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. 144
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 March 2, 1990 as supplemented November 29, and December 21, 1990, 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. 144, 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: January 10, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 144

PROVISIONAL 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 1.0.2	Page 1.0.2
Page 4.1-7	Page 4.1-7
Page 4.1-8	Page 4.1-8
Page 4.1-9	Page 4.1.9
Page [illegible]	Page 4.2-1
Page [illegible]	Page 4.4-1
Page [illegible]	Page 4.5-6
Page 4.7-1	Page 4.7-1
Page 4.8-1	Page 4.8-1
Page 4.13-2	Page 4.13-2

1.7 COLD SHUTDOWN

The reactor is at cold shutdown when the mode switch is in the shutdown mode position, there is fuel in the reactor vessel, all operable control rods are fully inserted, and (except during reactor vessel pressure testing), the reactor coolant system maintained at less than 212°F and vented.

1.8 PLACE IN SHUTDOWN CONDITION

Proceed with and maintain an uninterrupted normal plant shutdown operation until the shutdown condition is met.

1.9 PLACE IN COLD SHUTDOWN CONDITION

Proceed with and maintain an uninterrupted normal plant shutdown operation until the cold shutdown condition is met.

1.10 PLACE IN ISOLATED CONDITION

Proceed with and maintain an uninterrupted normal isolation of the reactor from the turbine condenser system including closure of the main steam isolation valves.

1.11 REFUEL MODE

The reactor is in the refuel mode when the reactor mode switch is in the refuel mode position and there is fuel in the reactor vessel. In this mode the refueling platform interlocks are in operation.

1.12 REFUELING OUTAGE

For the purpose of designating frequency of testing and surveillance, a refueling outage shall mean a regularly scheduled refueling outage. Following the first refueling outage, successive tests or surveillances shall be performed at least once per 24 months.

1.13 PRIMARY CONTAINMENT INTEGRITY

Primary containment integrity means that the drywell and adsorption chamber are closed and all of the following conditions are satisfied:

A. All non-automatic primary containment isolation valves which are not required to be open for plant operation are closed.

B. At least one door in the airlock is closed and sealed.

C. All automatic containment isolation valves specified in Table 3.5.2 are operable or are secured in the closed position.

D. All blind flanges and manways are closed.

Table 4.1.1 (cont'd)

Instrument Channel	Check	Calibrate	Test	Remarks (Applies to Test and Calibration)
17. IRM Blocks	N A	Prior to startup and shutdown	Prior to startup and shutdown	Upscale and downscale
18. Condenser Low Vacuum	N A	1/20	1/20	
19. Manual Scram Buttons	N A	N A	1/3 mo.	
20. High Temperature Main Steamline Tunnel	N A	1/20	Each refueling outage	Using heat source box
21. SRM	*	*	*	Using built-in calibration equipment
22. Isolation Condenser High Flow Δ P (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	1/20	N A	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

Amendment No.: 63,108,144
Change: 5,7

TABLE 4.1.1
(cont'd)

Instrument Channel	Check	Calibrate	Test	Remarks (Applies To Test and Calibration)
27. Scram Discharge Volume (Rod Block)				
a) Water level high	N/A	1/20	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	1/24 mos.	1/mo.	
b) 4.16 KV Emergency Bus Undervoltage (Degraded Voltage)	Daily	1/24 mos.	1/mo.	
29. Drywell High Radiation	N/A	Each refueling outage	Each refueling outage	

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

Legend: N/A = Not Applicable; 1/s = Once per shift; 1/d = Once per day; 1/3d = Once per three days; 1/wk = Once per week
1/3 mo = Once every 3 months; 1/18 mos. = Once every 18 months, 1/24 = Once per 24 months;
1/20 = Once per 20 months

The following notes are only for Item 15 of Table 4.1.1:
A channel may be taken out of service for the purpose of a check, calibration, test or maintenance without declaring the channel to be inoperable.

a. The channel functional test shall also demonstrate that control room alarm annunciation occurs if any of the following conditions exists:

1) Instrument indicates measured levels above the alarm setpoint.
2) Instrument indicates a downscale failure.
3) Instrument controls not set in operate mode.
4) Instrument electrical power loss.

TABLE 4.1.2

MINIMUM TEST FREQUENCIES FOR TRIP SYSTEMS

Trip System	Minimum Test Frequency
1) Dual Channel (Scram)	Same as for respective instrumentation in Table 4.1.1
2) Rod Block	Same as for respective instrumentation in Table 4.1.1
3) Containment Spray, each trip system, one at a time	1/3 mo. and each refueling outage
4) Automatic Depressurization, each trip system, one at a time	Each refueling outage
5) MSIV Closure, each closure logic circuit independently (1 valve at a time)	Each refueling outage
6) Core Spray, each trip system, one at a time	1/3 mo. and each refueling outage.
7) Primary Containment Isolation, each closure circuit independently (1 valve at a time)	Each refueling outage
8) Refueling Interlocks	Prior to each refueling operation
9) Isolation Condenser Actuation and Isolation, each trip circuit independently (1 valve at a time)	Each refueling outage
10) Reactor Building Isolation and SGTS Initiation	Same as for respective instrumentation in Table 4.1.1
11) Condenser Vacuum Pump Isolation	Prior to each startup
12) Air Ejector Offgas Line Isolation	Each refueling outage
13) Containment Vent and Purge Isolation	1/20 mo.

