

August 9, 1988

Docket No. 50-461

Mr. Frank Spangenberg  
Manager - Licensing and Safety  
Clinton Power Station  
Post Office Box 678  
Mail Code V920  
Clinton, Illinois 61727

Dear Mr. Spangenberg:

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Docket File ✓

NRC & Local PDRs  
PDIII-2 Rdg.  
DCrutchfield  
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JStevens  
OGC-Rockville  
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EJordan

BGrimes  
TBarnhart (4)  
Wanda Jones  
EButcher  
ACRS (10)  
ARM/LFMB  
GPA/PA  
PDIII-2 Plant File

SUBJECT: TECHNICAL SPECIFICATION CHANGE REQUEST TO ADD TEST CONNECTIONS  
UPSTREAM OF CERTAIN EXCESS FLOW CHECK VALVES (TAC NO. 66553)

Re: Clinton Power Station, Unit 1

The Commission has issued the enclosed Amendment No. 7 to the Facility Operating License No. NPF-62 for the Clinton Power Station, Unit No. 1. This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated October 30, 1987.

This amendment revises Technical Specification Sections 3.6.1.8, 3.6.2.7, 4.6.1.8.2 and 4.6.2.7.4, Table 3.6.4-1, and Bases 3/4.6.2.7 and 3/4.6.1.8 concerning the containment building and drywell vent and purge systems.

A copy of our Safety Evaluation is also enclosed. Notice of Issuance will be provided in the Federal Register.

Sincerely,

Janice A. Stevens, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects

Enclosures:

1. Amendment No. 7 to License No. NPF-62
2. Safety Evaluation

cc:

See next page

\*See Previous Concurrence

PDIII-2:PM\*  
JStevens:mr  
07/11/88

PDIII-2:LA\*  
LLuther  
07/11/88

SPLB\*  
JWCraig  
07/13/88

OGC-Rockville\*  
07/21/88

PDIII-2:AD\*  
DMuller  
07/13/88

DF01  
11

8808250274 XA 5PP.



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

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*Janice A. Stevens*

Janice A. Stevens, Project Manager  
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BGRIME'S

JPartlow  
TBarnhart (4)  
Wanda Jones  
EButcher  
ACRS (10)  
ARM/LFMB  
GPA/PA  
PDIII-2 Plant File

Dear Mr. Spangenberg:

SUBJECT: TECHNICAL SPECIFICATION CHANGE REQUEST TO ADD TEST CONNECTIONS  
UPSTREAM OF CERTAIN EXCESS FLOW CHECK VALVES (TAC NO. 67163)

Re: Clinton Power Station, Unit 1

The Commission has issued the enclosed Amendment No. 8 to the Facility  
Operating License No. NPF-62 for the Clinton Power Station, Unit No. 1. This  
amendment consists of changes to the Technical Specifications (TSs) in  
response to your application dated October 30, 1987.

This amendment revises Technical Specification Sections 3.6.1.8, 3.6.2.7,  
4.6.1.8.2 and 4.6.2.7.4, Table 3.6.4-1, and Bases 3/4.6.2.7 and 3/4.6.1.8  
concerning the containment building and drywell vent and purge systems.

A copy of our Safety Evaluation is also enclosed. Notice of Issuance will be  
provided in the Federal Register.

Sincerely,

Janice A. Stevens, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects

Enclosures:

1. Amendment No. 5 to  
License No. NPF-62
2. Safety Evaluation

cc:  
See next page

PDIII-2:PM  
JStevens:mr  
7/8/88

PDIII-2:LA  
LLuther  
7/11/88

SPLB  
WCraig  
7/13/88

OGC-Rockville  
SH Lewis  
7/12/88

PDIII-2:AD  
DMuller  
7/13/88

No legal objection,  
subject to supplementation  
to satisfy attached note.

