

September 24, 1991

Docket No. 50-461

Mr. Frank A. Spangenberg  
Licensing and Safety  
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Dear Mr. Spangenberg:

SUBJECT: AMENDMENT NO. 59 TO FACILITY OPERATING LICENSE NO. NPF-62  
(TAC NO. 73808)

The Commission has issued the enclosed Amendment No. 59 to Facility Operating License No. NPF-62 for the Clinton Power Station, Unit No. 1. This amendment is in response to your application dated October 30, 1987.

This amendment to the surveillance requirements in Technical Specification 4.8.1.1.2 revises the conditions for test starting of the diesel generators consistent with the recommendations in NRC Generic Letter 84-15.

Copies of the Safety Evaluation and of the notice of issuance are also enclosed. The notice of issuance is being filed with the Office of the Federal Register for publication.

Sincerely,

original signed by

Anthony T. Gody, Jr., Project Manager  
Project Directorate III-3  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 59 to License No. NPF-62
2. Safety Evaluation
3. Notice of Issuance

RECEIVED NRC OFFICE OF NUCLEAR REACTOR REGULATION

cc w/enclosures:  
See next page

\*See previous concurrence

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DOCUMENT NAME: 73808 AMD

DFD 11/1  
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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. 59  
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 October 30, 1987 and revised June 30, 1989, 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. 59, 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



Anthony T. Gody, Jr., Project Manager  
Project Directorate III-3  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of issuance: September 24, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 59

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. The corresponding overleaf pages are provided to maintain document completeness.

Remove  
3/4 8-4

3/4 8-5

3/4 8-6

3/4 8-7

B 3/4 8-1

B 3/4 8-2

B 3/4 8-3

Insert  
3/4 8-4

3/4 8-5

3/4 8-6

3/4 8-7

B 3/4 8-1

B 3/4 8-2

B 3/4 8-3

## ELECTRICAL POWER SYSTEMS

### AC SOURCES - OPERATING

#### LIMITING CONDITION FOR OPERATION (Continued)

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##### 3.8.1.1 ACTION (Continued):

- of the above-required offsite circuits to OPERABLE status within 24 hours or be in at least HOT SHUTDOWN within the next 12 hours. With only one offsite circuit restored to OPERABLE status, restore at least two offsite circuits to OPERABLE status within 72 hours from time of initial loss or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. A successful test(s) of diesel generator OPERABILITY per Surveillance Requirements 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5, performed under this ACTION statement for the OPERABLE diesel generators, satisfies the diesel generator test requirements of ACTION statement a.
- g. With diesel generators 1A and 1B of the above-required AC electrical power sources inoperable, demonstrate the OPERABILITY of the remaining AC sources by performing Surveillance Requirement 4.8.1.1.1.a within 1 hour and at least once per 8 hours thereafter and Surveillance Requirements 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5 for diesel generator 1C within 8 hours.\* Restore at least one of the inoperable diesel generators 1A and 1B to OPERABLE status within 2 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. Restore both diesel generators 1A and 1B to OPERABLE status within 72 hours from time of initial loss or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- h. With one offsite circuit of the above-required AC electrical power sources inoperable and diesel generator 1C inoperable, apply the requirements of ACTION statements a and d specified above.
- i. With either diesel generator 1A or 1B inoperable and diesel generator 1C inoperable, apply the requirements of ACTION statements b, d and e specified above.

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\*This test is required to be completed regardless of when the inoperable diesel generator is restored to OPERABILITY. The provisions of Specification 3.0.2 are not applicable.

## ELECTRICAL POWER SYSTEMS

### AC SOURCES - OPERATING

#### SURVEILLANCE REQUIREMENTS

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4.8.1.1.1 Each of the above required independent circuits between the offsite transmission network and the onsite Class 1E distribution system shall be:

- a. Determined OPERABLE at least once per 7 days by verifying correct breaker alignments and indicated power availability, and
- b. Demonstrated OPERABLE at least once per 18 months during shutdown by transferring, manually and automatically, unit power supply from the normal circuit to the alternate circuit.

