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Docket No. 50-461

10CFR50.90

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Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Clinton Power Station Revision to Proposed Amendment of Facility Operating License No. NPF-62 (LS-96-003) and Response to Related Request for Additional Information

Dear Madam or Sir:

By letter dated June 28, 1996 (letter number U-602587), Illinois Power (IP) submitted an application for amendment of the Clinton Power Station (CPS) Operating License (License No. NPF-62) to incorporate a proposed change to the CPS Technical Specifications (Appendix A) that would allow removal of the Inclined Fuel Transfer System (IFTS) primary containment blind flange while primary containment is required to be operable. The change would be effected by incorporating a provisional note into Surveillance Requirement (SR) 3.6.1.3.3, associated with Technical Specification (TS) 3.6.1.3, "Primary Containmen. Isolation Valves (PCIVs)."

IP received a Request for Additional Information (RAI) from the NRC (dated August 8, 1996) requesting a formal response to a number of questions that were raised during the review process of the proposed license amendment. Attachment 2 to this letter provides IP's response to each of the questions contained in the RAI.

In addition to the response to the RAI, this letter contains a revision to the wording of the proposed TS change. Specifically, the wording provided in Attachment 3 to this letter supersedes in its entirety the proposed wording contained in Page 3 of 3, of Attachment 3 to U-602587. IP has determined that the original wording would be improved by eliminating the possibility that the proposed Note to SR 3.6.1.3 could be inadvertently applied to penetrations other than the IFTS penetration. In the proposed Note to be added to SR 3.6.1.3, the word "when" is being changed to "for," and the phrase, "penetration when the associated," is being added before "primary." An affidavit supporting the facts set forth in this letter and its attachments is provided in Attachment 1.

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This letter also contains a revision to the wording of the proposed change to the TS Bases. The wording provided in Attachment 4 of this letter supersedes in its entirety the proposed wording contained in Page 3 of 3, of Attachment 4 to U-602587. IP has determined that the original wording would be improved by adding a description of the administrative controls that will be used to control the IFTS drain line path when the blind flange is not installed.

IP has reviewed the justification and the Bases for No Significant Hazards Considerations contained in IP's June 28, 1996 amendment request and has concluded that the changes contained in this revision do not alter the bases or conclusions provided in those assessments. Additionally, the changes contained in this revision do not alter IP's determination that the proposed changes meet the criteria given in 10CFR50.22(c)(9) for a categorical exclusion from the requirement for an Environmental Impact Statement.

Sincerely yours,

Wilfred Connell
Vice President

JFK/csm

Attachments

cc: NRC Clinton Licensing Project Manager
NRC Resident Office, V-690
Regional Administrator, Region III, USNRC
Illinois Department of Nuclear Safety

Attachment 1
to U-602628

Wilfred Connell, being first duly sworn, deposes and says: That he is Vice President of Illinois Power; that this revision to the proposed amendment of Facility Operating License NPF-62 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 letter and the facts contained therein are true and correct.

Date: This 17th day of September 1996.

Signed: Wilfred Connell
Wilfred Connell

STATE OF ILLINOIS } SS.
DeWitt COUNTY }

"OFFICIAL SEAL"
Jacqueline S. Matthias
Notary Public, State of Illinois
My Commission Expires 11/24/97

Subscribed and sworn to before me this 17th day of September 1996.

Jacqueline S. Matthias
(Notary Public)

By letter dated August 8, 1996, the NRC requested additional information related to Illinois Power's (IP's) June 28, 1996 request to amend the Operating License for Clinton Power Station (CPS). That request proposed to revise the CPS Technical Specifications (TS) to allow removal of the Inclined Fuel Transfer System (IFTS) primary containment blind flange while primary containment is required to be operable. IP's response to each of the specific NRC questions is provided below.

Questions and Responses

1. **"Explain why the drain valves have to be opened while removing or after removing the blind flange?"**

Response: The IFTS transfer tube drain line is currently maintained open during blind flange removal or installation to ensure personnel performing the activity are working on a system that remains completely drained. The isolation valves in the IFTS transfer tube drain line (1F42-F003 and 1F42-F301) will be administratively controlled when in the open position and will be shut during this activity when conditions allow. Consistent with the Bases for TS 3.6.1.3, "Primary Containment Isolation Valves (PCIVs)," these controls consist of stationing a dedicated individual at the controls of the valve(s), who is in continuous communication with the control room. This individual can isolate the IFTS transfer tube drain line first by shutting the motor-operated valve (1F42-F003) from the control panel, and completing the isolation process by shutting the manual valve (1F42-F301). In this way, the IFTS transfer tube drain line can be rapidly isolated if a need for primary containment isolation is indicated. In addition, IP will include a note in applicable plant procedures to minimize the time that the IFTS transfer tube drain line remains open.

