

UNITED STATES NUCLEAR REGULATORY COMMISSION

ILLINOIS POWER COMPANY

DOCKET NO. 50-461

NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO  
FACILITY OPERATING LICENSE, PROPOSED NO SIGNIFICANT HAZARDS  
CONSIDERATION DETERMINATION, AND OPPORTUNITY FOR A HEARING

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. NPF-62, issued to the Illinois Power Company (the licensee), for operation of the Clinton Power Station, Unit 1, located in DeWitt County, Illinois.

The proposed amendment would modify Technical Specification 3/4.4.3.1, "Reactor Coolant System Leakage - Leakage Detection Systems," to permit continued plant operation with inoperable drywell floor drain sump flow rate monitoring instrumentation. Continued plant operation would be permitted until the first time the plant is required to be brought to COLD SHUTDOWN after July 10, 1994.

Technical Specification 3/4.4.3.1 requires that systems capable of monitoring unidentified reactor coolant system leakage rates remain operable. Reactor coolant system leakage that falls on the drywell floors is channeled through the floor drains and enters the drywell floor drain sump. Prior to entering the floor drain sump, water passes through the drywell floor drain sump flow monitoring instrumentation where the instantaneous flow rates and total integrated flow are measured. The flow monitoring instrumentation consists of a V-notch weir box containing a capacitance probe. Water flows

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through a V-notch water level which is directly proportional to the flow through the weir box. Thus, flow through the V-notch is equal to the sump inlet flow rate. The capacitance probe is calibrated to correspond to the incoming flow rate and provides a continuous control room indication of the unidentified reactor coolant system leakage rate. An alarm is generated when the technical specification limit of 5 gpm of unidentified leakage occurs. The V-notch weir box instrumentation meets the accuracy and sensitivity requirements of Regulatory Guide 1.45 for drywell floor drain sump flow monitoring.

The licensee began to observe questionable readings from the indicated drywell floor drain sump inlet flow and subsequently declared the drywell floor drain sump monitoring instrumentation inoperable on June 10, 1994. Technical Specification 3.4.3.1 permits 30 days of continuous plant operation provided the drywell floor drain sump flow rate is monitored and determined by alternative means at least once every 8 hours.

All efforts by the licensee to restore the drywell sump inlet flow monitoring instrumentation to operable status have been unsuccessful. The instrument loop has been recalibrated and equipment external to the drywell has been verified to be operating properly. The only option remaining for the licensee is to enter the drywell in order to examine the V-notch weir box and associated capacitance probe. However, the V-notch weir box is located in a keyway beneath the reactor vessel and inside the biological shield wall. Due to the high radiation and temperatures in this location, a plant shutdown would be required before personnel would be able to reach the instrumentation.

In a letter dated June 20, 1994, the licensee requested that this amendment application be treated as an emergency because unless approved,

technical specifications would require a plant shutdown. The licensee stated that such action would be necessary to preclude an unnecessary plant transient and related plant risk associated with a plant shutdown. Due to time constraints, sufficient time is not available to permit the customary public notices in advance of this action.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

Pursuant to 10 CFR 50.91(a)(6) for amendments to be granted under exigent circumstances, the NRC staff must determine that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an 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. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

- (1) The proposed change does not affect any initiators of any previously evaluated accidents. Additionally, the proposed change involves equipment that only provides indication and therefore, it cannot increase the probability of any accident previously evaluated.

As stated in Updated Safety Analysis Report (USAR) Section 7.7.1.24.1, no credit is taken in the safety analysis for operation of or operator reliance upon the leakage detection monitoring instrumentation associated with the drywell sumps. Notwithstanding, the drywell floor drain sump flow monitoring system provides the capability to detect and measure leakage from unknown sources of leakage in the drywell. The drywell floor drain sump inlet flow monitoring V-notch weir box instrumentation is designed to meet the accuracy requirements of Regulatory Guide 1.45. This instrumentation does not provide any

automatic action or control functions. In addition to the V-notch system, drywell floor drain sump flow rates can be determined by using the sump pump pump-out timers, cycle counters and level switches. In addition, UNIDENTIFIED LEAKAGE into the drywell is monitored by a flow rate meter in the condensate discharge line from the drywell air coolers and by a particulate and a gaseous radiation monitoring channel of the drywell fission product monitor. While the drywell fission product monitor does not provide a quantitative leakage rate, it is sensitive enough to provide plant operators with early indication of an unanticipated increase in UNIDENTIFIED LEAKAGE. Furthermore, a number of other parameters are monitored with appropriate instrumentation to provide the plant operators with indirect indication of increases in UNIDENTIFIED LEAKAGE. These parameters include drywell pressure and drywell temperature. These alternate methods of detecting increases in UNIDENTIFIED LEAKAGE rates provide operators with sufficient information to take appropriate action to respond to an increase in leakage. Based on the above, Illinois Power concludes that the proposed change will not increase the consequences of any accident previously evaluated.

