

May 30, 1991

Docket No. 50-461

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

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Dear Mr. Spangenberg:

SUBJECT: AMENDMENT NO. 58 TO FACILITY OPERATING LICENSE NO. NPF-62  
(TAC NO. M80382)

The Commission has issued the enclosed Amendment No. 58 to Facility Operating License No. NPF-62 for the Clinton Power Station, Unit No. 1. This amendment revises the Technical Specifications in response to your application dated May 15, 1991 as supplemented by letter dated May 22, 1991.

The amendment modifies ACTION statement number 82 for Technical Specification (TS) 3.3.7.5, "Accident Monitoring Instrumentation," to allow continued plant operation with the inboard Main Steam Isolation Valve, 1B21-F022D, closed position indication inoperable until the next reactor shutdown.

Your letter dated May 15, 1991, requested that this amendment be treated as an emergency in that failure to act in a timely manner would result in an unnecessary shutdown of the Clinton Power Station. The staff, in its review of your application, has determined that conditions do indeed exist to warrant emergency treatment in accordance with 10 CFR 50.91(a)(5).

Additionally, your application represented a permanent change which requested that the proposed footnote to the Technical Specifications be applicable to any primary Containment Isolation Valve position indication. This portion of your amendment request is denied as discussed in the enclosed Safety Evaluation. However, you may wish to request the Boiling Water Reactor Owners Group to sponsor this generic Technical Specification change as a line item improvement.

**NRC FILE CENTER COPY**

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Mr. Frank A. Spangenberg

- 2 -

May 30, 1991

A copy of the Notice of Denial is also enclosed. The Notice of Denial has been forwarded to the Office of the Federal Register for publication. The notice of issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

Original signed by Allen Hansen for

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. 58 to License No. NPF-62
- 2. Safety Evaluation
- 3. Notice of Denial

cc w/enclosures:  
See next page

LA:PD33:DRPW  
PKreutzer  
5/21/91

AT 5/23/91  
PM:PD33:DRPW  
AGody, Jr./bj  
5/22/91

H  
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CMcCracken  
5/22/91

DOCUMENT NAME: M80382 AMD

w/comments -  
procedural concerns  
separate

Mr. Frank A. Spangenberg  
Illinois Power Company

Clinton Power Station  
Unit No. 1

cc:

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Vice President  
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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. 58  
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 May 15, 1991, as supplemented by letter dated May 22, 1991, 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. 58, 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 the date of issuance and is to be implemented no later than 30 days from date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*L.B. Marsh for J. Zwolinski*

John A. Zwolinski, Assistant Director  
for Region III Reactors  
Division of Reactor Projects III/IV/V  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of issuance: May 30, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 58

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 3-88

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Insert

3/4 3-88

3/4 3-88a



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 58 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

The Illinois Power Company (IP) proposes to amend Facility Operating License No. NPF-62 for the Clinton Power Station (CPS) pursuant to 10 CFR 50.90 and 50.91(a)(5). By letter dated May 15, 1991, IP submitted a request for an emergency Technical Specification (TS) change regarding the Action Statement of TS 3.3.7.5, "Accident Monitoring Instrumentation," for inoperable Primary Containment Isolation Valve (PCIV) position indication(s).

During the performance of a routine functional test of Main Steam Isolation Valve (MSIV) dual solenoid valves on May 4, 1991, CPS main control room operators observed that the normal position indication for inboard MSIV 1B21-F022D did not properly indicate that the valve had closed when the valve was stroked to the closed position. IP has indicated in its submittal that the problem was traced to a malfunctioning limit switch which provides the "open" position signal for indication in the Main Control Room.

With the number of operable channels less than the required number of channels for PCIV valve position indication instrumentation, the Action Statement currently requires the plant operators to verify the valve's position and restore the channel to operable status within 30 days or begin plant shutdown. The failed MSIV limit switch is located on the inboard MSIV for the "D" main steam line. Due to its location in the drywell, an area where relatively high radiation fields and temperatures exist, repair cannot be performed during plant operation.

