

ENCLOSURE

MEETING SUMMARY

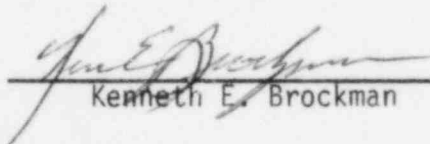
Licensee: Georgia Power Company
Facility: Hatch Nuclear Plant, Units 1 and 2
Docket Nos. 50-321 and 50-366
SUBJECT: HATCH REQUALIFICATION EXAMINATIONS

On April 23, 1985, representatives of Georgia Power Company (GPC) met with NRC Region II personnel in Atlanta, Georgia, to discuss the requalification examination conducted at Plant Hatch during the week of March 11, 1985 (OL-50-321/85-01). The meeting was held at the request of Georgia Power Company. The attendance list is attached as Attachment A to this summary.

After opening remarks by Mr. J. Badgett, Mr. C. T. Moore presented Georgia Power's analysis of selected examination items. This analysis was limited to Section VIII of the Senior Operator written exam (Administrative Procedures, Conditions, and Limitations). It was the opinion of GPC that this section was the most substantive for displaying items whose impact was significant. The specific methodology by which the evaluation was made, the deduced implications on the accelerated requalification training program, and the resultant concerns with specific questions (to include corrective recommendations) constituted the GPC presentation. The briefing vu-graphs are enclosed as Attachment B and provide a more detailed description of the presentation.

Attachment C is a by-item response to the concerns and recommendations presented by Georgia Power. No modifications to the March 1985, requalification exam will be made. The concerns expressed, however, will be factored into future test item construction as part of the Region's effort to improve examination quality. Additionally, Georgia Power's request for waiver of the operating tests scheduled for July, 1985, is under consideration.

Upon completion of the GPC presentation, Commission representatives reaffirmed the Commission commitment to assist Plant Hatch in ensuring that their operating personnel are both trained and qualified. Final accelerated requalification program evaluation was confirmed for July 1985.


Kenneth E. Brockman

5/3/85
Date

- Attachments:
A. Attendance List
B. Presentation Vu-Graphs
C. Specific Item Responses

ATTACHMENT A

ATTENDANCE LIST

Georgia Power Company

J. J. Badgett, Corporate Nuclear Training Manager
C. T. Moore, Manager of Training - Plant Hatch
H. Nix, General Manager - Plant Hatch

General Electric Company

D. Janecek, Manager, Nuclear Training Services

General Physics

W. E. Burns, Nuclear Engineer & Evaluation Manager

Nuclear Regulatory Commission - Region II

P. R. Bemis, Director, Division of Reactor Safety
K. E. Brockman, Reactor Engineer
V. L. Brownlee, Chief, Projects Branch 2
A. F. Gibson, Chief, Operations Branch
J. Munro, Reactor Engineer
B. A. Wilson, Chief, Operator Licensing Section

ATTACHMENT B

MARCH 1985

NRC EXAM ANALYSIS

**TRAINING DEPARTMENT
PLANT HATCH**

AGENDA

- OVERVIEW
- EVALUATION
- TRAINING PROGRAM
STRENGTHS AND
WEAKNESSES
- CONCERNS WITH NRC EXAM
- RECOMMENDATIONS

● OVERVIEW

- DUE TO RESULTS OF SRO EXAM, SECTION 8 WAS ANALYZED
- QUANTITATIVE ASSESSMENT PERFORMED TO IDENTIFY QUESTIONS WITH LOW SCORES
- QUALITATIVE ASSESSMENT PERFORMED INDEPENDENT OF QUANTITATIVE ASSESSMENT
- QUANTITATIVE AND QUALITATIVE ASSESSMENTS THEN COMPARED TO IDENTIFY:
 - AREAS OF NEEDED TRAINING IMPROVEMENTS
 - CONCERNS WITH EXAM
- GE AND GP UTILIZED

— EXAM LENGTH — 4 HOURS

- EXTENDED 25 MINUTES BY NRC
- NRC DOES NOT TIME VALIDATE EXAMS
- STRESS ON OPERATORS BY TIME LIMIT
FOR NON-TIME VALIDATED EXAM CAN
AFFECT RESULTS

● EVALUATION

SPECIFIC QUESTIONS (AVERAGE $\leq 50\%$)
— 6 QUESTIONS IDENTIFIED —

QUESTION <u>NO.</u>	<u>AVERAGE</u>	<u>COMMENTS</u>
8.04	42%	<ul style="list-style-type: none">-ROTE MEMORIZATION OF T/S-NOT OPERATIONALLY ORIENTED-NO NEED TO KNOW (CAN LOOK IT UP)-NOT SUPPORTED BY OBJECTIVES
8.06a	33%	<ul style="list-style-type: none">-NUMBER OF RESPONSES NOT SPECIFIED-NOT CLEAR-NO REFERENCE MATERIAL PROVIDED

EVALUATION Continued...

