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

JERSEY CENTRAL POWER & LIGHT COMPANY

DOCKET NO. 50-219

OYSTER CREEK NUCLEAR GENERATING STATION, UNIT NO. 1

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 54
License No. DPR-16

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

   A. The application for amendment by Jersey Central Power & Light Company (the licensee) dated September 23, 1980, 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 3.B of Provisional Operating License No. DPR-16 is hereby amended to read as follows:

   B. Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 54 , are hereby incorporated in the license. The licensee 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

Dennis M. Crutchfield

Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 29, 1981

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*Issued by NRC Order dated 10-24-80.

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; however, where such outages occur within 8 months of the end of the previous refueling outage, the test or surveillance need not be performed until the next regularly scheduled outage. Following the first refueling outage, the time between successive tests or surveillance shall not exceed 20 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 3.7.2 are operable or are secured in the closed position.

D. All blind flanges and manways are closed

1.14 SECONDARY CONTAINMENT INTEGRITY

Secondary containment integrity means that the reactor building is closed and the following conditions are met:

c. The reactor coolant system is maintained at less than 212 °F and vented.

d. At least one core spray pump, and system components necessary to deliver rated core spray flow to the reactor vessel, must remain operable to the extent that the pump and any necessary valves can be started or operated from the control room or from local control stations, and the torus is mechanically intact.

e. (1) No work shall be performed on the reactor or its connected systems which could result in lowering the reactor water level to less than 4'8" above the top of the active fuel and the condensate storage tank level is greater than thirty (30) feet (350,000 gallons). At least two redundant systems including core spray pumps and system components must remain operable as defined in d. above.

or

(2) The reactor vessel head, fuel pool gate, and separator-dryer pool gates are removed and the water level is above elevation 117 feet.

NOTE: When filling the reactor cavity from the condensate storage tank and draining the reactor cavity to the condensate storage tank, the 30 foot limit does not apply provided there is a sufficient amount of water to complete the flooding operation.

3. Primary containment integrity shall be maintained at all times when the reactor is critical or when the reactor water temperature is above 212 °F and fuel is in the reactor vessel except while performing low power physics tests at atmospheric pressure during or after refueling at power levels not to exceed 5 Mwt.

a) With one or more of the containment isolation valves shown in Table 3.5.2 inoperable:

1. Maintain at least one isolation valve operable in each affected penetration that is open and within 4 hours (48 hours for the traversing in-core probe system) either;

a) Restore the inoperable valve(s) to operable status or

b) Isolate each affected penetration by use of at least one deactivated automatic valve secured in the isolation position, or

c) Isolate each affected penetration by use of at least one closed manual valve or blind flange.

2. An inoperable containment isolation valve of the shutdown cooling system may be opened with a reator water temperature equal to or less than 350 °F in order to place the reactor in the

cold shutdown condition. The inoperable valve shall be returned to the operable status prior to placing the reactor in a condition where primary containment integrity is required.

TABLE 3.5.2

CONTAINMENT ISOLATION VALVES

VALVE FUNCTION/VALVE DESIGNATION	ISOLATION SIGNALS
Main Steam Isolation Valves (NS03A, NS03B, NS04A, NS04B)	1
Main Steam Condensate Drain Valves (V-1-106, V-1-107, V-1-110, V-1-111)	1
Reactor Building Closed Cooling Valves (V-5-147, V-5-166, V-5-167)	2
Instrument Air Valve (V-6-395)	1
Emergency Condenser Vent Valves (V-14-1, V-14-5, V-14-19, V-14-20)	1
Reactor Cleanup Valves (V-16-1, V-16-2, V-16-14, V-16-61)	3
Shutdown Cooling Valves (V-17-19, V-17-54)	3
Drywell Equipment Drain Tank Valves (V-22-1, V-22-2)	3
Drywell Sump Valves (V-22-28, V-27-29)	3
Drywell & Torus Atmosphere Control Valves (V-27-1, V-27-2, V-27-3, V-27-4, V-28-17, V-28-18, V-23-21, V-23-22, V-28-47, V-23-13, V-23-14, V-23-15, V-23-16, V-23-17, V-23-18, V-23-19, V-23-20)	3
Reactor Recirculation Loop Sample Valves (V-24-29, V-24-30)	1
Torus to Reactor Building Vacuum Relief Valves (V-26-16, V-26-18)	3*
Traversing In-Core Probe System (Tip machine ball valve No. 1, No. 2, No. 3, No. 4)	3

