

**Nuclear**

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Writer's Direct Dial Number:

September 20, 1990

Mr. Thomas T. Martin  
Regional Administrator  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406

Dear Mr. Martin:

Subject: Oyster Creek Nuclear Generating Station  
Docket No. 50-219  
Response to Requalification Program  
Evaluation Report 90-05

Enclosed is GPU Nuclear's response to NRC letter dated August 9, 1990 which forwarded Requalification Program Evaluation Report 90-05. As requested, this response includes confirmation of corrective actions GPUN committed to take to correct identified Requalification Program weaknesses, and addresses NRC concerns relative to GPUN's self-evaluation provided by letter dated July 26, 1990.

If there are any questions regarding this matter, please call Mr. Michael Heller, Licensing Engineer at 609-971-4680.

Very truly yours,

*E.E. Fitzpatrick* 9/20/90  
E.E. Fitzpatrick  
Vice President and Director  
Oyster Creek

EEF/MH:jc  
(MH-LTRS 18)

cc: U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555

NRC Resident Inspector  
Oyster Creek Nuclear Generating Station

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Attachment 1

Corrective Actions

Listed below are the actions completed or in progress to correct identified weaknesses in the requalification program. Expected completion dates are in parenthesis.

- 1) A clearly defined process for technical and time validation will be established (complete).
- 2) The written exam bank will receive an independent review to improve question clarity (March 1991).
- 3) The written exam bank will be technically and time revalidated (March 1991).
- 4) The JPM format and evaluation process will be modified to more thoroughly stress demonstration of procedural adherence along with the critical steps as pass/fail criteria (3rd quarter 1990).
- 5) The JPM administration process will be modified as follows:
  - ° Use of a flashlight to clearly point out switches (complete).
  - ° Each operator will be exposed to the use of two GPUN evaluators to closely simulate the actual requal exam (as appropriate).
  - ° Require operators to write down task initially to minimize potential miscommunication (complete).
  - ° The plant referenced simulator will be used when available (projected - mid 1991).
- 6) The training process for JPM evaluators will be expanded to include the importance of identification and resolution of differences between utility and NRC evaluators on the spot to avoid subsequent factual disagreements (complete).
- 7) An enhanced on-the-job training program is being developed by the operations department. It will include JPM walkthroughs. JPM revalidation will be an on-going part of this effort (implemented - 4th quarter 1990).
- 8) Individual JPM failures will be reviewed one-on-one with each operator involved (complete).
- 9) Individual written exams will be reviewed one-on-one with operators involved to upgrade their knowledge (complete).

Attachment 1

(Cont'd)

- 10) Common areas of question difficulty will be identified for inclusion in this biennial requal cycle as appropriate (complete).
- 11) Simulator scenarios will be enhanced to increase detail via the inclusion of more operational steps, clearly defined expected operator actions and to reduce the number of critical tasks (Prior to next simulator requalification exam). In addition, future simulator scenarios will be developed in-house utilizing the plant-referenced simulator when available.
- 12) A training lesson dealing with administration of JPMs, will be presented to all instructors and operations personnel during Cycle 90-8 of the licensed operator requalification program.
- 13) A JPM writers guide will be developed and published which will improve the consistency of JPM content and level of detail of evaluation criteria (3rd quarter 1990).
- 14) A comprehensive examination administration procedure will be developed. This will provide overall guidance to training personnel for development, administration and grading of all weekly quizzes and comprehensive examinations (October, 1990).
- 15) Using INPO's "Advanced Simulator Instructor" course as a guideline, GPUN will develop and present a site-specific course to appropriate training and operations personnel to improve evaluation and critique techniques during simulator training and evaluation sessions (4th quarter 1990).

## Attachment 2

The following concerns were raised by the NRC relative to GPUN's self evaluation provided by letter dated July 26, 1990.

### NRC Concern #1

A root cause analysis that identified why the noted weaknesses occurred was not provided.

