January 20, 1999

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Mr. Joseph V. Sipek
Director - Licensing
Clinton Power Station
P.0. Box 678
Mail Code V920
Clinton, IL 61727

SUBJECT: ISSUANCE OF AMENDMENT NO.120 TO FACILITY OPERATING LICENSE NO. NPF-62 - CLINTON POWER STATION, UNIT 1 (TAC NO. MA2474)

Dear Mr. Sipek:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 120 to Facility Operating License No. NPF-62 for the Clinton Power Station, Unit 1. The amendment is in response to your application dated July 31, 1998.

The amendment clarifies requirements for diesel generator start voltage and frequency.

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:
Jon B. Hopkins, Senior Project Manager
Project Directorate III-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-461

DF01

Enclosures: 1. Amendment No.120 to NPF-62
2. Safety Evaluation

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NAME	EBarnhill		JHopkins				SRichards	
DATE	12/16/98		12/18/98		12/23/98		1/20/98	

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

January 20, 1999

Mr. Joseph V. Sipek
Director - Licensing
Clinton Power Station
P.0. Box 678
Mail Code V920
Clinton, IL 61727

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Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-461

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cc w/encls: See next page

cc:

John. P. McElwain
Senior Vice President
Clinton Power Station
P.O. Box 678
Clinton, IL 61727

Wayne Romberg
Manager Nuclear Station
Engineering Department
Clinton Power Station
P.O. Box 678
Clinton, IL 61727

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

R. T. Hill
Licensing Services Manager
General Electric Company
175 Curtner Avenue, M/C 481
San Jose, CA 95125

Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, IL 60532-4351

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

J. W. Blattner
Project Manager
Sargent & Lundy Engineers
55 East Monroe Street
Chicago, IL 60603

Illinois Department of Nuclear Safety
Office of Nuclear Facility Safety
ATTN: Mr. Frank Nizidlek
1035 Outer Park Drive
Springfield, IL 62704

Leah Manning Stetzner
VP, General Counsel & Corp. Secretary
500 South 27th Street
Decatur, IL 62525

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

ILLINOIS POWER COMPANY

DOCKET NO. 50-461

CLINTON POWER STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 120
License No. NPF-62

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Illinois Power Company (the licensee), dated July 31, 1998, 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:

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(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.120 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 and shall be implemented within 45 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Jon B. Hopkins

Jon B. Hopkins, Senior Project Manager
Project Directorate III-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: January 20, 1999

ATTACHMENT TO LICENSE AMENDMENT NO. 120

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 Pages	Insert Pages
3.8-6	3.8-6
	3.8-6a
	3.8-6b
3.8-9	3.8-9
3.8-10	3.8-10
	3.8-10a
	3.8-10b
3.8-14	3.8-14

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.8.1.7	----------NOTE---------- All DG starts may be preceded by an engine prelube period. ---------- Verify each DG starts from standby condition and achieves: a. In ≤ 12 seconds, voltage ≥ 3870 V and frequency ≥ 58.8 Hz; and b. Steady state voltage ≥ 3870 V and ≤ 4580 V and frequency ≥ 58.8 Hz and ≤ 61.2 Hz.	184 days
SR 3.8.1.8	----------NOTE---------- This Surveillance shall not be performed in MODE 1 or 2. However, credit may be taken for unplanned events that satisfy this SR. ---------- Verify automatic and manual transfer of unit power supply from the normal offsite circuit to the alternate offsite circuit.	18 months

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.8.1.9	----------NOTE---------- 1. This Surveillance shall not be performed in MODE 1 or 2. However, credit may be taken for unplanned events that satisfy this SR. 2. If performed with DG synchronized with offsite power, it shall be performed at a power factor ≤ 0.9. ---------- Verify each DG rejects a load greater than or equal to its associated single largest post accident load and following load rejection, the engine speed is maintained less than nominal plus 75% of the difference between nominal speed and the overspeed trip setpoint or 15% above nominal, whichever is lower.	18 months

(continued)

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SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.8.1.12	----------NOTES---------- 1. All DG starts may be preceded by an engine prelube period. 2. This Surveillance shall not be performed in MODE 1 or 2. However, credit may be taken for unplanned events that satisfy this SR. ---------- Verify on an actual or simulated Emergency Core Cooling System (ECCS) initiation signal each DG auto-starts from standby condition and: a. In ≤ 12 seconds after auto-start and during tests, achieves voltage ≥ 3870 V and frequency ≥ 58.8 Hz; b. Achieves steady state voltage ≥ 3870 V and ≤ 4580 V and frequency ≥ 58.8 Hz and ≤ 61.2 Hz; and c. Operates for ≥ 5 minutes.	18 months
SR 3.8.1.13	----------NOTE---------- This Surveillance shall not be performed in MODE 1, 2, or 3. However, credit may be taken for unplanned events that satisfy this SR. ---------- Verify each DG's automatic trips are bypassed on an actual or simulated ECCS initiation signal except: a. Engine overspeed; b. Generator differential current; and c. Overcrank for DG 1A and DG 1B.	18 months

