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

GPU NUCLEAR CORPORATION

AND

JERSEY CENTRAL POWER AND LIGHT COMPANY

OYSTER CREEK NUCLEAR GENERATING STATION

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 80
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 August 11, 1980 and supplemented October 18, 1982, December 5, 1983, February 9 and March 23, 1984 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.

8502140100 850211
PDR ADOCK 05000219
P PDR

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. 80 , 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: February 11, 1985.

ATTACHMENT TO LICENSE AMENDMENT NO. 80

PROVISIONAL OPERATING LICENSE NO. DPR-16

DOCKET NO. 50-206

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

Remove Page	Replace Page
2.3-3	2.3-3
2.3-8	2.3-8
--	3.1-11b
3.1-14	3.1-14
3.7-1	3.7-1
4.1-6a	4.1-6a
-	-

	FUNCTION	LIMITING SAFETY SYSTEM SETTINGS
C.	Reactor High, Pressure, Scram	≤1060 psig
D.	Reactor High Pressure, Relief Valves Initiation	2 @ ≤ 1070 psig 3 @ ≤ 1090 psig
E.	Reactor High Pressure, Isolation Condenser Initiation	≤1060 psig with time delay ≤3 seconds
F.	Reactor High Pressure, Safety Valve Initiation	4 @ 1212 psig 4 @ 1221 psig ± 12 psi 4 @ 1230 psig 4 @ 1239 psig
G.	Low Pressure Main Steam Line, MSIV Closure	≥825 psig (initiated in IRM range 10)
H.	Main Steam Line Isolation Valve Closure, Scram	≤10% Valve Closure from full open
I.	Reactor Low Water Level, Scram	≥11'5" above the top of the active fuel as indicated under normal operating conditions
J.	Reactor Low-Low Water Level, Main Steam Line Isolation Valve Closure	≥7'2" above the top of the active fuel as indicated under normal operating conditions
K.	Reactor Low-Low Water Level, Core Spray Initiation	≥7'2" above the top of the active fuel
L.	Reactor Low-Low Water Level, Isolation Condenser Initiation	≥7'2" above the top of the active fuel with time delay ≤ 3 seconds
M.	Turbine Trip, Scram	10 percent turbine stop valves(s) closure from full open
N.	Generator Load Rejection, Scram	Initiate upon loss of oil pressure from turbine acceleration relay
O.	Recirculation Flow, Scram	≤ 71.4 Mlb/hr (117% of rated flow)
P.	Loss of Power	
	1) 4.16 KV Emergency Bus Undervoltage (Loss of Voltage)	0 volts with 3 seconds ± 0.5 seconds time delay
	2) 4.16 KV Emergency Bus Undervoltage (Degraded Voltage)	3671 ± 1% (36.7) volts 10 ± 10% (1.0) second time delay

During periods when the reactor is shut down, decay heat is present and adequate water level must be maintained to provide core cooling. Thus, the low-low level trip point of 7'2" above the core is provided to actuate the core spray system to provide cooling water should the level drop to this point. In addition, the normal reactor feedwater system and control rod drive hydraulic system provide protection for the water level safety limit both when the reactor is operating at power and in the shutdown condition.

The turbine stop valve(s) scram is provided to anticipate the pressure, neutron flux, and heat flux increase caused by the rapid closure of the turbine stop valve(s) and failure of the turbine bypass system.

The generator load rejection scram is provided to anticipate the rapid increase in pressure and neutron flux resulting from fast closure of the turbine control valves to a load rejection and failure of the turbine bypass system. This scram is initiated by the loss of turbine acceleration relay oil pressure. The timing for this scram is almost identical to the turbine trip.

The total recirculation flow scram is provided to terminate a flow increase transient. Flow transients are normally protected against by employing the k_f factor and using mechanical stops on the recirculation pumps. Oyster Creek does not have mechanical stops on its recirculation pumps and maximum flow is beyond the limit for which the k_f factor provides protection. The recirculation flow scram is set to the maximum flow level corresponding to the k_f curve to be used (Section 3.10).

The undervoltage protection system is a 2 out of 3 coincident logic relay system designated to shift emergency buses C and D to on site power should normal power be lost or degraded to an unacceptable level. The trip points and time delay settings have been selected to assure an adequate power source to emergency safeguards systems in the event of a total loss of normal power or degraded conditions which would adversely affect the functioning of engineered safety features connected to the plant emergency power distribution system.

References

(1) FDSAR, Volume I, Section VII-4.2.4.2
(2) FDSAR, Amendment 28, Item III.A-12
(3) FDSAR, Amendment 32, Question 13
(4) Letters, Peter A. Morris, Director, Division of Reactor Licensing, USAEC to John E. Logan, Vice President, Jersey Central Power and Light Company, dated November 22, 1967 and January 9, 1968
(5) FDSAR, Amendment 65, Section B.XI.
(6) FDSAR, Amendment 65, Section B.IX.

