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

CONSUMERS POWER COMPANY

DOCKET NO. 50-255

PALISADES PLANT

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 66
License No. DPR-20

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

   A. The application for amendment by Consumers Power Company (the licensee) dated May 26, 1981, 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-20 is hereby amended to read as follows:

   B. Technical Specifications

   The Technical Specifications contained in Appendices A and B (Environmental Protection Plan), as revised through Amendment No. 66, 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

Richard H. Vollmer for

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

Attachments:
Changes to the Technical
Specifications

Date of Issuance: June 12, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 66

PROVISIONAL OPERATING LICENSE NO. DPR-20

DOCKET NO. 50-255

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

REMOVE	INSERT
4.3	4.3
4.4	4.4
4.6	4.6
4.11	4.11
4.29	4.29

TABLE 4.1.1

Minimum Frequencies for Checks, Calibrations and Testing of Reactor Protective System[5]

Channel Description	Surveillance Function	Frequency	Surveillance Method
1. Power Range Safety Channels	a. Check[3]	S	a. Comparison of four-power channel readings.
	b. Check[3]	D	b. Channel adjustment to agree with heat balance calculation. Repeat whenever flux-ΔT power comparator alarms.
	c. Test	M[2]	c. Internal test signal.[4]
	d. Calibrate	R	d. Channel alignment through measurement/ adjustment of internal test points.
2. Wide-Range Logarithmic Neutron MOnitors	a. Check	S	a. Comparison of both wide-range readings.
	b. Test	P	b. Internal test signal.
3. Reactor Coolant Flow	a. Check	S	a. Comparison of four separate total flow indications.
	b. Calibrate[6]	R	b. Known differential pressure applied to sensors.
	c. Test	M[2]	c. Bistable trip tester.[1][4]
4. Thermal Margin/Low Pressurizer Pressure	a. Check:	S	a. Check:
	(1) Temperature Input		(1) Comparison of four separate calculated trip pressure set point indications.
	(2) Pressure Input		(2) Comparison of four pressurizer pressure indications. (Same as 5(a) below.)
	b. Calibrate	R	b. Calibrate:
	(1) Temperature Input		(1) Known resistance substituted for RTD coincident with known pressure input.
	(2) Pressure Input		(2) Part of 5(b) below.
	c. Test	M[2]	c. Bistable trip tester.[1][4]
5. High-Pressurizer Pressure	a. Check	S	a. Comparison of four separate pressure indications.
	b. Calibrate	R	b. Known pressure applied to sensors.
	c. Test	M[2]	c. Bistable trip tester.[1]

TABLE 4.1.1

Minimum Frequencies for Checks, Calibrations and Testing of Reactor Protective System[5] (Contd)

Channel Description	Surveillance Function	Frequency	Surveillance Method
6. Steam Generator Level	a. Check	S	a. Comparison of four level indications per generator.
	b. Calibrate	R	b. Known differential pressure applied to sensors.
	c. Test	M[2]	c. Bistable trip tester.[1]
7. Steam Generator Pressure	a. Check	S.	a. Comparisons of four pressure indications per generator.
	b. Calibrate	R	b. Known pressure applied to sensors.
	c. Test	M[2]	c. Bistable trip tester.[1]
8. Containment Pressure	a. Calibrate	R	a. Known pressure applied to sensors.
	b. Test	M[2]	b. Simulate pressure switch action.
9. Loss of Load	a. Test	P	a. Manually trip turbine auto stop oil relays.
10. Manual Trips	a. Test	P	a. Manually test both circuits.
11. Reactor Protection System Logic Units	a. Test	M[2]	a. Internal test circuits.

Notes: (1) The bistable trip tester injects a signal into the bistable and provides a precision readout of the trip set point.

(2) All monthly tests will be done on only one of four channels at a time to prevent reactor trip.

(3) Adjust the nuclear gain pot on the ΔT cabinet until readout agrees with heat balance calculations.

(4) Trip setting for operating pump combination only. Settings for other than operating pump combinations must be tested during routine monthly testing performed when shut down and within four hours after resuming operation with a different pump combination if the setting for that combination has not been tested within the previous month.