- (2) The proposed change does not involve any modification to plant structures or components and only involves equipment that provides indication of leakage to the plant operators. The affected equipment does not provide any automatic action or control functions. As a result, the proposed change does not involve a change in the operation of the plant, nor does it introduce any new failure modes. Therefore, this proposed change cannot create the possibility of a new or different kind of accident from any accident previously evaluated.
- (3) The margin of safety associated with the instrumentation affected by the proposed change may be related to the limits on UNIDENTIFIED LEAKAGE. As stated in the Bases for Technical Specification 3/4.4.3.2. "The allowable leakage rates from the reactor coolant system have been based on the predicted and experimentally observed behavior of cracks in pipes... The evidence obtained from experiments suggests that for leakage somewhat greater than that specified for UNIDENTIFIED LEAKAGE the probability is small that the imperfection or crack associated with such leakage would grow rapidly. With respect to Intergranular Stress Corrosion Cracking (IGSCC) related cracks in service sensitive austenitic stainless steel piping however, an additional limit on the allowed increase in UNIDENTIFIED LEAKAGE (within a 24-hour period or less) is imposed in accordance with NRC Generic Letter 88-01, 'NRC Position on IGSCC in BWR Austenitic Stainless Steel Piping,' since an abrupt increase in the UNIDENTIFIED LEAKAGE could be indicative of leakage from such a source." The proposed change does not alter any of these limits on the UNIDENTIFIED LEAKAGE.

As previously described, flow rates into the drywell floor drain sump can be determined based on the indicated run time for the sump pumps and the known pump flow rates or by monitoring the sump fill-up times and considering the volume corresponding to the current level control band. These alternate methods are sufficient to determine whether UNIDENTIFIED LEAKAGE in the drywell exceeds the 5 pgm limit and whether changes in

this leakage exceed the limit of a 2 gpm increase in any 24-hour period or less.

Additionally, with respect to the ability to detect changes in UNIDENTIFIED LEAKAGE rates, in addition to the V-notch system, drywell floor drain sump flow rates can be determined by using the sump pump pump-out timers, cycle counters and level switches. In addition, UNIDENTIFIED LEAKAGE into the drywell is monitored by a flow rate meter in the condensate discharge line from the drywell air coolers and by a particulate and a gaseous radiation monitoring channel of the drywell fission product monitor. While the drywell fission product monitor does not provide a quantitative leakage rate, it is sensitive enough to provide plant operators with early indication of an unanticipated increase in the UNIDENTIFIED LEAKAGE rate involving reactor coolant. Furthermore, a number of other parameters are monitored with appropriate instrumentation to provide the plant operators with indirect indication of increases in UNIDENTIFIED LEAKAGE. These parameters include drywell pressure and drywell temperature.

As stated above, the drywell floor drain sump flow monitoring instrumentation does not provide any automatic action or control functions. Further, as stated in USAR Section 7.7.1.24.1, no credit is taken in the safety analysis for operation of or operator reliance upon the leakage detection monitoring instrumentation associated with the drywell sumps.

In light of all the above, Illinois Power concludes that the proposed change does not involve a reduction in the margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 15 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of the 15-day notice period. However, should circumstances change during the notice period, such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the

Commission may issue the license amendment before the expiration of the 15-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish in the FEDERAL REGISTER a notice of issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Rules Review and Directives Branch, Division of Freedom of Information and Publications Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and should cite the publication date and page number of this FEDERAL REGISTER notice. Written comments may also be delivered to Room 6D22, Two White Flint North, 11555 Rockville Pike, Rockville Maryland, from 7:30 a.m. to 4:15 p.m. Federal workdays. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By July 22, 1994, the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult



a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555 and at the local public document room located at the Vespasian Warner Public Library, 120 West Johnson Street, Clinton, Illinois, 61727. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If the amendment is issued before the expiration of the 30-day hearing period, the Commission will make a final determination on the issue of no significant hazards consideration. If a hearing is requested, the final



determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Services Branch, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555, by the above date. Where petitions are filed during the last 10 days of the notice period, it is requested that the petitioner promptly so inform the Commission by a toll-free telephone call to Western Union at 1-(800) 248-5100 (in Missouri 1-(800) 342-6700). The Western Union operator should be given Datagram Identification Number N1023 and the following message addressed to John Hannon, Director, Project Directorate III-3: petitioner's name and telephone number, date petition was mailed, plant name, and publication date and page number of this FEDERAL REGISTER notice. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to Sheldon Zabel, Esq., Schiff, Hardin and Waite, 7200 Sears Tower, 233 Wacker Drive, Chicago, Illinois 60606, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the application for amendment dated June 20, 1994, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555, and at the local public document room, located at the Vespasian Warner Public Library, 120 West Johnson Street, Clinton, Illinois 61727.

Dated at Rockville, Maryland, this 20th day of June 1994.

FOR THE NUCLEAR REGULATORY COMMISSION



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