August 9, 1988

Docket No. 50-461

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Manager - Licensing and Safety  
Clinton Power Station  
Post Office Box 678  
Mail Code V920  
Clinton, Illinois 61727

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UPSTREAM OF CERTAIN EXCESS FLOW CHECK VALVES (TAC NO. 66553)

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IV, V and Special Projects

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\*See Previous Concurrence

PDIII-2:PM*	PDIII-2:LA*	SPLB*	OGC-Rockville*	PDIII-2:AD*
JStevens:mr	LLuther	JWCraig		DMuller
07/11/88	07/11/88	07/13/88	07/21/88	07/13/88

Mr. Frank A. Spangenberg  
Illinois Power Company

Clinton Power Station  
Unit 1

cc:

Mr. D. P. Hall  
Vice President  
Clinton Power Station  
P. O. Box 678  
Clinton, Illinois, 61727

Mr. R. D. Freeman  
Manager-Nuclear Station Engineering Dept.  
Clinton Power Station  
P. O. Box 678  
Clinton, Illinois 61727

Sheldon Zabel, Esquire  
Schiff, Hardin & Waite  
7200 Sears Tower  
233 Wacker Drive  
Chicago, Illinois 60606

Resident Inspector  
U. S. Nuclear Regulatory Commission  
RR 3, Box 229 A  
Clinton, Illinois 61727

Mr. L. Larson  
Project Manager  
General Electric Company  
175 Curtner Avenue, N/C 395  
San Jose, California 95125

Regional Administrator, Region III  
799 Roosevelt Road, Bldg. #4  
Glen Ellyn, Illinois 60137

Chairman of DeWitt County  
c/o County Clerk's Office  
DeWitt County Courthouse  
Clinton, Illinois 61727

Illinois Department  
of Nuclear Safety  
Division of Engineering  
1035 Outer Park Drive, 5th Floor  
Springfield, Illinois 62704

Mr. Donald Schopfer  
Project Manager  
Sargent & Lundy Engineers  
55 East Monroe Street  
Chicago, Illinois 60603



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.

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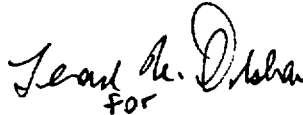
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-62 is hereby amended to read as follows:

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

  
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  $\leq 500$  hours<sup>#</sup> 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.<sup>##</sup> 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)

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##### 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  $\leq 0.01$  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

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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)

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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.

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\*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>						
3/4 6-38	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		
3/4 6-38	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		
Amendment No. 7	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		
Amendment No. 7	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		
	53) DW Chilled Water Supply	107		1, 2, 3		No	9.0
	1VP004B		L, U		74		
	1VP005B		L, U		74		
Amendment No. 7	54) DW Chilled Water Return	108		1, 2, 3		No	9.0
	1VP014B		L, U		74		
	1VP015B		L, U		74		

## CONTAINMENT SYSTEMS

### BASES

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#### 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

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#### 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.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 7 TO FACILITY OPERATING LICENSE NO. NPF-62

ILLINOIS POWER COMPANY, ET AL

CLINTON POWER STATION, UNIT 1

DOCKET NO. 50-461

1.0 INTRODUCTION

By letter dated October 30, 1987, the licensees (Illinois Power Company, et al.) requested an amendment to Facility Operating License NPF-62 for Clinton Power Station, Unit No. 1, in the form of Technical Specification (TS) changes. This amendment proposes a number of changes to the TS. Among these changes, the licensees revised a portion of the TS related to containment ventilation and drywell purge (VR/VQ) system isolation valves. Specifically, the licensees propose (1) deletion of the operability and surveillance requirements for the 50° stops installed for the VR/VQ valves, (2) insertion of footnotes in the limiting conditions for operation and applicable surveillance requirements to exclude the time when the VR/VQ valves are opened for performing stroke-time testing, and (3) extension of the administrative control permitting opening of the VR/VQ valves.

The following is the staff's evaluation of the above proposed TS changes pertaining to the VR/VQ system isolation valves.

