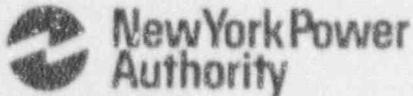


James A. FitzPatrick  
Nuclear Power Plant  
P.O. Box 41  
Lycoming, New York 13093  
315 342-3840



Harry P. Salmon, Jr.  
Resident Manager

June 3, 1992  
JAFF-92-0436

Mr. Thomas T. Martin  
Regional Administrator - Region I  
United States Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406

Dear Mr. Martin:

Attached is the James A. FitzPatrick Plant's evaluation of the results of the NRC observed licensed operator requalification examinations conducted during the weeks of May 10 and May 17, 1992. We have concluded that the program meets all of the criteria specified in NUREG 1201, ES-601, for a satisfactory program. Areas needing improvement have been noted and will be addressed as indicated in the report.

If you have questions regarding this report, please contact Fred Catella, Operations Training Supervisor, at (315) 349-6475.

I would like to take this opportunity to commend Paul Bonnett and the NRC examination team for the professional manner in which the recently concluded evaluations were conducted.

Very truly yours,

HARRY P. SALMON, JR.

HPS:FJC:nrb

Attachment

cc: R. Conte, USNRC  
P. Bonnett, USNRC  
R. Beedle  
M. Colomb  
R. Liseno  
RMS-JAF  
RMS-WPO

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NEW YORK POWER AUTHORITY  
JAMES A. FITZPATRICK NUCLEAR POWER PLANT  
LICENSED OPERATOR REQUALIFICATION PROGRAM EVALUATION  
MAY 11 - MAY 21, 1992

1. EXAMINEES

Thirteen operators (10 SRO/3 RO) took all portions of the examination. Four additional reactor operators participated in the simulator portion of the examination. Half of the JAF licensed personnel took part in the examination. The results of this examination provide a sound representation of the competency of the JAF licensed staff.

2. EXAMINATION RESULTS

	RO PASS/FAIL	SRO PASS/FAIL	TOTAL PASS/FAIL
WRITTEN	3/0	10/0	13/0
SIMULATOR	7*/0	10/0	17*/0
JPM	3/0	10/0	13/0
OVERALL	3/0	10/0	13/0

\* Includes 4 ROs who participated in the simulator exams only

3. PROGRAM EVALUATION RESULTS

Overall rating: SATISFACTORY

An evaluation of the requalification program was performed based on the facility's examination results. The criteria for program evaluation as specified in ES-601 were used. The sample size (13) exceeded the minimum requirement of ES-601.

- a. Facility pass/fail decisions agreed with NRC decisions in all cases. This satisfies ES-601 criterion C.2.b(1)(a).
- b. All operators passed all portions of the examination. This satisfies ES-601 criterion C.2.b(1)(b).
- c. All crews passed the simulator portion of the examination. This satisfies ES-601 criterion C.2.b(1)(c).
- d. The program satisfied all of the secondary criteria listed in ES-601, section C.2.b(2).
- e. The short term and long term corrective actions committed to following the 1991 unsatisfactory program evaluation have been completed.

#### 4. SIMULATOR EVALUATION

All crews and individuals successfully completed this portion of the examination. All ISCTs were completed and the crew competencies were adequately demonstrated.

The following strengths and weaknesses were noted during the simulator portion of the operating examination based upon the crew competency checklists (ES-604-2).

##### a. STRENGTHS:

- (1) Consistent use of and adherence to procedures was noted.
- (2) Administrative tasks such as Emergency Plan classifications and Technical Specification determinations were effectively carried out. In some instances, the emergency plan classification was made at one level higher than expected, but the SROs provided a sound basis for their determination.
- (3) Operators demonstrated good familiarity with system controls and instrumentation and proficiency in system operation.
- (4) Recognition of and attendance to alarms and off-normal trends was timely and appropriate.

##### b. WEAKNESSES:

- (1) No generic weaknesses were noted in this portion of the examination. ES-604-2 was completed for each crew for each scenario. No competency areas received more than one rating of "i". None were in common nor were they repeated from one scenario to the next for any given crew.
- (2) Although communications were adequate and much improved from last year, the crews did not meet management's expectations in this area at all times. This area will continue to receive increased attention during routine simulator training and evaluation.
- (3) One SRO, although he passed, demonstrated the need for more training in ATWS situations involving the power/level control mitigation strategy. He will receive individual coaching in this area and be reevaluated by the facility prior to returning to licensed duties.

##### c. SIMULATOR PERFORMANCE:

During the conduct of a scenario involving an ATWS with a stuck open relief valve, the power/level control strategy was implemented by the crew. Reactor power and water level did not respond as expected. Although the crew operated within the bounds of the EOPs, level dropped at a rate which was beyond the control of the panel operator.

The scenario sequence was recreated by the exam team and was found to be highly dependent upon the timing of SLC initiation and initial power level. The exam team could not control level in this sequence either. Based on this, the scenario was invalidated. Another scenario was developed by the team and was substituted for the ATWS scenario.