QUESTION <u>NO.</u>	<u>AVERAGE</u>	<u>COMMENTS</u>
8.08	33%	<ul style="list-style-type: none">-ROTE MEMORIZATION OF MTN-01-NOT SUPPORTED BY OBJECTIVES-NOT OPERATIONALLY ORIENTED-UNCLEAR
8.11	50%	<ul style="list-style-type: none">-ROTE MEMORIZATION OF MNT-01-PICK OUT PHRASE THAT ISN'T IN MNT-01-ONLY 1 WORD WRONG IN CORRECT CHOICE-TESTED WHO MWO RETURNED TO-UNCLEAR-NOT SUPPORTED BY OBJECTIVES

EVALUATION Continued ...

<u>QUESTION NO.</u>	<u>AVERAGE</u>	<u>COMMENTS</u>
8.13	33%	-FAIR QUESTION
8.16	50%	-FAIR QUESTION

— AVERAGES

- SRO EXAM 80.9%
- SECTION 8 66.8%

<u>SECTION 8 RANGE OF SCORES</u>	<u>SCORES</u>
> 80%	1
70-80%	2
< 70%	3

EVALUATION Continued ...

QUESTION <u>NO.</u>	<u>AVERAGE</u>	<u>COMMENTS</u>
8.13	33%	-FAIR QUESTION
8.16	50%	-FAIR QUESTION

- AVERAGES

- SRO EXAM 80.9%
- SECTION 8 66.8%

<u>SECTION 8 RANGE OF SCORES</u>	<u>SCORES</u>
> 80%	1
70-80%	2
< 70%	3

— EVALUATION OF ALL SECTION 8 QUESTIONS

37.5%	SUPPORTED BY GPC LEARNING OBJECTIVES
75%	OBJECTIVE (25%SUBJECTIVE)
60%	MEMORY (40% COMPREHENSION)
62.5%	OPERATIONALLY ORIENTED
15%	INCOMPLETE (DID NOT HAVE EVERY THING STUDENT NEEDED)
47.5%	LACKED CLARITY
17.5%	T.S. DEFINITIONS

● TRAINING PROGRAM STRENGTHS AND WEAKNESSES

– STRENGTHS

- 100% RO WRITTEN EXAM PASS RATE
- 100% RO AND SRO SIMULATOR EXAM PASS RATE
- 100% RO AND SRO ORAL EXAM PASS RATE

– WEAKNESSES

- NEED ADDITIONAL EMPHASIS ON HNP-514 (LOCKED VALVES)
- NEED ADDITIONAL PRACTICE AND FAMILIARITY WITH OPERABILITY IN MODES 4/5

● CONCERNS WITH NRC EXAM

- QUESTIONS 8.04, 8.06a, 8.08, and 8.11 HAD 3 IDENTIFIED WEAKNESSES EACH

- AVERAGE SCORE OF 4 QUESTIONS

38.4%

- ABILITY TO ANSWER THESE DOES NOT REFLECT ABILITY TO HOLD SRO LICENSE

- 3/4 NOT SUPPORTED BY OBJECTIVES

- 1 QUESTION WAS SUPPORTED BUT SOMEWHAT OPEN-ENDED AND LACKED CLARITY

● RECOMMENDATIONS

- NRC DELETE QUESTIONS
8.04, 8.06a, 8.08 AND 8.11
FROM GRADING
- WAIVER JULY ORAL AND
SIMULATOR EXAMS BASED
ON NOVEMBER '83 AND
MARCH '84 PERFORMANCES

