

UNITED STATES NUCLEAR REGULATORY COMMISSION

ILLINOIS POWER COMPANY

DOCKET NO. 50-461

ENVIRONMENTAL ASSESSMENT AND FINDING OF

NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is issuing exemptions from certain requirements of 10 CFR Part 50 to the Illinois Power Company (the applicant) for the Clinton Power Station, Unit 1 facility located in Dewitt County, Illinois.

ENVIRONMENTAL ASSESSMENT

A. Containment Airlock Testing

Identification of Proposed Action:

The exemption would eliminate the full pressure test required by Paragraph III.D.2(b)(ii) of Appendix J each time the air lock is opened during periods when containment integrity is not required and substitute a seal leakage test to be conducted at a pressure specified in the Technical Specifications. The exemption is in accordance with the applicant's request dated December 9, 1985.

The Need for the Action:

The exemption is required to provide the applicant with greater plant availability over the lifetime of the plant.

Environmental Impact of the Action:

The exemption would allow the substitution of an airlock seal test for an airlock pressure test while the reactor is in a shutdown or refueling mode. With respect to this exemption from Appendix J, the increment of environmental impact is related solely to the potential increased probability and the magnitude of containment leakage during an accident which would lead to potentially greater offsite radiological consequences. However, the potential increase due to this

exemption is small and would result from the potential leakage path through the door mechanism which will not be measured by this modified test. The 6-month test requirement of paragraph III.D.2(b)(i) of Appendix J, the 3-day test requirement of paragraph III.D.2(b)(iii) of Appendix J and the test requirements when maintenance is performed on the airlock, will measure the leakage through the door mechanism and provide assurance that the air lock will not leak excessively.

Alternative to the Proposed Action:

Because the staff has concluded that there is no measurable environmental impact associated with the exemption, any alternative to the exemption will have either no environmental impact or greater environmental impact.

The principal alternative would be to deny the requested exemption. This would not reduce the environmental impacts of plant operations and would result in reduced operational flexibility and unwarranted delays in power ascension.

B. Leak Rate Testing of Main Steam Isolation Valves (MSIV's)

Identification of Proposed Action:

The exemption would exclude the measured leakage from the MSIV's from the summation of the local leak rate test results. The proposed exemption is in accordance with the applicant's request dated December 9, 1985.

The Need for the Proposed Action:

The exemption is needed because the NRC staff in Supplement 2 to the Clinton Safety Evaluation Report found the applicant's proposed MSIV leakage test program acceptable, and concluded that the design of the MSIV leakage control system at Clinton is acceptable. The Clinton Technical Specifications have been written based on the NRC staff's evaluation in Supplement 2 to the Clinton SER.

### Environmental Impact of the Action

The proposed exemption would exclude the measured leakage through the MSIV's from the combined local leak rate test results. The MSIV leakage control system at Clinton is designed to control and minimize the release of fission products that could leak through the closed MSIV's after onset of a loss of coolant accident (LOCA) by maintaining a negative pressure between the MSIV's in each line. The effluent will be discharged into a volume where it will be processed by the stand-by gas treatment system before being released to the environs. A radiological analysis including this potential source of containment atmosphere leakage was performed, and the MSIV's will be periodically leak rate tested to verify that the leakage assumed in the radiological analysis is not exceeded.

### Alternative to the Proposed Action:

The proposed CPS Technical Specification requirements will provide reasonable assurance against undue MSIV leakage and that no material increase in the probability or extent of MSIV leakage is to be expected. Therefore, there is no significant increase in the probability of higher post-accident offsite or onsite doses related to the proposed exemption and no significant increase in environmental impact beyond that experienced with no exemption.

The principal alternative would be to deny the requested exemption. This would not reduce the environmental impact of plant operations and would provide no greater assurance that offsite or onsite doses, in the event of an accident that resulted in fission product release, would be any less.

### Alternative Use of Resources:

These actions in the granting of exemptions A and B above do not involve the use of resources not previously considered in connection with the "Final Environmental Statement Related to the Operation of the Clinton Power Station, Unit 1," dated May 1982.

Agencies and Persons Consulted:

The NRC staff reviewed the licensee's requests that support the requested exemptions A and B above. The NRC staff did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the requested exemptions.

Based upon the foregoing environmental assessment, we conclude that the requested actions will not have a significant effect on the quality of the human environment.

For further details with respect to this action, see the requests for the exemptions as listed herein, which are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, DC 20555 and at the Vesparian Warner Public Library, 120 West Johnson Street, Clinton, Illinois 61727.

Dated at Bethesda, Maryland, this 12th day of February 1986.

FOR THE NUCLEAR REGULATORY COMMISSION

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