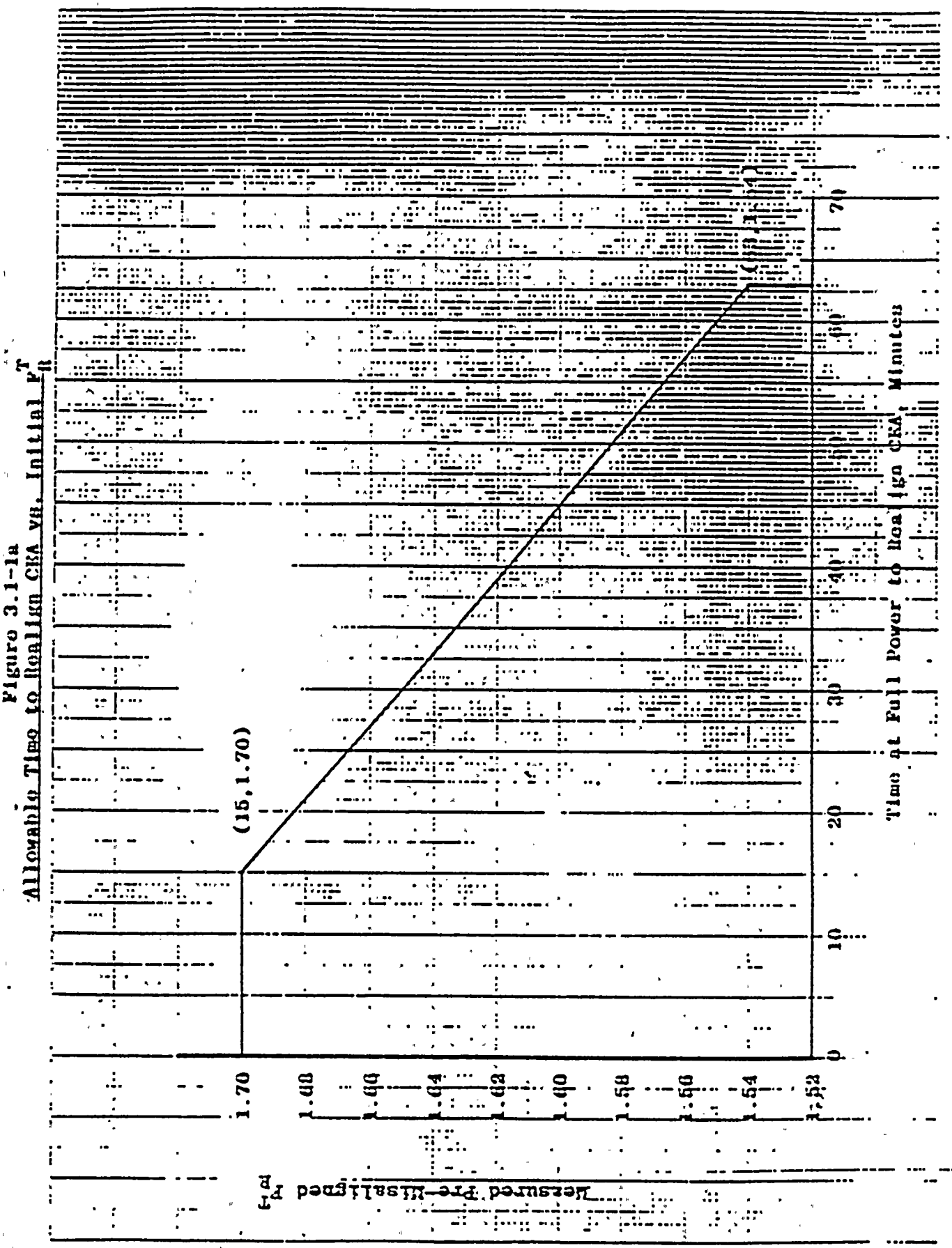
Figure 3.1-1a
Allowable Time to Realign CEA vs. Initial P_R^T
Time at Full Power to Realign CEA, Minutes
Measured Pre-Misaligned P_R
(15, 1.70)
(70, 1.70)
0
10
20
30
40
60
70
1.70
1.68
1.66
1.64
1.62
1.60
1.58
1.56
1.54
1.52

ACTION: (Continued)

b. With one full-length CEA inoperable due to causes other than addressed by ACTION a., above, but within its above specified alignment requirements and either fully withdrawn or within the Long Term Steady State Insertion Limits if in full-length CEA group 5, operation in MODES 1 and 2 may continue.

SURVEILLANCE REQUIREMENTS

4.1.3.1.1 The position of each full-length CEA shall be determined to be within 7.0 inches (indicated position) of all other CEAs in its group at least once per 12 hours except during time intervals when the Deviation Circuit and/or CEA Block Circuit are inoperable, then verify the individual CEA positions at least once per 4 hours.

4.1.3.1.2 Each full-length CEA not fully inserted in the core shall be determined to be OPERABLE by movement of at least 7.0 inches in any one direction at least once per 31 days.

4.1.3.1.3 The CEA Block Circuit shall be demonstrated OPERABLE at least once per 31 days by a functional test which verifies that the circuit prevents any CEA from being misaligned from all other CEAs in its group by more than 7.0 inches (indicated position).

4.1.3.1.4 The CEA Block Circuit shall be demonstrated OPERABLE by a functional test which verifies that the circuit maintains the CEA group overlap and sequencing requirements of Specification 3.1.3.6 and that the circuit prevents the regulating CEAs from being inserted beyond the Power Dependent Insertion Limit of Figure 3.1-2:

*a. Prior to each entry into MODE 2 from MODE 3, except that such verification need not be performed more often than once per 31 days. and

b. At least once per 6 months.

*The licensee shall be excepted from compliance during the initial startup test program for an entry into MODE 2 from MODE 3 made in association with a measurement of power defect.

QUESTION: 059 (1.00)

Given the following post trip indications, which one would determine that a Loss Of Coolant Accident was occurring instead of an Excess Steam Demand Event?

a. RCS subcooling lowering

b. RCS pressure dropping

c. Pressurizer level dropping

d. Containment pressure rising

QUESTION: 060 (1.00)

EOP-03, "Loss Of Coolant Accident" requires realigning Safety Injection flow for simultaneous hot and cold leg injection within a specified time frame. Which one of the following is the "minimum" time based upon?

a. Boron precipitation.

b. Steam Generator availability.

c. Refueling Water Tank level.

d. Core decay heat.

