Docket File

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

September 12, 1991

Docket No. 50-219

Mr. John J. Barton
Vice President and Director
GPU Nuclear Corporation
Oyster Creek Nuclear Generating Station
Post Office Box 388
Forked River, New Jersey 08731

Dear Mr. Barton:

SUBJECT: ISSUANCE OF AMENDMENT (TAC NO. 80654)

The Commission has issued the enclosed Amendment No. 154 to Facility Operating License No. DPR-16 for the Oyster Creek Nuclear Generating Station, in response to your application dated June 11, 1991.

The amendment adds Technical Specification 4.3.I which requires an inservice inspection program for piping to be performed as identified in Generic Letter (GL) 88-01 or in accordance with alternate measures approved by the staff.

The staff has completed its review of GPU Nuclear Corporation (GPUN) submittal dated June 11, 1991, addressing intergranular stress corrosion cracking (IGSCC) inspection plans for refueling outage 13, IGSCC inspection result/repairs for refueling outages 10R, 11R, and 12R, water chemistry control at Oyster Creek, technical clarifications to GL 88-01 and NUREG 0313, Rev. 2 clarifications. In addition, the subject submittal contained the planned mitigating action to minimize the susceptibility to IGSCC and technical specification changes regarding the GL 88-01 inservice inspection (ISI) statement. GPUN's submittal is a revision of its submittal dated October 18, 1990, which was addressed by the staff in a safety evaluation (SE) dated June 28, 1991. The staff concluded that the revised IGSCC inspection plan for 14R, IGSCC inspection reports, and GL 88-01 responses are acceptable with the exception of GPUN's position on cast stainless steel piping components and post inspection of stress improved (SI) welds.

The staff recognizes that GPUN did not receive the staff's SE dated June 28, 1991 prior to GPUN submitting its letter dated June 11, 1991.

Therefore, the staff repeats the recommendations made in its SE dated June 28, 1991 requesting GPUN to identify the carbon content and ferrite number by a documentation review and/or perform a chemical analysis (e.g., carbon content) and the ferrite number measurements of the subject material to determine if the material is resistant to IGSCC under GL 88-01. The material samples for chemical analysis and ferrite measurements should be taken during the next scheduled refueling outage (14R) or any unscheduled outage with sufficient duration. In addition, if the material is found to be nonresistant to IGSCC, GPUN should contact the staff for approval of their inspection plan for the

OP-1

DF01

welds. Furthermore, GPUN should classify the subject SI welds as IGSCC Category C welds. The staff's evaluations and conclusions are in the enclosed safety evaluation.

The notice of issuance will be included in the Commission's biweekly Federal Register notice.

The requirements of this letter affect fewer than 10 respondents and, therefore, are not subject to Office of Management and Budget review under P.L. 96-511.

Sincerely,

/s/

Alexander W. Dromerick, Senior Project Manager
Project Directorate I-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. to DPR-16
2. Safety Evaluation

cc w/enclosures:
See next page

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cc:

Ernest L. Blake, Jr., Esquire
Shaw, Pittman, Potts & Trowbridge
2300 N Street, NW.
Washington, DC 20037

I. H. Jolles, Executive Vice President
GPU Service Corporation
100 Interpace Parkway
Parsipanny, New Jersey 07054

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, Pennsylvania 19406

BWR Licensing Manager
GPU Nuclear Corporation
1 Upper Pond Road
Parsippany, New Jersey 07054

Mayor
Lacey Township
818 West Lacey Road
Forked River, New Jersey 08731

Licensing Manager
Oyster Creek Nuclear Generating Station
Mail Stop: Site Emergency Bldg.
P. O. Box 388
Forked River, New Jersey 08731

Resident Inspector
c/o U.S. Nuclear Regulatory Commission
Post Office Box 445
Forked River, New Jersey 08731

Kent Tosch, Chief
New Jersey Department of Environmental
Protection
Bureau of Nuclear Engineering
CN 415
Trenton, New Jersey 08625

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

GPU NUCLEAR CORPORATION

AND

JERSEY CENTRAL POWER & LIGHT COMPANY

DOCKET NO. 50-219

OYSTER CREEK NUCLEAR GENERATING STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 154
License No. DPR-16

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by GPU Nuclear Corporation, et al., (the licensee), dated June 11, 1991, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-16 is hereby amended to read as follows:

   (2) Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 154 , are hereby incorporated in the license. GPU Nuclear Corporation shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance, to be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

John F. Stolz, Director
Project Directorate I-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 12, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 154

FACILITY OPERATING LICENSE NO. DPR-16

DOCKET NO. 50-219

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages as indicated. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

Remove	Insert
Page 4.3-2	Page 4.3-2

* G. Primary Coolant System Pressure Isolation Valves Specification:

1. Periodic leakage testing [a] on each valve listed in Table 4.3.1 shall be accomplished prior to exceeding 600 psig reactor pressure every time the plant is placed in the cold shutdown condition for refueling, each time the plant is placed in a cold shutdown condition for 72 hours if testing has not been accomplished in the preceding 9 months, whenever the valve is moved whether by manual actuation or due to flow conditions, and after returning the valve to service after maintenance, repair or replacement work is performed.

