



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

ILLINOIS POWER COMPANY, ET AL

DOCKET NO. 50-461

CLINTON POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 7
License No. NPF-62

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Illinois Power Company* (IP), Soyland Power Cooperative, Inc. and Western Illinois Power Cooperative, Inc. (the licensees) dated October 30, 1987 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.

*Illinois Power Company is authorized to act as agent for Soyland Power Cooperative, Inc. and Western Illinois Power Cooperative, Inc. and has exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

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 Facility Operating License No. NPF-62 is hereby amended to read as follows:

Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 7, are hereby incorporated into this license. IP shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Daniel R. Muller
FOR

Daniel R. Muller, Director
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 9, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 7

FACILITY OPERATING LICENSE NO. NPF-62

DOCKET NO. 50-461

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the area of change. Overleaf page(s) are provided to maintain document completeness.

Remove

3/4 6-12

3/4 6-13

3/4 6-21

3/4 6-22

3/4 6-38

B 3/4 6-3

B 3/4 6-5

Insert

3/4 6-12

3/4 6-13

3/4 6-21

3/4 6-22

3/4 6-38

B 3/4 6-3

B 3/4 6-5

CONTAINMENT SYSTEMS

CONTAINMENT BUILDING VENTILATION AND PURGE SYSTEMS

LIMITING CONDITION FOR OPERATION

3.6.1.8 The primary containment building ventilation 36-inch supply (1VR001A, 1VR001B) and 36-inch exhaust (1VQ004A, 1VQ004B) isolation valves and the containment purge 12-inch supply (1VR006A, 1VR006B) and 12-inch exhaust (1VR007A, 1VR007B) isolation valves shall be OPERABLE, and

- a. Primary containment building ventilation 36-inch supply and exhaust isolation valve(s) may be open for containment ventilation system operation* with such operation limited to <500 hours[#] per year for reducing airborne activity and atmosphere control for personnel safety.
- b. Primary containment building ventilation 36-inch supply and exhaust isolation valves shall be closed when the 12-inch containment purge isolation valve(s) are open. The 12-inch containment purge valves may be opened for reducing airborne activity and for atmospheric control to support containment access requirements to perform surveillances in accordance with these Technical Specifications.## When the 12-inch containment purge system is not required to support these access needs, the 12-inch valves shall be closed.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With the containment building ventilation 36-inch supply and/or exhaust isolation valve(s) inoperable or open for more than 500 hours per year for containment ventilation system operation, within 4 hours close the open 36-inch isolation valve(s) or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. With containment purge 12-inch supply and/or exhaust isolation valve(s) inoperable, within 4 hours close the inoperable valve(s) or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

*Containment ventilation system operation shall be defined as any time 36-inch supply and/or exhaust isolation valves are open except when opened for inservice testing performed pursuant to Specification 4.0.5.

#Applicable for the period from initial fuel load to 3 months after completion of the first refueling outage, otherwise a 250 hours per 365 days limit shall be imposed.

##The 12-inch containment purge valves may be maintained open when required to support multiple daily access to the containment to perform required surveillances.

CONTAINMENT SYSTEMS

CONTAINMENT BUILDING VENTILATION AND PURGE SYSTEMS

LIMITING CONDITIONS FOR OPERATION (Continued)

3.6.1.8 ACTION (Continued)

- c. With the containment purge supply and/or exhaust isolation valves with resilient material seals having a measured leakage rate exceeding the limit of Surveillance Requirement 4.6.1.8.3, restore the inoperable valves to OPERABLE status within 24 hours or be in at least HOT SHUTDOWN within the next 12 hours or in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.8.1 The cumulative time that the 36-inch supply and exhaust containment ventilation isolation valves have been open during the past 365 days for containment ventilation system operation shall be determined at least once per 7 days.

4.6.1.8.2 Deleted

4.6.1.8.3 At least once per 92 days each 36-inch supply and exhaust containment ventilation isolation valve (with resilient material seals) shall be demonstrated OPERABLE by verifying that the measured rate is ≤ 0.01 La when pressurized to Pa.

4.6.1.8.4 Prior to opening the containment building ventilation system 36-inch supply and/or exhaust valve(s), verify that each containment purge 12-inch supply and exhaust isolation valve is closed.

4.6.1.8.5 Prior to opening the 12-inch valve(s), verify that the 36-inch containment building ventilation supply exhaust isolation valves are closed. Once the requirement for reducing airborne activity and atmospheric control is completed, the 12-inch valves shall be closed.

CONTAINMENT SYSTEMS

DRYWELL VENT AND PURGE SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.2.7 The drywell vent and purge system 24-inch supply isolation valves (1VQ001A, 1VQ001B), the 10-inch (1VQ005) and 24-inch (1VQ002) exhaust isolation valves, and the 36-inch outboard isolation valve (1VQ003) shall be OPERABLE.