QUESTION: 061 (1.00)

EOP-03, "Loss Of Coolant Accident" has all four Reactor Coolant Pumps (RCPs) tripped if SIAS is initiated or Pressurizer pressure is less than 1600 psia. The RCPs are TRIPPED to:

a. decrease the amount of water mass inventory lost through the break, therefore enhancing efforts to keep the core covered.

b. increase the flow of steam (instead of two-phase mixture) from the break, therefore enhancing heat removal from the core.

c. decrease the cold leg pressure head, therefore enhancing Safety Injection System performance at higher flow rates.

d. increase flow stability of the RCS by allowing for development of natural circulation, therefore enhancing slow, controlled heat removal.

QUESTION: 062 (1.00)

Given the following Reactor Coolant Pump (RCP) seal data:

- Pressurizer pressure 2250 psia
- Middle Seal Cavity pressure 2100 psia
- Upper Seal Cavity pressure 260 psia
- Bleedoff Cavity pressure 170 psia
- Seal Leakoff flow 1.4 gpm

Which one of the following RCP seals have degraded/failed?

a. Upper and Middle.

b. Upper and Lower.

c. Middle only.

d. Middle and Lower.

QUESTION: 063 (1.00)

According to ONOP 2-0120034, "Reactor Coolant Pump Off Normal Operation", which one of the following Reactor Coolant Pump (RCP) parameters has an associated criteria for immediately tripping the Reactor?

a. Bearing Temperature

b. Vibration

c. Seal Pressure

d. Component Cooling Water Flow

QUESTION: 064 (1.00)

Where is the Unit 2 Manual Emergency Borate Valve (V-2174) physically located?

a. -.5 RAB Boric Acid Valve Gallery

b. -.5 Boric Acid Makeup Tank room

c. A Charging Pump room

d. C Charging Pump room

QUESTION: 065 (1.00)

According to the Off-Normal Operating Procedure for Component Cooling Water (CCW), which one of the following Automatic Actions occurs on "both" Unit 1 and Unit 2?

a. High radioactivity in the CCW system will divert the CCW Surge Tank Vent valve, RCV-14-1, from atmosphere to the Chemical Drain Tank.

b. Low level in the A (B) side of the CCW Surge Tank will isolate the "N" header from the A (B) header by closing HCV-14-8A(B) and HCV-14-9(10).

c. Isolation of the "N" header will isolate the Fuel Pool Heat Exchanger.

d. 2-out-of-4 logic on low CCW flow from the Reactor Coolant Pump return header, after a 10 minute time delay, will trip the Reactor.

QUESTION: 066 (1.00)

If an Anticipated Transient Without Scram (ATWS) were to occur as a result of any of the following transients, which one would be covered by the Off-Normal Operating Procedure for ATWS?

a. Steam Generator Tube Rupture

b. Main Steam Line Rupture

c. Loss Of Coolant Accident

d. Stuck Open Power Operated Relief Valve

QUESTION: 067 (1.00)

According to Off-Normal Operating Procedure for Anticipated Transient Without Scram (ATWS), which one of the following actions is the "last" attempt to insert the CEAs prior to exiting to the Emergency Operating Procedures?

a. Tripping the Turbine.

b. Attempting to manually insert CEAs using CEDMCS.

c. Locally opening Reactor trip breakers.

d. Locally stopping "both" M-G Sets.

QUESTION: 068 (1.00)

Which one of the following events creates the most potential for Pressurized Thermal Shock (PTS)?

a. Loss Of Coolant Accident

b. Steam Generator Tube Rupture

c. Excess Steam Demand

d. Loss Of All Feedwater

QUESTION: 069 (1.00)

The Emergency Operating Procedure for Excess Steam Demand provides a caution to limit feedwater flow when restoring Steam Generator level to avoid all of the following. Which one would be the primary concern if the excess steam demand were occurring on "both" Steam Generators (i.e. both Steam Generators are affected)?

a. Excessive Pressurizer level and temperature transients.

b. Excessive cooldown rates.

c. Overfilling the Steam Generators.

d. Water hammer in the Steam Generator feed sparger.

QUESTION: 070 (1.00)

According to the Off-Normal Operating Procedure for Loss Of Condenser Vacuum, the Unit is required to be tripped when operating at greater than 30% of rated load and backpressure reaches or exceeds:

a. 3.5 inches Hg

b. 4.0 inches Hg

c. 5.0 inches Hg

d. 5.5 inches Hg

QUESTION: 099 (1.00)

Following a Loss Of Offsite Power, natural circulation flow can "not" be accurately verified for about 15 minutes. This is because of which one of the following parameters?

a. Reactor Coolant System (RCS) Cold Leg Temperature

b. RCS Subcooling Margin

c. Core Exit Thermocouple (CET) Temperature

d. RCS Loop Delta Temperature

(********** END OF EXAMINATION **********)

QUESTION: 071 (1.00)

The Station Blackout Study done for St. Lucie estimates 30 minutes for restoration of power based on which one of the following?

a. Restoring normal offsite power to Startup Transformers.

b. Temporary power connection to Startup Transformers.

c. Restoring the affected Units Diesel Generator.

d. Aligning the other Units Diesel Generator.

QUESTION: 072 (1.00)

How is Auxiliary Feed Water (AFW) flow equivalent to 150 gpm determined during a Station Blackout?

a. Local flow indicator.

b. Control room flow indicator.

c. Flow control valve stroke time.

d. Flow control valve position indication.

QUESTION: 073 (1.00)

A loss of Radiation Monitoring Panel, RM-11 indications is a symptom for which one of the following Off-Normal Operating Procedures?

a. ONOP 1-0970030, "120V Instrument AC System (Class 1E)/QSPDS Off-Normal Operation"

b. ONOP 1-0970031, "Loss Of SUPS-Non-Safety Vital AC Or Fire And Security Inverters"

c. ONOP 2-0970030, "120V Instrument AC System (Class 1E) QSPDS Off-Normal Operation"

d. ONOP 2-0970031, "Loss Of SUPS-Non-Safety Vital AC Or Fire And Security Inverters"

QUESTION: 074 (1.00)

According to procedure AP 0010120, "Duties And Responsibilities Of Operators On Shift", which one of the following personnel has the authority to approve radioactive waste discharge permits?

a. Nuclear Plant Supervisor

b. Assistant Nuclear Plant Supervisor

c. Nuclear Watch Engineer

d. Health Physics Supervisor

QUESTION: 075 (1.00)

Which one of the following liquid process radiation monitors is required by Technical Specifications?

a. Letdown (CVCS)

b. Steam Generator Blowdown

c. Waste Evaporator Condensate

d. Component Cooling Water (safety related)

QUESTION: 076 (1.00)

Which one of the following statements describe the difference between Unit 1 and Unit 2 equipment protection/availability in the event of an "Alternate Shutdown"?

a. Unit 1 has "A" train components fire protected and Unit 2 has "both" trains components fire protected.

b. Unit 1 has "A" train components fire protected and Unit 2 has "B" train components fire protected.

c. Unit 1 has "B" train components fire protected and Unit 2 has "A" train components fire protected.

d. Unit 1 has "B" train components fire protected and Unit 2 has "both" trains components fire protected.