2.0 EVALUATION

2.1 TS Pages 3/4 6-12, and 13, "Containment Building Ventilation and Purge Systems"

The licensees propose to delete the requirements associated with the VR/VQ valve opening angle restriction in footnote 1 (one asterisk) of TS 3.6.1.8 (limiting conditions for operation) and in TS 4.6.1.8.2 (surveillance requirements), and to revise footnote 2 (two asterisks) of TS 3.6.1.8.

Footnote 1 of TS 3.6.1.8 requires that the 36-inch containment ventilation supply and exhaust valves be blocked to prevent them from opening more than 50°. The surveillance requirements of TS 4.6.1.8.2 require that the 50° valve-opening restriction for the 36-inch containment ventilation supply and exhaust valves be verified at least once every 31 days. The licensees propose to remove these requirements from the TS. Footnote 2 of TS 3.6.1.8 states that containment ventilation system operation shall be defined as any time the 36-inch supply and/or exhaust isolation valves are opened. The licensees propose to insert the following statement to footnote 2: "except when opened for inservice testing performed pursuant to TS 4.0.5".

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The staff originally required that the licensees demonstrate vent and purge valve operability in accordance with the requirements of NUREG-0737, Item II.E.4.2(6). In the staff report dated July 20, 1983, it was determined that, among other things, the use of the 24-inch and 36-inch purge valves would be acceptable during operational modes 1, 2, and 3 if the valves were blocked to a maximum opening angle of 50° (90° corresponds to fully open). In its letter dated November 17, 1983, the licensees committed to install mechanical stops on the valves to limit them from opening more than 50° during operational modes 1, 2, and 3. The 50° stops could be removed during modes 4 and 5 if increased purge flow were required during maintenance activities. The staff found the licensees' commitment acceptable as indicated in Supplement 5 to the Clinton Safety Evaluation Report (SSER 5) dated January 1986. The licensees incorporated the appropriate operability and surveillance requirements for the 50° stops into the TS.

Subsequently, the licensees found that purge flow was adequate during modes 4 and 5 with the 50° stops in place and thus, periodic removal of the 50° stops to increase purge flow as originally suggested would not be needed. Therefore, the licensees proposed to modify the 50° stops so that they are a permanent part of the installation of the valves and to delete the requirement for confirmation of the 50° opening angle limitation in the TS. The licensees also proposed to revise the bases for TS 3/4 6.1.8 to specify that the blocking devices are permanently installed on the 36-inch purge valves.

Because the 50° mechanical stops for these valves were previously approved by the staff as discussed in SSER 5 and are a part of the permanent valve installation, the staff finds the elimination of the operability and surveillance requirements for the 50° stops in TS 3.6.1.8 and TS 4.6.1.8.2 to be acceptable. The staff also agrees with the revised bases for TS 3/4 6.1.8 because of the permanent installation of the blocking device on these valves.

TS 3.6.1.8 requires that the opening of the containment building ventilation (36-inch) isolation valves for containment ventilation system operation be limited to less than or equal to 500 hours per year. System operation is defined by TS 3.6.1.8 as any time the valves are open. TS 4.0.5 requires that these valves be tested according to the inservice testing (IST) program by performing stroke-time testing every 92 days. The IST is performed such that the valves are open one at a time for stroke time verification while the other valve in series is closed. The licensees propose to exclude the time when these valves are opened to complete stroke-time testing from the cumulative system operation time limits currently specified in TS 3.6.1.8. The staff finds the proposed revision to footnote 2 of TS 3.6.1.8 acceptable because valve testing in accordance with the IST requirements does not require the containment ventilation system to be operable. Therefore, stroke-time testing should not be considered part of the system operation time limit.

## 2.2 TS Pages 3/4 6-21, 22, "Drywell Vent and Purge Systems"

The licensees propose to delete footnote 1 (one asterisk) and revise footnote 2 (two asterisks) in TS 3.6.2.7 (limiting conditions for operation), and delete TS 4.6.2.7.4 (surveillance requirements) and its footnote.

