

James A. FitzPatrick
Nuclear Power Plant
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William Fernandez II
Resident Manager

May 10, 1991
JAFP-91-0292

Mr. Thomas T. Martin
Regional Administrator - Region 1
United States Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Dear Mr. Martin:

As requested at the May 3, 1991 meeting with NRC Region 1 staff, Attachments 1 and 2 provide our Justification for Continued Operation and a summary of NRC observations of effective operator performance during the 1990-1991 time period. Attachment 3 provides a list of corrective actions and commitments proposed by the New York Power Authority to ensure the continued safe operation of the facility.

Based on the assurances and observations identified in the Attachments, we conclude that a sufficient number of licensed personnel are and will remain fully qualified to operate the plant safely and protect the health and safety of the public.

Should you have any additional questions, please do not hesitate to contact us.

Very truly yours,


WILLIAM FERNANDEZ

WF:DFY:kr
Attachments

cc: USNRC Resident Inspector, JAFNPP
R. Beedle, Exec. V.P., Nuc. Gen.
J. Gray - WPO Licensing
WPO Records Management
JAFNPP Document Control Center

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ATTACHMENT 1

James A. FitzPatrick Licensed Operator Requalification Training Program Justification for Continued Operation

Description of Condition and Events:

Requalification examinations were administered by the facility to four operating crews prior to the week of April 29, 1991. All examinations were developed using guidance provided in NUREG 1021 and were similar in scope and depth to the examinations administered the week of April 29. Of the sixteen licensees examined, four failed one or more portions of these examinations. These individuals were restricted from licensed duties until they were successfully reexamined.

During the week of April 29, 1991 the facility's licensed operator requalification training program was determined to be unsatisfactory because 5 of 12 operators failed the written examination by the NRC's grading. One crew, which included three of the operators who failed the written examination, also was found to be unsatisfactory during the simulator examination. Since two thirds of the crews passed the simulator evaluation and 11 of 12 operators passed the JPM evaluations, the other criteria for a satisfactory program were met. The JAFNPP and NRC evaluators were in agreement with all examination results at the time of the preliminary exit. Subsequent to the exit, an exam key change resulted in the facility passing one of the five operators.

All five individuals who failed the examination by the NRC's grading have been restricted from performing licensed duties pending either regrading or successful reexamination in accordance with the requirements of NUREG-1021. The operating crews have been slightly restructured using the individuals who have passed the facility or NRC administered examinations to support a five shift rotation rather than the normal six shift rotation.

Requalification examinations were administered to the remaining licensee operators (primarily staff licenses) the week of May 6, 1991. Three operators failed the written portion of the examination. These individuals have been restricted from licensed duties until they are successfully reexamined in accordance with ES-601.

Safety Significance and Justification for Continued Operation

There is reasonable assurance that a sufficient number of licensed operators are fully qualified to safely operate the facility and protect the health and safety of the public. This determination is based on the following:

1. The operators who failed one or more portions of the facility administered/NRC observed evaluation and the written examinations conducted subsequent to the unsatisfactory program evaluation have been restricted from performing licensed duties until they have been successfully reexamined in accordance with NUREG-1021.
2. All operators on shift are fully qualified to perform their licensed duties. All five crews have demonstrated their proficiency by passing

either a Power Authority or Power Authority/NRC administered examination in April or May of 1991. Grading results for requalification examinations have been consistent between the Authority and the NRC. This indicates that the Authority's standards are adequate to assure that operators who pass are qualified. In addition, the ability of facility evaluators to evaluate operator performance was noted as a strength by the NRC.