QUESTION: 077 (1.00)

Which one of the following Control Room indications is also part of the Remote Shutdown Instrumentation on Unit 1?

a. Shutdown Cooling Temperature

b. Power Range Flux

c. Steam Generator Level

d. Charging Flow

QUESTION: 078 (1.00)

The Emergency Operating Procedure for Excess Steam Demand provides guidance for placing the Hydrogen Analyzers in service if the break is inside Containment. Which one of the following sources of post accident hydrogen is of concern during this event?

a. Hydrogen concentration in RCS.

b. Zirconium-water reaction.

c. Corrosion of metals in containment.

d. Radiolytic decomposition of water.

QUESTION: 079 (1.00)

If the Reactor Vessel Level Monitoring System (RVLMS) shows a "void" indication for reactor vessel level sensors one (1) through eight (8), then:

a. the core is definitely uncovered.

b. RCS liquid level is at or below the Fuel Alignment Plate.

c. RCS liquid level is at the Hot Leg Nozzle centerline.

d. the reactor vessel space above the core is 50% full.

QUESTION: 080 (1.00)

According to the Off-Normal Operating Procedure for Excessive Reactor Coolant System Activity, which one of the following Radiochemical Analyses is used to determine when Reactor Coolant Pumps are secured during the plant cooldown?

a. Gross beta-gamma

b. Tritium

c. Reactor coolant gamma spectrum

d. Iodine concentration

QUESTION: 081 (1.00)

During performance of the Standard Post Trip Actions, which one of the following radiation monitors reading greater than a specified amount would require a contingency action to be performed?

a. Containment

b. Condenser Air Ejector

c. Blowdown

d. Main Steamline

QUESTION: 082 (1.00)

During performance of the Standard Post Trip Actions, which one of the following safety functions has the operator consider the Functional Recovery Procedure as part of its contingency actions?

a. Reactivity Control

b. Maintenance Of Vital Auxiliaries

c. Core Heat Removal

d. RCS Heat Removal

QUESTION: 083 (1.00)

For a Loss Of Coolant Accident (LOCA) outside containment, maintaining which one of the following levels is critical to preventing the possibility of core melt?

a. Steam Generator

b. Condensate Storage Tank

c. Refueling Water Tank

d. Containment Sump

QUESTION: 084 (1.00)

According to EOP-03, "Loss Of Coolant Accident", which one of the following would prevent throttling Safety Injection flow?

a. Reactor Vessel level indicates sensors 7 and 8 (only) are covered.

b. Both Steam Generator levels are constant at 50%.

c. Pressurizer level is constant at 40%.

d. Representative CET temperature is 28 degrees F subcooled.

QUESTION: 085 (1.00)

During the recovery from a Loss Of Coolant Accident (LOCA) inside Containment on Unit 1 the Technical Support Center reports that local radiation surveys indicate secondary plant activity. This report is followed up by secondary chemistry samples which show activity in Steam Generator "1A". Which one of the following courses of action should be taken?

a. Use 1-EOP-03, "Loss Of Coolant Accident" and 1-EOP-04, "Steam Generator Tube Rupture" in parallel completing all of the steps of both procedures.

b. Return to the 1-EOP-01, "Standard Post Trip Actions" and attempt diagnoses again.

c. Go to 1-EOP-15, "Functional Recovery" for further recovery guidance.

d. Refer to 1-EOP-04, "Steam Generator Tube Rupture" for guidance on Steam Generator isolation while continuing with 1-EOP-03, "Loss Of Coolant Accident".

QUESTION: 086 (1.00)

On Unit 1 which one of the following Charging Pump trips is BYPASSED/BLOCKED on a Safety Injection Actuation Signal (SIAS)?

a. Undervoltage

b. Low suction pressure

c. Overcurrent

d. Low oil pressure

QUESTION: 087 (1.00)

Which one of the following describes the response of the Shutdown Cooling (SDC) System to a loss of the "B3" 4.16 KV bus while operating both SDC trains?

a. On Unit 1, both trains would be lost.
   On Unit 2, only train "B" would be lost.

b. On Unit 1, only train "B" would be lost.
   On Unit 2, only train "B" would be lost.

c. On Unit 1, only train "B" would be lost.
   On Unit 2, both trains would be lost.

d. On Unit 1, both trains would be lost.
   On Unit 2, both trains would be lost.

QUESTION: 088 (1.00)

Which one of the following parameters would be the most likely cause of an "air bound" LPSI pump while running for Shutdown Cooling?

a. Throttled flow.

b. Rising suction temperature.

c. Lowering suction level.

d. Lowering suction pressure.

QUESTION: 089 (1.00)

Which one of the following does the Off-Normal Operating Procedure for Shutdown Cooling provide guidance for on Unit 1 "only"?

a. Loss of Electrical Power.

b. Loss of Component Cooling Water.

c. Loss of Intake Cooling Water.

d. Loss of Instrument Air.

QUESTION: 090 (1.00)

While operating with the Pressurizer solid and all systems configured correctly a malfunction occurs which causes Pressurizer pressure to increase. Which one of the following components is the most likely source of this malfunction?

a. Charging pump

b. Pressurizer heaters

c. Pressurizer spray valve

d. Letdown backpressure regulating valve

QUESTION: 091 (1.00)

According to Technical Specifications, Primary to Secondary Leakage through a Steam Generator is considered:

a. controlled leakage.

b. identified leakage.

c. pressure boundary leakage.

d. unidentified leakage.

QUESTION: 092 (1.00)

During implementation of which one of the following Emergency Operating Procedures is it preferred to have Reactor Coolant Pumps operating?

a. Loss Of Coolant Accident

b. Total Loss Of Feedwater

c. Steam Generator Tube Rupture

d. Functional Recovery

QUESTION: 093 (1.00)

During recovery from a Steam Generator Tube Rupture, which one of the following is the preferred method of maintaining the isolated Steam Generators level?

a. Steam Generator backflow to the RCS.

b. Draining to the Blowdown System.

c. Steaming the Steam Generator to the Main Condenser.

d. Steaming the Steam Generator to atmosphere.