Footnote 1 requires that the 24-inch drywell vent and purge supply and exhaust isolation valves and the 36-inch outboard isolation valves be blocked to prevent them from opening more than 50°. Footnote 2 specifies that drywell vent system operation shall be defined as any time either the 10-inch or the 24-inch inboard exhaust valves are open when all valves mentioned in TS 3.6.1.8 are closed. The licensees propose to revise footnote 2 by adding the following: "This excludes the time when either of these valves is opened for inservice testing performed pursuant to TS 4.0.5 (concurrent with all valves of TS 3.6.1.8 closed)."

The surveillance requirements of TS 4.6.2.7.4 state that at least once every 31 days, the 24-inch drywell vent and purge supply and exhaust valves and the 36-inch outboard isolation valves shall be verified to be blocked in order to restrict valve opening to less than or equal to 50°. The footnote for TS 4.6.2.7.4 also specifies that the blocking device for the 24-inch valves shall be verified installed prior to drywell closing and during each cold shutdown except such verification need not be performed more often than once every 92 days. The staff finds the proposed deletion of TS 3.6.2.7.4 and footnote 1 of TS 3.6.2.7 associated with the 50° valve opening angle limitation acceptable because the 50° stop device will become part of the permanent valve installation and cannot be removed.

TS 3.6.2.7 requires that the opening of the drywell vent and purge system (24-inch or 10-inch) isolation valves for drywell vent system operation be limited to 5 hours per year. The basis for limiting the amount of time the valve can be opened for drywell vent system operation is to limit the release of radioactivity to the environs during normal operating conditions. The staff finds that the revision to footnote 2 of TS 3.6.2.7 to exclude the IST stroke-time tests from the system operation time acceptable, because stroke-time testing per the IST program does not require the drywell vent and purge system to be operable.

## 2.3 TS Page 3/4/6-36, Table 3.6.4-1, "Containment Isolation Valves"

TS Table 3.6.4-1, note (a) states that certain containment isolation valves may be open on an intermittent basis under administrative control. The licensees propose to extend the application of this note to include the VR/VQ valves since they are needed to be opened while certain local leakrate tests are conducted. Note (a) would be inserted into Table 3.6.4-1 for valves 1VR002A,-B and 1VQ006A,-B to allow them to be opened under administrative control during the performance of leak testing

associated with the 36-inch containment ventilation supply and exhaust valves every 92 days as specified in TS 4.6.1.8.3. The VR/VQ valves are part of the test boundary for the 36-inch containment ventilation supply and exhaust valves. Also, when these valves are being leak tested, the 36-inch valves must be closed so that the penetration will remain effectively closed during the test. The staff finds extending the application of note (a) to the valves specified above acceptable because the valves are required to be opened during the local leakrate testing of the 36-inch ventilation system isolation valves every 92 days.

Based on the above review of the licensees' submittal and related documents concerning the containment ventilation system and drywell purge system isolation valves, the staff concludes that the proposed TS changes meet containment isolation dependability requirements set forth in NUREG-0737, Item II.E.4.2, and therefore, are acceptable.

### 3.0 ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR 51.21, 51.32, and 51.35, an environmental assessment and finding of no significant impact have been prepared and published (53 FR 29399) in the Federal Register on August 4, 1988. Accordingly, based upon the environmental assessment, the Commission has determined that the issuance of this amendment will not have a significant effect on the quality of the human environment.

### 4.0 CONCLUSION

We have concluded, based on the considerations discussed above, that:  
(1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and  
(2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: J. S. Guo, PSB/DEST

Dated: August 9, 1988



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

August 9, 1988

Docket No. 50-461

Mr. Frank Spangenberg  
Manager - Licensing and Safety  
Clinton Power Station  
Post Office Box 678  
Mail Code V920  
Clinton, Illinois 61727

Dear Mr. Spangenberg:

The Commission has filed the enclosed "Notice of Issuance of Amendment to Facility Operating License" with the Office of the Federal Register for publication. This notice is in regards to Amendment No. 7 of Operating License No. NPF-62 which was issued in response to Illinois Power Company, et al. request dated October 30, 1987.

