

FEB 04 1986

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: STANDBY DIESEL GENERATOR FUEL TANK

Re: Oyster Creek Nuclear Generating Station

The Commission has issued the enclosed Amendment No. 99 to Provisional Operating License No. DPR-16 for the Oyster Creek Nuclear Generating Station. This amendment is in response to your application dated November 7, 1985.

This amendment authorizes a change to Section 3.7, Auxiliary Electric Power, of the Appendix A Technical Specifications (TS) to (1) decrease the minimum amount of diesel fuel in the standby diesel generator fuel tank required in TS 3.7.C from 14,500 gallons to 14,000 gallons and (2) revise the Bases for this TS.

A copy of our related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly Federal Register notices.

Sincerely,

~~Original signed by~~

John A. Zwolinski, Director
BWR Project Directorate #1
Division of BWR Licensing

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Enclosures:

1. Amendment No.99 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

February 4, 1986

Docket No. 50-219

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:

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Sincerely,

A handwritten signature in black ink, appearing to read "John A. Zwolinski".

John A. Zwolinski, Director
BWR Project Directorate #1
Division of BWR Licensing

Enclosures:

1. Amendment No. 99 to License No. DPR-16
2. Safety Evaluation

cc w/enclosures:
See next page

Mr. P. B. Fiedler
Oyster Creek Nuclear Generating Station

Oyster Creek Nuclear
Generating Station

cc:

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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 PROVISIONAL OPERATING LICENSE

Amendment No. 99
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 November 7, 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.

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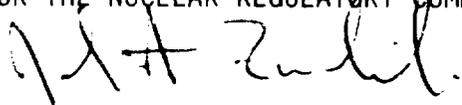
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Provisional Operating License No. DPR-16 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 99, 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, Director
BWR Project Directorate #1
Division of BWR Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 4, 1986

ATTACHMENT TO LICENSE AMENDMENT NO. 99

PROVISIONAL OPERATING LICENSE NO. DPR-16

DOCKET NO. 50-219

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

REMOVE

3.7-2
3.7-3

INSERT

3.7-2
3.7-3

None of the engineered safety-feature equipment fed by the remaining transformer may be out of service.

C. Standby Diesel Generators

1. The reactor shall not be made critical unless both diesel generators are operable and capable of feeding their designated 4160 volt buses.
2. If one diesel generator becomes inoperable during power operation, repairs shall be initiated immediately and the other diesel shall be operated at least one hour every 24 hours at greater than 20% rated power until repairs are completed. The reactor may remain in operation for a period not to exceed 7 days in any 30-day period if a diesel generator is out of service. During the repair period none of the engineered safety features normally fed by the operational diesel generator may be out of service or the reactor shall be placed in the cold shutdown condition.
3. If both diesel generators become inoperable during power operation, the reactor shall be placed in the cold shutdown condition.
4. For the diesel generators to be considered operable there shall be a minimum of 14,000 gallons of diesel fuel in the standby diesel generator fuel tank.

Bases: The general objective is to assure an adequate supply of power with at least one active and one standby source of power available for operation of equipment required for a safe plant shutdown, to maintain the plant in a safe shutdown condition and to operate the required engineered safety feature equipment following an accident.

AC power for shutdown and operation of engineered safety feature equipment can be provided by any of four active (two 230 KV and two 34.5 KV lines) and either of two standby (two diesel generators) sources of power. Normally all six sources are available. However, to provide for maintenance and repair of equipment and still have redundancy of power sources the requirement of one active and one standby source of power was established. The plant's main generator is not given credit as a source since it is not available during shutdown. The plant 125V DC power is normally supplied by two batteries, each with two associated full capacity chargers. One charger on each battery is in service at all times with the second charger available in the event of charger failure. These chargers are active sources and supply the normal 125V DC requirements with the batteries and standby sources. (1)

In applying the minimum requirement of one active and one standby source of AC power, since both 230 KV lines are on the same set of towers, either one or both 230 KV lines are considered as a single active source.

The probability analysis of Appendix "L" of the FDSAR was based on one diesel and shows that even with only one diesel the probability of requiring engineered safety features at the same time as the second diesel fails is quite small. This analysis used information on peaking diesels when synchronization was required which is not the case for Oyster Creek. Also the daily test of the second diesel when one is temporarily out of service tends to improve the reliability as does the fact that synchronization is not required.