QUESTION: 094 (1.00)

According to the Emergency Operating Procedure for Total Loss Of Feedwater, a Steam Generator is considered to be available for RCS heat removal if it has a wide range level of greater than:

a. 10%

b. 15%

c. 25%

d. 40%

QUESTION: 095 (1.00)

Which one of the following Off-Normal events will result in an immediate Reactor TRIP?

a. Loss of a Safety Related DC Bus.

b. Loss of a Safety Related AC Bus.

c. Loss of a 120V AC Instrument Bus.

d. Loss of SUPS Vital AC.

QUESTION: 096 (1.00)

Different colors are used on the RM-11 to display for status of a particular radiation monitor. Which one of the following is "dark blue" used to indicate?

a. Channel "ALERT" alarm

B. RM-11 Communications

C. System Failures

d. Normal Operations

QUESTION: 097 (1.00)

Which one of the following conditions would cause indicated Pressurizer level to be "LOWER" than actual level?

a. A Pressurizer temperature less than the temperature for which the level transmitter is calibrated.

b. A leak in the variable leg of the transmitter.

c. A leak in the reference leg of the transmitter.

d. A ruptured diaphragm on the transmitter.

QUESTION: 098 (1.00)

An accident involving new fuel (as opposed to spent fuel) is not detectable by installed radiation monitors with indication in the control room. Which one of the following describes the reason for this?

a. The location of the detectors.

b. The type of radiation released.

c. The sensitivity of the detectors.

d. The amount (level) of radiation released.

ANSWER: 001 (1.00)

c.

REFERENCE:

AP 1-0010123, pg. 3
LP-DN 0902722, obj. 29
[3.4/3.4]

194001A106 ..(KA's)

ANSWER: 002 (1.00)

a.

REFERENCE:

Technical Specification 6.2.2, pg. 6-2 and 6-5
AP 0010120, pg. 14
LP-DN 0902712, obj. 8 and 9
[2.5/3.4]

194001A103 ..(KA's)

ANSWER: 003 (1.00)

b.

REFERENCE:

10 CFR 20
No Facility Objective Found
[2.8/3.4]

194001K103 ..(KA's)

ANSWER: 004 (1.00)

c.

REFERENCE:

HP-1, pg. 8 and 9
No Facility Objective Found
[2.8/3.4]

194001K103 ..(KA's)

ANSWER: 005 (1.00)

c.

REFERENCE:

Facility Exam Bank QNUM 080765 (revised)
EPIP 3100021E, pg. 12 and 13
LP-DN 0902701, obj. 3
[3.1/4.4]

194001A116 ..(KA's)

ANSWER: 006 (1.00)

b.

REFERENCE:

EPIP 3100027E, pg. 4
LP-DN 0902701, obj. 13
[3.1/4.4]

194001A116 ..(KA's)

ANSWER: 007 (1.00)

c.

REFERENCE:

EPIP 3100026E, pg.6
LP-DN 0902701, obj. 12
[3.1/4.4]

194001A116 ..(KA's)

ANSWER: 008 (1.00)

a.

REFERENCE:

EPIP 3100021E, pg. 2
LP-DN 0902701, obj. 6
[3.1/4.4]

194001A116 ..(KA's)

ANSWER: 009 (1.00)

d.

REFERENCE:

AP 0010120, pg. 4 and 6
LP-DN 0902712, obj. 4
[3.1/3.4]

194001K105 ..(KA's)

ANSWER: 010 (1.00)

b.

REFERENCE:

AP 0010120, pg. 17
LP-DN 0902712, obj. 10
[2.8/4.1]

194001A111 ..(KA's)

ANSWER: 011 (1.00)

a.

REFERENCE:

Facility Exam Bank QNUM 080767
AP 0010120, pg. 3
LP-DN 0902712, obj. 3
[3.1/4.1]

194001A112 ..(KA's)

ANSWER: 012 (1.00)

b.

REFERENCE:

Facility Exam Bank QNUM 080826
QI 5PR/PSL1, pg.
LP-DN 0902712, obj. 22
[3.3/3.4]

194001A101 ..(KA's)

ANSWER: 013 (1.00)

c.

REFERENCE:

AP 0010136, pg. 6
LP-DN 0902722, obj. 6
[3.7/4.1]

194001K102 ..(KA's)

ANSWER: 014 (1.00)

c.

REFERENCE:

Facility Exam Bank QNUM 081078 (revised)
LP-DN 0711407, pg. 20
LP-DN 0711407, obj. 1
[4.3/4.1]

194001A113 ..(KA's)

ANSWER: 015 (1.00)

c.

REFERENCE:

Facility Exam Bank QNUM 082094
No Facility Objective Found
[2.7/3.9]

194001A109 ..(KA's)

ANSWER: 016 (1.00)

a.

REFERENCE:

Facility Exam Bank QNUM 082127 (revised)
Technical Specification 6.2.2, pg. 6-2
LP-DN 0902712, obj. 8
[3.5/4.2]

194001K116 ..(KA's)

ANSWER: 017 (1.00)

b.

REFERENCE:

Facility Exam Bank QNUM 082168 (revised)
AP 0010124, pg. 1 and 2
LP-DN 0902722, obj. 17
[3.6/3.7]

194001K107 ..(KA's)

ANSWER: 018 (1.00)

c.

REFERENCE:

Facility Exam Bank QNUM 086113
LP-DN 0711405, pg. 24
LP-DN 0711405, obj. 10
[3.4/3.6]

001000K103 ..(KA's)

ANSWER: 019 (1.00)

b.

REFERENCE:

LP-DN 0711405, pg. 38
LP-DN 0711405, obj. 8
[3.7/3.8]

001000K407 ..(KA's)

ANSWER: 020 (1.00)

a.

REFERENCE:

Facility Exam Bank QNUM 086182 (revised)
LP-DN 0711202, pg. 43
LP-DN 0711202, obj. 12
[3.3/3.9]

003000K501 ..(KA's)

ANSWER: 021 (1.00)

d.

REFERENCE:

Facility Exam Bank QNUM 086344 (revised)
LP-DN 0711202, pg. 11 and 50
LP-DN 0711202, obj. 5 and 7
[3.3/3.6]

003000K103 ..(KA's)

ANSWER: 022 (1.00)

a.

REFERENCE:

LP-DN 0711205, pg. 33, 56, and 61
LP-DN 0711205, obj. 15
[2.9/3.1]

004000K202 ..(KA's)

ANSWER: 023 (1.00)

c.

REFERENCE:

LP-DN 0711205, pg. 48
LP-DN 0711205, obj. 12
[4.1/4.3]

004010A205 ..(KA's)

ANSWER: 024 (1.00)

a.

