

August 3, 1988

Docket No.: 50-461

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

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Dear Mr. Spangenberg:

SUBJECT: TECHNICAL SPECIFICATION CHANGE REQUEST CONCERNING THE SAFETY/
RELIEF VALVES LOW-LOW SET FUNCTION SETPOINT TOLERANCE AND THE MAIN
STEAM ISOLATION VALVES-LEAKAGE CONTROL SYSTEM (TAC NO. 66553)

RE: CLINTON POWER STATION, UNIT NO. 1

The Commission has issued the enclosed Amendment No.5 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 October 30, 1987.

This amendment revises Technical Specification Section 3.4.2.2, in order to lower the safety/relief valves low-low set function setpoint tolerance to match the value in the design specifications, and Section 3.6.1.4, in order to allow a main steam isolation valve-leakage control system (MSIV-LCS) instrument channel to be placed in an inoperable status for up to two hours for the performance of surveillances provided the other channel(s) monitoring that parameter are operable.

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

Sincerely,

Janice 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 w/enclosures:
See next page

DFol
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PDR ADDCK 05000461
PDC

PDIII-2:PM *gas*
JStevens:km
7/18/88

PDIII-2:LA *2*
LLuther
7/27/88

~~SPLB
JWcraig
1/788~~

[Signature]
OGC-Rockville
8/3/88

PDIII-2:PD
DMuller
7/24/88

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cc w/enclosures:
See next page

PDIII-2:PM *gas*
JStevens:km
7/18/88

PDIII-2:LA *22*
LLuther
7/27/88

~~SPLB
JWraig
1/1/88~~

dk
OGC-Rockville
8/3/88

PDIII-2:PD
DMuller
7.12.88



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

August 3, 1988

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Manager - Licensing and Safety
Clinton Power Station
P. O. Box 678
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Clinton, Illinois 61727

Dear Mr. Spangenberg:

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Janice Stevens, Project Manager
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Division of Reactor Projects - III,
IV, V and Special Projects

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2. Safety Evaluation

cc w/enclosures:
See next page

Mr. Frank A. Spangenberg
Illinois Power Company

Clinton Power Station
Unit 1

cc:

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Vice President
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Project Manager
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Chicago, Illinois 60606

Chairman of DeWitt County
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DeWitt County Courthouse
Clinton, Illinois 61727

Resident Inspector
U. S. Nuclear Regulatory Commission
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Clinton, Illinois 61727

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of Nuclear Safety
Division of Engineering
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Project Manager
Sargent & Lundy Engineers
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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. 5
License No. NPF-62

1. The Nuclear Regulatory Commission (the Commission) has found that
 - A. The application for amendment by 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.
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 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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P PDC

(2) 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. 5, 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



D. 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 3, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 5

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 4-11

3/4 6-7

Insert

3/4 4-11

3/4 6-7

REACTOR COOLANT SYSTEM

SAFETY/RELIEF VALVES LOW-LOW SET FUNCTION

LIMITING CONDITION FOR OPERATION

3.4.2.2 The low-low set function of the following reactor coolant system safety/relief valves shall be OPERABLE with the following settings*:

Valve No.	Low-Low Set Function Setpoint* (psig) ± 15 psi	
	Open	Close
F051D	1033	926
F051C	1073	936
F047F	1113	946
F051B	1113	946
F051G	1113	946

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With the low-low set function of one of the above required reactor coolant system safety/relief valves inoperable, restore the inoperable low-low set function to OPERABLE status within 14 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. With the low-low set function of more than one of the above required reactor coolant system safety/relief valves inoperable, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.
- c. With either low-low set function pressure actuation trip system "A" or "B" inoperable, restore the inoperable trip system to OPERABLE status within 7 days; otherwise, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.4.2.2 The low-low set function pressure actuation instrumentation shall be demonstrated OPERABLE by performance of a:

- a. CHANNEL FUNCTIONAL TEST, including calibration of the trip unit, at least once per 31 days.
- b. CHANNEL CALIBRATION and LOGIC SYSTEM FUNCTIONAL TEST at least once per 18 months. Each of the two trip systems or divisions of the low-low set function actuation logic associated with the Nuclear System Protection System shall be manually tested independent of the SELF TEST SYSTEM during separate refueling outages such that both divisions and all channel trips are tested at least once every four fuel cycles.†

*One channel may be placed in an inoperable status for up to 2 hours for the purpose of performing surveillance testing in accordance with Specification 4.4.2.2.

**The lift setting pressure shall correspond to ambient conditions of the valves at nominal operating temperatures and pressures.

†Manual testing for the purpose of satisfying Specification 4.4.2.2.b. is not required until after shutdown during the first regularly scheduled refueling outage.