H. Reactor Coolant System Leakage

1. Unidentified leakage rate shall be calculated at least once every 4 hours.

2. Total leakage rate (identified and unidentified) shall be calculated at least once every 8 hours.

3. A channel calibration of the primary containment sump flow integrator and the primary containment equipment drain tank flow integrator shall be conducted at least once per 18 months.

I. An inservice inspection program for piping identified in NRC Generic Letter 88-01 shall be performed in accordance with the NRC staff positions on schedule, methods, personnel, and sample expansion included in the generic letter or in accordance with alternate measures approved by the NRC staff.

Bases:

Data is available relating neutron fluence (E>1.0MeV) and the change in the Reference Nil-Ductility Transition Temperature (RT_{NDT}). The pressure-temperature (P-T) operating curves (a),(b) and (c) in Figure 3.3.1 were developed based on the results of testing and evaluation of specimens removed from the vessel after 8.38 EFPY of operation. Similar testing and analysis will be performed throughout vessel life to monitor the effects of neutron irradiation on the reactor vessel shell materials.

The inspection program will reveal problem areas should they occur, before a leak develops. In addition, extensive visual inspection for leaks will be made on critical systems. Oyster Creek was designed and constructed prior to

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[a] To satisfy ALARA requirements, leakage may be measured indirectly (as from the performance of pressure indicators) if accomplished in accordance with approved procedures and supported by computations showing that the method is capable of demonstrating valve compliance with the leakage criteria.

* NRC Order dated April 20, 1981.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 154

TO FACILITY OPERATING LICENSE NO. DPR-16

GPU NUCLEAR CORPORATION AND
JERSEY CENTRAL POWER & LIGHT COMPANY

OYSTER CREEK NUCLEAR GENERATING STATION

DOCKET NO. 50-219

1.0 INTRODUCTION

By letter dated June 11, 1991, GPU Nuclear Corporation (licensee) submitted its amendment to Generic Letter (GL) 88-01 intergranular stress corrosion cracking (IGSCC) inspection plans for refueling outage 13 (first quarter 1991) that was submitted October 19, 1991. The revised submittal describes the changes to the subject IGSCC inspection plan by deferring stress improvement plans from 13R to 14R and deferring closure head welds repair/replacement plans from 13R to 14R. In addition the June 11, 1991 submittal included a Technical Specification (TS) change regarding GL 88-01 position on an inservice inspection (ISI) statement.

2.0 DISCUSSION

The licensee's submittal dated June 11, 1991, contained the same information provided in its submittal dated October 18, 1990, regarding IGSCC inspection results/repairs for refueling outages 10R, 11R and 12R, water chemistry control at Oyster Creek, technical clarifications to GL 88-01 and NUREG 0313, Rev. 2., and the planned mitigating action to minimize the susceptibility to IGSCC. The items in the licensee's letter dated October 18, 1990, were evaluated and addressed in the NRC staff's safety evaluation dated June 28, 1991 and were found to be acceptable with the exception of the licensee's position on cast stainless steel piping components and post inspection of stress improved (SI) welds.

In the licensee's subject revision to its GL 88-01 IGSCC inspection plan, it revised the number of replacement welds (IGSCC Category A) from 91 to 80 welds for 13R. The reduction in inspection sample was due to design changes in the isolation condenser (IC) piping system after the licensee's letter dated October 18, 1990 was submitted. In the area of IGSCC mitigation actions the licensee proposed that all the new welds in the isolation condenser will be stress improved during 14R, including all new welds outside the second isolation valves, and it will replace the Head Cooling Spray Nozzle Assembly, the 4" Tee

and the flange of the reactor vent line with IGSCC resistant material. In addition, the licensee proposes to stress improve, and perform post process inspection of the safe-ends in A, B, D, and E loops of the recirculation system during 14R.

The licensee also submitted its TS amendment request regarding the GL 88-01 ISI statement in its letter dated June 11, 1991. The proposed TS meets the requirements of GL-88-01 and, therefore, is acceptable.

Based on the information provided by the licensee, the NRC staff concludes that the revised IGSCC inspection plan for 13R and 14R , IGSCC inspection reports, and GL 88-01 responses are acceptable with the exception of the licensee's position regarding inspection of cast stainless steel piping components and post inspection of SI welds as discussed in the NRC's safety evaluation dated June 28, 1991. The licensee should determine the chemical properties and ferrite number and revise the IGSCC classification of the subject welds as discussed in the NRC's Safety Evaluation dated June 28, 1991. Furthermore, the staff found the licensee's proposal to amend the Oyster Creeks TS regarding the GL 88-01 ISI statement acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New Jersey State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (56 FR 31434). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such

activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: T. McLellan

Date: September 12, 1991