2.0 DISCUSSION AND EVALUATION

After exploring alternate repair methods, IP concluded that a change to the CPS TS 3.3.7.5 would be required to prevent an unnecessary plant shutdown, not only for this particular event but also in the event of a similar occurrence in the future. There are a number of PCIVs at CPS which could potentially require repair at inaccessible locations should failure occur during plant operation. The proposed TS Action Statement would allow continued

plant operation, provided that the inoperability of the PCIV position indication channel is due to a failure at a location that is inaccessible during plant operation and that a planned alternate method for determining the post-accident isolation status of the associated containment penetration is implemented. Repairs to inoperable PCIV position indication channels would need to be completed prior to start-up from the next plant shutdown.

Following the submittal and the initial NRC staff review, the staff determined that the TS change is generic and it is inappropriate to issue the TS change on an emergency basis. Therefore, the proposed change should be approved on a limited basis to include only the current MSIV position indication inoperability until the next plant shutdown.

Criterion 13, "Instrumentation and Control," of Appendix A, "General Design Criteria for Nuclear Power Plants," (GDC) to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," includes a requirement that instrumentation be provided to monitor variables and systems over their anticipated ranges for accident conditions as appropriate to ensure adequate safety.

Criterion 64, "Monitoring radioactivity releases," of Appendix A to 10 CFR Part 50 includes a requirement that means be provided for monitoring the reactor containment atmosphere, spaces containing components for recirculation of loss-of-coolant accident fluid, effluent discharge paths, and the plant environs for radioactivity that may be released from postulated accidents.

Other GDC could apply to PCIV position indication design such as Criterion 19, "Control room," and Criterion 54, "Piping systems penetrating containment."

The licensees are committed to NRC Regulatory Guide 1.97, Revision 3, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident," which describes acceptable means for complying with the Commission's regulations on providing instrumentation to monitor plant variables and systems. Regulatory Guide 1.97, Rev. 3, indicates that PCIV position indication is a Type B, Category 1 variable. A Type B variable is a variable which provides information to indicate whether plant safety functions have been accomplished after an accident. Generally speaking, the Category 1 classification provides for full qualification, redundancy, and continuous real-time display and requires Class 1E power.

TS 3.3.7.5 requires accident instrumentation monitoring to be OPERABLE as indicated in TS Table 3.3.7.5-1. The purpose of the CPS TS Section 3.3.7.5, as described in the TS Bases, is to ensure that sufficient information is available to plant operators on selected plant parameters to monitor and assess important variables following an accident. TS Table 3.3.7.5-1 defines the required number of channels, the minimum number of channels operable, the applicable operational conditions, and the Action statement associated with each particular instrument. The Action statement associated with the PCIV position indication (ACTION 82) ensures the availability of sufficient control room indication for an operator to determine that the containment isolation function is performed, if initiated.

To revise ACTION 82, IP proposed to add a footnote ("\*") which reads as follows:

If the location(s) of failure is inaccessible during plant operation, operation may continue provided that a planned alternate method for determining the post-accident isolation status of the associated containment penetration(s) is implemented. The provisions of Specification 3.0.4 are applicable if this alternative is utilized.

The asterisk appears just after the words "restore the inoperable channel(s) to OPERABLE status within 30 days" in part "a", and just after the words "restore the inoperable channel(s) to OPERABLE status within 7 days" in part "b" of Action 82.

The statement regarding Specification 3.0.4 in the footnote ensures that the inoperable channel(s) is returned to an operable status prior to plant start-up if the alternative described in the footnote is utilized.

In reviewing the proposed footnote and its application, the staff recognized its potential for generic application. As discussed above, the staff determined that it was inappropriate to review such a potentially generic application on an emergency basis. After a phone conversation with IP, a new footnote, as stated below, will be utilized for the CPS. The new footnote is applicable only until the first reactor shutdown after June 3, 1991. The footnote is as follows:

For valve 1B21-F022D, operation may continue until the first reactor shutdown after June 3, 1991, provided that a planned alternate method for determining the post-accident isolation status of the associated containment penetration is implemented.

The 3.0.4 applicability statement is not necessary since the footnote is only applicable until the next reactor shutdown. The footnote is now applicable only to Action 82 a., with the asterisk being placed after the words "restore the inoperable channel(s) to OPERABLE status within 30 days."

The licensees' proposed footnote, as modified, is acceptable to the staff until the next reactor shutdown in light of the compensatory measures taken to verify penetration integrity in the event of an accident. Additionally, IP, as part of the compensatory measures, has trained the operators in the utilization of the planned alternate method for determining the post-accident isolation status of the associated containment penetration.