4.8.1.1.2 Each of the above required diesel generators shall be demonstrated OPERABLE:\*

- a. In accordance with the frequency specified in Table 4.8.1.1.2-1 on a STAGGERED TEST BASIS by:
  1. Verifying the fuel level in the day fuel tank.
  2. Verifying the fuel level in the fuel storage tank.
  3. Verifying the fuel transfer pump starts and transfers fuel from the storage system to the day fuel tank.
  4. Verifying the diesel starts from ambient condition and accelerates to at least  $900 \pm 18$  rpm in less than or equal to 12 seconds.\*\* The generator voltage and frequency shall be  $4160 \pm 420$  volts and  $60 \pm 1.2$  Hz within 12 seconds\*\* after the start signal. The diesel generator shall be started for this test by using one of the following signals:
    - a) Manual.
    - b) Simulated loss of offsite power by itself.
    - c) Simulated loss of offsite power in conjunction with an ESF actuation test signal.
    - d) An ECCS actuation test signal by itself.

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\* All planned diesel generator starts performed for the purpose of meeting these surveillance requirements may be preceded by an engine prelube period as recommended by the manufacturer.

\*\* Surveillance testing to verify the diesel generator start and load times (less than or equal to 12 seconds and less than or equal to 90 seconds respectively) from ambient conditions shall be performed at least once per 184 days. All other engine starts performed for the purpose of meeting these surveillance requirements may be conducted in accordance with warmup and loading procedures as recommended by the manufacturer. This is in order to minimize mechanical stress and wear on the diesel generator caused by fast starting and loading of the diesel generator.

## ELECTRICAL POWER SYSTEMS

### AC SOURCES - OPERATING

#### SURVEILLANCE REQUIREMENTS (Continued)

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##### 4.8.1.1.2 (Continued)

5. Verifying the diesel generator is synchronized, loaded to greater than or equal to 3869 kW for diesel generator 1A, 3875 kW for diesel generator 1B and 2200 kW for diesel generator 1C in less than or equal to 90\*\* seconds, and operates with this load for at least 60 minutes.
  6. Verifying the diesel generator is aligned to provide standby power to the associated emergency buses.
  7. Verifying the pressure in all diesel generator air start receivers to be greater than or equal to 200 psig.
- b. At least once per 31 days and after each operation of the diesel where the period of operation was greater than or equal to 1 hour by checking for and removing accumulated water from the day fuel tanks.
  - c. At least once per 92 days by removing accumulated water from the fuel storage tanks.
  - d. At least once per 92 days and from new fuel oil prior to addition to the storage tanks, by obtaining a sample in accordance with ASTM-D270-1975, and by verifying that the sample meets the following minimum requirements and is tested within the specified time limits:
    1. As soon as sample is taken from new fuel or prior to addition to the storage tank, as applicable, verify in accordance with the tests specified in ASTM-D975-77 that the sample has:
      - a) A water and sediment content of less than or equal to 0.05 volume percent.
      - b) A kinematic viscosity at 40°C of greater than or equal to 1.9 centistokes, but less than or equal to 4.1 centistokes.
      - c) An API gravity @ 60°F of greater than or equal to 30 degrees but less than or equal to 40 degrees.
    2. Within one week after obtaining the sample, verify an impurity level of less than 2 mg of insolubles per 100 ml when tested in accordance with ASTM-D2274-70.

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\*\*Surveillance testing to verify the diesel generator start and load times (less than or equal to 12 seconds and less than or equal to 90 seconds respectively) from ambient conditions shall be performed at least once per 184 days. All other engine starts performed for the purpose of meeting these surveillance requirements may be conducted in accordance with warmup and loading procedures as recommended by the manufacturer. This is in order to minimize mechanical stress and wear on the diesel generator caused by fast starting and loading of the diesel generator.

