

April 20, 1989

Docket No.: 50-461

Mr. Dale L. Holtzscher
Acting Manager - Licensing and Safety
Clinton Power Station
P. O. Box 678
Mail Code V920
Clinton, Illinois 61727

Dear Mr. Holtzscher:

SUBJECT: TECHNICAL SPECIFICATION CHANGE REQUEST TO REVISE A SURVEILLANCE
REQUIREMENT FOR SINGLE LOOP OPERATION (TAC NO. 71978)

RE: Clinton Power Station, Unit No. 1

The Commission has issued the enclosed Amendment No. 22 to 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 January 26, 1989.

This amendment revises Technical Specification Section 4.4.1.1.3.d. to correct an error in a surveillance requirement for single loop operation. The current surveillance requirement directs that while in single loop operation, a minimum core flow must be verified when thermal power is within the unrestricted zone of Figure 3.4.1.1-1. The core flow should be verified when thermal power is within the restricted rather than unrestricted zone.

A copy of our Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

John B. Hickman, Project Manager
Project Directorate III-2
Division of Reactor Projects III,
IV, V, and Special Projects

Enclosures:

1. Amendment No. 22 to License No. NPF-62
2. Safety Evaluation

cc w/enclosures:
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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Acting Manager - Licensing and Safety
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Sincerely,

A handwritten signature in cursive script, reading "John B. Hickman".

John B. Hickman, Project Manager
Project Directorate III-2
Division of Reactor Projects III,
IV, V, and Special Projects

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cc w/enclosures:
See next page

Mr. Dale L. Holtzscher
Illinois Power Company

Clinton Power Station
Unit 1

cc:

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



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. 22
License No. NPF-62

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Illinois Power Company* (IP), and Soyland Power Cooperative, Inc. (the licensees) dated January 26, 1989, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-62 is hereby amended to read as follows:

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

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PDR ADCK 05000461
P FCC

Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 22, are hereby incorporated into this license. Illinois Power Company 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, Director
Project Directorate III-2
Division of Reactor Projects - III,
IV, V and Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 20, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 22

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.

Remove

3/4 4-3

Insert

3/4 4-3

REACTOR COOLANT SYSTEM

RECIRCULATION LOOPS

SURVEILLANCE REQUIREMENTS

4.4.1.1.1 Each reactor coolant system recirculation loop flow control valve shall be demonstrated OPERABLE at least once per 18 months by:

- a. Verifying that the control valve fails "as is" on loss of hydraulic pressure at the hydraulic control unit, and
- b. Verifying that the average rate of control valve movement is:
 1. Less than or equal to 11% of stroke per second opening, and
 2. Less than or equal to 11% of stroke per second closing.

4.4.1.1.2 When THERMAL POWER is within the restricted zone of Figure 3.4.1.1-1, and one or two pumps are in operation, establish a baseline APRM and LPRM* neutron flux noise value within 2 hours of entering this operating region unless baselining has previously been performed in the region since the last CORE ALTERATION, and

- a. Determine the APRM and LPRM* noise levels at least once per 8 hours, and
- b. Determine the APRM and LPRM* noise levels within 30 minutes after the completion of a THERMAL POWER increase of at least 5% of RATED THERMAL POWER.

4.4.1.1.3 With one reactor system recirculation loop not in operation, at least once per 12 hours verify that:

- a. Reactor THERMAL POWER is \leq 70% of RATED THERMAL POWER.
- b. The recirculation flow control system is in the Local Manual (Position Control) mode,
- c. The volumetric flow rate of the operating loop is \leq 33,000 gpm**, and
- d. Core flow is greater than (39)[#]% when THERMAL POWER is within the restricted zone of Figure 3.4.1.1-1.

4.4.1.1.4 With one reactor coolant system recirculation loop not in operation, within no more than 15 minutes prior to either THERMAL POWER increase or recirculation loop flow increase, verify that the following differential temperature

*Detector levels A and C of one LPRM string per core octant plus detectors A and C of one LPRM string in the center of the core should be monitored.

**This value represents the design volumetric recirculation loop flow which produces 100% core flow at 100% THERMAL POWER.

#Value to be established during Startup Test Program. (Core flow with both recirculation pumps at rated speed and minimum control valve position.)



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 22 TO FACILITY OPERATING LICENSE NO. NPF-62
CLINTON POWER STATION, UNIT NO. 1
ILLINOIS POWER COMPANY
DOCKET NO. 50-461

1.0 INTRODUCTION

By letter dated January 26, 1989, the Illinois Power Company (IP), et al. (the licensees) requested an amendment to Facility Operating License No. NPF-62 for the Clinton Power Station, Unit 1. The proposed amendment would revise Technical Specification Section 4.4.1.1.3.d. to correct an error in a surveillance requirement for single loop operation. The current surveillance requirement directs that while in single loop operation, a minimum core flow must be verified when thermal power is within the unrestricted zone of Figure 3.4.1.1-1. The core flow should be verified when thermal power is within the restricted rather than unrestricted zone. The associated LCO action statement (ACTION "d") requires that when core flow is less than the required minimum and thermal power is within the restricted zone that either the thermal power must be reduced to the unrestricted zone or core flow must be increased above the required minimum. This action statement conflicts with the correct surveillance requirement and would agree with the proposed revision.

2.0 EVALUATION

A review of the current version of the Technical Specifications governing Single Loop Operation (SLO) indicates a discrepancy between the action statements and the surveillance requirements for that condition. Specifically, action statement "d" states:

"With one or two reactor coolant recirculation loops in operation, and total core flow less than or equal to (39)[#]%, and THERMAL POWER within the restricted zone of Figure 3.4.1.1-1, within 15 minutes initiate corrective action to reduce THERMAL POWER to within the unrestricted zone of Figure 3.4.1.1-1, or increase core flow to greater than (39)[#]% within 4 hours." (emphasis added)

However, surveillance requirement 4.4.1.1.3 states in part:

"With one reactor system recirculation loop not in operation, at least once per 12 hours verify that:

- d. Core flow is greater than (39)[#]% when THERMAL POWER is within the unrestricted zone of Figure 3.4.1.1-1." (emphasis added)

These statements clearly are in conflict. The licensee has stated that a review of the technical specifications of other facilities and discussions with General Electric have confirmed that the use of the word "unrestricted" in the surveillance, rather than "restricted", is an error.

A review of the analysis provided by the licensee on October 7, 1986 to justify SLO and the Safety Evaluation Report of that analysis was conducted. Clearly the region of concern for SLO is the restricted zone due to instabilities which may occur during conditions of high power and low flow. The intent of this portion of the SLO technical specifications was to ensure that sufficient core flow was maintained when power levels were high or that power levels were sufficiently reduced under conditions of low core flow. Therefore, the staff finds the proposed revision of the surveillance requirement to be acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

The amendment involves a change in a surveillance requirement. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding.

The amendment only involves a change in surveillance requirements for the facility. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

4.0 CONCLUSION

The proposed changes to Technical Specification Section 4.4.1.1.3.d., in order to monitor for conditions of low core flow at high power, is acceptable since it corrects the criteria to monitor the area of concern.

The staff has 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 to the public.

Principal Contributor: John B. Hickman, NRR/PDIII-2

Dated: April 20, 1989