IP indicated in its submittal that, although the proposed change may impact the availability of the normal PCIV position indication, the proposed change has no impact on the operability of the containment isolation valves themselves.

That is, the design capability of automatic containment isolation valves to effect containment isolation in response to an accident or conditions requiring automatic containment isolation is unaffected by the proposed change. Automatic containment isolation would occur irrespective of the status or condition of the position indication instrumentation associated with the PCIVs. The staff agrees with this statement provided the licensees continue to maintain MSIV operability in a manner consistent with the TS.

The proposed TS to allow continued plant operation with an inoperable PCIV position indication channel provided the valve's position is known and acceptable alternate means are available for determination of the post-accident isolation status of the affected containment penetration is acceptable to the staff as noted above.

### 3.0 EMERGENCY CIRCUMSTANCES

In its May 15, 1991 submittal, IP requested that this amendment be treated as an emergency in accordance with 10 CFR 50.91(a)(5) because failure to act in a timely manner would result in a shutdown of the plant. IP also asserted that prompt review and approval of the proposed TS change would allow IP to avoid a plant shutdown to repair a component whose failure has minimal impact on plant safety and for which the problem can be adequately compensated through the use of an alternate method of determining the isolation status of the containment penetration. In addition, this failure was unforeseeable, particularly in view of the fact that the PCIV position indication instrumentation was proved to be working satisfactorily by the completion of previously performed surveillance tests. The staff believes that the licensees' assertions are appropriate in light of the discussion in 2.0 above. Thus, the NRC staff does not believe that the licensees have abused the emergency provisions in this instance. Accordingly, the Commission has determined that there are emergency circumstances warranting prompt approval by the Commission.

### 4.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission's regulations in 10 CFR 50.92 state that the Commission may make a final determination that a license amendment involves no significant hazards consideration if operation of the facility, in accordance with the amendment, would not:

- (1) Involve a significant increase in the probability or consequences of any accident previously evaluated; or
- (2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or
- (3) Involve a significant reduction in a margin of safety.

This amendment has been evaluated by the staff against the above standards. It does not involve a significant hazards consideration because the changes would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated. The proposed change to the TSs does not affect MSIV operability. Therefore, no significant increase in the probability of a previously evaluated accident would occur. Development of a planned alternate method for determining the post-accident isolation status of the associated penetration(s) in a manner as described in 2.0 above, provides sufficient confidence that no significant increase in the consequences of an accident previously evaluated will occur. Therefore, the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report would not be increased significantly.
2. Create the possibility of a new or different kind of accident from any previously evaluated. The licensees' request, in itself, does not involve any changes to the design or operation of the facility. In performing the procedure to implement the planned alternative for determining the penetration's post-accident status, operators must open a panel and measure the MSIV signal to determine the valve's actual position. Since the associated test points are clearly labelled and accessible, the possibility of a new or different kind of accident from any previously evaluated would not be created by performing the proposed procedure. The staff has reviewed the licensees' planned alternative and has found it acceptable.
3. Involve a significant reduction in a margin of safety. Provided the MSIV operability is maintained through proper maintenance and surveillance testing, the proposed request would not impact the reliability of the MSIV and, therefore, would not constitute a reduction in a margin of safety.

Accordingly, the Commission has determined that this amendment involves no significant hazards consideration.

#### 5.0 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.

## 6.0 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 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. 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.

## 7.0 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: Anthony T. Gody, Jr.

Date: May 30, 1991

UNITED STATES NUCLEAR REGULATORY COMMISSIONILLINOIS POWER COMPANY, ET AL.CLINTON POWER STATION, UNIT NO. 1DOCKET NO. 50-461NOTICE OF DENIAL OF AMENDMENT TO FACILITY OPERATING LICENSE  
AND OPPORTUNITY FOR A HEARING

The U. S. Nuclear Regulatory Commission (the Commission) has denied in part a request by the licensees for amendment to Facility Operating License No. NPF-62, issued to the Illinois Power Company and Soyland Power Cooperative (the licensees), for operation of the Clinton Power Station (CPS), Unit No. 1 (the facility) located in DeWitt County, Illinois.