## ELECTRICAL POWER SYSTEMS

### AC SOURCES - OPERATING

#### SURVEILLANCE REQUIREMENTS (Continued)

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##### 4.8.1.1.2 (Continued)

3. Within two weeks after obtaining the sample, verify that the other properties specified in Table 1 of ASTM-D975-77 and Regulatory Guide 1.137, Position 2.a, are met when tested in accordance with ASTM-D975-77.
- e. At least once per 18 months,# during shutdown, by:
1. Subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service.
  2. Verifying the diesel generator capability to reject a load of greater than or equal to 1120 kW for diesel generators 1A and 1B, and greater than or equal to 1995 kW for diesel generator 1C while maintaining engine speed < nominal plus 75% of the difference between nominal speed and the overspeed trip setpoint or 15% above nominal whichever is less.
  3. Verifying the diesel generator capability to reject a load of 3869 kW\* for diesel generators 1A, 3875 kW\* for diesel generator 1B and 2200 kW\* for diesel generator 1C without tripping. The generator voltage shall not exceed 5000 volts for diesel generator 1A and 1B and 5824 volts for diesel generator 1C during and following the load rejection.
  4. Simulating a loss of offsite power by itself, and:
    - a) For Divisions I and II:
      - 1) Verifying deenergization of the emergency buses and load shedding from the emergency buses.
      - 2) Verifying the diesel generator starts on the auto-start signal, energizes the emergency buses with permanently connected loads within 12 seconds, energizes the auto-connected loads required for safe shutdown through the load sequence (individual timers), and operates for greater than or equal to 5 minutes while its generator is loaded with the shutdown loads. After energization, the steady state voltage and frequency of the emergency buses shall be maintained at  $4160 \pm 420$  volts and  $60 \pm 1.2$  Hz during this test.

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#For any start of a diesel, the diesel must be operated with a load in accordance with the manufacturer's recommendations.

\*Momentary transients due to changing bus loads shall not invalidate the test.

## ELECTRICAL POWER SYSTEMS

### AC SOURCES - OPERATING

#### SURVEILLANCE REQUIREMENTS (Continued)

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##### 4.8.1.1.2 (Continued)

- b) For Division III:
- 1) Verifying deenergization of the emergency bus.
  - 2) Verifying the diesel generator starts on the auto-start signal, energizes the emergency bus with the permanently connected loads within 12 seconds, and operates for greater than or equal to 5 minutes while its generator is loaded with the shutdown loads. After energization, the steady state voltage and frequency of the emergency bus shall be maintained at  $4160 \pm 420$  volts and  $60 \pm 1.2$  Hz during this test.
5. Verifying that on an ECCS actuation test signal, without loss of off-site power, the diesel generator starts on the auto-start signal and operates on standby for greater than or equal to 5 minutes. The generator voltage and frequency shall be  $4160 \pm 420$  volts and  $60 \pm 1.2$  Hz within 12 seconds after the auto-start signal; the steady state generator voltage and frequency shall be maintained within these limits during this test.
6. Simulating a loss of offsite power in conjunction with an ECCS actuation test signal, and:
- a) For Divisions I and II:
- 1) Verifying deenergization of the emergency buses and load shedding from the emergency buses.
  - 2) Verifying the diesel generator starts on the auto-start signal, energizes the emergency buses with permanently connected loads within 12 seconds, energizes the auto-connected loads required for safe shutdown through the load sequence (individual timers), and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads. After energization, the steady state voltage and frequency of the emergency buses shall be maintained at  $4160 \pm 420$  volts and  $60 \pm 1.2$  Hz during this test.
- b) For Division III:
- 1) Verifying deenergization of the emergency bus.
  - 2) Verifying the diesel generator starts on the auto-start signal, energizes the emergency bus with its loads and the auto-connected emergency loads within 12 seconds and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads. After energization, the steady state voltage and frequency of the

## ELECTRICAL POWER SYSTEMS

### AC SOURCES - OPERATING

#### SURVEILLANCE REQUIREMENTS (Continued)

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##### 4.8.1.1.2 (Continued)

emergency bus shall be maintained at  $4160 \pm 420$  volts and  $60 \pm 1.2$  Hz during this test.