Sincerely,

*Janice A. Stevens*

Janice A. Stevens, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects

Enclosure:  
As stated

cc: See next page

~~8808250279~~ 4P.

August 9, 1988

Docket No. 50-461

Mr. Frank Spangenberg  
Manager - Licensing and Safety  
Clinton Power Station  
Post Office Box 678  
Mail Code V920  
Clinton, Illinois 61727

Dear Mr. Spangenberg:

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Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects

Enclosure:  
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Docket No. 50-461

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The Commission has filed the enclosed "Notice of Issuance of Amendment to Facility Operating License" with the Office of the Federal Register for publication. This notice is in regards to Amendment No. 8 of Operating License No. NPF-62 which was issued in response to Illinois Power Company, et al. request dated October 30, 1987.

Sincerely,

Janice A. Stevens, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects

Enclosure:  
As stated

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August 9, 1988

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Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects

Enclosure:  
As stated

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\*See Previous Concurrence

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UNITED STATES NUCLEAR REGULATORY COMMISSIONILLINOIS POWER COMPANY, ET AL.DOCKET NO. 50-461NOTICE OF ISSUANCE OF AMENDMENT TOFACILITY OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 7 to Facility Operating License No. NPF-62 issued to the Illinois Power Company\* (IP), Soyland Power Cooperative, Inc. and Western Illinois Power Cooperative, Inc., (the licensees), for operation of the Clinton Power Station, Unit 1, located in DeWitt County, Illinois.

This amendment consists of three changes to Technical Specification Sections 3.6.1.8, 3.6.2.7, 4.6.1.8.2, and 4.6.2.7.4, Table 3.6.4-1, and Bases 3/4.6.2.7 and 3/4.6.1.8 concerning the containment building and drywell vent and purge systems. The first change consists of those changes required to delete the OPERABILITY and surveillance requirements associated with 50° stops installed for the VR/VQ system containment isolation valves on the basis that

\*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.

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the 50° stops will now be considered to be a part of the permanent design for these valves. The second change inserts footnotes into the Limiting Conditions for Operation and applicable surveillance requirements associated with Specifications 3.6.1.8 and 3.6.2.7 to exclude the time when valves are opened for performing stroke-time testing from the cumulative system operation time limited by the Limiting Conditions for Operation. The third change extends the application of Note "(a)" in Table 3.6.4-1 of the Technical Specifications to include specific VR/VQ containment isolation valves which need to be opened while conducting certain local leak rate tests.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment.

Notice of Consideration of Issuance of Amendment and Opportunity for Hearing in connection with this action was published in the FEDERAL REGISTER on February 18, 1988 (53 FR 4919). No request for a hearing or petition for leave to intervene was filed following this notice.

The Commission has prepared an Environmental Assessment related to the action and has determined not to prepare an environmental impact statement. Based upon the Environmental Assessment, the Commission has concluded that the issuance of this amendment will not have a significant effect on the quality of the human environment.

- 3 -

For further details with respect to the action see (1) the application for amendment dated October 30, 1987, (2) Amendment No. 7 to License No. NPF-62, and (3) Environmental Assessment and Finding of No Significant Impact. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W.; and at Vespasian Warner Public Library, 120 West Johnson Street, Clinton, Illinois 61727. A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Reactor Projects.

Dated at Rockville, Maryland this 9th day of August 1988.

FOR THE NUCLEAR REGULATORY COMMISSION



Leonard N. Olshan, Acting Director  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects

- 3 -

For further details with respect to the action see (1) the application for amendment dated October 30, 1987, (2) Amendment No. 7 to License No. NPF-62, and (3) Environmental Assessment and Finding of No Significant Impact. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W.; and at Vespasian Warner Public Library, 120 West Johnson Street, Clinton, Illinois 61727. A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Reactor Projects.