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.8.1.14	----------NOTES---------- 1. Momentary transients outside the load and power factor ranges do not invalidate this test. 2. This Surveillance shall not be performed in MODE 1 or 2. However, credit may be taken for unplanned events that satisfy this SR. ---------- Verify each DG operating at a power factor ≤ 0.9 operates for ≥ 24 hours: a. For ≥ 2 hours loaded ≥ 4062 kW for DG 1A, ≥ 4069 kW for DG 1B, and ≥ 2310 kW for DG 1C; and b. For the remaining hours of the test loaded ≥ 3482 kW for DG 1A, ≥ 3488 kW for DG 1B, and ≥ 1980 kW for DG 1C.	18 months

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.8.1.15	----------NOTE---------- 1. This Surveillance shall be performed within 5 minutes of shutting down the DG after the DG has operated ≥ 2 hours loaded ≥ 3482 kW for DG 1A, ≥ 3488 kW for DG 1B, and ≥ 1980 kW for DG 1C. Momentary transients outside of the load range do not invalidate this test. 2. All DG starts may be preceded by an engine prelube period. ----------	
	Verify each DG starts and achieves: a. In ≤ 12 seconds, voltage ≥ 3870 V and frequency ≥ 58.8 Hz; and b. Steady state voltage ≥ 3870 V and ≤ 4580 V and frequency ≥ 58.8 Hz and ≤ 61.2 Hz.	18 months

(continued)

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SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.8.1.20	----------NOTE---------- All DG starts may be preceded by an engine prelube period. ---------- Verify, when started simultaneously from standby condition, each DG achieves: a. In ≤ 12 seconds, voltage ≥ 3870 V and frequency ≥ 58.8 Hz; and b. Steady state voltage ≥ 3870 V and ≤ 4580 V and frequency ≥ 58.8 Hz and ≤ 61.2 Hz.	10 years

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 120 TO FACILITY OPERATING LICENSE NO. NPF-62

ILLINOIS POWER COMPANY

CLINTON POWER STATION, UNIT 1

DOCKET NO. 50-461

1.0 INTRODUCTION

By letter dated July 31, 1998, Illinois Power Company (IP), the licensee for Clinton Power Station, requested a change to the Clinton Power Station Technical Specifications on diesel generator (DG) surveillances associated with fast starting of the machines. These surveillances (SR 3.8.1.7, SR 3.8.1.12, SR 3.8.1.15, and SR 3.8.1.20) require that the DG start from a dead-stop condition and accelerate to specified voltage and frequency limits within 12 seconds. The limits of the voltage and frequency tolerance specified in the current surveillances are more representative of steady state conditions than transient conditions. IP has therefore requested that the surveillances be modified to reflect the transient nature of the DG voltage and frequency at the 12-second period following a fast start from the dead-stop condition. These types of changes have been approved by the staff as generic changes to be incorporated into the next revision of the Improved Standard Technical Specifications (ISTS).

2.0 EVALUATION

IP proposes to change Clinton Technical Specification Section 3.8.1 by revising the acceptance criteria of surveillances SR 3.8.1.7, SR 3.8.1.12, SR 3.8.1.15, and SR 3.8.1.20 consistent with the generic changes to be incorporated into the next revision of the ISTS. Currently, these surveillances in the Clinton Technical Specifications require that each DG achieve a voltage ≥ 3870 V and ≤ 4580 V and frequency ≥ 58.8 Hz and ≤ 61.2 Hz within 12 seconds. IP is proposing that the surveillances be revised to require that each DG (a) achieve a voltage ≥ 3870 V and a frequency ≥ 58.8 Hz within 12 seconds, and (b) subsequently achieve a steady state voltage ≥ 3870 V and ≤ 4580 V and frequency ≥ 58.8 Hz and ≤ 61.2 Hz.

In their letter dated July 31, 1998, IP has stated that when a test is performed that does not result in tying the DG to the bus, a momentary voltage or frequency overshoot (and/or subsequent undershoot) can occur because no loads are being tied to the DG. IP indicates

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that loading tends to minimize the overshoot, whereas the unloaded overshoot might momentarily exceed the specified limit(s) within the 12-second time limit. The NRC staff agrees. The voltage and frequency tolerance band currently specified in the subject surveillances are more appropriate for steady state limits than transient limits, as evidenced by the recommendations in NRC Regulatory Guide 1.9 which allow a larger band for transient voltage and frequency deviations. The changes IP has proposed appropriately specify the original voltage and frequency tolerance band as steady state values while, in the transient region within 12 seconds, they specify only minimum values. In addition, the LOOP and the LOCA/LOOP load sequencing tests required by SR 3.8.1.11 and SR 3.8.1.19 in the Clinton Technical Specifications will continue to verify (on an 18-month frequency) the capability of the Clinton DGs to provide power at a voltage and frequency adequate to start and operate the safety loads.

Based on the foregoing considerations, the staff concludes that the proposed amendment is 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 a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or changes a surveillance requirement. The NRC 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 the amendment involves no significant hazards consideration and there has been no public comment on such finding (63 FR 53949). Accordingly, the 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 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: J. Lazevnick

Date: January 20, 1999