- a. Each 24-inch supply isolation valve shall be sealed closed.
- b. Either the 10-inch (1VQ005) or the 24-inch (1VQ002) exhaust isolation valve may be open for drywell vent system operation* with such operation limited to 5** hours per 365 days for pressure control.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With a 24-inch drywell vent and purge supply isolation valve(s) (1VQ001A, 1VQ001B) open, not sealed closed or otherwise inoperable, within 4 hours close and seal the valve(s) or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. With a 10-inch (1VQ005) or 24-inch (1VQ002) drywell vent and purge exhaust isolation valve(s) inoperable or open for more than 5 hours per 365 days, for drywell vent system operation*, within 4 hours close the open 10-inch and 24-inch exhaust isolation valve(s) or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- c. The provisions of Specification 3.0.4 are not applicable provided the affected penetration is isolated in accordance with ACTION a, above, and provided that the associated system, if applicable, is declared inoperable and appropriate ACTION statements for that system are performed.

SURVEILLANCE REQUIREMENTS

4.6.2.7.1 Each 24-inch drywell vent and purge supply isolation valve (1VQ001A, 1VQ001B) shall be verified to be sealed closed at least once per 31 days.

*Drywell vent system operation shall be defined as any time either the 10-inch or the 24-inch inboard exhaust valves are open concurrent with all valves of Specification 3.6.1.8 closed. This excludes the time when either of these valves is opened for inservice testing performed pursuant to Specification 4.0.5 (concurrent with all valves of Specification 3.6.1.8 closed).

**Applicable for the period for initial fuel load date to 3 months after completion of the first refueling outage, otherwise these valves should be locked closed.

CONTAINMENT SYSTEMS

DRYWELL VENT AND PURGE SYSTEM

SURVEILLANCE REQUIREMENTS (Continued)

4.6.2.7.2 The cumulative time that the 10-inch and 24-inch drywell vent and purge exhaust isolation valves (1VQ005, 1VQ002) have been open during the past 365 days for purge system operation* shall be determined at least once per 7 days.

4.6.2.7.3 Prior to opening a 10-inch (1VQ005) or 24-inch drywell vent and purge exhaust isolation valve (1VQ002) demonstrate that the 12-inch containment continuous purge isolation supply valves and the 36-inch containment ventilation isolation supply valves of Specification 3.6.1.8 are closed.

*Drywell vent system operation shall be defined as any time either the 10-inch or the 24-inch inboard exhaust valves are open concurrent with all valves of Specification 3.6.1.8 closed. This excludes the time when either of these valves is opened for inservice testing performed pursuant to Specification 4.0.5 (concurrent with all valves of Specification 3.6.1.8 closed).

TABLE 3.6.4-1 (Continued)

CONTAINMENT ISOLATION VALVES

CLINTON - UNIT 1	VALVE NUMBER	PENETRATION NUMBER	ISOLATION SIGNAL†	APPLICABLE OPERATIONAL CONDITIONS	MAXIMUM ISOLATION TIME (Seconds)	SECONDARY CONTAINMENT BYPASS PATH (YES/NO)	TEST PRESSURE (psig)*
	<u>Automatic Isolation Valves (Continued)</u>						
	48) Containment HVAC Supply	101		1, 2, 3, #		Yes	9.0
	1VR001A		B, L, M, Z, 5, R		4		
	1VR001B		B, L, M, Z, 5, R		4		
	1VR002A, B(a)		P	1(g), 2(g), 3(g), 4(g), #	16		
	49) Containment HVAC Exhaust	102		1, 2, 3, #		Yes	9.0
	1VQ004A		B, L, M, Z, 5, R		10		
	1VQ004B		B, L, M, Z, 5, R		10		
	1VQ006A, B(a)		P	1(g), 2(g), 3(g), 4(g), #	16		
3/4 6-38	50) Plant Chilled Water Supply	103		1, 2, 3, #		Yes	9.0
	1W0001A		L, U		44		
	1W0001B		L, U		44		
	51) Plant Chilled Water Return	104		1, 2, 3, #		Yes	9.0
	1W0002A		L, U		44		
	1W0002B		L, U		44		
	52) Containment Bldg. HVAC	106		1, 2, 3, #		Yes	9.0
	1VR007B		B, L, M, Z, 5, R		6		
	1VR007A		B, L, M, Z, 5, R		6		
Amendment No. 7	53) DW Chilled Water Supply	107		1, 2, 3		No	9.0
	1VP004B		L, U		74		
	1VP005B		L, U		74		
	54) DW Chilled Water Return	108		1, 2, 3		No	9.0
	1VP014B		L, U		74		
	1VP015B		L, U		74		

CONTAINMENT SYSTEMS

BASES

3/4.6.1.8 CONTAINMENT BUILDING VENTILATION AND PURGE SYSTEMS

The 36-inch containment purge supply and exhaust isolation valves have permanently installed blocking devices to restrict their opening to 50° during plant OPERATIONAL CONDITIONS 1, 2, and 3, since these valves have not been demonstrated capable of closing from the full open position during an accident. Maintaining these valves blocked during plant operations ensures that excessive quantities of radioactive materials will not be released via the containment purge system. To provide assurance that the 36-inch valves cannot be inadvertently fully opened, they are blocked in accordance with staff's recommendations accepted in SSER 5, paragraph 6.2.4.1.