7. Verifying that all automatic diesel generator trips are automatically bypassed upon an ECCS actuation signal except for Divisions I, II and III, engine overspeed and generator differential current.
8. Verifying the diesel generator operates for at least 24 hours. During the first 2 hours of this test, the diesel generator shall be loaded to greater than or equal to 4256 kW\*\* for diesel generator 1A, 4263 kW\*\* for diesel generator 1B and 2420 kW\*\* for diesel generator 1C. During the remaining 22 hours of this test, the diesel generator shall be loaded to 3869 kW\*\* for diesel generator 1A, 3875 kW\*\* for diesel generator 1B and 2200 kW\*\* for diesel generator 1C. The generator voltage and frequency shall be  $4160 \pm 420$  volts and  $60 \pm 1.2$  Hz within 12 seconds after the start signal; the steady state generator voltage and frequency shall be maintained at  $4160 \pm 420$  volts and  $60 \pm 1.2$  Hz during this test. Within 5 minutes after completing this 24-hour test, perform Surveillance Requirement 4.8.1.1.2.e.4.a)2) and b)2)\*.
9. Verifying that the auto-connected loads to each diesel generator do not exceed the 2000-hour rating of 4078 kW for diesel generator 1A, 4082 kW for diesel generator 1B and 2350 kW for diesel generator 1C.
10. Verifying the diesel generator's capability to:
  - a) Synchronize with the offsite power source while the generator is loaded with its emergency loads upon a simulated restoration of offsite power,
  - b) Transfer its loads to the offsite power source, and
  - c) Be restored to its standby status.
11. Verifying that, with the diesel generator operating in a test mode and connected to its bus, a simulated ECCS actuation signal overrides the test mode and returns the diesel generator to standby operation, and automatically energizes the emergency loads with offsite power.
12. Verifying that the fuel transfer pump transfers fuel from the fuel storage tank to the day tank of each diesel.

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\*If Surveillance Requirements 4.8.1.1.2.e.4.a)2) and b)2) are not satisfactorily completed, it is not necessary to repeat the preceding 24-hour test. Instead, the diesel generator may be operated at continuous rating for 1 hour or until operating temperatures have stabilized prior to performing Surveillance Requirements 4.8.1.1.2.e.4.a)2) and 4.8.1.1.2.e.4.b)2).

\*\*Momentary transients due to changing bus loads shall not invalidate the test.

## 3/4.8 ELECTRICAL POWER SYSTEMS

### BASES

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#### 3/4.8.1, 3/4.8.2, AND 3/4.8.3 AC SOURCES, DC SOURCES, AND ONSITE POWER DISTRIBUTION SYSTEMS

The OPERABILITY of the AC and DC power sources and associated distribution systems during operation ensures that sufficient power will be available to supply the safety related equipment required for (1) the safe shutdown of the facility and (2) the mitigation and control of accident conditions within the facility. The minimum specified independent and redundant AC and DC power sources and distribution systems satisfy the requirements of General Design Criteria 17 of Appendix "A" to 10 CFR 50.

The ACTION requirements specified for the levels of degradation of the power sources provide restriction upon continued facility operation commensurate with the level of degradation. The OPERABILITY of the power sources are consistent with the initial condition assumptions of the accident analyses and are based upon maintaining at least Division I or II of the onsite AC and DC power sources and associated distribution systems OPERABLE during accident conditions coincident with an assumed loss of offsite power and single failure of the other onsite AC source. Division III supplies the high pressure core spray (HPCS) system only.

The AC and DC source allowable out-of-service times are based on Regulatory Guide 1.93, "Availability of Electrical Power Sources," December 1974. When diesel generator 1A or 1B is inoperable, there is an additional ACTION requirement to verify that all required systems, subsystems, trains, components and devices, that depend on the remaining OPERABLE diesel generator 1A or 1B as a source of emergency power, are also OPERABLE. This requirement is intended to provide assurance that a loss of offsite power event will not result in a complete loss of safety function of critical systems during the period diesel generator 1A or 1B is inoperable. The term verify as used in this context means to administratively check by examining logs or other information to determine if certain components are out-of-service for maintenance or other reasons. It does not mean to perform the surveillance requirements needed to demonstrate the OPERABILITY of the component.