3. There are a sufficient number of qualified licensed operators and non-licensed operators for a five shift rotation. The five shift rotation requires no overtime except for that normally required due to vacations and illness. The shift rotation schedule conforms to the overtime requirements in the FitzPatrick Technical Specifications and provides ample time off for the operators.
4. Generic strengths noted by the NRC during the week of April 29, 1991 include use of normal and emergency procedures, effective teamwork and communications skills. This is consistent with the observations made during the facility administered examinations.
5. The NRC passed all twelve individuals during the last Authority/NRC administered examination in 1989.
6. The Authority's licensed operator requalification training program has been accredited by INPO since 1986. This accreditation was renewed in 1990 after intensive INPO review and evaluation.
6. Operator response to actual plant abnormal conditions and transients during the last requalification cycle have been noted as strong by the Plant Operations Review Committee (PORC). PORC made specific reference to the effectiveness of simulator training in preparing the operators for these events.
8. Plant operation at Fitzpatrick have been considered a SALP 1 program by the NRC over the past several years. The NRC has also made numerous observations concerning effective operator performance in recent inspections as described in Attachment 2.

Assessment

1. Dynamic Simulator - Operator performance on this portion of the examination was generally satisfactory. The ability of crews to interact, diagnose and communicate was good. A weakness was identified for three individuals in the use of EOP-3, "Failure to Scram". Training program corrective action has been initiated.
2. Job Performance Measures - Operator performance in this portion of the examination was generally satisfactory. One individual of the thirty-five examined to date failed this portion of the examination. No corrective action is required beyond remediation of this individual.
3. Written examination - Operator performance on the written examinations was unsatisfactory. JAFNPP evaluators have noted a failure rate of 26% (6 of 23) on the facility administered examinations. During the week of April 29, 1991 the written examination failure rate was 42.5%. Our

analysis of the examination administered the week of April 29 points to the following contributing factors:

- ° The written examination may have had a disproportionate number of test items which required the use of facility prints. The operator's ability to use the electrical prints in a timed situation with accuracy appears to be a generic weakness.
 - ° Only a qualitative time validation of the written examination was performed. The resulting examinations were too long. Facility evaluators have historically provided licensees with a reasonable amount of additional time to complete their written examinations when the need was indicated. Additional time was also allowed and provided when needed during the 1989 JAF/NRC requalification examination. During the week of April 29 the examinations were picked up at the time limit based on a discussion with the NRC lead examiner. Most operators stated that they were rushed to complete the examinations within the time limit.
 - ° Facility standard practice on static simulator examinations had been to allow the operators to familiarize themselves with plant conditions for five minutes prior to beginning the examination. During the week of April 29, this was not done because there was no allowance for this in NUREG-1021. Most operators began on the examination immediately, prior to fully assessing the conditions. The facility feels that it is appropriate to allow time to assess the plant conditions and that this should be specifically addressed in NUREG-1021.
 - ° The vast majority of test items on both part A and B required the use of facility reference material to determine the answer. This was inconsistent with current ES-601 guidance which expects that a [significant] percentage of questions should be able to be answered without use of a reference.
4. Other - Additional time constraints were placed on the facility examination team due to a recent plant contamination event which resulted in implementation of the site emergency plan and demanded significant overtime. As a direct result there was a loss of preparation/validation time for exam team members on both the facility administered and NRC observed examinations. This factor contributed to inadequate time validation of the written examination.

Attachment 2

Summary of NRC Observed Operator Performance 1990 - Present

Routine Inspection Report 91-01 Feb. 1 - March 16, 1991

"On February 28, the inspector observed a very well coordinated and controlled response by the control room operators, to a momentary loss of the UPS...Operator performance was good over the period. Responses to operating events, an environmental qualification issue and inoperable emergency sirens were proper and conservative."

Routine Inspection Report 90-09 Dec. 23, 1990 - Feb. 14, 1991

"Following the B recirculation pump trip on January 26 operators performed well and met the conditions for single loop operation...within the technical specification limit. The inspector determined that operators were familiar with the procedures for single loop operation."

Routine Inspection Report 90-08 Nov. 4 - Dec. 22, 1990

"Control room operators continued to perform well during routine and scram recovery activities. Shift Supervisor control and monitoring was excellent (during recovery from the December 12 reactor scram) as was the flow of information from the operators to the SS. Operators performed well evaluating the feed system problems and regaining feed flow, without the need of HPCI or RCIC."

Routine Inspection Report 90-07 Sept. 23 - Nov. 3, 1990

"The control room operators performed well during the degradation of plant cooling water supply on October 19."