(5) It is not necessary to perform the specified testing during prolonged periods in the regueling shutdown condition. If this occurs, omitted testing will be performed prior to returning the plant to service.

(6) The 1981 surveillance function may be deferred until the end of the 1981 refueling outage.

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TABLE 4.1.2

Minimum Frequencies for Checks, Calibrations and Testing of Engineered Safety Feature Instrumentation Controls

	Channel Description		Surveillance Function	Frequency		Surveillance Method
1.	Low-Pressure SIS Initiation Channels	a.	Check	S	a.	Comparison of four separate pressure indications.
		b.	Test(1)(4)	R	b.	Signal to meter relay adjust with test device to verify SIS actuation logic.
		c.	Test	M(2)	c.	Signal to meter relay adjusted with test device.
2.	Low-Pressure SIS Signal Block Permissive and Auto Reset	a.	Test(1)(4)	R	a.	Part of 1(b) above.
3.	SIS Actuation Relays	a.	Test	Q	a.	Simulation of SIS 2/4 logic trip using built-in testing system. Both "standby power" and "no standby power" circuits will be tested for left and right channels. Test will verify functioning of initiation circuits of all equipment normally operated by SIS signals.
		b.	Test	R	b.	Complete automatic test initiated by same method as Item 1(b) and including all normal automatic operations.
4.	Containment High-Pressure Channels	a.	Calibrate	R	a.	Known pressure applied to sensors.
		b.	Test	R	b.	Simulation of CHP 2/4 logic trip to verify actuation logic for SIS, containment isolation and containment spray
		c.	Test	M(2)	c.	Pressure switch operation simulated by opening or shorting terminals or pressure applied to the switch.
5.	Containment High Radiation Channels	a.	Check	D	a.	Comparison of four separate radiation level indications.
		b.	Calibrate	R	b.	Exposure to known external radiation source.

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TABLE 4.1.2

Minimum Frequencies for Checks, Calibrations and Testing of Engineered Safety Feature Instrumentation Controls (Contd)

	Channel Description	Surveillance Function	Frequency	Surveillance Method
13.	Safety Injection Tank Level and Pressure Instruments	a. Check	S	a. Verify that level and pressure indication is between independent high high/low alarms for level and pressure.
		b. Calibrate	R	b. Known pressure and differential pressure applied to pressure and level sensors.
14.	Boric Acid Tank Level Switches	a. Test	R	a. Pump tank below low-level alarm point to verify switch operation.
15.	Boric Acid Heat Tracing System	a. Check	D	a. Observe temperature recorders for proper readings.
16.	Main Steam Isolation Valve Circuits	a. Check	S	a. Compare four independent pressure indications.
		b. Test(3)	R	b. Signal to meter relay adjusted with test device to verify MSIV circuit logic.
17.	SIRW Tank Temperature Indication and Alarms	a. Check	M	a. Compare independent temperature readouts.
		b. Calibrate	R	b. Known resistance applied to indicating loop.
18.	Low-Pressure Safety Injection Flow Control Valve CV-3006	a. Check	P	a. Observe valve is open with air supply isolated.
19.	Safety Injection Bottle Isolation Valves	a. Check	P	a. Ensure each valve open by observing valve position indication and valve itself. Then lock open breakers (at MCC-9) and control power (key switch in control room).
20.	Safety Injection Miniflow Valves CV-3027, 3056	a. Check	P	a. Verify valves open and HS-3027 and 3056 positioned to maintain them open.

Notes: (1) Calibration of the sensors is performed during calibration of Item 5(b), Table 4.1.1.
(2) All monthly tests will be done on only one channel at a time to prevent protection system actuation.
(3) Calibration of the sensors is performed during calibration of Item 7(b), Table 4.1.1.
(4) The 1981 surveillance function may be deferred until the end of the 1981 refueling outage.