Analysis has shown that testing which includes a semi-annual fast start of the diesel generators is sufficient to demonstrate the capability of the onsite A.C. power systems to mitigate the consequences of the design basis event for the plant (i.e., large LOCA coincident with a loss-of-offsite power) while minimizing the mechanical stress and wear on the diesel generator.

The OPERABILITY of the minimum specified AC and DC power sources and associated distribution systems during shutdown and refueling ensures that (1) the facility can be maintained in the shutdown or refueling condition for extended time periods and (2) sufficient instrumentation and control capability is available for monitoring and maintaining the unit status.

The surveillance requirements for demonstrating the OPERABILITY of the diesel generators are in accordance with the recommendations of Regulatory Guide 1.9,

## ELECTRICAL POWER SYSTEMS

### BASES

#### 3/4.8.1, 3/4.8.2, and 3/4.8.3 AC SOURCES, DC SOURCES, AND ONSITE POWER DISTRIBUTION SYSTEMS (Continued)

"Selection of Diesel Generator Set Capacity for Standby Power Supplies", March 10, 1971, Regulatory Guide 1.108, "Periodic Testing of Diesel Generator Units Used as Onsite Electric Power Systems at Nuclear Power Plants," Revision 1, August 1977 and Regulatory Guide 1.137 "Fuel-Oil Systems for Standby Diesel Generators," Revision 1, October 1979.

The surveillance requirements for demonstrating the OPERABILITY of the unit batteries are in accordance with the recommendations of Regulatory Guide 1.129 "Maintenance Testing and Replacement of Large Lead Storage Batteries for Nuclear Power Plants," February 1978, Regulatory Guide 1.32, "Criteria for Safety-Related Electric Power Systems for Nuclear Power Plants," February 1977, IEEE Std 450-1975, "IEEE Recommended Practice for Maintenance, Testing, and Replacement of Large Lead Storage Batteries for Generating Stations and Substations," and IEEE Std 308-1974, "IEEE Standard Criteria for Class 1E Power Systems for Nuclear Power Generating Stations" with exceptions noted in the CPS-FSAR.

Verifying average electrolyte temperature above the minimum for which the battery was sized, total battery terminal voltage on float charge, connection resistance values and the performance of battery service and discharge tests ensures the effectiveness of the charging system, the ability to handle high discharge rates and compares the battery capacity at that time with the rated capacity.

Table 4.8.2.1-1 specifies the normal limits for each designated pilot cell and each connected cell for electrolyte level, float voltage and specific gravity. The limits for the designated pilot cells float voltage and specific gravity, greater than 2.13 volts and .015 below the manufacturer's full charge specific gravity or a battery charger current that had stabilized at a low value, is characteristic of a charged cell with adequate capacity. The normal limits for each connected cell for float voltage and specific gravity, greater than 2.13 volts and not more than .020 below the manufacturer's full charge specific gravity with an average specific gravity of all the connected cells not more than .010 below the manufacturer's full charge specific gravity, ensures the OPERABILITY and capability of the battery.

Operation with a battery cell's parameter outside the normal limit but within the allowable value specified in Table 4.8.2.1-1 is permitted for up to 7 days. During this 7 day period: (1) the allowable values for electrolyte level ensures no physical damage to the plates with an adequate electron transfer capability; (2) the allowable value for the average specific gravity of all the cells, not more than .020 below the manufacturer's recommended full charge specific gravity ensures that the decrease in rating will be less than the safety margin provided in sizing; (3) the allowable value for an individual cell's specific gravity ensures that an individual cell's specific gravity will not be more than .040 below the manufacturer's full charge specific gravity and that the overall capability of the battery will be maintained within an acceptable limit; and (4) the allowable value for an individual cell's float voltage, greater than 2.07 volts, ensures the battery's capability to perform its design function.