Question	Value/	DAL	OCV	YLB	BLD	CIJ	BDM	BOZ	BYE	%
8.01	1	1	1	1	1	1	1	.80	1	100.00%
8.02	1	1	1	1	1	1	1	.80	1	100.00%
8.03	.50	.50	.50	.50	.50	.50	.50	.40	.50	100.00%
8.04a	.25	.25	0	0	0	0	0	.20	.04	16.67%
8.04b	.25	0	0	.25	.25	0	.25	.20	.13	50.00%
8.04c	.25	.25	0	.25	.25	0	.25	.20	.17	66.67%
8.04d	.25	.25	0	0	0	.25	0	.20	.08	33.33%
8.05	1.50	.50	1.50	1.50	1.50	1.50	1	1.20	1.25	83.33%
8.06a	2	1.17	0	.67	.67	.33	1.16	1.60	.67	33.33%
8.06b	1	1	1	.90	1	1	1	.80	.98	98.33%
8.07	1	0	1	1	1	0	1	.80	.67	66.67%
8.08	1	0	0	0	1	1	0	.80	.33	33.33%
8.09a	.50	.50	.50	.50	.50	.50	0	.40	.42	83.33%
8.09b	.50	0	.50	.50	.50	.50	.50	.40	.42	83.33%
8.09c	.50	.50	.50	.50	.50	.50	.50	.40	.50	100.00%
8.09d	.50	.50	.50	.50	.50	0	.50	.40	.42	83.33%
8.10	1	0	1	1	1	1	1	.80	.83	83.33%
8.11	1	0	0	1	1	0	1	.80	.50	50.00%
8.12	1	1	1	0	1	0	1	.80	.67	66.67%
8.13	1	0	1	1	0	0	0	.80	.33	33.33%
8.14	1	0	0	1	1	1	1	.80	.67	66.67%
8.15a	1	1	0	1	1	1	0	.80	.67	66.67%
8.15b	1	0	0	.75	1	1	1	.80	.63	62.50%
8.16	1	1	1	0	0	0	1	.80	.50	50.00%
Sub	20	10.42	12	14.82	16.17	12.08	14.66	16	13.36	66.79%
%		52.10%	60.00%	74.10%	80.85%	60.40%	73.30%		66.79%	
Pt Total	79	55.97	63.75	63.22	70.07	63.23	67.06	63.20	63.88	80.86%
%		70.85%	80.70%	80.03%	88.70%	80.04%	84.89%		80.86%	

NRC EXAM ANALYSIS - SECTION 8

(All Questions Included)