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TABLE 4.1.3

Minimum Frequencies for Checks, Calibrations and Testing of Miscellaneous Instrumentation and Controls (Contd)

	Channel Description	Surveillance Function	Frequency	Surveillance Method
8.	Control Rod Drive System Interlocks	a. Test	R	a. Verify proper operation of all rod drive control system interlocks, using simulated signals where necessary.
		b. Test	P	b. Same as 8(a) above, if not done within three months.
9.	Flux-ΔT Power Comparator	a. Calibrate	R	a. Use simulated signals.
		b. Test	M	b. Internal test signal.
10.	Calorimetric Instrumentation	a. Calibrate (2)	R	a. Known differential pressure applied to feed-water flow sensors.
11.	Containment Building Humidity Detectors	a. Test	R	a. Expose sensor to high humidity atmosphere.
12.	Interlocks - Isolation Valves on Shutdown Cooling Line	a. Calibrate	R	a. Known pressure applied to sensor.
13.	Service Water Break Detector in Containment	a. Test	R	a. Known differential pressure applied to sensors.
14.	Control Room Ventilation	a. Test	R	a. Check damper operation for DBA mode with HS-1801 and isolation signal.
		b. Test	R	b. Check control room for positive pressure.

(1) During the 1978 refueling outage, Item 2.c will only be performed on 7 rods (1 per bank). The secondary rod position surveillance (Item 3.c) will be performed in entirety. Additionally, a 20" rod position check (comparing primary indication to secondary indication) will be conducted on each rod. If the primary and secondary indications vary more than 2" from each other, corrective action will be taken to restore the proper tolerances.

(2) The 1981 surveillance function may be deferred until the end of the 1981 refueling outage.

4.5 CONTAINMENT TESTS (Contd)

(3) Visual inspection shall be made for excessive leakage from components of the system. Any significant leakage shall be measured by collection and weighing or by another equivalent method.

b. Acceptance Criterion

The maximum allowable leakage from the recirculation heat removal systems' components (which include valve stems, flanges and pump seals) shall not exceed 0.2 gallon per minute under the normal hydrostatic head from the SIRW tank (approximately 44 psig).

c. Corrective Action

Repairs shall be made as required to maintain leakage within the acceptance criterion of 4.5.3.b.

d. Test Frequency

Tests of the recirculation heat removal system shall be conducted at intervals not to exceed twelve months.

e. The 1981 recirculation heat removal system test may be deferred until the end of the 1981 refueling outage.

4.5.4 Surveillance for Prestressing System

a. Tendon inspection shall be accomplished in accordance with the following schedule:

1. One year after initial structural integrity test.
2. Three years after initial structural integrity test.
3. Five years after initial structural integrity test.
4. At five-year intervals thereafter for the life of the plant.

b. Surveillance tendons for the one-year inspection shall be the nine designated surveillance tendons plus V-104 and V-200. In addition, 15 vertical tendons shall be tested for lift-off forces only.

c. For the three-year inspection, the surveillance tendons shall consist of the 11 tendons inspected during the one-year test plus an additional 10 vertical tendons to be tested for lift-off force only. The additional 10 tendons shall be selected from tendons other than those tendons tested for lift-off force during the one-year inspection.

4.7 EMERGENCY POWER SYSTEM PERIODIC TESTS (Contd)

b. Every three months, the specific gravity of each cell, the temperature reading of every fifth cell, the height of electrolyte, and the amount of water added shall be measured and recorded.

4.7.3 Emergency Lighting

The correct functioning of the emergency lighting system shall be verified at least once each year. The 1981 verification may be deferred until the end of the 1981 refueling outage.

Basis

The emergency power system provides power requirements for the engineered safety features in the event of a DBA. Each of the two diesel generators is capable of supplying minimum required safeguards equipment from independent buses.(1, 2) This redundancy is a factor in establishing testing intervals. The monthly tests specified above will demonstrate operability and load capacity of the diesel generator. The fuel supply and various controls are continuously monitored and alarmed for abnormal conditions. Starting on complete loss of off-site power will be verified by simulated loss-of-power tests at approximately yearly intervals (during refueling shutdowns). Considering system redundancy, the specified testing intervals for the station batteries should be adequate to detect and correct any malfunction before it can result in system malfunction. Batteries will deteriorate with time, but precipitous failure is extremely unlikely. The surveillance specified is that which has been demonstrated over the years to provide an indication of a cell becoming unserviceable long before it fails.

References

(1) FSAR, Section 8.4.1.

(2) FSAR, Section 8.5.2.2.