## ELECTRICAL POWER SYSTEMS

### BASES

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#### 3/4.8.4 ELECTRICAL EQUIPMENT PROTECTIVE DEVICES

Containment electrical penetrations and penetration conductors are protected by demonstrating the OPERABILITY of primary and backup overcurrent protection circuit breakers by periodic surveillance. The surveillance requirements applicable to lower voltage circuit breakers provides assurance of breaker reliability by testing at least one representative sample of each manufacturer's brand of circuit breaker. Each manufacturer's molded case and metal case circuit breakers are grouped into representative samples which are then tested on a rotating basis to ensure that all breakers are tested. If a wide variety exists within any manufacturer's brand of circuit breakers, it is necessary to divide that manufacturer's breakers into groups and treat each group as a separate type of breaker for surveillance purposes.

The bypassing of the motor-operated valves thermal overload protection continuously ensures that the thermal overload protection will not prevent safety-related valves from performing their function. The Surveillance Requirements for demonstrating the bypassing of the thermal overload protection continuously are in accordance with Regulatory Guide 1.106 "Thermal Overload Protection for Electric Motors on Motor-Operated Valves," Revision 1, March 1977.

The reactor protection system (RPS) electric power monitoring assemblies provide protection to the RPS and other systems which receive power from the RPS buses by acting to disconnect the RPS from the power source in the presence of an electrical fault in the power supply.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 59 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

By letter dated October 30, 1987, Illinois Power Company, et al. (the licensee) requested 24 changes to the Clinton Power Station Technical Specifications. Package number 12 proposed that a footnote allowing engine prelube and/or warm-up prior to diesel generator starting be made applicable to most of the required load tests required by Technical Specification (TS) 4.8.1.1.2.a.5. Following discussions with the NRC Project Manager, the licensee submitted a revision to this proposed amendment by letter dated June 30, 1989. This revision proposed that all test starts required by TS 4.8.1.1.2 may be preceded by engine prelube and/or warmup except for ambient starts required every 184 days. The revision was within the scope of the original amendment request, as noticed in the Federal Register.

2.0 EVALUATION

NRC Generic Letter (GL) 84-15, "Proposed Staff Actions to Improve and Maintain Diesel Generator Reliability," describes methods for Emergency Diesel Generator (EDG) testing which, if implemented, would minimize the impact of testing on EDG reliability. These methods include engine prelube, modified or slow starts as applicable, and loading in accordance with vendor recommendations. Prior to licensing, a footnote was added to Section 4.8.1.1.2 of the Clinton TS for the specific purpose of allowing this methodology to be applied to certain EDG surveillance testing. However, this footnote was not made applicable for all required surveillances and subsequently the NRC determined that the wording of the footnote was ambiguous, and that clarification was appropriate.

The licensee provided a proposed amendment to clarify the specification and broaden the applicability of the footnote by letter dated October 30, 1987 which they amended by letter dated June 30, 1989. The proposed amendment deletes the existing footnote and adds two new footnotes. The first new footnote states that all planned diesel generator starts for the purpose of meeting the surveillance requirements (TS 4.8.1.1.2) may be preceded by an engine prelube period as recommended by the manufacturer. For the purposes of this review, the staff interprets "prelube" to mean the deliberate act of pressurizing the entire diesel engine lubricating system for a specified period of time to

ensure adequate lubrication to all moving parts prior to activating any engine starting mechanism. The diesel engines at Clinton are normally continuously maintained in this conditions using a separate, motor driven pump. The second new footnote covers when fast starts and loading from ambient conditions are and are not required as part of the surveillance requirements. The staff has reviewed the licensee's submittal and has concluded that the proposes TS changes, with the new footnotes, accurately reflect the staff's current position regarding EDG testing methodology as documented in GL 84-15. Therefore, the proposed TS changes are acceptable.