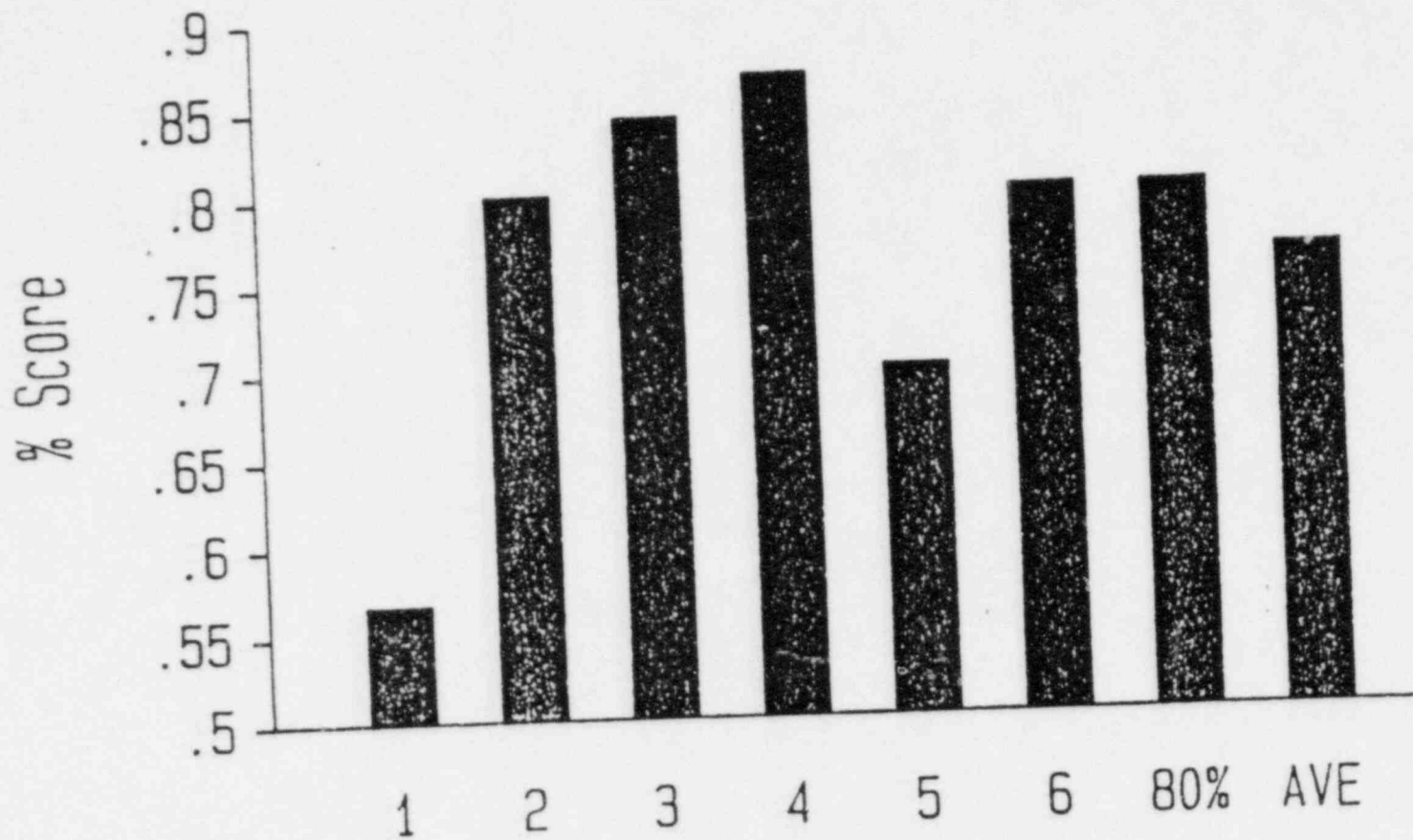
Question	Value/	DAL	OCV	ILB	BLD	CIJ	RDM	BOZ	AVE	%
8.01	1	1	1	1	1	1	1	.80	1	100.00%
8.02	1	1	1	1	1	1	1	.80	1	100.00%
8.03	.50	.50	.50	.50	.50	.50	.50	.40	.50	100.00%
8.05	1.50	.50	1.50	1.50	1.50	1.50	1	1.20	1.25	83.33%
8.06b	1	1	1	.90	1	1	1	.80	.98	98.33%
8.07	1	0	1	1	1	0	1	.80	.67	66.67%
8.09a	.50	.50	.50	.50	.50	.50	0	.40	.42	83.33%
8.09b	.50	0	.50	.50	.50	.50	.50	.40	.42	83.33%
8.09c	.50	.50	.50	.50	.50	.50	.50	.40	.50	100.00%
8.09d	.50	.50	.50	.50	.50	0	.50	.40	.42	83.33%
8.10	1	0	1	1	1	1	1	.80	.83	83.33%
8.12	1	1	1	0	1	0	1	.80	.67	66.67%
8.13	1	0	1	1	0	0	0	.80	.33	33.33%
8.14	1	0	0	1	1	1	1	.80	.67	66.67%
8.15a	1	1	0	1	1	1	0	.80	.67	66.67%
8.15b	1	0	0	.75	1	1	1	.80	.63	62.50%
8.16	1	1	1	0	0	0	1	.80	.50	50.00%
Sub 8	15	8.50	12	12.65	13	10.50	12	12	11.44	76.28%
%		56.67%	80.00%	84.33%	86.67%	70.00%	80.00%	80.00%	76.28%	
Pt Total	74	54.05	63.75	61.05	66.90	61.65	64.40	59.20	61.97	83.74%
%		73.04%	86.15%	82.50%	90.41%	83.31%	87.03%	80.00%	83.74%	

NRC EXAM ANALYSIS - SECTION 8

(8.4, 8.6a, 8.8, 8.11 Removed)

