July 9, 1990

Docket No. 50-461

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

Dear Mr. Spangenberg:

SUBJECT: AMENDMENT NO. 38 TO FACILITY OPERATING LICENSE NO. NPF-62
(TAC NO. 73803)

The Commission has issued the enclosed Amendment No. 38 to Facility Operating License No. NPF-62 for the Clinton Power Station, Unit No. 1. This amendment is in response to your application dated February 5, 1988.

This amendment revises a surveillance in the Control Room Ventilation System section of the Clinton Power Station Technical Specifications. The revision to Surveillance Requirement 4.7.2.h. adds a specific equipment identification number to an integrity verification.

A copy of the Safety Evaluation is also enclosed. The notice of issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

/s/

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

Enclosures:
1. Amendment No. 38 to
License No. NPF-62
2. Safety Evaluation

cc w/enclosures:
See next page

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DOCUMENT NAME: 73803 AMD

| Office: | LA/PDIII-3 | PM/PDIII-3 | PD/PDIII-3 | OGC |
|---|---|---|---|---|
| Surname: | PKreutzer | JHickman/tg | JHannon | EBachmann |
| Date: | 6/19/90 | 6/20/90 | 6/20/90<br>7/9/90 | 6/27/90 |

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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. 38
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 February 5, 1988 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.

(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. 38 , 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

John N. Hannon, Director
Project Directorate III-3
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 9, 1990

ATTACHMENT TO LICENSE AMENDMENT NO. 38

FACILITY OPERATING LICENSE NO. NPF-62

DOCKET NO. 50-461

Replace the following page of the Appendix "A" Technical Specifications with the attached page. The revised page is identified by amendment number and contains vertical lines indicating the area of change. The corresponding overleaf page is also provided to maintain document completeness.

| Remove | Insert |
|---|---|
| 3/4 7-6 | 3/4 7-6 |

SURVEILLANCE REQUIREMENTS (Continued)

4.7.2 (Continued)

d. After every 720 hours of charcoal adsorber operation, by verifying within 31 days after removal, that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978*, meets the laboratory testing criteria of Regulatory Position C.6.a of Regulatory Guide 1.52, Revision 2, March 1978*, for a methyl iodide penetration of less than 0.175% for the makeup filter system carbon adsorber and 6% for the recirculation filter system carbon adsorber when tested; in accordance with ASTM D3803-79 methods, with the following parameters:

Make Up Filter System

| | | |
|---|---|---|
| a) | Bed Depth | - 4 inches |
| b) | Velocity | - 40 fpm |
| c) | Temperature | - 30°C |
| d) | Relative Humidity | - 70% |

Recirculation Filter System

| | | |
|---|---|---|
| a) | Bed Depth | - 2 inches |
| b) | Velocity | - 80 fpm |
| c) | Temperature | - 30°C |
| d) | Relative Humidity | - 70% |

e. At least once per 18 months by:

1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6 inches Water Gauge while operating the makeup filter system at a flow rate of 3000 cfm ± 10%.
2. Verifying that on a high chlorine actuation** and a manual initiation test signal, the system automatically** switches to the chlorine mode of operation and the dampers close within 2 seconds.***
3. Verifying that the control room leak rate is limited to < 4000 cfm ± 10% at ≥ 1/8-inch Water Gauge (W.G.) with respect to adjacent areas.
4. Verifying that on a smoke mode actuation test signal, the system automatically switches to the smoke mode of operation at a flow rate less than or equal to 64,000 cfm ± 10%.
5. Verifying that on a high radiation actuation test signal, the system automatically switches to the high radiation mode of operation and

*ANSI N510-1980 shall be used in place of ANSI N510-1975 as referenced in Regulatory Guide 1.52, Revision 2, March 1978.

**Automatic transfer to the chlorine mode is not required when chlorine containers having a capacity of 150 pounds or less are stored 100 meters from the control room or its fresh air inlets.

***This specification is not applicable after all chlorine containers having a capacity of 100 pounds or greater are removed from the site including the chlorine containers located at the site sewage treatment plant.

SURVEILLANCE REQUIREMENTS (Continued)

4.7.2 (Continued)

the control room is maintained at a positive pressure of at least 1/8-inch W.G. relative to the outside atmosphere during system operation at a flow rate less than or equal to 3000 cfm.