4.2 REACTIVITY CONTROL

Applicability: Applies to the surveillance requirements for reactivity control.

Objective: To verify the capability for controlling reactivity.

Specification:

A. Sufficient control rods shall be withdrawn following a refueling outage when core alterations were performed (interval not to exceed 20 months) to demonstrate with a margin of 0.25% Δk that the core can be made subcritical at any time in the subsequent fuel cycle with the strongest operable control rod fully withdrawn and all other operable rods fully inserted.

B. The control rod drive housing support system shall be inspected after reassembly.

C. 1. After each major refueling outage (interval not to exceed 20 months) and prior to resuming power operation, all operable control rods shall be scram time tested from the fully withdrawn position with reactor pressure above 800 psig.

2. Following each reactor scram from rated pressure, the mean 90% insertion time shall be determined for eight selected rods. If the mean 90% insertion time of the selected control rod drives does not fall within the range of 2.4 to 3.1 seconds or the measured scram time of any one drive for 90% insertion does not fall within the range of 1.9 to 3.6 seconds, an evaluation shall be made to provide reasonable assurance that proper control rod drive performance is maintained.

3. Following any outage not initiated by a reactor scram, eight rods shall be scram tested with reactor pressure above 800 psig provided these have not been measured in six months. The same criteria of 4.2.C(2) shall apply.

D. Each partially or fully withdrawn control rod shall be exercised at least once each week. This test shall be performed at least once per 24 hours in the event of power operation is continuing with two or more inoperable control rods or in the event power operation is continuing with one fully or partially withdrawn rod which cannot be moved and for which control rod drive mechanism damage has not been ruled out. The surveillance need not be completed within 24 hours if the number of inoperable rods has been reduced to less than two and if it has been demonstrated that control rod drive mechanism collet housing failure is not the cause of an immovable control rod.

E. Surveillance of the standby liquid control system shall be as follows:

1.	Pump operability	Once/month
2.	Boron concentration determination	Once/month

Corrected: 12/24/84
Amendment No.: ~~13~~, ~~75~~, 144

4.4 EMERGENCY COOLING

Applicability: Applies to surveillance requirements for the emergency cooling systems.

Objective: To verify the operability of the emergency cooling systems.

Specification: Surveillance of the emergency cooling systems shall be performed as follows:

	Item	Frequency
A.	**Core Spray System**	
	1. Pump Operability	Once/month. Also after major maintenance and prior to startup following a refueling outage.
	2. Motor operated valve operability	Once/month
	3. Automatic actuation test	Every three months
	4. Pump compartment water-tight doors closed	Once/week and after each entry
	5. Core spray header Δ P instrumentation	
	check	Once/day
	calibrate	Once/3 months
	test	Once/3 months
B.	**Automatic Depressurization**	
	1. Valve operability	Following a refueling outage * (interval not to exceed 20 months)
	2. Automatic actuation test	Every refueling outage
C.	**Containment Cooling System**	
	1. Pump Operability	Once/month. Also after major maintenance and prior to startup following a refueling outage.

*Valve operability shall be demonstrated at system operating pressure prior to exceeding 5 percent power.

4. Reactor Building to Suppression Chamber Vacuum Breakers

a. The reactor building to suppression chamber vacuum breakers and associated instrumentation, including setpoint, shall be checked for proper operation every three months.

b. During each refueling outage each vacuum breaker shall be tested to determine that the force required to open the vacuum breaker from closed to fully open does not exceed the force specified in Specification 3.5.A.4.a. The air-operated vacuum breaker instrumentation shall be calibrated during each refueling outage.

5. Pressure Suppression Chamber - Drywell Vacuum Breakers

a. Periodic Operability Tests

Once each month and following any release of energy which would tend to increase pressure to the suppression chamber, each operable suppression chamber - drywell vacuum breaker shall be exercised. Operation of position switches, indicators and alarms shall be verified monthly by operation of each operable vacuum breaker.

b. Refueling Outage Tests

(1) All suppression chamber - drywell vacuum breakers shall be tested to determine the force required to open each valve from fully closed to fully open.

(2) The suppression chamber - drywell vacuum breaker position indication and alarms systems shall be calibrated and functionally tested.

(3) At least four of the suppression chamber - drywell vacuum breakers shall be inspected. If deficiencies are found, all vacuum breakers shall be inspected and deficiencies corrected such that Specifications 3.5.A.5.a can be met.

