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

July 1, 1985

Docket No. 50-219
LS05-85-07-002

Mr. P. B. Fiedler
Vice President and Director
Oyster Creek Nuclear Generating Station
Post Office Box 388
Forked River, New Jersey 08731

Dear Mr. Fiedler:

SUBJECT: DRYWELL-SUPPRESSION CHAMBER DIFFERENTIAL PRESSURE

Re: Oyster Creek Nuclear Generating Station

The Commission has issued the enclosed Amendment No. 87 to Provisional Operating License No. DPR-16 for the Oyster Creek Nuclear Generating Station. This amendment is in response to your application dated March 21, 1985.

This amendment authorizes changes to the Oyster Creek Appendix A Technical Specifications (TS) pertaining to limiting conditions for operation and surveillance requirements in Sections 3.5 and 4.5 of the TS Containment. These changes (1) correct a typographical error in TS 3.5.A.4.c and TS 3.5.A.5.a, (2) delete TS 3.5.A.9 and Figure 3.5-1, (3) revise the Bases for Section 3.5 of the TS and (4) delete TS 4.5.P.5. The deletion of TS 3.5.A.9, 4.5.P.5 and Figure 3.5-1 delete the requirements in the TS on the drywell-suppression chamber differential pressure.

A Notice of Consideration of Issuance of Amendment to License and Proposed No Significant Hazards Consideration Determination and Opportunity for Hearing related to the requested action was published in the Federal Register on May 21, 1985 (50 FR 20980). No public comments or requests for hearing were received.

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A copy of our related Safety Evaluation is also enclosed. A notice of issuance pertaining to this action will appear in the Commission's biweekly notice publication in the Federal Register.

Sincerely,

John A. Zwolinski, Chief
Operating Reactors Branch #5
Division of Licensing

Enclosures:
1. Amendment No. 87 to License No. DPR-16
2. Safety Evaluation

cc w/enclosures:
See next page

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

GPU NUCLEAR CORPORATION

AND

JERSEY CENTRAL POWER & LIGHT COMPANY

OYSTER CREEK NUCLEAR GENERATING STATION

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 87
License No. DPR-16

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

   A. The application for amendment by GPU Nuclear Corporation and Jersey Central Power and Light Company (the licensees) dated March 21, 1985, 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 Provisional 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. 87 , 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 its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

John A. Zwolinski, Chief
Operating Reactors Branch #5
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 1, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 87

PROVISIONAL OPERATING LICENSE NO. DPR-16

DOCKET NO. 50-219

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain vertical lines indicating the area of change.

REMOVE	INSERT
3.5-2	3.5-2
3.5-3	3.5-3
3.5-3a	3.5-3a
3.5-7	3.5-7
3.5-14	-
4.5-6a	4.5-6a

4. Reactor Building to Suppression Chamber Vacuum Breaker System

a. Except as specified in Specification 3.5.A.4.b below, two reactor building to suppression chamber vacuum breakers in each line shall be operable at all times when primary containment integrity is required. The set point of the differential pressure instrumentation which actuates the air-operated vacuum breakers shall not exceed 0.5 psid. The vacuum breakers shall move from closed to fully open when subjected to a force equivalent of not greater than 0.5 psid acting on the vacuum breaker disc.

b. From the time that one of the reactor building to suppression chamber vacuum breakers is made or found to be inoperable, the vacuum breaker shall be locked closed and reactor operation is permissible only during the succeeding seven days unless such vacuum breaker is made operable sooner, provided that the procedure does not violate primary containment integrity.

c. If the limits of Specification 3.5.A.4.a are exceeded, reactor shutdown shall be initiated and the reactor shall be in a cold shutdown condition within 24 hours.

5. Pressure Suppression Chamber - Drywell Vacuum Breakers

a. When primary containment is required, all suppression chamber - drywell vacuum breakers shall be operable except during testing and as stated in Specification 3.5.A.5.b and c, below. Suppression chamber - drywell vacuum breakers shall be considered operable if:

(1) The valve is demonstrated to open from closed to fully open with the applied force at all valve positions not exceeding that equivalent to 0.5 psi acting on the suppression chamber face of the valve disk.

(2) The valve disk will close by gravity to within not greater than 0.10 inch of any point on the seal surface of the disk when released after being opened by remote or manual means.

(3) The position alarm system will annunciate in the control room if the valve is open more than 0.10 inch at any point along the seal surface of the disk.

b. Two of the fourteen suppression chamber - drywell vacuum breakers may be inoperable provided that they are secured in the closed position.

c. One position alarm circuit for each operable vacuum breaker may be inoperable for up to 15 days provided that each operable suppression chamber - drywell vacuum breaker with one defective alarm circuit is physically verified to be closed immediately and daily during this period.