### GPUN Response

GPUN believes that causes and corrective actions to improve Oyster Creek's operator requalification program have been thoroughly reviewed with the NRC at the interim exit meeting on April 24, 1990 and the final exit meeting on June 26, 1990. In review of all noted weaknesses, the following are considered the most significant fundamental causes:

1. The written exam bank is not sufficiently objective. The bank was generated by a contractor with minimum GPUN involvement.
2. Exam validation process was not clearly defined and was therefore applied inconsistently.

Additionally, by necessity, several positions in operator training were filled with newly assigned personnel shortly before the new exam process was being implemented. GPUN is taking thorough and extensive corrective actions to improve the requalification program as detailed in Attachment 1. GPUN believes the revalidation of the written exam bank, the reformatting and review of JPM's and the enhancement of simulator scenarios to include more procedural detail will result in more clearly defined standards of performance.

### NRC Concern #2

The evaluation did not address procedure quality.

### GPUN Response

This concern is characterized in Section 6.2 of the NRC requalification report which states, "It appeared that the facility was not routinely correcting operating procedures based on examination activities". The report lists a number of concerns the NRC had with various procedures and states, "Apparently, the 1989 requalification examination did not effectively identify and address the quality of procedures".

Attachment 2

(Continued)

GPUN agrees the specific concerns listed were not identified by GPUN during the 1989 exam process. Procedure changes that did result from this process would be difficult to list because records do not always reveal how a procedure problem was identified. At the exit meeting on June 26, 1990, GPUN did provide a list of thirty (30) procedure changes resulting solely from the ongoing biennial review process and the GPUN validation of the JPM and written exam bank for the 1990 requal exams. This listing is provided as an attachment to this response.

In May, 1989, shortly after the 1989 exam period began, GPUN instituted an operator concern program which enabled an operator to document any concern, including procedural problems, for formal resolution. Since that time, the operator concern forms use has been expanded to identify and document procedural deficiencies discovered during operator training activities. In addition, our new license requalification on-the-job training program will utilize our JPMS and will also identify procedure inadequacies as well as continuously revalidate our JPMS. Further, Procedure 103, "Station Document Control" provides the mechanism whereby procedure change requests are processed. GPUN believes these mechanisms are being used effectively both within and outside of the requalification process to continually improve plant procedures.

NRC Concern #3

The evaluation did not address the RO rotation practices during the annual operating examination.

GPUN Response

This matter was reviewed with the NRC at the exit meeting on June 26, 1990. 10 CFR 55.59 requires, in part, an operating test which confirms operator understanding and ability to perform the actions necessary to accomplish a comprehensive sample of items specified in section 55.45(a). GPUN believes the intent of this requirement is being met with GPUN's RO rotation practices despite the use of a non-site specific simulator. The following supports GPUN's position:

1. The cause of this issue is attributable to differences in configuration between the Oyster Creek control room and the Nine Mile Unit 1 (NMP-1) simulator. Specifically, the table at which the operator sits at Oyster Creek has no controls while the same table at the NMP-1 simulator does hold controls for recirculation flow and control rods.
2. All control room operators are rotated through all positions throughout the training week and are meticulously critiqued on their performance at every station.
3. ES-601 examination guidance (page 10) item c(1)(b) states "Position rotation shall be dependent upon facility rotation practices." Additionally, item c(1)(d) states "Each simulator evaluation should place individual crew members in the most senior watch standing position in which individual normally operates on shift." At Oyster Creek, only an RO further qualified as lead CRO can assume the duties of control room coordination which take place at the central table location in our control room. We believe this guidance justifies the practices utilized at the NMP-1 simulator.

## Attachment 2

(Continued)

The controls at hand associated with the lead CRO position are typically the least challenging of any of the three possible CRO stations. This effectively results in our exam process testing the most junior CROs at the most difficult stations in the N&P-1 control room.