(4) A drywell to suppression chamber leak rate test (interval not to exceed 20 months) shall demonstrate that with an initial differential pressure of not less than 1.0 psi, the differential pressure decay rate shall not exceed the equivalent of air flow through a 2-inch orifice.

K. Reactor Building

1. Secondary containment capability tests shall be conducted after isolating the reactor building and placing either Standby Gas Treatment System filter train in operation.

2. The tests shall be performed at least once per operating cycle (interval not to exceed 20 months) and shall demonstrate the capability to maintain a ¼ inch of water vacuum under calm wind conditions with a Standby Gas Treatment System Filter train flow rate of not more than 4000 cfm.

4.7 AUXILIARY ELECTRICAL POWER

Applicability: Applies to surveillance requirements of the auxiliary electrical supply.

Objective: To verify the availability of the auxiliary electrical supply.

Specification: A. Diesel Generator

1. Each diesel generator shall be started and loaded to not less than 20% rated power every two weeks.

2. The two diesel generators shall be automatically actuated and functionally tested during each refueling outage. This shall include testing of the diesel generator load sequence timers listed in Table 3.1.1.

3. Each diesel generator shall be given a thorough inspection at least once per 24 months during shutdown.

4. The diesel generators' fuel supply shall be checked following the above tests.

5. The diesel generators' starting batteries shall be tested and monitored the same as the station batteries, Specification 4.7.b.

B. Station Batteries

1. Weekly surveillance will be performed to verify the following:

   a. The active metallic surface of the plates shall be fully covered with electrolyte in all batteries,

   b. The designated pilot cell voltage is greater than or equal to 2.0 volts and

   c. The overall battery voltage is greater than or equal to 120 volts (Diesel battery; 112 volts).

   d. The pilot cell specific gravity, corrected to 77°F, is greater than or equal to 1.190.

2. Quarterly Surveillance will be performed to verify the following:

   a. The active metallic surface of the plates shall be fully covered with electrolyte in all batteries.

   b. The voltage of each connected cell is greater than or equal to 2.0 volts under float charge and

4.8 ISOLATION CONDENSER

Applicability: Applies to periodic testing requirements for the isolation condenser system.

Objective: To verify the operability of the isolation condenser system.

Specification: A. Surveillance of each isolation condenser loop shall be as follows:

Item		Frequency
1.	Operability of motor-operated isolation valves and condensate makeup valves.	Once/month
2.	Automatic actuation and functional test.	Each refueling outage (interval not to exceed 20 months) or following major repair.
3.	Shell side water volume check.	Once/day
4.	Isolation valve (steam side)	
	a. Visual inspection	Each refueling outage
	b. External leakage check	Each primary system leak test
	c. Area temperature check	Once/shift

Basis: Motor-operated valves on the isolation condenser steam and condensate lines and on the condensate makeup line that are normally on standby should be exercised periodically to make sure that they are free to operate. The valves will be stroked full length every time they are tested to verify proper functional performance. This frequency of testing is consistent with instrumentation tests discussed in Specification 4.1. Engineering judgment based on experience and availability analyses of the type presented in Appendix L of the FDSAR indicates that testing these components once a month provides assurance of availability of the system. Also, at this frequency of testing, wearout should not be a problem throughout the life of the plant.

The automatic actuation and functional test will demonstrate the automatic opening of the condensate return line valves and the automatic closing of the isolation valves on the vent lines to the main steam lines. Automatic closure of the isolation condenser steam and condensate lines on actuation of the condenser pipe break detectors will also be verified by the test. It is during a major maintenance or repair that a system's design intent may be violated accidentally. This makes the functional test necessary after every major repair operation.

By virtue of normal plant operation the operators daily observe the water level in the isolation condensers. In addition, isolation condenser shell side water level sensors provide control room annunciation of condenser high or low water level.

TABLE 4.13-1

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
1. Primary and Safety Valve Position Indicator (Primary Detector*)	A	B
Relief and Safety Valve Position Indicator (Backup Indications**)	A	B
Relief Valve Position Indicator (Common Header Temperature Element**)	C	B
2. Wide Range Drywell Pressure Monitor (PT/PR 53 & 54)	A	D
3. Wide Range Torus Water Level Monitor (LT/LR 37 & 38)	A	D
4. Drywell H_2 Monitor	A[1]	E
5. Containment High Range Radiation Monitor	A	F***
6. High Range Radioactive Noble Gas Effluent Monitor		
a. Main Stack	A	G
b. Turbine Building Vent	A	G

Legend:

A = at least once per 31 days;
B = at least once per 18 months (550 days)
C = at least once per 15 days until channel calibration is performed and thence at least once per 31 days
D = at least once per 6 months
E = at least once per 12 months
F = each refueling outage
G = once per 20 months
1 = Span and Zero using calibration gases

* Acoustic Monitor

** Thermocouple

*** Channel calibration shall consist of electronic signal substitution of the channel, not including the detector, for all decades above 10R/hr and a one point calibration check of the detector at or below 10R/hr by means of a calibrated portable radiation source traceable to NBS.