During a phone conversation on September 11, 1991, the licensee indicated that the proposed double asterisk footnote on TS page 3/4 8-4 is applicable to both TS Surveillance Requirement 4.8.1.1.2 a.4 and a.5. The licensee's submittal dated June 30, 1989 failed to include the double asterisk and footnote for TS Surveillance Requirement 4.8.1.1.2 a.5 (SR a.5). It is readily apparent that this footnote does indeed apply to TS SR a.5 since the footnote itself addresses the 90-second loading time of the diesel generator. The footnote indicates that surveillance testing to verify the diesel generator start and load times (less than or equal to 12 seconds and less than or equal to 90 seconds, respectively) from ambient conditions shall be performed at least once per 184 days. All other engine starts may be conducted in accordance with the manufacturer recommendations. The proposed changes described above do not affect the staff's initial proposal of no significant hazards, is acceptable to the staff, and therefore, has been incorporated into the TS.

The Bases of the affected specification sections have been modified by the licensee to provide the basis for change in the EDG starting requirements. Based on its review, the staff concludes that the changes to these bases are acceptable.

### 3.0 STATE CONSULTATION

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

### 4.0 ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR 51.21, 51.32, and 51.35, an environmental assessment and finding of no significant impact has been prepared and published in the Federal Register on February 4, 1991 (56 FR 4309). Accordingly, based upon the environmental assessment, the Commission has determined that the issuance of this amendment will not have a significant effect on the quality of the human environment.

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; 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 to the health and safety of the public.

Principal Contributor: John B. Hickman, NRR

Dated: September 24, 1991

UNITED STATES NUCLEAR REGULATORY COMMISSIONILLINOIS POWER COMPANY, ET AL.DOCKET NO. 50-461NOTICE OF ISSUANCE OF AMENDMENT TO  
FACILITY OPERATING LICENSE

The U.S. Nuclear Regulatory Commission (Commission) has issued Amendment No. 59 to Facility Operating License No. NPF-62 issued to the Illinois Power Company (IP) and Soyland Power Cooperative, Inc., (the licensee) for operation of the Clinton Power Station, Unit 1, located in DeWitt county, Illinois. The amendment was effective as of the date of issuance.

This amendment to the surveillance requirements in Technical Specification 4.8.1.1.2 revised the conditions for test starting of the diesel generators consistent with the recommendations in NRC Generic Letter 84-15.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment.

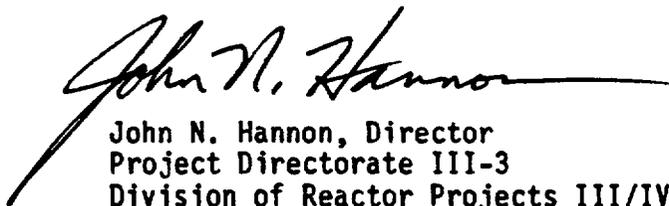
Notice of Consideration of Issuance of Amendment and Opportunity for Hearing in connection with this action was published in the FEDERAL REGISTER on February 18, 1988 (53 FR 4920). No request for a hearing or petition for leave to intervene was filed following this notice.

The Commission has prepared an Environmental Assessment and Finding of No Significant Impact related to this action and has determined not to prepare an environmental impact statement. Based upon the environmental assessment, the Commission has concluded that the issuance of this amendment will not have a significant effect on the quality of the human environment.

For further details with respect to the action see (1) the application for amendment dated October 30, 1987 and revised June 30, 1989; (2) Amendment No. 59 to License No. NPF-62; (3) Safety Evaluation dated September 24, 1991; and (4) Environmental Assessment and Finding of No Significant Impact dated January 22, 1991 (56 FR 4309). All of these items are available for public inspection at the Commission's Public Document Room, Gelman Building, 2120 L Street N. W., Washington, D. C., and at the Vespasian Warner Public Library, 120 West Johnson Street, Clinton, Illinois 61727. A copy of items (2), (3) and (4) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Reactor Projects III/IV/V.

Dated at Rockville, Maryland this 24th day of September 1991.

FOR THE NUCLEAR REGULATORY COMMISSION



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