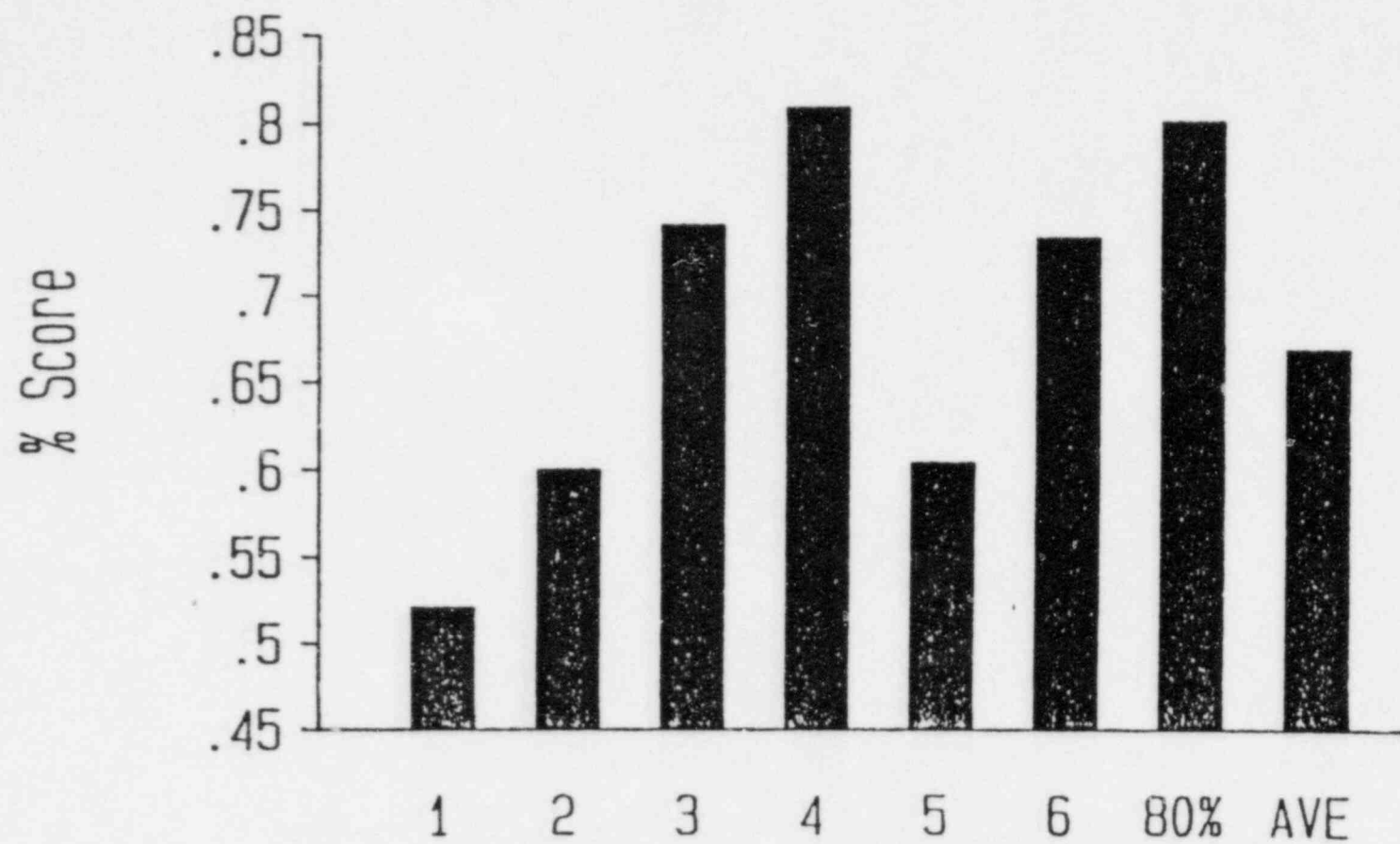
S8-4, 6a, 8, 11

1
%



SRO 8

█
%



8. ADMINISTRATIVE PROCEDURES, CONDITIONS, AND LIMITATIONS

PAGE

QUESTION 8.03 (.50)

STATE who can declare the unit/plant to be in an emergency condition (classification).

NOTE: Identify by Position Title and any special required qualifications.

QUESTION 8.04 (1.00)

Unit 2 Technical Specifications specify the frequency intervals for the performance of Surveillance requirements. This is accomplished by use of FREQUENCY NOTATION.

COMPLETE the following Table. (DO NOT INCLUDE GRACE PERIODS)

	NOTATION	FREQUENCY
a)	S	At least once per ----- hours.
b)	Q	At least once per ----- days.
c)	M	At least once per ----- days.
d)	---	At least once per 18 months.

QUESTION 8.05 (1.50)

Unit 2 Technical Specifications define SHUTDOWN MARGIN as...

Shutdown Margin shall be the amount of reactivity by which the reactor is subcritical, or would be subcritical from its present condition, assuming...

LIST the three conditions which complete the definition of SHUTDOWN MARGIN.