REFERENCE:

LP-DN 0711401, pg. 11 and 12
LP-DN 0711401, obj. 7
[4.5/4.7]

013000A403 ..(KA's)

ANSWER: 025 (1.00)

d.

REFERENCE:

LP-DN 0711401, pg. 23
LP-DN 0711401, obj.12
[3.9/4.3]

013000K104 ..(KA's)

ANSWER: 026 (2.00)

a. 5.
b. 3.
c. 2.
d. 1.

REFERENCE:

LP-DN 0711405, pg. 12 through 21
LP-DN 0711405, obj. 11
[3.4/3.2]

014000A402 ..(KA's)

ANSWER: 027 (1.00)

b.

REFERENCE:

Facility Exam Bank QNUM 086264 (revised)
LP-DN 0711403, obj. 16 and 18
[3.9/3.9]

015000A303 ..(KA's)

ANSWER: 028 (1.00)

a.

REFERENCE:

LP-DN 0711403, pg. 32, 33, 57, 58, and 59
LP-DN 0711403, obj. 11
[3.3/3.4]

015000A107 ..(KA's)

ANSWER: 029 (1.00)

b.

REFERENCE:

LP-DN 0711407, pg. 30 and 31
LP-DN 0711407, obj. 6
[3.1/3.2]

017000G008 ..(KA's)

ANSWER: 030 (1.00)

b.

REFERENCE:

Technical Specification 3.6.2.1, pg. 3/4 6-15
LP-DN 0711207, obj. 15
[3.0/3.7]

022000G005 ..(KA's)

ANSWER: 031 (1.00)

c.

REFERENCE:

Facility Exam Bank QNUM 081084 (revised)
LP-DN 0711207, pg. 22
LP-DN 0711207, obj. 3, 4, 18, and 20
[2.7/3.0]

026020A102 ..(KA's)

ANSWER: 032 (1.00)

a.

REFERENCE:

LP-DN 0711408, pg. 34 and 36
LP-DN 0711408, obj. 4
[3.0/3.3]

059000A211 ..(KA's)

ANSWER: 033 (1.00)

d.

REFERENCE:

Technical Specification Bases 3.7.1.3, pg. B 3/4 7-2 (both units)
LP-DN 0711412, obj. 2
[2.7/3.8]

061000G006 ..(KA's)

ANSWER: 034 (1.00)

d.

REFERENCE:

LP-DN 0711412, pg. 10 and 46
LP-DN 0711412, obj. 2, 5, and 10
[3.2/3.3]

061000K201 ..(KA's)

ANSWER: 035 (1.00)

b.

REFERENCE:

Facility Exam Bank QNUM 086266 (revised)
LP-DN 0711503, pg. 4 and Figure 2
LP-DN 0711503, obj. 2
[3.5/3.7]

063000K302 ..(KA's)

ANSWER: 036 (1.00)

d.

REFERENCE:

Facility Exam Bank QNUM 082131 (revised)
LP-DN 0711201, pg. 57
LP-DN 0711201, obj. 10
[4.2/4.4]

002000K410 ..(KA's)

ANSWER: 037 (1.00)

a.

REFERENCE:

Facility Exam Bank QNUM 081075
LP-DN 0711206, pg. 38
LP-DN 0711206, obj. 8
[4.0/3.8]

010000A403 ..(KA's)

ANSWER: 041 (1.00)

c.

REFERENCE:

LP-DN 0711206, pg. 28
LP-DN 0711206, obj. 7
[3.2/3.6]

010000K603 ..(KA's)

ANSWER: 042 (1.00)

d.

REFERENCE:

Facility Exam Bank QNUM 086371
LP-DN 0711206, pg. 21 and 22
LP-DN 0711206, obj. 12
[3.3/3.7]

011000A205 ..(KA's)

ANSWER: 043 (1.00)

c.

REFERENCE:

Technical Specification LSSS Bases, pg. B 2-5
LP-DN 0711404, pg. 16
LP-DN 0711404, obj. 2
[3.9/4.3]

012000K402 ..(KA's)

ANSWER: 044 (1.00)

a.

REFERENCE:

LP-DN 0711404, pg. 33 and 34
LP-DN 0711404, obj. 8
[3.6/3.6]

012000A403 ..(KA's)

ANSWER: 045 (1.00)

a.

REFERENCE:

LP-DN 0711404, pg. 15 and 18
LP-DN 0711404, obj. 2
[2.9/3.4]

012000A101 ..(KA's)

ANSWER: 046 (1.00)

c.

REFERENCE:

LP-DN 0711402, pg. 6
LP-DN 0711402, obj. 1
[3.4/3.3]

016000K102 ..(KA's)

ANSWER: 047 (1.00)

b.

REFERENCE:

LP-DN 0711207, pg. 26
LP-DN 0711207, obj. 18
[3.4/3.7]

027000K101 ..(KA's)

ANSWER: 048 (1.00)

a.

REFERENCE:

LP-DN 0711602, pg. 15
No Facility Objective Found
[3.4/3.9]

028000K502 ..(KA's)

ANSWER: 049 (1.00)

c.

REFERENCE:

Technical Specification Bases 6.1.7, pg. B 3/4 6-2
No Facility Objective Found
[2.3/3.4]

029000G006 ..(KA's)

ANSWER: 050 (1.00)

b.

REFERENCE:

Facility Exam Bank QNUM 086303 (revised)
LP-DN 0711502, pg. 16 and 17
LP-DN 0711502, obj. 5 and 6 (objectives are the same)
[3.5/3.9]

062000K301 ..(KA's)

ANSWER: 051 (1.00)

b.

REFERENCE:

LP-DN 0711501, pg. 23 and 26
LP-DN 0711501, obj. 6
[4.1/4.0]

064000A301 ..(KA's)

ANSWER: 052 (1.00)

c.

REFERENCE:

Unit 1 Technical Specification 3.7.11.4, pg. 3/4 7-44c
Unit 2 Technical Specification 3.7.11.2, pg. 3/4 7-32
LP-DN 0902722, obj. 25
[3.0/3.6]

086000G005 ..(KA's)

ANSWER: 053 (1.00)

c.

REFERENCE:

LP-DN 0711209, pg. 5
LP-DN 0711209, obj. 1
[3.3/3.4]

008000K102 ..(KA's)

ANSWER: 054 (1.00)

c.

REFERENCE:

LP-DN 0711406, pg. 9 and 10
LP-DN 0711406, obj. 4
[3.0/3.1]

041020A408 ..(KA's)

ANSWER: 055 (1.00)

b.