With regard to the issue of "B" control room operators not being evaluated in both the balance of plant (BOP) and the nuclear steam supply system (NSSS) positions, selection of the positions for evaluation was essentially random. The NRC report (p.15) implies that GPUN hadn't planned on assigning "B" operators to the NSSS position until the NRC made this an issue. This is not correct.

In summary, we believe our approach results in the best and most fair process for evaluating our trainees in a non-site specific simulator. This situation will be completely alleviated when the use of our plant referenced simulator begins.

### NRC Concern #4

The corrective actions did not include provisions for upgrading evaluator ability to conduct objective evaluations and critiques.

### GPUN Response

- 1) To produce a consistent evaluation, a training lesson dealing with administration of JPMs, will be presented to all instructors and operations personnel during Cycle 90-8 of the licensed operator requalification program.
- 2) A JPM writers guide will be developed and published which will improve the consistency of JPM content and level of detail of evaluation criteria.
- 3) A comprehensive examination administration procedure will be developed. This will provide overall guidance to training for personnel development, administration and grading of all weekly quizzes and comprehensive written examinations.
- 4) Using INPO's "Advanced Simulator Instructor" course as a guideline, GPUN will develop and present a site-specific course to appropriate training and operations personnel to improve evaluation and critique techniques during simulator training and evaluation sessions.

Attachment 3

I. Procedure Changes resulting from on-going Biennial Review Process.

Proc. 107, Procedure Control

- Replaces previous temp change to this procedure. Requires that one of the RTRs signing a temp change must hold an SRO if the change "may affect the operational status of facility systems or equipment".

Proc. 201.1, Approach to Criticality

- An item is added to the pre-critical check-off to ensure PASS is ready for operation.

Proc. 201.2, Plant Heatup to Hot Standby

- Gives directions for bypassing IRM channel whenever ranging between ranges 6 and 7 to prevent spurious half scrams.
- Renewal of previous temp change to make value of condenser vacuum for removing mechanical vacuum pump from service consistent with other procedures. Adds step to manually reset condenser vacuum switches if they don't automatically reset.

Proc. 203.2, Plant Cooldown from Hot Standby to Cold Shutdown

- Deletes unnecessary surveillance requirements when removing low condenser vacuum and MSIV closure jumpers.

Proc. 315.2, Turbine Lube Oil System

- Provide guidance on swapping the EPR final filters and roughing filters.

Proc. 317.4, Feedwater Hydrogen Injection

- Provides added isolation when placing hydrogen injection system into service, by closing manual isolation valves in addition to automatic valves.

Proc. 330, Standby Gas Treatment System

- Precaution added to remind operator to notify Chemistry before securing Reactor Building exhaust fans.
- Moves material for system reset from Precautions and Limitations to Instructions, where it belongs.
- Step added to open Reactor Building isolation valves V-28-21 and V-28-22 before resetting push button interlock on Panel 11R.
- Provides damper numbers for inlet dampers to SGTS fans EF-1-8 and EF-1-9 and corrects the position of these dampers in the lineup to locked open.

Proc. 312, Reactor Containment Integrity and Atmosphere Control

- Changes requirements for nitrogen tank level for commencement of containment inerting.

Proc. 610.4.007, Core Spray System Firewater Valve Test

- Corrects PIV number in System 1 valve lineup.

Proc. 2000-ABN-3200.32, Response to Loss of Intake

- Puts references to Emergency Plan procedures at beginning of low intake level section.

Proc. 2000-RAP-3024.03, BOP Annunciator Response Procedures

- Window Q-3-c revised to correct condenser low vacuum scram setpoint and to have operator take corrective action in accordance with Ops procedure.
- Window Q-6-b revised to clarify the points that will cause the alarm.

## II. Procedure Changes resulting from Oyster Creek JPM and Exam Bank Validation.

Proc. 301, Nuclear Steam Supply System

- Clarifies procedure for taking remote manual control of recirc pump after an air failure lockup.