CONTAINMENT SYSTEMS

MSIV LEAKAGE CONTROL SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.1.4 Two independent MSIV leakage control system (LCS) subsystems shall be OPERABLE.*

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

With one MSIV leakage control system subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.4 Each MSIV leakage control system subsystem shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying:
 1. Blower OPERABILITY by starting the blowers from the control room and operating the blowers for at least 15 minutes.
 2. Heater OPERABILITY by demonstrating electrical continuity of the heating element circuitry.
- b. During each COLD SHUTDOWN, if not performed within the previous 92 days, by cycling each remote, manual and automatic motor operated valve through at least one complete cycle of full travel.
- c. At least once per 18 months by:
 1. Performance of a functional test which includes simulated actuation of the subsystem throughout its operating sequence, and verifying that each automatic valve actuates to its correct position, the blower(s) start.
 2. Verifying that the blowers develop at least the required vacuum at the rated capacity and each heater unit draws 7.4 to 9.2 amperes per phase.
 - a) Inboard subsystem, 15" H₂O vacuum at \geq 100 scfm.
 - b) Outboard subsystem, 15" H₂O vacuum at \geq 200 scfm.

*An MSIV leakage control system instrumentation channel may be placed in an inoperable status for up to 2 hours for required surveillance without placing the channel in the tripped condition provided all other channels monitoring that parameter are OPERABLE.

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

Introduction

By letter dated October 30, 1987, the Illinois Power Company (the licensee) proposed changing the Technical Specifications (TS) for the Clinton Power Station to:

1. Lower the safety/relief valves low-low set function setpoint tolerance to match the value in the design specifications.
2. Allow a main steam isolation valve-leakage control system (MSIV-LCS) instrument channel to be placed in an inoperable status for up to two hours for the performance of surveillances provided the other channel(s) monitoring that parameter are operable.

A Notice of Consideration of Issuance of Amendment to License and Proposed No Significant Hazards Consideration Determination and Opportunity for Hearing related to the requested action was published in the Federal Register on January 27, 1988 (53 FR 2318 and 53 FR 2320). No requests for hearing and no public comments were received.

Evaluation

1. Safety/Relief Valves Low-Low Set Function Setpoint Tolerance

The licensee proposes to change Technical Specification (TS) 3.4.2.2 Low-Low Set Function Setpoint tolerance associated with the safety/relief valves (SRVs) from the presently specified $\pm 2\%$ to a value of ± 15 psi. The latter amounts to approximately $\pm 1.5\%$ of setpoint value. The staff has determined that the proposed tolerance value of ± 15 psi is consistent with the tolerance specified in TS 3.4.2.1 for the relief portion of the SRVs, agrees with General Electric's design specification 22A4622AV, and is a more conservative tolerance than the presently specified value. Based on the above, the staff finds the licensee's proposed new tolerance value of ± 15 psi acceptable.

2. Main Steam Isolation Valves - Leakage Control System (MSIV-LCS)

The licensee proposes to add the following footnote to TS 3.6.1.4 (page 3/4 6-7) OPERABILITY requirements, "An MSIV leakage control system instrumentation channel may be placed in an inoperable status for up to two hours for required surveillance without placing the channel in the tripped condition provided the other channel or channels monitoring that parameter are OPERABLE."

The staff has determined that the MSIV-LCS meets the requirements of Industry Standard IEEE-279. As a result the:

- a. system's redundant and separate instrumentation, and controls, have been designed to perform their safety function following a LOCA and an assumed single active failure;
- b. sensors can be checked one at a time by application of simulated signals during plant operation;
- c. system can be initiated manually from the main control room;
- d. parts of the system which have been deliberately made inoperative for test, calibration, or maintenance provide an indication in the control room of their condition.

IEEE-279 also provides for the violation of the single failure criterion during channel bypass provided that the bypass time interval required for the test, calibration, or maintenance can be shown to be so short that the probability of failure of the active channel would be commensurate with the probability of failure of the system during its normal interval between tests. The present TS 3.6.1.4 ACTION statement allows plant operation for up to 30 days with an inoperable MSIV-LCS subsystem. Therefore, the time being proposed by the licensee (two hours) for the channel to be inoperable for testing is insignificant relative to the out-of-service time allowed for the subsystem under the ACTION statement. Based on the above, the staff finds the licensee's proposed footnote to TS 3.6.1.4 acceptable.

3. Environmental Consideration

This amendment involves changes to the surveillance requirements in the use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). 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. Conclusion

The staff has further 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 the health and safety of the public.

5. Acknowledgement

This evaluation was prepared by F. Maura.

Dated: August 3, 1988