U-601117
L30-88(01 -13)-LP
1A.120

ILLINOIS POWER COMPANY

CLINTON POWER STATION, P.O. BOX 678, CLINTON, ILLINOIS 61727

DPH-0129-88
January 13, 1988
10CFR50.12

Docket No. 50-461

Document Control Desk
Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Clinton Power Station
Request for Exemption from 10CFR50,
Appendix J, Leak Testing Requirements

Dear Sir:

Pursuant to 10CFR50.12, Illinois Power Company (IP) hereby requests exemption from the requirements of 10CFR50, Appendix J, paragraph III.D.3.

IP requests one-time exemption from the two year surveillance interval requirement for Type C Local Leak Rate Tests for Containment Isolation Valves (CIVs) 1E12-F023, 1E51-F034, 1E51-F035, 1E51-F390, 1E51-F391, 1E12-F061, 1E12-F062 and 1E51-F013. Attachment 2 to this letter provides a description of the requested change, and response to regulatory requirements including the special circumstances required for commission consideration. An affidavit supporting certification accompanies this letter. The related Technical Specification change request was submitted in IP Letter U-601084 dated December 10, 1987.

In accordance with the provisions of 10CFR170.12 and 170.21, IP is enclosing a check made out to the Nuclear Regulatory Commission in the amount of $150.00 as payment of the application fee.

Sincerely yours,

D. P. Hall
Vice President

GSL/krm

Attachments

RECD W/CHECK
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cc: NRC Resident Office
NRC Region III, Regional Administrator
NRC Clinton Licensing Project Manager
Illinois Department of Nuclear Safety

Attachment 1
to U-601117

STATE OF ILLINOIS

COUNTY OF DEWITT

DONALD P. HALL, Being first duly sworn, deposes and says: That he is Vice President of Illinois Power Company; that the provided information to certify that this request for exemption from the 10CFR50, Appendix J, paragraph III.D.3 leak testing requirements has been prepared under his supervision and direction; that he knows the contents thereof; and that to the best of his knowledge and belief said request and the facts contained therein are true and correct.

DATED: This 13th day of January 1988

Signed: D. P. Hall
Donald P. Hall

Subscribed and sworn to before me this 13th day of January 1988.

Linda S. Chamberlain
Notary Public

My commission expires:

"OFFICIAL SEAL"
LINDA S. CHAMBERLAIN
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES 2-11-90

Description and Justification:

IP is requesting a one-time exemption to 10CFR50, Appendix J, paragraph III.D.3 for leak-rate testing of Containment Isolation Valves (CIVs), 1E12-F023, 1E51-F034, 1E51-F035, 1E51-F390, 1E51-F391, 1E12-F061, 1E12-F062, and 1E51-F013. These CIVs were last tested on October 21, 1986, and would require testing by October 21, 1988. The first refueling outage at Clinton Power Station is scheduled for the spring of 1989. IP is requesting exemption from these testing requirements until the first refueling outage.

Requirements

10CFR50.12.(a) states:

> "The Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of the regulations of this part, which are -
> (1) Authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security."

IP satisfies these requirements as follows:

(1) Authorized by Law:

If the criteria established in 10CFR50.12(a) are satisfied, as they are in this case, and if no other prohibition of law exists to preclude the activities which would be authorized by the requested exemption, and there is not such prohibition, then the Commission is authorized by law to grant this exemption request.

Will not present an undue risk to the public health and safety:

The effects of deferral of the requested Type C tests upon the potential for post-accident leakage from the primary containment, and thus risk to the public health and safety, have been evaluated and are shown to be negligible. The following forms the basis for this conclusion:

> The most recent test of the valves was performed satisfactorily. No significant increase in the probability of equipment failures is postulated for a short, extended time-period effected by the deferred testing.

The Local Leak Rate Testing provides verification of valve seating integrity and does not provide assurance that the valve actuates (either automatically or manually) to its isolation position. Other surveillances are performed to verify the isolation function for the applicable valves (1E51-F013 and 1E12-F023). The test intervals associated with these surveillances will not be affected by the proposed change.