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FOR THE NUCLEAR REGULATORY COMMISSION

Leoneard N. Olshan, Acting Director  
Project Directorate III-2  
Division of Reactor Projects - III,  
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For further details with respect to the action see (1) the application for amendment dated October 30, 1987, (2) Amendment No. *8* to License No. NPF-62, and (3) Environmental Assessment and Finding of No Significant Impact. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W.; and at Vespasian Warner Public Library, 120 West Johnson Street, Clinton, Illinois 61727. A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Reactor Projects.

Dated at Rockville, Maryland this            day of

FOR THE NUCLEAR REGULATORY COMMISSION

*Leonard N. Oleker, Acting*

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

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

August 9, 1988

Docket No.: 50-461

Mr. Frank Spangenberg  
Manager - Licensing and Safety  
Clinton Power Station  
Post Office Box 678  
Mail Code V920  
Clinton, Illinois 61727

Dear Mr. Spangenberg:

SUBJECT: ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT -  
TECHNICAL SPECIFICATION CHANGE CONCERNING THE CONTAINMENT BUILDING  
AND DRYWELL VENT AND PURGE SYSTEMS (TAC NO. 66553)

RE: CLINTON POWER STATION, UNIT 1

Pursuant to 10 CFR 51.119, the Commission has requested the Office of the Federal Register to publish the enclosed "Environmental Assessment and Finding of No Significant Impact." This notice is in regard to your request dated October 30, 1987 for changes to the Technical Specifications (TSs) concerning the containment building and drywell vent and purge systems.

*Janice A. Stevens*

Janice A. Stevens, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects

Enclosure:  
As stated

cc: w/enclosure:  
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August 9, 1988

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Project Directorate III-2  
Division of Reactor Projects - III,  
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7/11/88

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DMuller  
7/13/88

OGC *LH*  
S. H. Lewis  
7/12/88 No legal objection.  
See typographical & grammatical errors.



August 9, 1988

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07/13/88

OGC\*  
SHLewis  
07/21/88

UNITED STATES NUCLEAR REGULATORY COMMISSIONILLINOIS POWER COMPANY, ET ALDOCKET NO. 50-461ENVIRONMENTAL ASSESSMENT AND FINDING OFNO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to the Illinois Power Company \*(IP), Soyland Power Cooperative, Inc. and Western Illinois Power Cooperative, Inc. (the licensees) for Clinton Power Station, Unit 1, located in DeWitt County, Illinois.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action: In general, the proposed license amendment would revise the Technical Specifications (TS) related to containment ventilation and drywell purge (VR/VQ) system isolation valves.

Specifically, the licensees proposed (1) deletion of the operability and surveillance requirements for the 50° stops installed for the VR/VQ valves, (2) insertion of footnotes in the limiting conditions for operation and applicable surveillance requirements to exclude the time when the VR/VQ valves are opened for performing stroke-time testing, and (3) extension of the administrative control permitting opening of the VR/VQ valves.

\*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.

This revision to the Clinton Power Station license would be made in response to the licensees' application for amendment dated October 30, 1987.

The Need for the Proposed Action: Pursuant to 10 CFR 50.90, IP, et al. have proposed an amendment to Facility Operating License No. NPF-62 which consists of three changes to the TS concerning the containment ventilation and drywell purge system isolation valves. The first change would delete the requirements associated with the VR/VQ valve opening angle restriction in footnote 1 (one asterisk) of TS 3.6.1.8 (limiting conditions for operations) and in TS 4.6.1.8.2 (surveillance requirements), and would revise footnote 2 (two asterisks) of TS 3.6.1.8.

Footnote 1 of TS 3.6.1.8 requires that the 36-inch containment ventilation supply and exhaust valves be blocked to prevent them from opening more than 50°. The surveillance requirements of TS 4.6.1.8.2 require that the 50° valve-opening restriction for the 36-inch containment ventilation supply and exhaust valves be verified at least once every 31 days. The licensees propose to remove these requirements from the TS. Footnote 2 of TS 3.6.1.8 states that containment ventilation system operation shall be defined as any time the 36-inch supply and/or exhaust isolation valves are opened. The licensees propose to insert the following statement to footnote 2: "except when opened for inservice testing performed pursuant to TS 4.0.5".