8. ADMINISTRATIVE PROCEDURES, CONDITIONS, AND LIMITATIONS

PAGE :

QUESTION 8.06 (3.00)

a. The following data was taken on Unit 2 during a single day of operation at Operational Condition 1:

		Identified Leakage	Unidentified Leakage
Shift 1:	0400	5020 gal	604 gal
	0800	4940 gal	1020 gal
Shift 2:	1200	5040 gal	900 gal
	1600	5340 gal	1032 gal
Shift 3:	2000	5840 gal	1100 gal
	2400	4640 gal	1248 gal

Indicate any TS (or other) limit(s) that was(were) exceeded. Justify your answer(s).

(2.0)

b) What is the definition of "Pressure Boundary Leakage?"

(1.0)

QUESTION 8.07 (1.00)

Temporary changes to operating procedures should be minimized. Under which one of the following conditions is a temporary change permitted and warranted, as the proper corrective action?

- The addition of a CAUTION is necessary to prevent possible equipment damage.
- A correction is required to a valve/electrical lineup.
- The plant physical conditions assumed by a procedure are incorrect and prevent its completion as written.
- A procedural step is determined to be unnecessary and should be deleted.

8. ADMINISTRATIVE PROCEDURES, CONDITIONS, AND LIMITATIONS

PAGE

QUESTION 8.08 (1.00)

Per Administrative Procedure MNT-01-0, 'Maintenance Program',
EMERGENCY MAINTENANCE ...(CHOOSE ONE)

- a. ... is maintenance that must be performed to maintain safe operating conditions, as determined by the Operations Supervisor On Shift.
- b. ... may be performed without issuance, or approval, of a Maintenance Work Order (MWO), or procedure.
- c. ... must be approved by the General Manager or Deputy General Manager -AND- the OSOS or SS on duty.
- d. ... may be worked on a 24 hour/day, 7 day/week schedule, upon the specific approval of the General Manager.

QUESTION 8.09 (2.00)

Answer the following TRUE or FALSE questions with regard to the control of Lifted Wires and Temporary Jumpers (HNF-504 and HNF-9).

- a. A lifted wire or jumper that is required by Tech Specs, such as placing an inoperable channel in the tripped condition, does NOT require PRB approval. (0.5)
- b. When lifting wires or installing jumpers not requiring a 'J and LW' sheet, 'J and LW' tags must still be placed on the jumpers and/or lifted wires. (0.5)
- c. The final approval to activate a 'J and LW' clearance sheet on a safety system that is required to be operable by Tech Specs is provided by two members of the plant staff, one of whom must be a licensed SRD. (0.5)
- d. For surveillance procedures requiring the use of temporary jumpers, independent verification is ONLY required on system restoration and NOT on initial installation. (0.5)

QUESTION 8.10 (1.00)

HNF-501, "Equipment Clearance and Tagging", provides instructions for the proper method of requesting and issuing clearances and hold tags. Which of the following accurately describes the clearance process?

- a. When a maintenance project will require a clearance for more than one shift, the Shift Supervisor can release the sub-clearance to the "Maintenance Foreman"; by name release is not required in this case.
- b. Any clearance which requires the normal electrical lineup of the plant to be modified, will be issued by the Shift Supervisor in the form of written Switching Orders, per HNF-X-1646.
- c. If a new MWO has identical isolation boundaries to a previously released MWO/Clearance, the new MWO may be added to the clearance.
- d. When restoring a safety-related component to service, if NOT covered by procedure or surveillance requirement, INDEPENDENT VERIFICATION of the release is REQUIRED.

QUESTION 8.11 (1.00)

Procedure MNT 01-0, "Maintenance Program", designates certain responsibilities for the Shift Supervisor in returning components/ systems to service after maintenance activities. Which of the following is NOT one of these responsibilities?

- a. The Shift Supervisor will EVALUATE the inspections and tests performed to determine if the system or component may be returned to service.
- b. The Shift Supervisor will PLACE the system or component in operation and DOCUMENT its operational status by signing the MWO.
- c. The Shift Supervisor will attach a copy of any LCO report generated as a result of the work activity to the MWO package, once the MWO is closed out.
- d. If the operational test(s) are UNSATISFACTORY, the Shift Supervisor will return the MWO, with amplifying remarks, to the Maintenance Foreman in charge of the work activity, to allow for further corrective maintenance to be performed.