The ATWS scenario was used subsequently with SLC initiated earlier and at a lower power level and the simulator responded in a satisfactory manner.

The problem has been documented and entered into the simulator deficiency tracking system (DR# 6421) and will be resolved by 12/31/92.

d. PROCEDURE ENHANCEMENT:

It was noted that the abnormal operating procedure for a stuck open relief valve (AOP-36) should provide more concise direction on initiating a manual scram if the valve cannot be expeditiously closed. This procedure will be revised accordingly by 7/15/92

5. JOB PERFORMANCE MEASURES EVALUATION

The following strengths and weaknesses were noted during the JPM portion of the operating examination.

a. STRENGTHS:

- (1) Familiarity with the location and operation of all system controls and instrumentation.
- (2) Consistent use of and adherence to procedures.

b. WEAKNESSES:

- (1) No generic weaknesses were noted in the performance portion of the JPM examination.
- (2) Four questions were answered incorrectly by three to four operators. The questions dealt with the effects of remote shutdown panel operation on EDG trips, RWR pump seal failure indications and SBGT system design. While not necessarily indicative of a generic weakness, these items will be reviewed in conjunction with the next scheduled training sessions on the related systems or procedures or as stand alone topics.

## 6. WRITTEN EXAMINATION RESULTS

The following strengths and weaknesses were noted during the written portion of the examination.

### a. STRENGTHS:

In general, operators performed very well on all portions of the written examination as evidenced by the scores. The best performance was in the "Limits and Controls" portion of the examination.

### b. WEAKNESSES:

Six questions were answered incorrectly by three to four operators. These questions will be discussed with operators during the review of the examinations. Based upon a review of the questions and the answers given by the operators, the following conclusions were reached:

- (1) Based on the information available to the operator, a second answer may be considered to be plausible for one question. This question will be deleted or revised prior to future use. Since pass/fail decisions will not be affected, no question deletion or regrading will be done for this examination.
- (2) Several SROs classified emergency events in two questions at one level higher than was indicated by the answer key. Based on the information available, these classifications can be justified. Since the classifications made by the operators are considered to be conservative in these instances, a generic weakness is not indicated. The questions will be deleted or revised such that they elicit only one answer.
- (3) Two questions dealt with determining applicable technical specification LCOs for control rod operability and MSIV operability. While some knowledge deficiency was demonstrated, a more conservative determination was made by the operators than was called for in the answer key.
- (4) In the sixth question, dealing with the status of the nitrogen supply to the containment, three operators selected an answer which was partially correct. The correct answer takes into account the fail position of an SOV on a loss of power that the operators overlooked.

While some ambiguity is suggested for several questions above, it is not indicative of a lack of quality control of the examination materials. ES-601 criterion C.2.b.(2)(e) is met since fewer than five percent of the questions may require revision.

## ATTACHMENT 4

### SIMULATION FACILITY REPORT

Facility Licensee: James A. FitzPatrick Nuclear Power Station

Facility Docket No: 50-333

Requalification Examinations Administered on: May 11 - 20, 1992

This form is used 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.

During an ATWS scenario with a stuck open Safety Relief Valve (SRV), a simulator model malfunction occurred that resulted in invalidating the scenario as an evaluation tool. An investigation into the cause of the malfunction revealed that the operator's action taken had allowed the simulator to reach a condition that prevented reasonable operator response from mitigating the consequences of the event.

The plant conditions for the scenario were as follows: 1) a failure to scram; 2) high initial reactor power (> 90%); and 3) Boron injection started just prior to decreasing Reactor Level for Power/Level control. As reactor level approached and went below Top of Active Fuel (TAF) with reactor power still above 2.5%, the thermo-hydraulic calculation and the core neutronics became unstable and resulted in pressure and power oscillations.

The scenario was used to examine all four crews as a common scenario. The malfunction occurred while evaluating the staff crew. Post review of the actions taken by the crew revealed that they were acting within the guidelines of their procedures. However, delays in performing certain actions that the operating crews were observed to promptly perform aided in establishing the simulator's malfunction condition. These actions included not fully reducing the recirculation pumps to 50% speed, not injecting Boron at a lower torus temperature (95-100°F) when the operators realized that the SRV could not be closed. Boron was injected at 108°F which was within the Emergency Operating Procedure (EOP) guidelines, but two degrees away from the temperature requiring that reactor level be reduced for Power/Level control. The condition resulted in the condition that prevented reasonable operator actions to be taken which would have mitigated the consequences of the event. Reactor level decreased quickly, which required the operator to add large amounts of water to maintain level. This action would have been contrary to the mitigation strategy of the EOPs.

**Attachment 4 (cont'd)**

The initial investigation indicated that the simulator's conditional response was based on the power level at which the power/level control was initiated and the duration of Boron injection. The simulator's performance based on the actual sequence of operator actions was repeatable and recorded by the licensee for further review. However, the problem will require extensive evaluation to accurately determine where the instability begins and what correction will be required to resolve the problem. The facility has initiated a discrepancy report (DR-6421).