1)Reactor Isolation Signals as shown in Table 3.1.1
2)Low-Low Reactor Water Level and High Drywell Pressure; or Low-Low-Low Reactor Water Level.
3)Primary Containment Isolation Signals as shown in Table 3.1.1

*Valves automcatically reset to provide vacuum relief

3.13 ACCIDENT MONITORING INSTRUMENTATION

Applicability: Applies to the operating status of accident monitoring instrumentation.

Objective: To assure operability of accident monitoring instrumentation.

Specification:

A. Relief and Safety Valve Position Indicators

1. The accident monitoring instrumentation channels show in Table 3.13.1 shall be operable when the mode switch is in the Startup or Run positions.

2. With the number of operable accident monitoring instrumentation channels less than the Total Number of Channels shown in Table 3.13.1, either restore the inoperable channels to operable status within 7 days, or place the reactor in the cold shutdown condition within 24 hours.

3. With the number of operable accident monitoring instrumentation channels less than the Minimum Channels Operable requirements of Table 3.13.1, either restore the inoperable channel(s) to the operable status within 48 hours, or place the reactor in the cold shutdown condition within 24 hours.

Bases:

The operability of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and access these variables during and following an accident. This capability is consistent with NUREG 0578.

TABLE 3.13.1

ACCIDENT MONITORING INSTRUMENTATION

INSTRUMENT	TOTAL NO. OF CHANNELS	MINIMUM CHANNELS OPERABLE
1. Relief and Safety Valve Position Indicator (Primary Detector*)	1/valve	1/valve
or		
Relief and Safety Valve Position Indicator (Backup indications**)	1/valve	

*Acoustic monitor

**Thermocouple

C. Continuous Leak Rate Monitor

1. When the primary containment is inerted the containment shall be continuously monitored for gross leakage by review of the inerting system makeup requirements.

2. This monitoring system may be taken out of service for the purpose of maintenance or testing but shall be returned to service as soon as practical.

D. Report of Test Results

Each integrated leakage rate test shall be the subject of a summary technical report, including results of the local leakage rate tests. The report shall include analysis and interpretation of the results which demonstrate compliance in meeting the specified leakage rate limits.

E. Functional Test of Valves

1. All containment isolation valves specified in Table 3.5.2 shall be tested for automatic closure by an isolation signal during each refueling otuage. The following valves are required to close in the time specified below:

Main steam line isolation valves ≥ 3 sec. and	≤10 sec.
Isolation condenser isolation valves	≤60 sec.
Cleanup system isolation valves	≤60 sec.
Cleanup auxiliary pumps system isolation valves	≤60 sec.
Shutdown system isolation valves	≤60 sec.

2. Each containment isolation valve shown in Table 3.5.2 shall be demonstrated operable prior to returning the valve to service after maintenance, repair or replacement work is performed on the valve or the associated actuator by cycling the valve through at least one complete cycle of full travel and verifying the specified isolating time. Following maintenance, repair or replacement work on the control or power circuit for the valves shown in Table 3.5.2, the affected component shall be tested to assure it will perform its intended function in the circuit.

3. During periods of sustained power operation each main steamline isolation valve shall be exercised in accordance with the following schedule.

a. Daily tests - Exercise valve (one at a time) to approximately 95% open position with reactor at operation power level.

b. Quarterly tests - Trip valve (one at a time) and check full closure time, with reactor power not greater than 50% of rated power.

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4.13 ACCIDENT MONITORING INSTRUMENTATION

Applicability: Applies to surveillance requirements for the accident monitoring instrumentation.

Objective: To verify the operability of the accident monitoring instrumentation.

Specification:

A. Relief and Safety Valve Position Indicators

1. Each accident monitoring instrumentation channel shall be demonstrated operable by performance of the Channel Check and Channel Calibration operations at the frequencies shown in Table 4.13.1.

