

December 14, 1998

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

Distribution w/encs:

Docket File
PUBLIC
PDIII-2 r/f
ACRS
GGrant, RIII
TLH3, SE only

GHill (2)
EGA1
WBeckner
OGC
NTrehan

SUBJECT: ISSUANCE OF AMENDMENT NO. 118 TO FACILITY OPERATING LICENSE
NO. NPF-62 - CLINTON POWER STATION, UNIT 1 (TAC NO. MA3394)

Dear Mr. Sipek:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 118 to Facility Operating License No. NPF-62 for the Clinton Power Station, Unit 1. The amendment is in response to your application dated August 17, 1998.

The amendment reduces the load at which diesel generators are tested.

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-3
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-461

Enclosures: 1. Amendment No. 118 to NPF-62
2. Safety Evaluation

cc w/encs: See next page

DOCUMENT NAME: G:\PD3-3\CLINTON\MA3394.AMD

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	LA:PDIII-2	E	PM:PDIII-2	E	OGC	PD:PDIII-2	E
NAME	EBarnhill		JHopkins			SRichards	
DATE	11/19/98		11/13/98		1/198 12/2/98	12/11/98	

OFFICIAL RECORD COPY

210100

9812230250 981214
PDR ADOCK 05000461
P PDR

CP-1

December 14, 1998

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

Distribution w/encs:

Docket File

PUBLIC

PDIII-2 r/f

ACRS

GGrant, RIII

TLH3, SE only

GHill (2)

EGA1

WBeckner

OGC

NTrehan

SUBJECT: ISSUANCE OF AMENDMENT NO. 118 TO FACILITY OPERATING LICENSE
NO. NPF-62 - CLINTON POWER STATION, UNIT 1 (TAC NO. MA3394)

Dear Mr. Sipek:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 118 to Facility Operating License No. NPF-62 for the Clinton Power Station, Unit 1. The amendment is in response to your application dated August 17, 1998.

The amendment reduces the load at which diesel generators are tested.

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-3
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-461

Enclosures: 1. Amendment No. 118 to NPF-62
2. Safety Evaluation

cc w/encs: See next page

DOCUMENT NAME: G:\PD3-3\CLINTON\MA3394.AMD

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	LA:PDIII-2	E	PM:PDIII-2	E	OGC	PD:PDIII-2	E
NAME	EBarnhill <i>EB</i>		JHopkins <i>JH</i>			SRichards <i>SR</i>	
DATE	11/19/98		11/19/98		1/98 12/21/98	12/11/98	

OFFICIAL RECORD COPY



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

December 14, 1998

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

SUBJECT: ISSUANCE OF AMENDMENT NO. 118 TO FACILITY OPERATING LICENSE
NO. NPF-62 - CLINTON POWER STATION, UNIT 1 (TAC NO. MA3394)

Dear Mr. Sipek:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 118 to Facility Operating License No. NPF-62 for the Clinton Power Station, Unit 1. The amendment is in response to your application dated August 17, 1998.

The amendment reduces the load at which diesel generators are tested.

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,

A handwritten signature in cursive script, reading "Jon B. Hopkins", is written over the typed name and title.

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

Enclosures: 1. Amendment No. 118 to NPF-62
2. Safety Evaluation

cc w/encls: See next page

Joseph V. Sipek
Illinois Power Company

Clinton Power Station, Unit 1

cc:

Walter G. MacFarland IV
Senior Vice President
Clinton Power Station
P.O. Box 678
Clinton, IL 61727

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

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

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

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



**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. 118
License No. NPF-62

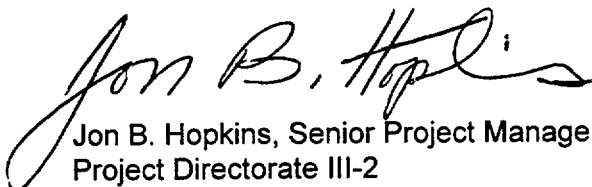
1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Illinois Power Company (the licensee), dated August 17, 1998, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules 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:

(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. , 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 immediately and shall be implemented within 45 days of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