By letter dated July 20, 1983, the staff informed the licensees that the use of the 24-inch and 36-inch purge valves would be acceptable during operational modes 1, 2, and 3 if the valves were blocked to a maximum opening angle of 50° (90° corresponds to fully open). In its letter dated

November 17, 1983, the licensees committed to install mechanical stops on the valves to limit them from opening more than 50° during operational modes 1, 2, and 3. The 50° stops could be removed during modes 4 and 5 if increased purge flow were required during maintenance activities. The staff found the licensees' commitment acceptable as indicated in Supplement 5 to the Clinton Supplemental Safety Evaluation Report (SSER 5) dated January 1986. The licensees incorporated the appropriate operability and surveillance requirements for the 50° stops into the TS.

Subsequently, the licensees found that purge flow was adequate during modes 4 and 5 with the 50° stops in place and thus, periodic removal of the 50° stops to increase purge flow as originally suggested would not be needed. Therefore, the licensees proposed to modify the 50° stops so that they are a permanent part of the installation of the valves and to delete the requirement for confirmation of the 50° opening angle limitation in the TS. The licensees also proposed to revise the bases for TS 3/4 6.1.8 to specify that the blocking devices are permanently installed on the 36-inch purge valves.

TS 3.6.1.8 requires that the opening of the containment building ventilation (36-inch) isolation valves for containment ventilation system operation be limited to less than or equal to 500 hours per year. System operation is defined by TS 3.6.1.8 as any time the valves are open. TS 4.0.5 requires that these valves be tested according to the inservice testing (IST) program by performing stroke-time testing every 92 days. The IST is performed such that the valves are open one at a time for stroke time verification while

the other valve in series is closed. The licensees propose to exclude the time when these valves are opened to complete stroke-time testing from the cumulative system operation time limits currently specified in TS 3.6.1.8.

The second change would delete footnote 1 (one asterisk) and revise footnote 2 (two asterisks) in TS 3.6.2.7 (limiting conditions for operation), and delete TS 4.6.2.7.4 (surveillance requirements) and its footnote.

Footnote 1 requires that the 24-inch drywell vent and purge supply and exhaust isolation valves and the 36-inch outboard isolation valves be blocked to prevent them from opening more than 50°. Footnote 2 specifies that drywell vent system operation shall be defined as any time either the 10-inch or the 24-inch inboard exhaust valves are open when all valves mentioned in TS 3.6.1.8 are closed. The licensees propose to revise footnote 2 by adding the following: "This excludes the time when either of these valves is opened for inservice testing performed pursuant to TS 4.0.5 (concurrent with all valves of TS 3.6.1.8 closed)."

The surveillance requirements of TS 4.6.2.7.4 state that at least once every 31 days, the 24-inch drywell vent and purge supply and exhaust valves and the 36-inch outboard isolation valves shall be verified to be blocked in order to restrict valve opening to less than or equal to 50°. The footnote for TS 4.6.2.7.4 also specifies that the blocking device for the 24-inch valves shall be verified installed prior to drywell closing and during each cold shutdown except such verification need not be performed more often than once every 92 days. The licensees propose to delete TS 3.6.2.7.4 and footnote 1 of TS 3.6.2.7 associated with the 50° valve opening angle limitation since the 50° stop device will become part of the permanent valve installation.

TS Table 3.6.4-1, note (a) states that certain containment isolation valves may be open on an intermittent basis under administrative control. The third change would extend the application of this note to include the VR/VQ valves since they are needed to be opened while certain local leakrate tests are conducted. Note (a) would be inserted into Table 3.6.4-1 for valves 1VR002A,-B and 1VQ006A,-B to allow them to be opened under administrative control during the performance of leak testing associated with the 36-inch containment ventilation supply and exhaust valves every 92 days as specified in TS 4.6.1.8.3.