TABLE 3.1.1 PROTECTIVE INSTRUMENTATION REQUIREMENTS (CONTD)

Function	Trip Setting	Reactor Modes in which Function Must be Operable				Min. No. of Operable or Operating (Tripped) Trip Systems	Min. No. of Operable Instrument Channels Per Operable Trip Systems	Action Required*
		Shutdown	Refuel	Startup	Run			
N. Loss of Power								
a. 4.16KV Emergency Bus Undervoltage (Loss of Voltage)	**	X(ff)	X(ff)	X(ff)	X(ff)	2	1	
b. 4.16 KV Emergency Bus undervoltage (Degraded Voltage)	**	X(ff)	X(ff)	X(ff)	X(ff)	2	3	See Note ee

Amendment No. 80

v. These functions not required to be operable when the ADS is not required to be operable.

w. These functions must be operable only when irradiated fuel is in the fuel pool or reactor vessel and secondary containment integrity is required per specification 3.5.B.

y. The number of operable channels may be reduced to 2 per Specification 3.9-E and F.

z. The bypass function to permit scram reset in the shutdown or refuel mode with control rod block must be operable in this mode.

aa. Pump circuit breakers will be tripped in 10 seconds $\pm$ 15% during a LOCA by relays SK7A and SK8A.

bb. Pump circuit breakers will trip instantaneously during a LOCA.

cc. Only applicable during startup mode while operating in IRM range 10.

dd. If an isolation condenser inlet (steam side) isolation valve becomes or is made inoperable in the open position during the run mode comply with Specification 3.8.E. If an AC motor-operated outlet (condensate return) isolation valve becomes or is made inoperable in the open position during the run mode comply with Specification 3.6.F.

ee. With the number of operable channels one less than the Min. No. of Operable Instrument Channels per Operable Trip Systems, operation may proceed until performance of the next required Channel Functional Test provided the inoperable channel is placed in the tripped condition within 1 hour.

ff. This function is not required to be operable when the associated safety bus is not required to be energized or fully operable as per applicable sections of these technical specifications.

3.7 AUXILIARY ELECTRICAL POWER

Applicability: Applies to the operating status of the auxiliary electrical power supply.

Objective: To assure the operability of the auxiliary electrical power supply.

Specification:

A. The reactor shall not be made critical unless all of the following requirements are satisfied:

1. The following buses or panels energized.

   a. 4160 volt buses 1C and 1D in the turbine building switchgear room.
   b. 460 volt buses 1A2, 1B2, 1A21, 1B21 vital MCC 1A2 and 1B2 in the reactor building switchgear room: 1A3 and 1B3 at the intake structure; 1A21A, 1B21A, 1A21B, and 1B21B and vital MCC 1AB2 on 23'6" elevation in the reactor building; 1A24 and 1B24 at the stack.
   c. 208/120 volt panels 3, 4, 4A, 4B, 4C and VACP-1 in the reactor building switchgear room.
   d. 120 volt protection panel 1 and 2 in the cable room.
   e. 125 volt DC distribution centers C and B, and panel D, Panel DC-F, isolation valve motor control center DC-1 and 125V DC motor control center DC-2.
   f. 24 volt D.C. power panels A and B in the cable room.

2. One 230 KV line is fully operational and switch gear and both startup transformers are energized to carry power to the station 4160 volt AC buses and carry power to or away from the plant.

3. An additional source of power consisting of one of the following is in service connected to feed the appropriate plant 4160 V bus or buses:

   a. A second 230 KV line fully operational.
   b. One 34.5 KV line fully operational.

4. The station batteries B and C are available for normal service and a battery charger is in service for each battery.

5. Bus tie breakers ED and EC are in the open position.

	Instrument Channel	Check	Calibrate	Test	Remarks (Applies to Test & Calibration)
19.	Manual Scram Buttons	N A	NA	1/3 mo	
20.	High Temperature Main Steamline Tunnel	N A	Each refueling outage	Each refueling outage	Using heat source box
21.	SRM	*	*	*	Using built-in calibration equipment
22.	Isolation Condenser High FlowΔP (Steam and Water)	N A	1/3 mo	1/3 mo	By application of test pressure
23.	Turbine Trip Scram	N A		Every 3 months	
24.	Generator Load Rejection Scram	N A	Every 3 months	Every 3 months	
25.	Recirculation Loop Flow	N A	Each Refueling Outage	NA	By application of test pressure
26.	Low Reactor Pressure Core Spray Valve Permissive	N A	Every 3 months	Every 3 months	By application of test pressure
27.	Scram Discharge Volume (Rod Block)				
	a) Water level high	N A	Each Refueling Outage	Every 3 months	By varying level in switch column.
	b) Scram trip bypass	N A	N A	Each refueling outage	
28.	Loss of Power				
	a) 4.16 KV Emergency Bus Undervoltage (Loss of voltage)	Daily	1/18 mos.	1/mo.	
	b) 4.16 KV Emergency Bus Undervoltage (Degraded Voltage)	Daily	1/18 mos.	1/mo.	

*Calibrate prior to startup and normal shutdown and thereafter check 1/s and test 1/wk until no longer required.

Change No. 8, 71
Amendment No. 63, 80