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: December 14, 1998

ATTACHMENT TO LICENSE AMENDMENT NO. 118

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

3.8-5
3.8-7
3.8-10

Insert Pages

3.8-5
3.8-7
3.8-10

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.3 -----NOTES-----</p> <ol style="list-style-type: none"> 1. DG loadings may include gradual loading as recommended by the manufacturer. 2. Momentary transients outside the load range do not invalidate this test. 3. This Surveillance shall be conducted on only one DG at a time. 4. This SR shall be preceded by, and immediately follow, without shutdown, a successful performance of SR 3.8.1.2 or SR 3.8.1.7. <p>-----</p> <p>Verify each DG operates for ≥ 60 minutes at a load ≥ 3482 kW for DG 1A, ≥ 3488 kW for DG 1B, and ≥ 1980 kW for DG 1C.</p>	<p>As specified in Table 3.8.1-1</p>
<p>SR 3.8.1.4 Verify each day tank contains ≥ 385 gal of fuel oil for DG 1A and DG 1B and ≥ 240 gal for DG 1C.</p>	<p>31 days</p>
<p>SR 3.8.1.5 Check for and remove accumulated water from each day tank.</p>	<p>31 days</p>
<p>SR 3.8.1.6 Verify the fuel oil transfer system operates to automatically transfer fuel oil from the storage tank to the day tank.</p>	<p>31 days</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.10 -----NOTE----- This Surveillance shall not be performed in MODE 1 or 2. However, credit may be taken for unplanned events that satisfy this SR. -----</p> <p>Verify each DG operating at a power factor ≤ 0.9 does not trip and voltage is maintained ≤ 5000 V for DG 1A and DG 1B and ≤ 5824 V for DG 1C during and following a load rejection of a load ≥ 3482 kW for DG 1A, ≥ 3488 kW for DG 1B, and ≥ 1980 kW for DG 1C.</p>	<p>18 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.14 -----NOTES-----</p> <ol style="list-style-type: none"> 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. <p>-----</p> <p>Verify each DG operating at a power factor ≤ 0.9 operates for ≥ 24 hours:</p> <ol style="list-style-type: none"> 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. 	<p>18 months</p>
<p>SR 3.8.1.15 -----NOTES-----</p> <ol style="list-style-type: none"> 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. <p>Momentary transients outside of the load range do not invalidate this test.</p> <ol style="list-style-type: none"> 2. All DG starts may be preceded by an engine prelube period. <p>-----</p> <p>Verify each DG starts and achieves, in ≤ 12 seconds, voltage ≥ 3740 V and ≤ 4580 V and frequency ≥ 58.8 Hz and ≤ 61.2 Hz.</p>	<p>18 months</p>

(continued)



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 118 TO FACILITY OPERATING LICENSE NO. NPF-62

ILLINOIS POWER COMPANY

CLINTON POWER STATION, UNIT 1

DOCKET NO. 50-461

1.0 INTRODUCTION

Technical Specification (TS) 3.8.1 of the Clinton Power Station contains Surveillance Requirements (SRs) that require the plant emergency diesel generators (EDGs) to be electrically loaded to a specific load during testing. SR 3.8.1.3 provides the requirements for the 60-minute load-run test, and requires the EDGs to be loaded to greater than or equal to 100% of their continuous ratings. SR 3.8.1.10 provides the requirements for the full-load rejection test, and requires the EDGs to be capable of rejecting a load greater than or equal to 100% of their continuous ratings. SR 3.8.1.14 provides the requirements for the endurance and margin test, and requires the EDGs to be loaded to greater than or equal to 110% of their continuous ratings for at least 2 hours out of the total 24 hours of continuous operation, and to greater than 100% of their continuous ratings for the remaining portion of the 24-hour period (i.e., 22 hours). SR 3.8.1.15 demonstrates that the EDGs can restart from a hot condition (such as when the EDGs could be demanded to respond to an accident immediately following completion of normal surveillance testing) by verifying that each EDG starts and achieves required voltage and frequency within a specified time. This SR contains a Note that requires the SR to be performed within a specified time after the EDGs have operated at a load greater than or equal to 100% of their continuous ratings for at least one hour. In July 1993, the staff issued RG 1.9 Rev. 3 which integrated the guidance previously addressed in RG 1.9 Rev. 2, RG 1.108 Rev. 1, and GL 84-15, "Proposed Staff Actions to Improve and Maintain Diesel Generator Reliability." By letter dated August 17, 1998, Illinois Power (licensee) requested approval of the Technical Specification changes to SR 3.8.1.3, SR 3.8.1.10, SR 3.8.1.14, and SR 3.8.1.15 to partially reduce the load at which the standby EDGs are required to be tested.

2.0 EVALUATION

The 60-minute run test (SR 3.8.1.3), the full-load rejection test (SR 3.8.1.10), and the 24-hour run test (SR 3.8.1.14) are currently required to be conducted at loads greater than or equal to the continuous ratings of the EDGs. Except for a required portion of SR 3.8.1.14 (as described below), the licensee has proposed to revise these tests to allow them to be conducted with the EDGs loaded to greater than or equal to 90% of their continuous ratings.