REFERENCE:

Technical Specification 3.1.3.1 (both Units)
OJT Guide 0905204, pg. 5
OJT Guide 0905204, obj. III.B.2 and III.B.4
[3.6/4.1]

000005K303 ..(KA's)

ANSWER: 059 (1.00)

a.

REFERENCE:

EOP-03, pg. 47
LP-DN 0702824, obj. 10
[3.7/3.7]

000011A213 ..(KA's)

ANSWER: 060 (1.00)

d.

REFERENCE:

LP-DN 0702824, pg. 30
LP-DN 0702824, obj. 13
[3.8/4.2]

000011K313 ..(KA's)

ANSWER: 061 (1.00)

a.

REFERENCE:

LP-DN 0702824, pg. 21
LP-DN 0702824, obj. 6
[4.1/4.2]

000011K314 ..(KA's)

ANSWER: 062 (1.00)

b.

REFERENCE:

Facility Exam Bank QNUM 086343 (revised)
ONOP 2-0120034, pg. 5
LP-DN 0711202, obj. 2
[4.0/4.2]

000015A122 ..(KA's)

ANSWER: 063 (1.00)

a.

REFERENCE:

ONOP 2-0120034, pg. 2
LP-DN 0711202, pg. 44 and 45
LP-DN 0711202, obj. 13
[3.4/3.5]

000015A208 ..(KA's)

ANSWER: 064 (1.00)

a.

REFERENCE:

ONOP 1-0030030, pg. 4
ONOP 2-0030030, pg. 4
LP-DN 0905204, obj. II.A
[4.1/4.1]

000029K310 ..(KA's)

ANSWER: 068 (1.00)

c.

REFERENCE:

LP-DN 0702826, pg. 8
LP-DN 0702826, obj. 5
[4.1/4.4]

000040K101 ..(KA's)

ANSWER: 069 (1.00)

d.

REFERENCE:

1-EOP-05, pg. 16
2-EOP-05, pg. 14
LP-DN 0702826, obj. 9
[3.4/4.2]

000040K107 ..(KA's)

ANSWER: 070 (1.00)

d.

REFERENCE:

Facility Exam Bank QNUM 086357 (revised)
LP-DN 0711301, pg. 31 and 47
LP-DN 0711301, obj. 3 and 9
[3.3/3.6]

045000K412 ..(KA's)

ANSWER: 056 (1.00)

a.

REFERENCE:

LP-DN 0711413, pg. 46 and 47
LP-DN 0711413, obj. 5
[3.4/3.5]

078000K105 ..(KA's)

ANSWER: 057 (1.00)

b.

REFERENCE:

Facility Exam Bank QNUM 089062 (revised)
ONOP 2-0110030, pg. 23
OJT Guide 0905204, pg. 5
OJT Guide 0905204, obj. III.B.3
[4.1/4.1]

000003A105 ..(KA's)

ANSWER: 058 (1.00)

c.

REFERENCE:

Facility Exam Bank QNUM 082137 (revised)
LP-DN 0711407, pg. 24
LP-DN 0711407, obj. 4
[3.9/4.1]

002000A104 ..(KA's)

ANSWER: 038 (1.00)

b.

REFERENCE:

LP-DN 0711207, pg. 17 and 18
LP-DN 0711207, obj. 21
[3.5/3.9]

006000K506 ..(KA's)

ANSWER: 039 (1.00)

c.

REFERENCE:

LP-DN 0711207, pg. 17
LP-DN 0711207, obj. 4
[3.6/3.9]

006000K201 ..(KA's)

ANSWER: 040 (1.00)

d.

REFERENCE:

OJT Guide 0905204, pg. 5
OJT Guide 0905204, obj. III.A.2
[3.6/3.7]

000024A104 ..(KA's)

ANSWER: 065 (1.00)

a.

REFERENCE:

ONOP 1-0310030, pg. 2
ONOP 2-0310030, pg. 2
LP-DN 0711209, obj. 5
[3.6/3.9]

000026K302 ..(KA's)

ANSWER: 066 (1.00)

d.

REFERENCE:

ONOP 1-0030030, pg. 1
ONOP 2-0030030, pg. 1
No Facility Objective Found
[4.4/4.7]

000029K312 ..(KA's)

ANSWER: 067 (1.00)

b.

REFERENCE:

ONOP 1-0610031, pg. 4
ONOP 2-0610031, pg. 4
OJT Guide 0905206, obj. III.C
[3.9/4.1]

000051A202 ..(KA's)

ANSWER: 071 (1.00)

d.

REFERENCE:

1-EOP-10, pg. 10
2-EOP-10, pg. 10
LP-DN 0702830, obj. 2 and 7
[4.3/4.6]

000055K302 ..(KA's)

ANSWER: 072 (1.00)

c.

REFERENCE:

1-EOP-10, pg. 5
1-EOP-10, pg. 5
LP-DN 0702830, obj. 9
[3.7/4.1]

000055A204 ..(KA's)

ANSWER: 073 (1.00)

d.

REFERENCE:

ONOP 2-0970031, pg. 2
OJT Guide 0905208, obj. II.B
[3.8/3.8]

000057G011 ..(KA's)

ANSWER: 074 (1.00)

b.

REFERENCE:

Administrative Procedure 0010120, pg. 6
LP-DN 0902712, obj. 13
[2.9/3.9]

000059A202 ..(KA's)

ANSWER: 075 (1.00)

b.

REFERENCE:

Unit 1 Technical Specification 3.3.3.9, pg. 3/4 3-45
Unit 2 Technical Specification 3.3.3.9, pg. 3/4 3-48
LP-DN 0711410,, obj. 10
[2.9/3.8]

000059G003 ..(KA's)

ANSWER: 076 (1.00)

c.

REFERENCE:

ONOP 1-0030135, pg. 5
ONOP 2-0030135, pg. 5
OJT Guide 0905101, obj. II.E
[3.1/4.3]

000067A204 ..(KA's)

ANSWER: 077 (1.00)

c.

REFERENCE:

OJT Guide 0905101, pg. 4
OJT Guide 0905101, obj. III.C
[3.9/4.0]

000069K201 ..(KA's)

ANSWER: 078 (1.00)

c.

REFERENCE:

1-EOP-05, pg. 7
2-EOP-05, pg. 7
LP-DN 0802850, pg. 13
LP-DN 0802850, obj. 6
[3.8/4.2]

000069K301 ..(KA's)

ANSWER: 079 (1.00)

b.

REFERENCE:

LP-DN 0711407, pg. 33 through 35
LP-DN 0711407, obj. 5
[4.2/4.4]

000074A101 ..(KA's)

ANSWER: 080 (1.00)

d.