ATTACHMENT C

SPECIFIC ITEM RESPONSES

Utility Comment: The examination was limited to a four-hour time period. Mitigating factors were:

- Time was extended 25 minutes by the NRC
- NRC does not time validate exams
- Stress on operators by time limit for non-time validated exam can affect results

NRC Resolution: The examination was limited to a four-hour time period. This was based upon the guidance presented in NUREG 1021, ES-601, "... the length of the examination should be about 60% of that for a standard licensing examination." This coincided with the exam scope being 80 points, as compared to the 120 point/6-hour time limit for the replacement exam which was given concurrently. The 25 minute extension was for dissemination of clarifying information. The stress that is imposed upon operators by a time limit is acknowledged. As a by-product of Three Mile Island, the examination format was redesigned to intentionally add time consideration. This guidance from the Commission will be maintained until the requirement is changed.

Utility Comment: Concerning Question 8.04

- Required Rote Memorization of T/S
- Not Operationally Oriented
- No Need to Know
- Not Supported by Objectives

NRC Resolution: While knowing the definition of surveillance frequencies does not directly impact reactor safety, it is an item which the operator deals with everyday. At Plant Hatch the surveillance program is directed via a computerized system; however, it remains the SRO's responsibility to ensure that reference information provided to him does not cause him to violate T/S. The SRO should be familiar with whether a shiftily surveillance is required every 8, 12, or 24 hours as an example. It is agreed that the topic was not specifically addressed by GPC learning objectives; but, it is an item of daily contact for the operational staff and should have posed no problem.

Utility Comment: Concerning Question 8.06(a)

- Number of responses required was not specified
- Data was not clear
- No reference material was provided

NRC Resolution: NUREG 1021 indicates that a question should be specific in letting an examinee know the depth of answer elicited. For example, if 10 automatic actions occur for a given condition, he should be told if only 5 are required to receive full credit. In this case, all violations of leakage limits were being asked for. This required the candidate to know how many limits there are and then, to evaluate against them. The question asked him to list

"every" limit violated. This was explicit. The data provided the candidates was potentially confusing -- this was corrected by proctor clarification to all examinees and will be made more straight-forward and recognizable for any future applications. Reference material was specifically not provided as this question investigated whether the candidate knew the plant's leakage LCOs. This intention was further supported since the facility had recently experienced an event wherein a violation of the leakage limits was done improperly. Finally, the unit is under Commission Order, causing extra conservatism on leakage limit applications, and this information is not readily available via the T/S.

Utility Comment: Concerning Question 8.08

- Required rote memorization of MTN-01
- Not supported by objectives
- Not operationally oriented
- Unclear

NRC Resolution: The objective of this question was to identify whether the candidate was familiar with his responsibilities and allowed actions, as applies to Emergency Maintenance. MTN-01 is a recently released procedure. It established new administrative procedures and formats for maintenance activities and, in general, revamped the conduct of maintenance activities at the plant. The Senior Operator should be "familiar" with this new system. Major changes in plant operations is one of the key goals of requalification training; it is considered that this question was both relevant and oriented to the operating environment.

Utility Comment: Concerning Questions 8.11:

- Required rote Memorization of MTN-01
- Pick out phrase that isn't in MTN-01
- Only one word wrong in correct choice
- Tested who MWO returned to
- Unclear
- Not supported by objectives

NRC Resolution: As with Question 8.08 the staff considers this topic to be important. The question did not require memorization, but instead required the operator to "recognize" which activity he did not have the authority to allow. It did not test who an MWO was returned to, but whether the Shift Supervisor had the authority to re-release an MWO after failing an OPTEST. The responsibilities and authorities of the Shift Supervisor in administering the maintenance program are considered to be both valid and important concepts.

Utility Recommendation: Delete Questions 8.04, 8.06(a), 8.08, and 8.11 from grading.

NRC Resolution: Recommendation denied. The Commission, as specifically described above, considers all questions to be relevant and "human factors-wise" acceptable. The level of knowledge elicited is considered proper for the Senior Operator. Suggestions for improving these questions for future use will be incorporated by the Operator Licensing Staff.

Utility Recommendation: Waive July oral and simulator exams based on November 1984, and March 1985, performance.

NRC Resolution: Recommendation under consideration. While the performance of GPC personnel on the oral and simulator exams has been above 90%, the sample has been biased toward those operators who daily run the plant. Evaluation must be made to identify the applicability of extrapolating these results for all licensed personnel. Resolution will be made no later than June 15, 1985.