Proc. 305, Shutdown Cooling System Operation

- Clarifies requirements for satisfying the shutdown cooling pump start interlock.

Proc. 308, (Upcoming Rev.)

- Move directions for taking manual control of Core Spray from Section 5.0 to 6.0.

Proc. 308, Rev. 40, Emergency Core Cooling System Operation

- Directions for verifying fire water injection and securing fire water injection enhanced to agree with emergency operating procedures.

Proc. 310, Containment Spray System Operation

- Has operators enter emergency operating procedures anytime that torus water temperature is greater than 90°F.

Proc. 312.1, (Upcoming Rev.)

- Make various clarifications, corrections and additions identified in performance of operator JPMs.

Proc. 331.1, Rev. 1, Control Room and Old Cable Spreading Room HVAC System

- Adds a note to ensure that a path for contamination to enter the Control Room via EF-1-24 is eliminated when operating in partial or full recirc modes.
- Note added to confirm EF-1-24 is off and its damper closed when operating Control Room HVAC in partial or full recirculation modes.

Proc. 334, (Upcoming Rev.)

- Change steps contained in a "NOTE" to regular procedural steps.

Proc. 337, 4160 Volt Electrical System

- Clarifies procedure for energizing a dead emergency bus.

Proc. 2000-RAP-3024.01, NSSS Annunciator Response Procedures

- Corrects alarm setpoint for Cleanup System area high radiation to 100mR/hr.

Proc. 2000-RAP-3024.02, Electrical Annunciator Response Procedures

- Window R-3-c revised to have operator take corrective actions in accordance with associated ABN procedure.

Proc. 2000-RAP-3024.03, BOP Annunciator Response Procedures

- Corrects the references to Emergency Plan procedures for window J-3-a, J-4-a, J-1-b, J-2-b, J-3-b, K-5-e and K-5-f.
- Windows J-1-b, K-5-e and K-5-f revised to provide guidance to the operators on the possible entrance into the EPIP's.

III. Procedure Changes resulting from NRC and OC Exam Team review of JPMs and Simulator Scenarios.

Proc. 309.2, Reactor Building Closed Cooling Water System

- Corrects the Tech Spec section on radioactive releases referenced in the section on heat exchanger tube leak determination.

Proc. 310, Containment Spray System Operation

- Deletes the  $\pm$  tolerances for pump start time delays.

IV. Procedure Changes resulting from Oyster Creeks Simulator Training.

Proc. 201.1, Approach to Criticality

- Step added to allow for exiting procedure if a startup must be aborted.

Proc. 315.1, Main Turbine Operation

- Adds step to confirm EPR power switch is on.

Proc. 2000-RAP-3024.01, NSSS Annunciator Response Procedures

- Window H-7-e, G-1-b, G-2-b and H-6-a revised to have the operators perform actions in the associated ABN series procedures.
- Window E-1(2)-c, E-1(2)-e, F-1(2)-a, F-1(2)-c and F-1(2)-e revised to reflect that only one recirc loop must be open at most times.
- Adds initiating signal to window C-1(2)-a, ISOL COND LOGIC TRAIN I(II) ACTUATED, V-14-34(35) manually opened.
- Clarifies and adds reference to Standing Order 21 for windows G-1(2)-d, REACTOR MONITORS CHANNEL I(II).
- Adds reference to Procedure 2000-ABN-3200.07, "Unexplained Reactivity Change", to window G-7-d, SRM PERIOD SHORT.

V. Procedure Changes resulting from Actual Requal Exam.

Proc. 315.1, (Upcoming Rev.)

- Remove instructions for operating EPR, MPR and BVOJ from turbine normal ops to own section.

Proc. 2000-ABN-3200.29, Response to Fire.

- Instructs operator to reset fire detection alarm and HVAC system before returning HVAC system to normal.