The use of the containment purge lines is restricted to the 12-inch purge supply and exhaust isolation valves since, unlike the 36-inch valves, the 12-inch valves close during accident conditions and therefore the site boundary dose guidelines of 10 CFR Part 100 would not be exceeded in the event of an accident during purging operations. The design of the 12-inch purge supply and exhaust isolation valves meets the requirements of Branch Technical Position CSB 6-4, "Containment Purging During Normal Plant Operations."

The use of the 12-inch containment purge exhaust and supply lines shall be in accordance with the Clinton Power Station (CPS) "Interim Guidelines for Containment Purge Operation" provided in Illinois Power (IP) Letter U-0731, dated September 10, 1984. These guidelines establish a mechanism for minimizing operation of this system as used only for purposes of reducing containment airborne radioactivity and atmospheric control. To support these interim guidelines, a "Containment Access Management Program," in accordance with the referenced letter and IP Letter U-0716, dated June 29, 1985, is implemented to coordinate all access requirements, hereby minimizing containment occupancy times and thus minimizing the required operation of the 12-inch containment purge system. This is in accordance with the staff's recommendations accepted in SSER 5, paragraph 6.2.4.1. Once the 12-inch containment purge system is initiated, it will remain operating to support multiple daily containment access requirements in accordance with referenced guidelines. Otherwise, the 12-inch containment purge exhaust and supply lines will be isolated.

Continuous containment purge using the 36-inch containment building ventilation system is limited to only OPERATIONAL CONDITIONS 4 and 5. Intermittent use of the 36-inch system during OPERATIONAL CONDITIONS 1, 2, and 3 is permitted only for the purpose of reducing airborne activity levels, or containment pressure, and atmosphere control (excluding temperature and humidity), and shall not exceed 500 hours of use per 365 days.

Leakage integrity tests with a maximum allowable leakage rate for 36-inch supply and exhaust isolation valves will provide early indication of resilient material seal degradation and will allow the opportunity for repair before gross leakage failures develop. The 0.60 La leaking limit should not be exceeded when the

CONTAINMENT SYSTEMS

BASES

3/4.6.2.4 DRYWELL STRUCTURAL INTEGRITY

This limitation ensures that the structural integrity of the drywell will be maintained comparable to the original design specification for the life of the unit. A visual inspection in conjunction with Type A leakage tests is sufficient to demonstrate this capability.

3/4.6.2.5 DRYWELL INTERNAL PRESSURE

The limitations on drywell-to-containment differential pressure ensure that the drywell peak calculated pressure of 18.9 psig does not exceed the design pressure of 30.0 psig and that the containment peak pressure of 9.0 psig does not exceed the design pressure of 15.0 psig during steam line break conditions. The maximum external drywell pressure differential is limited to 0.2 psid, well below the pressure at which suppression pool water will be forced over the wier wall and into the drywell. The limit of 1.0 psid for initial positive drywell to containment pressure will limit the drywell pressure to 18.9 psid which is less than the design pressure and is consistent with the safety analysis to limit drywell internal pressure.

3/4.6.2.6 DRYWELL AVERAGE AIR TEMPERATURE

The limitation on drywell average air temperature ensures that peak drywell temperature does not exceed the design temperature of 330°F during LOCA conditions and is consistent with the safety analysis.

3/4.6.2.7 DRYWELL VENT AND PURGE

The drywell purge system must be normally maintained closed to eliminate a potential challenge to containment structural integrity due to a steam bypass of the suppression pool. Intermittent venting of the drywell is allowed for pressure control during OPERATIONAL CONDITIONS 1, 2, and 3, but the cumulative time of venting is limited to 5 hours per 365 days. Venting of the drywell is prohibited when the 12-inch continuous containment purge system or the 36-inch containment building ventilation system supply or exhaust valves are open. This eliminates any resultant direct leakage path from the drywell to the environment.

In OPERATIONAL CONDITIONS 1, 2 and 3, the drywell isolation valves (IVQ002, IVQ003) have permanently installed blocking devices so as not to open more than 50°. This assures that the valve would be able to close against drywell pressure buildup resulting from a LOCA.

Operation of the drywell vent and purge 24-inch supply and exhaust valves during plant operational conditions 4 and 5 is unrestricted, and the cumulative time for vent and purge operation is unlimited.