6. After completion of the startup test program and demonstration of plant electrical output, the primary containment atmosphere shall be reduced to less than 4.0% O_2 with nitrogen gas within 24 hours after the reactor mode selector switch is placed in the run mode. Primary containment deinerting may commence 24 hours prior to a scheduled shutdown.

7. If specifications 3.5.A.1.a, b, c(1) and 3.5.A.2 through 3.5.A.5 cannot be met, reactor shutdown shall be initiated and the reactor shall be in the cold shutdown condition within 24 hours.

8. Shock Suppressors (Snubbers)

a. During all modes of operation except cold shutdown and refuel, all safety related snubbers listed in Table 3.5.1 shall be operable except as noted 3.5.A.8.b, c and d below.

b. From and after the time that a snubber is determined to be inoperable, continued reactor operation is permissible only during the succeeding 72 hours unless the snubber is sooner made operable or replaced.

c. If the requirements of 3.5.A.8.a and 3.5.A.8.b cannot be met, an orderly shutdown shall be initiated and the reactor shall be in a cold shutdown condition within 36 hours.

d. If a snubber is determined to be inoperable while the reactor is in the shutdown or refuel mode, the snubber shall be made operable or replaced prior to reactor startup.

e. Snubbers may be added to safety related systems without prior License Amendment to Table 3.5.1 provided that a revision to Table 3.5.1 is included with the next License Amendment request.

B. Secondary Containment

1. Secondary containment integrity shall be maintained at all times unless all of the following conditions are met:

   a) The reactor is subcritical and Specification 3.2.A is met.

   b) The reactor is in the cold shutdown condition.

   c) The reactor vessel head or the drywell head are in place.

   d) No work is being performed on the reactor or its connected systems in the reactor building which could result in inadvertent releases of radioactive material.

   e) No operations are being performed in, above, or around the spent fuel storage pool that could cause release of radioactive materials.

1.1 Upon the accidental loss of secondary containment integrity, restore secondary containment integrity within 4 hours, or:

   a) During Power Operation:

      1) Have the reactor mode switch in the shutdown mode position within the following 24 hours.

      2) Cease all work on the reactor or its connected systems in the reactor building which could result in inadvertent releases of radioactive materials.

      3) Cease all operations in, above or around the Spent Fuel Storage Pool that could cause release of radioactive materials.

   b) During refueling:

      1) Cease fuel handling operations or activities which could

When secondary containment is not maintained, the additional restrictions on operation and maintenance give assurance that the probability of inadvertent releases of radioactive material will be minimized. Maintenance will not be performed on systems which connect to the reactor vessel lower than the top of the active fuel unless the system is isolated by at least one locked closed isolation valve.

The standby gas treatment system (6) filters and exhausts the reactor building atmosphere to the stack during secondary containment isolation conditions, with a minimum release of radioactive materials from the reactor building to the environs.

Two separate filter trains are provided each having 100% capacity. (6) If one filter train becomes inoperable, there is no immediate threat to secondary containment and reactor operation may continue while repairs are being made. Since the test interval for this system is one month (Specification 4.5), the time out-of-service allowance of 7 days is based on considerations presented in the Bases in Specification 3.2 for a one-out-of-two system.

References:
(1) FDSAR, Volume I, Section V-1
(2) FDSAR, Volume I, Section V-1.4.1
(3) FDSAR, Volume I, Section V-1.7
(4) Licensing Application, Amendment 11, Question III-25
(5) FDSAR, Volume I, Section V-2
(6) FDSAR, Volume I, Section V-2.4
(7) Licensing Application, Amendment 42
(8) Licensing Application, Amendment 32, Question 3
(9) Robbins, C. H., "Tests on a Full Scale 1/48 Segment of the Humboldt Bay Pressure Suppression Containment," GEAP-3596, November 17, 1960.
(10) Bodega Bay Preliminary Hazards Summary Report, Appendix I, Docket 50-205, December 28, 1962.
(11) Report H. R. Erickson, Bergen-Paterson to K. R. Goller, NRC, October 7, 1974. Subject: Hydraulic Shock Sway Arrestors.
(12) General Electric NEDO-22155 "Generation and Mitigation of Combustible Gas Mixtures in Inerted BWR Mark I Containments" June 1982.
(13) Oyster Creek Nuclear Generating Station, Mark I Containment Long-Term Program, Plant Unique Analysis Report, Suppression Chamber and Vent System, MPR-733; August, 1982.
(14) Oyster Creek Nuclear Generating Station, Mark I Containment Long-Term Program, Plant Unique Analysis Report, Torus Attached Piping, MPR-734; August, 1982.

P. Suppression Chamber Surveillance

1. At least once per day the suppression chamber water level and temperature and pressure suppression system pressure shall be checked.

2. A visual inspection of the suppression chamber interior, including water line regions, shall be made at each major refueling outage.

3. Whenever heat from relief valve operation is being added to the suppression pool, the pool temperature shall be continually monitored and also observed until the heat addition is terminated.

4. Whenever operation of a relief valve is indicated and the suppression pool temperature reaches 160°F or above while the reactor primary coolant system pressure is greater than 180 psig, an external visual examination of the suppression chamber shall be made before resuming normal power operation.

Q. Shock Suppressors (Snubbers)

1. All hydraulic snubbers listed in Table 3.5.1 whose seal material has been demonstrated by operating experience, lab testing or analysis to be compatible with the operating environment shall be visually inspected. This inspection shall include, but not necessarily be limited to, inspection of hydraulic fluid reservoir, fluid connections, and linkage connections to the piping and anchor to verify snubber operability in accordance with the following schedule:

Number of Snubbers Found Inoperable During Inspection or During Inspection Interval	Next Required Inspection Interval
0	18 months ± 25%
1	12 months ± 25%
2	6 months ± 25%
3, 4	124 days ± 25%
5, 6, 7	62 days ± 25%
≥8	31 days ± 25%

The required inspection interval shall not be lengthened more than one step at a time.

Snubbers may be categorized in two groups, "Accessible" or "Inaccessible" based on their accessibility for inspection during reactor operation. These two groups may be inspected independently according to the above schedule.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 87 TO PROVISIONAL 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 March 21, 1985, GPU Nuclear (the licensee) requested an amendment to Provisional Operating License No. DPR-16 for the Oyster Creek Nuclear Generating Station (OCNGS). This amendment to the OCNGS Appendix A Technical Specifications (TS) authorizes changes to limiting conditions for operation and surveillance requirements in Sections 3.5 and 4.5 of the TS, Containment. These changes correct a typographical error in TS 3.5.A.4.c and TS 3.5.A.5.a, delete TS 3.5.A.9 and TS Figure 3.5-1, revise the Bases for Section 3.5 of the TS and delete TS 4.5.P.5. The deletion of TS 3.5.A.9, 4.5.P.5 and Figure 3.5-1 delete the requirements on the drywell-suppression chamber differential pressure in the TS.

A Notice of Consideration of Issuance of Amendment to License and Proposed No Significant Hazards Consideration Determination and Opportunity for Hearing related to the requested action was published in the Federal Register on May 21, 1985, (50 FR 20980). No public comments or requests for hearing were received.

2.0 DISCUSSION AND EVALUATION

In the staff's Safety Evaluation (SE) dated January 13, 1984, the staff completed its post-implementation audit review of the Oyster Creek Plant Unique Analyses Report (PUAR) for the Mark I containment Long Term Program. The staff concluded in its SE that the Oyster Creek containment modifications made by the licensee were acceptable to the staff and that the PUAR verifies that these modifications have restored the original design safety margin to the Mark I containment at the Oyster Creek plant. This SE completed the staff's review of this issue.

In its letter dated January 13, 1985, the staff requested that the licensee submit any TS changes required as a result of the Mark I containment modifications. By its letter dated March 21, 1985, the licensee has proposed changes to the limiting conditions for operation and surveillance requirements that were originally incorporated in the TS as part of the Mark I Short Term Program in order to ensure the containment integrity under hydrodynamic load conditions.

In its letter, the licensee requested that the requirement for maintaining a drywell to suppression chamber differential pressure be deleted from the TS. This requested change is consistent with the analyses presented in the PUAR.

The staff had previously reviewed the analyses presented in the PUAR and concluded that the containment modifications made to the OCNGS had restored the original design margin without the use of differential pressure operation. Therefore, the staff concludes the proposed changes to delete TS 3.5.A.9, 4.5.P.5 and Table 3.5-1 and revise the Bases of Section 3.5 by adding two references to the Oyster Creek Mark I Containment Long Term Program and deleting the section and references to the Mark I Containment Short Term Program are acceptable.

In its letter dated March 21, 1985, the licensee also proposed to correct two typographical errors in TS section 3.5. These changes are to (1) change "3.5.A.3.a" to "3.5.A.4.a" in TS 3.5.A.4.c and (2) change "3.5.A.4.b" to "3.5.A.5.b" in TS 3.5.A.5.a. These are on page 3.5-2 of the TS. The staff has reviewed these proposed changes and agrees with the licensee that the references to 3.5.A.3.a and 3.5.A.4.b, in TS 3.5.A.4.a and 3.5.A.5.a, respectively, are in error and the references should be to 3.5.A.4.a and 3.5.A.5.b, respectively. Therefore, the staff concludes that the proposed changes are acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involve changes to requirements with respect to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20 and changes to the surveillance requirements. The 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this 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 this amendment.

4.0 CONCLUSION

The staff 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; and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

5.0 ACKNOWLEDGEMENT

This evaluation was prepared by F. Eltawila.

Dated: July 1, 1985