As indicated in Amendment 18 to the Licensing Application, there are numerous sources of diesel fuel which can be obtained within 6 to 12 hours and the heating boiler fuel in a 75,000 gallon tank on the site could also be used. As indicated in Amendment 32 of the Licensing Application and including the Security System loads, the load requirement for the loss of offsite power would require 12,410 gallons for a three day supply. For the case of loss of offsite power plus loss-of-coolant plus bus failure 9790 gallons would be required for a three day supply. In the case of loss of offsite power plus loss-of-coolant with both diesel generators starting the load requirements (all equipment operating) shown there would not be three days' supply. However, not all of this load is required for three days and, after evaluation of the conditions, loads not required on the diesel will be curtailed. It is reasonable to expect that within 8 hours conditions can be evaluated and the following loads curtailed:

1. One Core Spray Pump
2. One Core Spray Booster Pump
3. One Control Rod Drive Pump
4. One Containment Spray Pump
5. One Emergency Service Water Pump

With these pieces of equipment taken off at 8 hours after the incident it would require a total consumption at 12,840 gallons for a three day supply. Therefore, a minimum technical specification requirement of 14,000 gallons of diesel fuel in the standby diesel generator fuel tank will exceed the engineered safety features operational requirement after an accident by approximately 9%.

References:

(1) Letter, Ivan R. Finrock, Jr. to the Director of Nuclear Reactor Regulations dated April 14, 1978.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 99 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 November 7, 1985, GPU Nuclear (the licensee) requested an amendment to Provisional Operating License No. DPR-16 for the Oyster Creek Nuclear Generating Station (Oyster Creek). This amendment authorizes a change to the Appendix A Technical Specifications (TS) pertaining to Section 3.7, Auxiliary Electric Power. The limiting conditions for operation for the emergency diesel generators to be considered operable are being changed to reduce the minimum amount of diesel fuel required in the standby diesel generator fuel tank from 14,500 gallons to 14,000 gallons and the Bases for the TS is being revised.

2.0 DISCUSSION AND EVALUATION

The staff issued TS Amendment 60 on February 3, 1982. This revised the staff's calculation of the expected consumption of diesel generator fuel oil for a 3-day running period. The requirements on the licensee were that the Oyster Creek site had to have a minimum supply of diesel fuel to run one diesel for 3 days continuously. The Safety Evaluation for Amendment 60 revised the minimum amount of diesel fuel expected to be consumed in the 3 days from 14,230 gallons to 12,840 gallons. This amount was revised by adding Security System loads to and removing the Reactor Building Closed Cooling Water pump and Service Water pump loads from the emergency diesel generator. The 12,840 gallons of fuel is for the worst case considered by the staff in the Safety Evaluation for Amendment 60. The 12,840 gallons is less than the licensee's proposed minimum amount of 14,000. As indicated in Amendment 18 dated December 30, 1976, there are numerous sources of diesel fuel which can be obtained within 6 to 12 hours and the heating boiler fuel in a 75,000 gallon tank on the site could also be used.

The licensee's proposed reduction in the minimum amount of diesel fuel onsite in the standby diesel generator fuel tank is to provide sufficient margin above the TS limit to provide for operating flexibility. As reported by the licensee, in Oyster Creek Licensee Event Report, LER 84-001, the potential exists for overflowing and underfilling the Diesel Generator Fuel Oil Tank. The current TS required capacity is 14,500

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gallons and the maximum capacity of the tank is 14,986 gallons. When the diesel generator test is run, the fuel consumption is approximately 200 gallons for a 1-hour test. In addition, the day tank (capacity 130 gallons) at the diesel generator may be partially full at the start of the test and may require approximately 100 gallons to fill after the diesel generator is started. Therefore, about 300 gallons in excess of the current 14,500 gallon minimum may be required before the test is started to ensure that the TS requirement is met during and after the tests. The maximum capacity of the tank thus does not provide sufficient margin above the current TS limit for minimum fuel capacity and, therefore, the current TS does not allow sufficient operating flexibility.

Based on the above, the staff concludes that the reduction of the minimum required diesel fuel in the standby diesel generator fuel tank in TS 3.7.C to 14,000 gallons is acceptable.

The licensee also proposed changes to the Bases for TS 3.7.C. These changes have been reviewed by the staff and determined to be correct. Based on this, the staff concludes that these changes to the Bases are acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 nor 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 nor to the health and safety of the public.

Principal Contributor: J. Donohew

Dated: February 4, 1986