During the performance of a routine functional test of Main Steam Isolation Valve (MSIV) dual solenoid valves, the Main Control room failed to receive positive indication of full closure of inboard MSIV 1B21-F022D. The valve was verified to have been closed through the use of other control room indications. The problem was traced to a malfunctioning limit switch which provides the "open" position signal for indication in the Main Control room. During the licensees' evaluation of the event and TS-required action statement, it appeared that a change to CPS TS 3.3.7.5 would be required to prevent an unnecessary plant shutdown not only for this event but also in the event of a similar occurrence in the future.

The amendment, as proposed by the licensees, would consist of changes to the Technical Specifications (Appendix A to Facility Operating License No. NPF-62.

Technical Specification (TS) 3/4.3.7.5, "Accident Monitoring Instrumentation," describes Limiting Conditions for Operation (LCO) for inoperable primary containment isolation valve (PCIV) position indication(s). The licensees proposed to modify the TS Action statements (82 a. and 82 b.) by providing a footnote following the words, "restore the inoperable channel(s) to OPERABLE status within 30 days," for Action 82a. and "restore the inoperable channel(s) to OPERABLE status within 7 days," for Action 82b. The licensees' submittal included the following proposed footnote:

If the location(s) of failure is inaccessible during plant operation, operation may continue provided that a planned alternate method for determining the post-accident isolation status of the associated containment penetration(s) is implemented. The provisions of Technical Specification 3.0.4 are applicable if this alternative is utilized.

The licensees' application for an amendment to operating license NPF-62 was dated May 15, 1991, and supplemented by a letter dated May 22, 1991.

The portion of the amendment application which proposed the use of the TS for any PCIV is interpreted by the staff as being potentially generic in nature and thus not appropriate to issue on an emergency basis; therefore, the staff has denied this aspect of the licensee's request. The staff determined that the proposed amendment was acceptable as applied to the current MSIV failure and the licensees' proposed alternate method for determining containment penetration status alone.

The licensees were notified of the Commission's denial of this request by letter dated May 30, 1991 . All other changes requested by the licensees' application have been approved by Amendment No. 58 . Notice of issuance of Amendment No. 58 will be published in the Commission's regular biweekly FEDERAL REGISTER notice.

By \_\_\_\_\_, the licensees may demand a hearing with respect to the denial described above and any person whose interest may be affected by this proceeding may file a written petition for leave to intervene.

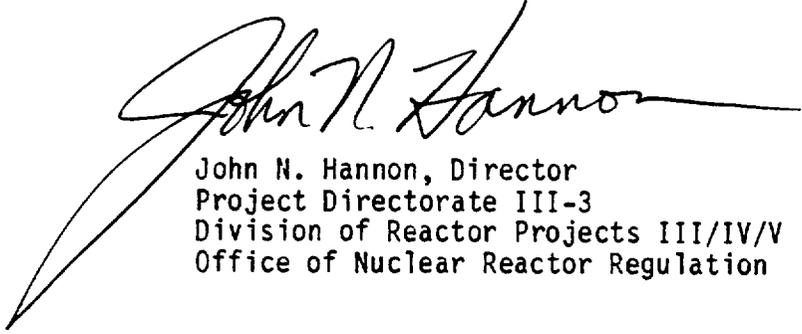
A request for hearing or petition for leave to intervene must be filed with the Secretary of the Commission, U. S. Nuclear Regulatory Commission, Washington, D.C., 20555, Attention: Docketing and Service Branch, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, N.W., Washington, D.C., by the above date.

A copy of any petitions should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, D.C., 20555 and to Sheldon Zabel, Esq., Schiff, Hardin and Waite, 7200 Sears Tower, 233 Wacker Drive, Chicago, Illinois 60606, attorney for the licensees.

For further details with respect to this action, see (1) the application for amendment dated May 15, 1991; (2) its supplement dated May 22, 1991; and (3) the Commission's Safety Evaluation issued with Amendment No. 58 to NPF-62 dated May 30, 1991 which 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 item (3) may be obtained

upon request addressed to the U. S. Nuclear Regulatory Commission, Washington,  
D.C., 20555, Attention: Division of Reactor Projects - III/IV/V.

Dated at Rockville, Maryland, this 30th day of May 1991.



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