REFERENCE:

ONOP 1-0120032, pg. 7
ONOP 2-0120032, pg. 7
No Facility Objective Found
[2.9/3.4]

000076G007 ..(KA's)

ANSWER: 081 (1.00)

a.

REFERENCE:

1-EOP-01, pg. 10
2-EOP-01, pg. 10
LP-DN 0702822, obj. 4
[4.2/4.1]

000007G010 ..(KA's)

ANSWER: 082 (1.00)

a.

REFERENCE:

1-EOP-01, pg. 3
2-EOP-01, pg. 3
LP-DN 0702822, obj. 4
[4.4/4.6]

000007A204 ..(KA's)

ANSWER: 083 (1.00)

c.

REFERENCE:

LP-DN 0702824, pg. 36
LP-DN 0702824, obj. 15
[4.0/4.3]

000009K317 ..(KA's)

ANSWER: 084 (1.00)

a.

REFERENCE:

1-EOP-03, pg. 30
2-EOP-03, pg. 28
LP-DN 0711207, obj. 9
[3.6/4.2]

000009A234 ..(KA's)

ANSWER: 085 (1.00)

c.

REFERENCE:

1-EOP-03, pg. 22 and 45
1-EOP-15, pg. 2
LP-DN 0802828, obj. 1
[4.1/4.3]

000009G012 ..(KA's)

ANSWER: 086 (1.00)

b.

REFERENCE:

OJT Guide 0905203, pg. 5
OJT Guide 0905203, obj. II.F
[3.2/3.7]

000022A202 ..(KA's)

ANSWER: 087 (1.00)

a.

REFERENCE:

OJT Guide 0905205, pg. 5
OJT Guide 0905205, obj. III.A
[3.9/4.3]

000025K101 ..(KA's)

ANSWER: 088 (1.00)

c.

REFERENCE:

LP-DN 0711140, pg. 2-25
LP-DN 0711140, obj. 2-11
[3.4/3.7]

000025A207 ..(KA's)

ANSWER: 089 (1.00)

d.

REFERENCE:

ONOP 1-0440030, pg. 2
ONOP 2-0440030, pg. 2
No Facility Objective Found
[2.9/3.4]

000065K303 ..(KA's)

ANSWER: 090 (1.00)

d.

REFERENCE:

LP-DN 0711206, pg. 68
LP-DN 0711206, obj. 11
[3.3/3.4]

000027A203 ..(KA's)

ANSWER: 091 (1.00)

b.

REFERENCE:

Unit 1 Technical Specifications, pg. 1-4
Unit 2 Technical Specifications, pg. 1-3
LP-DN 0711201, obj. 8
[3.2/3.9]

000037G003 ..(KA's)

ANSWER: 092 (1.00)

c.

REFERENCE:

LP-DN 0702825, pg. 23
LP-DN 0702825, obj. 10
[3.9/4.2]

000038K103 ..(KA's)

ANSWER: 093 (1.00)

a.

REFERENCE:

1-EOP-04, pg. 20
2-EOP-04, pg. 18
LP-DN 0702825, obj. 8
[4.5/4.4]

000038A101 ..(KA's)

ANSWER: 094 (1.00)

b.

REFERENCE:

1-EOP-06, pg. 11
2-EOP-06, pg. 11
No Facility Objective Found
[4.4/4.6]

000054K304 ..(KA's)

ANSWER: 095 (1.00)

a.

REFERENCE:

ONOP 1-0030136, pg. 3
ONOP 2-0030136, pg. 3
OJT Guide 0905208, obj. II.G
[3.5/3.9]

000058A203 ..(KA's)

ANSWER: 096 (1.00)

c.

REFERENCE:

LP-DN 0711411, pg. 59 and 60
LP-DN 0711411, obj. 6 and 7
[3.5/3.7]

000061A201 ..(KA's)

ANSWER: 097 (1.00)

b.

REFERENCE:

LP-DN 0711206, obj. 10
[2.8/3.1]

000028K101 ..(KA's)

ANSWER: 098 (1.00)

b.

REFERENCE:

OJT Guide 0905210, pg. 5
OJT Guide 0905210, obj. II.D and II.E
[3.4/3.9]

000036K202 ..(KA's)

ANSWER: 099 (1.00)

d.

REFERENCE:

1-EOP-09, pg. 7
2-EOP-09, pg. 8
LP-DN 0702835, obj. 5
[3.3/3.4]

000056A251 ..(KA's)

(********** END OF EXAMINATION **********)

A N S W E R K E Y

MULTIPLE CHOICE

001 c
002 a
003 b
004 c
005 c
006 b
007 c
008 a
009 d
010 b
011 a
012 b
013 c
014 c
015 c
016 a
017 b
018 c
019 b
020 a
021 d
022 a
023 c
024 a
025 d
026 MATCHING
a 5
b 3
c 2
d 1

MULTIPLE CHOICE

027 b
028 a
029 b
030 b
031 c
032 a
033 d
034 d
035 b
036 d
037 a
038 b
039 c
040 d

A N S W E R K E Y

041	c	064	a
042	d	065	a
043	c	066	d
044	a	067	b
045	a	068	c
046	c	069	d
047	b	070	d
048	a	071	d
049	c	072	c
050	b	073	d
051	b	074	b
052	c	075	b
053	c	076	c
054	c	077	c
055	b	078	c
056	a	079	b
057	b	080	d
058	c	081	a
059	a	082	a
060	d	083	c
061	a	084	a
062	b	085	c
063	a	086	b

A N S W E R K E Y

087 a

088 c

089 d

090 d

091 b

092 c

093 a

094 b

095 a

096 c

097 b

098 b

099 d

(********** END OF EXAMINATION **********)

S R O E x a m P W R R e a c t o r

O r g a n i z e d b y Q u e s t i o n N u m b e r

QUESTION	VALUE	REFERENCE
001	1.00	9000001
002	1.00	9000002
003	1.00	9000003
004	1.00	9000004
005	1.00	9000005
006	1.00	9000006
007	1.00	9000007
008	1.00	9000008
009	1.00	9000009
010	1.00	9000010
011	1.00	9000011
012	1.00	9000012
013	1.00	9000013
014	1.00	9000014
015	1.00	9000015
016	1.00	9000016
017	1.00	9000017
018	1.00	9000018
019	1.00	9000019
020	1.00	9000020
021	1.00	9000021
022	1.00	9000022
023	1.00	9000023
024	1.00	9000024
025	1.00	9000025
026	2.00	9000026
027	1.00	9000027
028	1.00	9000028
029	1.00	9000029
030	1.00	9000030
031	1.00	9000031
032	1.00	9000032
033	1.00	9000033
034	1.00	9000034
035	1.00	9000035
036	1.00	9000036
037	1.00	9000037
038	1.00	9000038
039	1.00	9000039
040	1.00	9000040
041	1.00	9000041
042	1.00	9000042
043	1.00	9000043
044	1.00	9000044
045	1.00	9000045
046	1.00	9000046
047	1.00	9000047
048	1.00	9000048
049	1.00	9000049