Environmental Impacts of the Proposed Action:

Because the 50° mechanical stops for these valves were previously approved by the staff (as discussed in SSER 5) and are a part of the permanent valve installation, the staff finds the elimination of the operability and surveillance requirements for the 50° stops in TS 3.6.1.8 and TS 4.6.1.8.2 to be acceptable. The staff also agrees with the revised bases for TS 3/4 6.1.8 because of the permanent installation of the blocking device on these valves.

The staff finds the proposed revision to footnote 2 of TS 3.6.1.8 acceptable because valve testing in accordance with the IST requirements does not require the containment ventilation system to be operable. Therefore, stroke-time testing should not be considered part of the system operation time limit.

The staff finds the proposed deletion of TS 3.6.2.7.4 and footnote 1 of TS 3.6.2.7 associated with the 50° valve opening angle limitation acceptable because the 50° stop device will become part of the permanent valve installation and cannot be removed.

TS 3.6.2.7 requires that the opening of the drywell vent and purge system (24-inch or 10-inch) isolation valves for drywell vent system operation be limited to 5 hours per year. The basis for limiting the amount of time the valve can be opened for drywell vent system operation is to limit the release of radioactivity to the environs during normal operating conditions. The staff finds that the revision to footnote 2 of TS 3.6.2.7 to exclude the IST stroke-time tests from the system operation time is acceptable, because stroke-time testing per the IST program does not require the drywell vent and purge system to be operable.

The VR/VQ valves are part of the test boundary for the 36-inch containment ventilation supply and exhaust valves. Also, when these valves are being leak tested, the 36-inch valves must be closed so that the penetration will remain effectively closed during the test. The staff finds extending the application of note (a) to the valves specified above acceptable because the valves are required to be opened during the local leakrate testing of the 36-inch ventilation system isolation valves every 92 days.

The Commission has determined that potential radiological releases during normal operations, transients, and for accidents would not be increased. With regard to non-radiological impacts, the proposed amendment involves systems located entirely within the restricted area as defined in 10 CFR Part 20. They do not affect non-radiological plant effluents and have no other environmental impact. Therefore, the staff also concludes that there are no significant non-radiological environmental impacts associated with the proposed amendment.

Accordingly, the Commission findings in the "Final Environmental Statement related to the operation of Clinton Power Station, Unit No. 1" dated May 1982

regarding radiological environmental impacts from the plant during normal operation or after accident conditions, are not adversely altered by this action. IP is committed to operate Clinton, Unit 1 in accordance with standards and regulations to maintain occupational exposure levels "as low as reasonably achievable."

Alternative to the Proposed Actions: The principal alternative would be to deny the requested amendment. This alternative, in effect, would be the same as a "no action" alternative. Since the Commission has concluded that no adverse environmental effects are associated with this proposed action, any alternative with equal or greater environmental impact need not be evaluated.

Alternative Use of Resources: This action does not involve the use of resources not previously considered in connection with the Nuclear Regulatory Commission's Final Environmental Statement dated May 1982 related to this facility.

Agencies and Persons Consulted: The NRC staff reviewed the licensees' request of October 30, 1987 and did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT: The Commission has determined not to prepare an environmental impact statement of the proposed license amendment.

Based upon this environmental assessment, the Commission concludes that the proposed action will not have a significant adverse effect on the quality of the human environment.

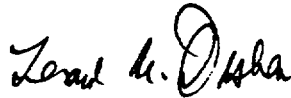
For further details with respect to this action, see the request for amendment dated October 30, 1987 and the Final Environmental Statement for the Clinton Power Station dated May 1982, which are available for public inspection



at the Commission Public Document Room, 1717 H Street, N.W., Washington, D.C. 20555 and at the Vespasian Warner, 120 West Johnson Street, Clinton, Illinois 61727.

Dated at Rockville, Maryland this 28th day of July 1988.

FOR THE NUCLEAR REGULATORY COMMISSION



Leonard N. Olshan, Acting Director  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects