

ATTACHMENT 3



PEACH BOTTOM—THE POWER OF EXCELLENCE

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM ATOMIC POWER STATION

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Delta, Pennsylvania 17314

(717) 456-7014

D. B. Miller, Jr.
Vice President

March 22, 1993

Mr. Lee H. Bettenhausen, Chief
Operations Branch
U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

SUBJECT: Final Regualification Program Evaluation Report

Dear Mr. Bettenhausen:

This report provides the facility evaluation of the Licensed Operator Regualification Examinations administered by the NRC to eight (8) licensees at Peach Bottom Atomic Power Station (PBAPS) from March 9 - 12, 1993.

The number of Licensed Operators examined by the NRC this year, combined with the licensees examined in 1992, was sufficient to perform a program evaluation using the criteria set forth in the Operator Licensing Examiner Standards (NUREG-1021) Section ES-601. Post examination review indicators and results from Philadelphia Electric Company examinations administered during the periods of March 9 - 12, 1992 and March 9 - 12, 1993 have shown the Licensed Operator Regualification Program to be SATISFACTORY with no generic weaknesses.

The following attachments detail various aspects of the examinations administered between March 9 - 12, 1993.

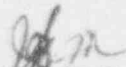
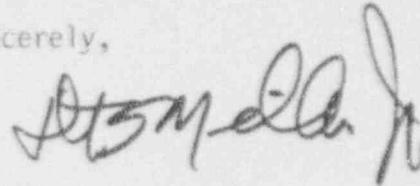
- 1) PBAPS Regualification Exam Results Summary
- 2) PBAPS Identified Strengths and Areas for Improvement

Included with this report are completed Regualification Examination Feedback Forms requested in accordance with NUREG 1021, ES-601.

To: Mr. Lee H. Bettenhausen, Chief
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If you should have any questions, please contact Mr. Dennis McClellan,
Manager, Operations Training at (717) 456-3204.

Sincerely,


DBM/DJS/DWM/KPP:clg

Attachments (2)

cc: R. A. Burricelli, Public Service Electric & Gas
W. P. Dornsife, Commonwealth of Pennsylvania
J. J. Lyash, Senior Resident Inspector, US NRC
T. T. Martin, Administrator, Region 1, US NRC
R. I. McLean, State of Maryland
H. C. Schwemm, Atlantic Electric
C. D. Schaefer, Delmarva Power

PEACH BOTTOM ATOMIC POWER STATION REQUALIFICATION EXAM RESULTS SUMMARY

REQUALIFICATION CYCLE: 92-06 (NRC)

OVERALL RESULTS	TOTAL NO.	PASSED NO: / %	FAILED NO: / %
REACTOR OPERATOR	4	4/100	0/0
SENIOR REACTOR OPERATOR	4	4/100	0/0
TOTAL OPERATOR RESULTS	8	8/100	0/0
OPERATING CREWS	2	2/100	0/0

DOCKET NO.	WRITTEN SCORE %			SAT JPM PERFORMANCE ___ OF ___	SAT JPM QUESTIONS ___ OF ___	OVERALL JPM GRADE %	RESULTS (P/F)		
	A	B	TOTAL				WRITTEN	JPM	SIM
61211	N/A %	N/A %	N/A %	N/A OF N/A	N/A OF N/A	N/A %	N/A	N/A	P
60915	83.33%	86.95%	85.71%	5 OF 5	NA/ OF N/A	100 %	P	P	P
60361	100 %	91.30%	94.28%	5 OF 5	N/A OF N/A	100 %	P	P	P
9525	75.00%	82.60%	80.00%	4 OF 5	N/A OF N/A	80 %	P	P	P
61087	N/A %	N/A %	N/A %	N/A OF N/A	N/A OF N/A	N/A %	N/A	N/A	P
61314	91.66%	82.60%	85.71%	5 OF 5	N/A OF N/A	100 %	P	P	P
61321	100 %	100 %	100 %	5 OF 5	N/A OF N/A	100 %	P	P	P
61500	91.66%	91.30%	91.42%	5 OF 5	N/A OF N/A	100 %	P	P	P
	%	%	%	OF	OF	%			
	%	%	%	OF	OF	%			
	%	%	%	OF	OF	%			
	%	%	%	OF	OF	%			
	%	%	%	OF	OF	%			
	%	%	%	OF	OF	%			

PBAPS IDENTIFIED STRENGTHS AND AREAS FOR IMPROVEMENT

The following strengths and areas for improvement were determined from a systematic analysis of the examination results. Actions to address the areas for improvement will be taken in accordance with established facility processes.

I. DYNAMIC SIMULATOR EVALUATIONS

- A. Procedure use and compliance in general was noted as a strength with the following items specifically addressed:

1. Strengths

- a. Emergency Response procedures were promptly and accurately carried out.
- b. Technical Specification limiting conditions for Operations were promptly and accurately determined.

2. Areas for Improvement

- a. Alarm Response card use, though very good, must include a review of all key alarms.
- b. Operational Transient and Off Normal procedures should be implemented during Transient Response procedure use.
- c. Securing of ECCS stayfull systems during the performance of T-240 should not delay plant emergency depressurization.
- d. Alternate means of negative reactivity insertion should be pursued while establishing minimum alternate flooding pressure. e.g., driving individual rods using T-220.

- B. Command and Control in general was noted as a strength with the following items specifically addressed:

1. Strengths

- a. Supervisory directives were conservative and allowed safe and integrated crew performance.
- b. Most actions were taken to provide early remediation of plant problems.

2. Areas for Improvement

- a. Supervisory directives must provide clear goals and objectives. e.g., post ATWS establishment of adequate core cooling.

- b. Personnel task assignments should allow for full attention to important tasks e.g., terminating and preventing injection and establishing minimum alternate flooding pressure.
 - c. Shift Manager's maintenance of an oversight role was very good while providing a proper mix of ERP duties and TRIP procedure review.
- C. Teamwork and Communications in general were noted as strengths with the following items specifically addressed:

1. Strengths

- a. Crew briefs were effective in establishing early action plans, goals and objectives.
- b. Shift Manager and Shift Technical Advisor oversight and SSV assistance roles were valuable assets used for team success.
- c. Outside support was promptly obtained as well as outside personnel promptly informed of plant conditions.

2. Areas for Improvement

Individual communication should include consistent acknowledgement of receipt.

- D. Control Board Operations were noted as satisfactory with the following areas specifically addressed:

Areas for Improvement

- 1. Chief Operator initial scram actions must ensure prompt verification of PCIS isolations to prevent any delay in recognition of failures.
- 2. Electrical loss diagnosis must be complete to prevent attempting to close in on a bus which has a fault.
- 3. When directed to perform a normal depressurization assertive action is required to ensure it is initiated promptly.
- 4. Reactor automatic scram should not be relied on during a loss of feedwater, rather a manual scram should be initiated.
- 5. Ensure RHR injection lineups are secured prior to initiation of Containment Spray lineups.

II. WRITTEN EXAMINATION

An analysis of written exam results showed the following areas for improvement based on repetitive incorrect responses to the following questions.

- A. Question #281 - Ability to predict and/or monitor changes in Secondary Containment differential pressure associated with operating the Standby Gas Treatment System. (K/A: 261000A1.04)
- B. Question #390 - Further analysis has shown that difficulty was experience in determining proper Y-axis values on T-102 Curve T/T-1 from reduced sized reference. Knowledge of the operational implications of Heat Capacity as it applies to Low Suppression Pool Level was adequately displayed during post exam review session. (K/A: 295030EK1.03)
- C. Question #457 - Ability to determine if adequate scram margin exists during the performance of Turbine Control Valve Fast Closure Scram Functional Testing ST-O-60F-420. (K/A: 241000K1.11)
- D. Question #1048 - Knowledge of Technical Specification Limiting Conditions for Operations application as they apply to Control Room RPV level instrumentation inoperabilities. (K/A: 216000G.05)
- E. Question #1577 - Further analysis has shown that difficulty was experienced in determining an appropriate frame of time in which to answer this question. Knowledge of the effect that Reactor Water level will have on the High Pressure Coolant Injection System was adequately displayed during post exam review session. (K/A: 206000K6.12)
- F. Question #1586 - Knowledge of AC Electrical Distribution System design features and/or interlocks which allow or prevent 13 KV Auxiliary Bus breaker closure. (K/A: 262000K4.01)
- G. Question #1656 - Knowledge of when to start the application of Technical Specification Limiting Conditions for Operations as they apply to Control Room Alarm conditions associated with the Containment Atmosphere Dilution Liquid Nitrogen System. (K/A: 223001G.05)

III. JOB PERFORMANCE MEASURES (JPMs)

Overall, the performance of JPMs was very good. However, minor areas for improvement were noted during the performance of the following tasks:

A. JPM-053C - Containment Venting via the 18" Torus Vent (T-200D)

1. One licensee opened an additional D/W Rx Bldg Equipment Exhaust damper not required by the procedure.
2. Three licensees did not verify CTMT Vent Pressure on Table PC/P-3 of T-102, Primary Containment Control procedure.

B. JPM-055P - Maximize CRD System Flow to the Reactor Vessel (T-246).

1. One licensee did not verify oil level in the motor bearing sightglass.
2. One licensee allowed the CRD drive water filter vent valve to remain cracked open.

C. JPM-079C - Initiate Containment Sprays Using HPSW (T-205)

One licensee did not verify positions of MO-154B, MO-174, MO-176 and MO-186 after manipulations of these valves were performed.

D. JPM-081C - Utilize HPSW to Inject into the Torus (T-231)

One licensee started an RHR pump vice a HPSW pump after accomplishing the proper valve lineup.

E. JPM-099C - Containment Venting via the 2" Torus Vent (T-200A)

One licensee did not verify positions of AO-2513 and AO-2514 after manipulations of these valves were performed.

F. JPM-308CA - Startup HPCI in the CST to CST Mode (SO 23.1.B) (Alternate Path - High Oil Temperature)

1. One licensee did not verify power on to the HPCI vibration recorder.
2. One licensee did not adjust HPCI pump discharge pressure between 1100 psig and 1300 psig.
3. Four licensees did not announce the HPCI turbine/pump start prior to admitting steam to the turbine.