S R O E x a m P W R R e a c t o r

O r g a n i z e d b y Q u e s t i o n N u m b e r

QUESTION	VALUE	REFERENCE
050	1.00	9000050
051	1.00	9000051
052	1.00	9000052
053	1.00	9000053
054	1.00	9000054
055	1.00	9000055
056	1.00	9000056
057	1.00	9000057
058	1.00	9000058
059	1.00	9000059
060	1.00	9000060
061	1.00	9000061
062	1.00	9000062
063	1.00	9000063
064	1.00	9000064
065	1.00	9000065
066	1.00	9000066
067	1.00	9000067
068	1.00	9000068
069	1.00	9000069
070	1.00	9000070
071	1.00	9000071
072	1.00	9000072
073	1.00	9000073
074	1.00	9000074
075	1.00	9000075
076	1.00	9000076
077	1.00	9000077
078	1.00	9000078
079	1.00	9000079
080	1.00	9000080
081	1.00	9000081
082	1.00	9000082
083	1.00	9000083
084	1.00	9000084
085	1.00	9000085
086	1.00	9000086
087	1.00	9000087
088	1.00	9000088
089	1.00	9000089
090	1.00	9000090
091	1.00	9000091
092	1.00	9000092
093	1.00	9000093
094	1.00	9000094
095	1.00	9000095
096	1.00	9000096
097	1.00	9000097
098	1.00	9000098

S R O E x a m P W R R e a c t o r

O r g a n i z e d b y Q u e s t i o n N u m b e r

QUESTION	VALUE	REFERENCE
099	1.00	9000099
	100.00	
	100.00	

S R O E x a m P W R R e a c t o r

O r g a n i z e d b y K A G r o u p

PLANT WIDE GENERICS

QUESTION	VALUE	KA
012	1.00	194001A101
002	1.00	194001A103
001	1.00	194001A106
015	1.00	194001A109
010	1.00	194001A111
011	1.00	194001A112
014	1.00	194001A113
006	1.00	194001A116
008	1.00	194001A116
005	1.00	194001A116
007	1.00	194001A116
013	1.00	194001K102
003	1.00	194001K103
004	1.00	194001K103
009	1.00	194001K105
017	1.00	194001K107
016	1.00	194001K116

PWG Total	17.00	

PLANT SYSTEMS

Group I

QUESTION	VALUE	KA
018	1.00	001000K103
019	1.00	001000K407
021	1.00	003000K103
020	1.00	003000K501
022	1.00	004000K202
023	1.00	004010A205
024	1.00	013000A403
025	1.00	013000K104
026	2.00	014000A402
028	1.00	015000A107
027	1.00	015000A303
029	1.00	017000G008
030	1.00	022000G005
031	1.00	026020A102
032	1.00	059000A211
033	1.00	061000G006
034	1.00	061000K201
035	1.00	063000K302

PS-I Total	19.00	

S R O E x a m P W R R e a c t o r

O r g a n i z e d b y K A G r o u p

PLANT SYSTEMS

Group II

QUESTION	VALUE	KA
037	1.00	002000A104
036	1.00	002000K410
039	1.00	006000K201
038	1.00	006000K506
040	1.00	010000A403
041	1.00	010000K603
042	1.00	011000A205
045	1.00	012000A101
044	1.00	012000A403
043	1.00	012000K402
046	1.00	016000K102
047	1.00	027000K101
048	1.00	028000K502
049	1.00	029000G006
050	1.00	062000K301
051	1.00	064000A301
052	1.00	086000G005

PS-II Total	17.00	

Group III

QUESTION	VALUE	KA
053	1.00	008000K102
054	1.00	041020A408
055	1.00	045000K412
056	1.00	078000K105

PS-III Total	4.00	

PS Total	40.00	

EMERGENCY PLANT EVOLUTIONS

Group I

QUESTION	VALUE	KA
057	1.00	000003A105
058	1.00	000005K303
059	1.00	000011A213
060	1.00	000011K313

S R O E x a m P W R R e a c t o r

O r g a n i z e d b y K A G r o u p

EMERGENCY PLANT EVOLUTIONS

Group I

QUESTION	VALUE	KA
061	1.00	000011K314
062	1.00	000015A122
063	1.00	000015A208
064	1.00	000024A104
065	1.00	000026K302
067	1.00	000029K310
066	1.00	000029K312
068	1.00	000040K101
069	1.00	000040K107
070	1.00	000051A202
072	1.00	000055A204
071	1.00	000055K302
073	1.00	000057G011
074	1.00	000059A202
075	1.00	000059G003
076	1.00	000067A204
077	1.00	000069K201
078	1.00	000069K301
079	1.00	000074A101
080	1.00	000076G007

EPE-I Total	24.00	

Group II

QUESTION	VALUE	KA
082	1.00	000007A204
081	1.00	000007G010
084	1.00	000009A234
085	1.00	000009G012
083	1.00	000009K317
086	1.00	000022A202
088	1.00	000025A207
087	1.00	000025K101
090	1.00	000027A203
091	1.00	000037G003
093	1.00	000038A101
092	1.00	000038K103
094	1.00	000054K304
095	1.00	000058A203
096	1.00	000061A201
089	1.00	000065K303

EPE-II Total	16.00	

S R O E x a m P W R R e a c t o r

O r g a n i z e d b y K A G r o u p

EMERGENCY PLANT EVOLUTIONS

Group III

QUESTION	VALUE	KA
097	1.00	000028K101
098	1.00	000036K202
099	1.00	000056A251
EPE-III Total	3.00	
EPE Total	43.00	
Test Total	100.00	

ENCLOSURE 3

SIMULATOR FIDELITY REPORT

Facility Licensee: Florida Power and Light Company

Facility Docket Nos.: 50-335 and 50-389

Operating Tests Administered On: May 20-30, 1991

This form is to be used only to report observations. These observations do not constitute audit or inspection findings and are not, without further verification and review, indicative of non-compliance 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 in response to these observations.

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

DESCRIPTION

The SPDS ECCS flow indication cannot be easily read on the monitor. The SPDS uses a color monitor and the blue color used to display total ECCS flow blends in with the background.

The SPDS indicates superheat when none exists.