EOP Inspection Report 90-20 August 20 - 23, 1990

"Operators are knowledgeable about where to enter and exit the procedures...scenarios were designed to evaluate the EOPs and the operators ability to utilize the procedures during various plant emergency conditions both before and after a reactor scram...the operators effectively used the EOPs...The inspectors concluded that the EOPs provide strategies to both mitigate plant emergencies and place the plant in a safe condition and that operators are adequately trained to utilize the EOPs."

Routine Inspection Report 90-06 Aug. 12 - Sept. 22, 1990

"The inspector found that the operators performed well during startups, shutdowns, surveillance testing and plant transients. Operators were attentive to duty and maintained a questioning attitude during non-routine evaluations...operators performed well when the B recirculation pump experienced an automatic run back to minimum speed...operators, engineers and maintenance performed a correct and thorough evaluation of this problem."

Summary of NRC Observed Operator Performance continued

Routine Inspection Report 90-05 July 1 - Aug. 11, 1990

"The inspector found that the operators were attentive to duty and performed well during startups, shutdowns, surveillance testing, and power change evaluations. NYPA performed the HPCI injection test to the reactor vessel very well, and the data analysis was proper and well documented. The control room staff performed very well during the testing. Teamwork was very evident when turbine speed decreased more than expected, the resulting reactor vessel water level transient, if not properly handled, could have caused a low level scram."

Outage Restart Inspection Report 90-81 June 4 - 8, 1990

"Operators were knowledgeable of plant status and alarms in the control room. The team determined that all licensed and non-licensed operators had received (modification) training. The team questioned on shift licensed operators concerning selected modifications. They understood the modifications and how they would impact plant operation."

Routine Inspection Report 90-03 Apr. 26 - May 26, 1990

"The inspector found that several operations department critiques of personnel errors adequately determined causes and recommended actions to prevent recurrence."

Routine Inspection Report 90-02 March 12 - April 25, 1990

"Operator performance during the March 19 reactor scram was commendable."

Routine Inspection Report 90-01 Jan. 25 - March 11, 1990

"The inspector observed effective operator simulator training using the new flow chart EOP format. The simulator instructors provided appropriate feedback to the operators during the observed scenario."

ATTACHMENT 3

Corrective Actions and Commitments

The New York Power Authority has taken or will take the following actions to ensure the continued safe operation of the facility and to effect improvement in the licensed operator requalification training program:

Short Term Corrective Actions:

1. Operators who have failed this examination or who fail subsequent examinations during the period in which the program is deemed to be unsatisfactory will be restricted from licensed duties until they have been successfully reexamined in accordance with NUREG-1021. A list of twelve operators will be submitted to the NRC who will be subject to a reexamination tentatively scheduled for June, 1991. The twelve operators will include those individuals who failed the NRC observed examination, those individuals who failed the written examination during the week of May 6, one operating shift and any additional staff licenses required to reach the required sample size.
2. Refresher training in the use of facility prints and drawings will be included in the next operator training cycle to ensure that all operators have the same basic foundation of knowledge. During the course of regularly scheduled continuing training, the use of prints will receive increased emphasis where it is germane to the topics of discussion.
3. Simulator training on EOP-3, "Failure to Scram", will be included in the next operator training cycle. Particular attention will be paid to the implementation of the power/level control override section of this procedure.
4. The results of the examination administered the week of May 6 will be analyzed to determine if any additional areas of weakness are indicated. Additional corrective action will be initiated, if necessary.

Long Term Corrective Actions:

1. In preparing the 1991 examinations, approximately 150 questions were reviewed, revised or generated as required by ES-601. As part of our continuing review of the examination bank, an additional 80 to 100 questions which do not require an extensive review of references will be developed. This effort will be complete prior to the submission of the examination bank to the NRC for the 1992 examinations. The tentative target date is February 13, 1991.
2. Static simulator scenarios will be used more frequently during operator training to enhance the development of the operators' diagnosis and analysis skills in this environment.
3. Future examinations will be time validated in their final form prior to examination administration.