

September 14, 1995

Mr. Richard F. Phares  
Director - Licensing  
Clinton Power Station  
P. O. Box 678  
Mail Code V920  
Clinton, IL 61727

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SUBJECT: ISSUANCE OF AMENDMENT NO. 101 TO FACILITY OPERATING LICENSE NO. NPF-62 - CLINTON POWER STATION, UNIT 1 (TAC NO. M88356)

Dear Mr. Phares:

The U. S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 101 to Facility Operating License No. NPF-62 for the Clinton Power Station, Unit No. 1. The amendment is in response to your application dated June 9, 1995 (U-602454).

The amendment modifies Technical Specification 4.1, "Site Location," to include a description of the exclusion area boundary. The modification ensures that the technical specifications conforms to Section 182 of the Atomic Energy Act of 1954.

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,

Original signed by:

Douglas V. Pickett, Project Manager  
Project Directorate III-3  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

- Enclosures: 1. Amendment No. 101 to NPF-62
- 2. Safety Evaluation

cc w/encls: See next page

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DATE	09/14/95	<input checked="" type="checkbox"/>	09/14/95		08/21/95		08/30/95	

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\* See previous concurrence

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

September 14, 1995

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Director - Licensing  
Clinton Power Station  
P. O. Box 678  
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NPF-62 - CLINTON POWER STATION, UNIT 1 (TAC NO. M88356)

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Sincerely,

A handwritten signature in cursive script that reads "Douglas V. Pickett".

Douglas V. Pickett, Project Manager  
Project Directorate III-3  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Enclosures: 1. Amendment No.101 to NPF-62  
2. Safety Evaluation

cc w/encls: See next page

Mr. Richard F. Phares  
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Clinton Power Station  
Unit No. 1

cc:

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

ILLINOIS POWER COMPANY, ET AL.

DOCKET NO. 50-461

CLINTON POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 101  
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 June 9, 1995, 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:

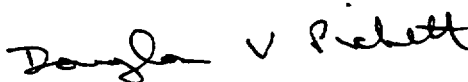
\*Illinois Power Company is authorized to act as agent for Soyland Power Cooperative, Inc. and has exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

(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. 101 , 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



Douglas V. Pickett, Project Manager  
Project Directorate III-3  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: September 14, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 101

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 contain a vertical line indicating the area of change.

Remove Pages

4.0-1

Insert Pages

4.0-1

## 4.0 DESIGN FEATURES

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### 4.1 Site Location

The site for the Clinton Power Station is located in Harp Township, DeWitt County, approximately six miles east of the city of Clinton in east-central Illinois. The exclusion area boundary shall have a radius of 975 meters from the Standby Gas Treatment System vent.

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### 4.2 Reactor Core

#### 4.2.1 Fuel Assemblies

The reactor shall contain 624 fuel assemblies. Each assembly shall consist of a matrix of Zircaloy or ZIRLO clad fuel rods with an initial composition of natural or slightly enriched uranium dioxide ( $UO_2$ ) as fuel material, and water rod(s). Limited substitutions of zirconium alloy or stainless steel filler rods for fuel rods, in accordance with approved applications of fuel rod configurations, may be used. Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff approved codes and methods and shown by tests or analyses to comply with all safety design bases. A limited number of lead test assemblies that have not completed representative testing may be placed in nonlimiting core regions.

#### 4.2.2 Control Rod Assemblies

The reactor core shall contain 145 cruciform shaped control rod assemblies. The control material shall be boron carbide or hafnium metal, or both.

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(continued)



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 101 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

On December 2, 1994, the staff issued Amendment No. 95 to the Clinton Power Station Technical Specifications. Amendment No. 95 represented the licensee's full conversion to NUREG-1434, "Standard Technical Specifications, General Electric Plants, BWR/6," also known as the Improved Technical Specifications (ITS). Part of the conversion to the ITS included removing selected items from the technical specifications and relocating them to licensee controlled documents.

Prior to issuance of Amendment No. 95, existing Technical Specification (TS) Section 5.1, "Site," included three separate subsections. These consisted of Section 5.1.1, "Exclusion Area," Section 5.1.2, "Low Population Zone," and Section 5.1.3, "Map Defining Unrestricted Areas and Site Boundary for Radioactive Gaseous and Liquid Effluents." Each of these subsections included a figure that identified their respective boundaries. However, in the conversion to the ITS, these figures were removed from the technical specifications and relocated to the Updated Final Safety Analysis Report. New TS Section 4.1, "Site Location," represents former Section 5.1 and only contains a single sentence that reads:

"The site for Clinton Power Station is located in Harp Township, DeWitt County, approximately six miles east of the city of Clinton in east-central Illinois."

Subsequent to the issuance of Amendment No. 95, the staff determined that the Clinton Power Station TSs did not adequately address the Exclusion Area Boundary (EAB). Citing Section 182 of the Atomic Energy Act of 1954, the staff requested the licensee to submit an amendment request to modify TS Section 4.1 to include a description of the EAB. By letter dated June 9, 1995, the licensee submitted the requested modification.

2.0 EVALUATION

A recent review examined the type of information necessary to be included in the design features section of the technical specifications. By letter dated March 14, 1995, the staff issued a license amendment and Safety Evaluation for



the Calvert Cliffs docket (50-317 and 50-318). This letter provided the staff's position regarding which information was necessary to be included in the technical specifications and which information could be relocated to other licensee controlled documents.

Section 182.a of the Atomic Energy Act of 1954, as amended (the Act) "License Applications," states, in part:

In connection with applications for licenses to operate production or utilization facilities, the applicant shall state such technical specifications, including information of the amount, kind and source of special nuclear materials required, the place of the use, the specific characteristics of the facility, and such other information as the Commission may, by rule or regulation, deem necessary in order to enable it to find that utilization or production of special nuclear material will be in accord with common defense and security of the public. Such technical specifications shall be a part of any license issued.

During the Calvert Cliffs review, the staff concluded that Section 182.a of the Act requires that the place of use of the special nuclear material be specified in the technical specifications. In addition, the staff concluded that (1) the maps that were previously included in the Calvert Cliffs Technical Specifications could be relocated to the Updated Safety Analysis Report (USAR), and (2) a sentence describing the EAB in the technical specifications is sufficient to meet regulatory requirements. This staff position is also reflected in the staff's review of the Grand Gulf conversion to the ITS. The Safety Evaluation supporting the Grand Gulf conversion is documented in a letter dated February 21, 1995.

The Clinton licensee's letter of June 9, 1995, proposed to add the following sentence to Technical Specification 4.1, "Site Location,"

The exclusion area boundary shall have a radius of 975 meters from the Standby Gas Treatment vent.

As previously stated, the staff has determined that the Atomic Energy Act of 1954 requires that a description of the EAB be included in the technical specifications. While the proposed modification does not alter the physical location or configuration of the EAB, inclusion in the technical specifications places additional controls on future changes to the EAB. Future changes to the EAB will now be subject to prior review and approval by the NRC in accordance with 10 CFR 50.90.

The staff has reviewed the proposed change and concludes that it is in accordance with the requirements of Section 182 of the Atomic Energy Act of 1954. Therefore, the staff finds the proposed modifications acceptable.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Illinois state official was notified of the proposed issuance of the amendment. The state official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

This amendment changes recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

### 5.0 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Douglas V. Pickett

Date: September 14, 1995