With regard to a 60-minute load-run test (SR 3.8.1.3), this test currently requires each EDG to be capable of synchronizing and accepting greater than or equal to the equivalent of the maximum expected accident loads (continuous rating). The licensee has proposed that this surveillance be performed with an EDG loaded to equal or greater than 90% of its continuous rating instead at a load greater than or equal to 100% of the EDG continuous rating. This is consistent with the guidance provided in Section 2.2.2 of RG 1.9 Rev. 3 which states that the load-run test be demonstrated at 90 to 100 percent of the continuous rating of the EDG for an interval of not less than 60 minutes.

With regard to full load rejection test requirements (SR 3.8.1.10), this test currently requires each EDG to be capable of rejecting a load greater than or equal to the 100 percent of its continuous rating. The licensee has proposed that this surveillance be performed with an EDG load equal to or greater than 90% of its continuous rating. This is consistent with the guidance provided in Section 2.2.8 of RG 1.9 Rev. 3 which states that the full load rejection test be demonstrated at a load equal to 90 to 100 percent of the continuous rating of the EDG.

With regard to the 24-hour run test (SR 3.8.1.14), this test currently requires each EDG to be operated at a load greater than or equal to 110% of its continuous rating for a period greater than or equal to 2 hours and at 100% of its continuous rating for the remaining 22 hours. Recently, the licensee discovered that after properly accounting for instrument accuracy, which required an additional margin to be incorporated into the maximum and minimum load values specified in the test procedures, the EDGs cannot be operated and loaded to greater than or equal to 110% of design load rating without exceeding the short-term ratings of the machines. Exceeding the short-term rating of an EDG can cause damage, and depending on the length of time that the short-term rating is exceeded, can require significant inspection to be performed to assess any damage. The EDG manufacturers typically specify load levels for EDGs, which if exceeded for certain periods of time, can require the EDGs to undergo additional inspection and maintenance. This problem would be resolved by the proposed change to the Technical Specifications, since reducing the minimum required load band within each EDG could be operated without the EDG's short-term rating being exceeded. The intent of the recommended guidance on RG 1.9 Rev. 3 for these tests is to reduce the load levels at which the EDGs are routinely tested, while still ensuring that the EDGs are sufficiently challenged to verify their operability. The licensee has proposed that each EDG be operated at a load greater than or equal to 105% of its continuous rating for greater than or equal to 2 hours and at 90% of its continuous rating for the remaining 22 hours. Section 2.2.9 of RG 1.9 Rev. 3 states that the endurance and margin test is to be demonstrated for an interval of not less than 24 hours, of which 2 hours are at a load equal to 105 to 110 percent of the continuous rating of the EDGs, and 22 hours are at a load equal to 90 to 100 percent of its continuous rating. The proposed change is consistent with the RG except that the licensee has proposed only to require that the EDGs be loaded to a load level greater than or equal to 90 percent or 105 percent of their continuous rating, with no upper limit specified. The staff believes that reducing the minimum required level meets this intent without the need to specify an upper limit. Moreover, the proposed Technical Specification changes (i.e., with no maximum limit specified) are consistent with the format of the licensee's current Technical Specifications, wherein no maximum limit is specified.

With regard to the requirements of SR 3.8.1.15, associated Note 1 sets forth the condition which requires the surveillance to be performed within 5 minutes of shutting down the EDG after it has operated for greater than or equal to one hour at a load greater than or equal to 100% of its continuous rating. The proposed Note would require the surveillance to be performed within 5 minutes of shutting down the EDG after the EDG has operated for greater than or equal 2 hours at a load greater than or equal to 90% of its continuous rating. However, whereas the current version of Note 1 requires the EDG to be previously loaded to the required load level for greater than or equal to one hour for performance of SR 3.8.1.15, the proposed version of Note 1 would require the EDG to be previously loaded to the new, reduced load level for at least 2 hours for performance of SR 3.8.1.15. The required load period of 2 hours is consistent with the guidance of RG 1.9, Rev. 3.

3.0 FINDING

Based on the above, the staff concludes that the proposed changes to SR 3.8.1.3, SR 3.8.1.10, SR 3.8.1.14, and SR 3.8.1.15 will permit the licensee to perform tests at reduced levels while still ensuring that the EDGs are adequately challenged at operating temperatures to confirm operability and the changes are consistent with the guidance of RG 1.9 Rev. 3 and are, therefore, acceptable.

4.0 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.

5.0 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.

6.0 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: N. Trehan

Date: December 14, 1998