Bases:

The operability of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables during and following an accident. This capability is consistent with NUREG 0578.

TABLE 4.13-1

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
1. Relief and Safety Valve Position Indicator (Primary Detector*)	A	B
Relief and Safety Valve Position Indicator (Backup Indications**)	A	B

Legend:

A = at least once per 31 days; B = at least once per 18 months (550 days).

*Acoustic Monitor

**Thermocouple

6.1 RESPONSIBILITY

6.1.1

The Director, Oyster Creek Operations shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.

6.2 ORGANIZATION

OFFSITE

6.2.1

The offsite organization for technical support shall be as shown on Figure 6.2.1.

FACILITY STAFF

6.2.2

The facility organization shall be as shown on Figure 6.2.2 and:

a. Each on duty shift shall include at least the shift staffing indicated on Figure 6.2.2.

b. At least one licensed operator shall be in the control room when fuel is in the reactor.

c. Two licensed operators shall be in the control room during all reactor startups, shutdowns, and other periods involving planned control rod manipulations.

d. ALL CORE ALTERATIONS shall be directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.

e. An individual qualified in radiation protection measures shall be on site when fuel is in the reactor.

f. A Fire Brigade of at least 5 members shall be maintained onsite at all time. The Fire Brigade shall not include the minimum shift crew necessary for safe shutdown of the unit or any personnel required for other essential functions during a fire emergency.

g. Each on duty shift shall include a Shift Technical Advisor except that the Shift Technical Advisors position need not be filled if the reactor is in the refuel or shutdown mode and the reactor is less than 212°F.

plant. A maximum of four years of this five year experience may be fulfilled by related technical or academic training.

Shift Technical Advisor

Requirements: Bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant for transients and accidents.

6.3.2

Each member of the radiation protection organization for which there is a comparable position described in ANSI N18.1-1971 shall meet or exceed the minimum qualifications specified therein, or in the case of radiation protection technicians, they shall have at least one year's continuous experience in applied radiation protection work in a nuclear facility dealing with radiological problems similar to those encountered in nuclear power stations, and shall have been certified by the Radiological Controls Manager, as qualified to perform assigned functions. This certification must be based on an NRC approved, documented program consisting of classroom training with appropriate examinations and documented positive findings by responsible supervision that the individual has demonstrated his ability to perform each specified procedure and assigned function with an understanding of its basis and purpose.

6.4 TRAINING

6.4.1

A retraining program for operators shall be maintained under the direction of the Manager, Training and shall meet the requirements and recommendation of Appendix A of 10CFR Part 55. Replacement training programs, the content of which shall meet the requirements of 10CFR Part 55, shall be conducted under the direction of the Manager, Training for licensed operators and Senior Reactor Operators.

6.4.2

A training program for the Fire Brigade shall be maintained under the direction of the Manager, Training.

6.5 SAFETY REVIEW AND AUDIT

The Director Oyster Creek Operations and three organizational units, the Plant Operations Review Committee (PORC), the Independent Safety Review Groups (ISRG) and the General Office Review Board (GORB) function to accomplish nuclear safety review and audit of the Oyster Creek Station.

6.5.1 Director Oyster Creek Operations (DOCO)

FUNCTION

6.5.1.1

The Director Oyster Creek Operations shall ensure that:

6.15 Integrity of Systems Outside Containment

The licensee shall implement a program to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. This program shall include the following:

1) Provisions establishing preventive maintenance and periodic visual inspection requirements, and

2) System leak test requirements, to the extent permitted by system design and radiological conditions, for each system at a frequency not to exceed refueling cycle intervals. The systems subject to this testing are (1) Core Spray, (2) Containment Spray, (3) Reactor Water Cleanup, (4) Isolation Condenser and (5) Shutdown Cooling.

6.16 Iodine Monitoring

The licensee shall implement a program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas* under accident conditions. This program shall include the following:

1. Training of personnel,

2. Procedures for monitoring, and

3. Provisions for maintenance of sampling and analysis equipment.

* Areas requiring personnel access for establishing hot shutdown condition.