The proposed change introduces no new modes of operation, failure modes or other changes to any equipment.

The requested extension does not significantly increase the specified surveillance frequency.

The requested amendment concerns schedule relief for surveillance testing of a very limited number of containment isolation valves associated with only one containment penetration.

Leak test acceptance criteria are not affected by the proposed change.

Consistent with the common defense and security:

The common defense and security are not implicated in this exemption request. Only the potential impact on public health and safety is at issue.

Special Circumstances

10CFR50.12.(a).(2) requires:

"The Commission will not consider granting an exemption unless special circumstances are present. Special circumstances are present whenever -
(i) Application of the regulation in the particular circumstances conflicts with other rules or requirements of the Commission; or
(ii) Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule; or
(iii) Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated; or
(iv) The exemption would result in benefit to the public health and safety that compensates for any decrease in safety that may result from the grant of the exemption; or

(v) The exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation; or

(vi) There is present any other material circumstance not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If such condition is relied on exclusively for satisfying paragraph (a)(2) of this section, the exemption may not be granted until the Executive Director for Operations has consulted with the Commission."

IP meets the following special circumstances:

50.12.(a).(2).(i) Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule:

The purpose of 10CFR50 Appendix J testing is to assure that (a) leakage through the primary reactor containment and systems and components penetrating primary containment shall not exceed allowable leakage rate values as specified in the Technical Specifications or associated bases and (b) periodic surveillance of reactor containment penetrations and isolation valves is performed so that proper maintenance and repairs are made during the service life of the containment, and systems and components penetrating primary containment.

The containment leakage rate is primarily affected by equipment wear and maintenance. Isolation valves typically see little usage (especially test connections, vents and drain valves) except for periodic operability testing. This leads to little degradation of equipment or increase in the leakage rate. From October 21, 1988 to the spring 1989 refueling outage, these valves will be subjected to minimal wear.

Redundancy regarding primary containment isolation is provided by two isolation valves in series or one isolation valve bounded by a closed loop outside containment. Consequently, a reduction in the effectiveness of one valve to provide a seal would not itself compromise containment integrity. Deterioration of the overall integrity of the containment penetrations is normally a gradual process. Considering the redundancy of the isolation barriers, the short duration of the requested extension of the testing interval and the limited number of valves affected, any reduction in the containment integrity during the extension period would be negligible.

These valves have not required maintenance since last tested on October 21, 1986. These valves are tested during cold shutdown, and to date, data from past testing shows leakage to be well within acceptable limits. Similar valves will be tested during the spring 1988 maintenance outage, and any excessive leakage or other degraded valve conditions indicative of a generic condition will be evaluated at that time. An internal commitment has been initiated to ensure this task is completed.

50.12.(a).(2).(iii) Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated:

Performing the leak testing on these valves will require the removal of the drywell head and the disassembly of the reactor head spray piping to allow installation of a blind flange as an inboard test boundary. Reassembly of the reactor head spray piping will require that a reactor coolant system boundary leakage test be performed in accordance with the ASME code. IP estimates that these tasks would extend the spring 1988 maintenance outage by about one week, and cause additional personnel exposure of approximately one to two Man-Rem.

The first refueling outage is scheduled for the spring of 1989. Drywell head removal and a reactor coolant boundary leakage test will be required during this outage. Leak testing of these Containment Isolation Valves will also be performed during this outage in order to bring the test schedule for these valves into alignment with the fuel cycle. Therefore, the time to perform the required testing has been accounted for in planning the first refueling outage.

Several other nuclear utilities have been granted temporary relief from 10CFR50 Appendix J paragraph III.D.3 for reasons very similar to those outlined in this request.

50.12.(a).(2).(v) The exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation:

IP is requesting a temporary exemption to the requirements of 10CFR50 Appendix J paragraph III.D.3 for a limited number (eight) of Containment Isolation Valves. All other Containment Isolation Valves at CPS are in compliance with these requirements. IP will be in complete compliance with 10CFR50 Appendix J paragraph III.D.3 after startup from the first refueling outage.