6. Verifying that the makeup filters heaters dissipate 16 ± 1.6 kW when tested in accordance with ANSI N510-1980.

f. After each complete or partial replacement of a HEPA filter bank in the makeup filter system, by verifying that the HEPA filter bank satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% in accordance with ANSI N510-1980 while operating the system at a flow rate of 3000 cfm ± 10%.

g. After each complete or partial replacement of a charcoal adsorber bank in the makeup or recirculation filter systems, by verifying that the charcoal adsorber bank satisfies the in-place penetration and bypass leakage testing acceptance criteria of less than 0.05% for the makeup filter system and 2% total bypass leakage for the recirculation filter system in accordance with ANSI N510-1980 for a halogenated hydrocarbon refrigerant test gas while operating the makeup system at a flow rate of 3000 cfm ± 10% and the recirculation filter system at a flow rate of 64,000 ± 10%.

h. At least once per 18 months by verifying that the air inleakage rate into the negative pressure portions of the Main Control Room Ventilation System ductwork located outside the Main Control Room habitability boundary between fan OVC04CA(B) and isolation dampers OVC03YA(B) inclusive, and fire dampers OVC042YA(E), OVC042YB(F), OVC042YC(G) and OVC042YD(H) to be $\leq$ 650 cfm when tested in accordance with an NRC-approved test method. In addition, visually verify the integrity of the Recirculation Filter Housing flexible connection to fan OVC03CA(B).

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 38 TO FACILITY OPERATING LICENSE NO. NPF-62

ILLINOIS POWER COMPANY, ET AL.

CLINTON POWER STATION, UNIT NO. 1

DOCKET NO. 50-461

## 1.0 INTRODUCTION

Technical Specification 3/4.7.2 for the Clinton Power Station, Unit 1, governs the Control Room Ventilation System. Surveillance Requirement 4.7.2.h. of that specification requires verification of minimal air inleakage to the negative pressure portions of the ventilation system ductwork and visual verification of the integrity of the flexible connection between the recirculation filter housing and the fan. The licensee proposes to add a specific equipment identification number to the designated fan.

## 2.0 EVALUATION

The Control Room Ventilation System is designed to maintain a habitable environment and to ensure the operability of all the components in the control room under all the station operating and accident conditions. The basic system design includes a recirculation and filtration stage and a supply stage. In the recirculation stage the ventilation discharge along with minimal make-up is driven by two 100% capacity return fans through the supply air filter package. This flow is then driven by the supply fans through the heating or cooling coils and into the control room ventilation areas. By design the supply portion of the control room ventilation system maintains pressure slightly positive (0.125" water) to prevent air inleakage of unconditioned air.

Technical Specification Surveillance Requirement 4.7.2. currently states:

> 4.7.2 Each Control Room Ventilation System shall be demonstrated OPERABLE: ...
>
> h. At least once per 18 months by verifying that the air inleakage rate into the negative pressure portions of the Main Control Room Ventilation System ductwork located outside the Main Control Room habitability boundary between fan OVC04CA(B) and isolation dampers OVC03YA(B) inclusive, and fire dampers OVC042YA(E), OVC042YB(F), OVC042YC(G) and

OVC042YD(H) to be ≤ 650 cfm when tested in accordance with an NRC-approved test method. In addition, visually verify the integrity of the Recirculation Filter Housing flexible connection to the fan.

The proposed amendment will replace the words "the fan" at the end of the quoted passage with the words "fan OVC03CA(B)." The intent of this surveillance requirement is to verify reasonable air tightness for those portions of the system that are normally maintained at a negative pressure. The first part of the surveillance requirement clearly deals with the portion of the system on the suction side of the recirculation fans OVC04CA(B). However, the second portion of the surveillance requirement is not clear as to whether it applies to the recirculation fans OVC04CA(B) or the supply fans OVC03CA(B). The intent should have been to perform the inspection of the connection to the supply fans. Any inleakage at the recirculation fans would have been identified in the first part of this surveillance. Therefore, an additional inspection on this fan would be unnecessary. Since the integrity of the system on the suction side of the supply fans is not pressure tested, an inspection of this connection is appropriate. In addition, any inleakage at the supply fans would bypass the filter system and allow unfiltered air to enter the habitable boundary, making this inspection an important safety consideration. Based on the above, the proposed addition of the equipment identification number for the supply fans to the inspection portion of the surveillance is acceptable.

## 3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or a change to 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. 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.

## 4.0 CONCLUSION

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 (3) the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Prinicipal Contributor: John B. Hickman, NRR

Dated: July 9, 1990