2. **"Assuming a LOCA occurs when the water seal created by the lower pool could potentially be bypassed (page 9 of 11 of the June 28, 1996 submittal): (a) will any piping, tank or other component be pressurized to a pressure greater than its allowable value? (b) Verify that any additional leakage from this path is within the capabilities of the Standby Gas Treatment System and the existing licensing basis for Clinton. (c) Would a bypass of this type affect the ability of personnel to perform other safety functions associated with mitigating the LOCA or otherwise maintaining the plant in a safe condition during a LOCA?**

Response: a) The primary containment pressure following a design basis LOCA is less than the design pressure of the piping and components that form the extension of the primary containment boundary while in this configuration. Therefore, no components will be pressurized to a pressure greater than their allowable value.

b) All potential air leakage pathways created by this proposed change are either water sealed or administratively controlled as described in response to Question 1. Since the water seal and the administrative controls of the IFTS transfer tube drain line ensure that there would be no additional leakage from this path, the proposed change does not challenge the capabilities of the Standby Gas Treatment System. In addition, control of this pathway will be consistent with the controls of other primary containment penetrations associated with inoperable PCIVs as required by TS 3.6.1.3. Thus, control of this potential air leakage pathway is consistent with the existing licensing basis for CPS.

c) Since, as previously discussed, potential air leakage pathways are either water sealed or can be rapidly isolated, a release to the Fuel Building atmosphere that could affect the ability of personnel to perform other safety functions associated with mitigating a postulated LOCA, or prevent them from maintaining the plant in a safe condition during or following a LOCA, would not be expected.

3. **"What signals initiate automatic isolation of the drain line valve (1F42-F003)?"**

Response: The logic signals associated with the automatic operation of the IFTS control the opening and closing of the drain line motor-operated isolation valve (1F42-F003). This valve does not receive any other automatic isolation signals.

4. **"Discuss why the proposed Note to Surveillance Requirement 3.6.1.3.3 should not include further restrictions to open the IFTS (e.g., only within a pre-determined time prior to shutdown). The proposal now would allow the removal of the blind flange at any time during operation and for any length of time."**

Response: The proposed change is based on the determination that rotation of the IFTS flange is acceptable during plant operation. In terms of plant risk, rotation of the flange just prior to shutdown is not less than that associated with any other time period during plant operation (for the same overall plant configuration). Including any further restrictions (such as only allowing rotation of the flange within a pre-determined time period prior to shutdown) only introduces the possibility of unnecessarily violating such a restriction. For example, it is conceivable that the scheduled start of a refueling outage could be delayed due to operational considerations. If this were to occur, it could create an unnecessary violation of such a restriction.

Currently, it should be noted that it is possible to perform this same operation (blind flange rotation) under an intentional entry into the Actions of LCO 3.6.1.3, with opening of the IFTS transfer tube drain line under administrative control as allowed by the Notes to the Actions. However, it is IP's desire to take the more appropriate approach of pursuing a TS amendment and obtaining explicit NRC approval to permit this activity without requiring entry into a TS Action statement. With the Fuel Building fuel transfer pool water level greater than elevation 753 feet and either the IFTS transfer tube drain line motor-operated isolation valve (1F42-F003) or the IFTS transfer tube drain line manual isolation valve (1F42-F301) closed, an air leakage pathway does not exist, even under postulated LOCA conditions. Thus, there is no need for a restriction on the length of time allowed to be in this configuration. The allowance to periodically open the IFTS transfer tube drain line isolation valves under administrative control is consistent with the current allowances for periodically opening penetrations associated with inoperable PCIVs under TS 3.6.1.3.

5. **"How often will the level in the Fuel Building Fuel Transfer pool be checked while the blind flange is removed and containment isolation is required? Is there an indication/alarm of the level in the control room?"**

Response: When the IFTS transfer tube drain line is open, the dedicated individual stationed at the valve controls will be within several feet of the pools in the Fuel Building and can easily verify pool water level. In addition, there is an alarm in the control room which is automatically initiated in the event of a low spent fuel pool level. The gate between the Fuel Building fuel transfer pool (in which the IFTS tube terminates) and the spent fuel pool will be removed during the time the IFTS blind flange is removed. Thus, this alarm will provide indication in the control room of lowering pool water level.

6. **"Describe the administrative controls that will be in place during the time that the water seal could be potentially bypassed. Will the individual truly be dedicated or will he/she have other duties? What type of communication will there be with the control room? How reliable is it post-LOCA? What actions will the individual have to take? Can the individual take these actions in a reasonable time?"**

Response: As described in response to Question 1, per the Bases for TS 3.6.1.3, the administrative controls consist of stationing a dedicated individual at the controls of the valve(s), who is in continuous communication with the control room. In this way, the IFTS transfer tube drain line can be rapidly isolated if a need for primary containment isolation is indicated. This

individual will be dedicated to the operation of the IFTS system and will thus be in control of the IFTS transfer tube drain line motor-operated isolation valve (1F42-F003). This individual will also be responsible for shutting the IFTS transfer tube drain line manual isolation valve (1F42-F301). In addition, IP will include a note in applicable plant procedures to minimize the time that the IFTS transfer tube drain line remains open.

Communication between the control room and the Fuel Building can be accomplished via radios and sound-powered phones. As discussed in Section 9.5.2.2 of the CPS Updated Safety Analysis Report (USAR), the diverse communication methods available assure reliable communications between the control room and work stations under all operating conditions.

To effect isolation of the IFTS transfer tube drain line, the dedicated individual will initiate a closure signal to the IFTS transfer tube drain line motor-operated isolation valve (1F42-F003) and then proceed around the fuel pool and close the IFTS transfer tube drain line manual isolation valve (1F42-F301) using the gear operator mounted on top of the valve. Experience has shown that these actions can be accomplished in less than five minutes; thus, in a reasonable period of time.

INSERT for SR 3.6.1.3.3

3. Not required to be met for the Inclined Fuel Transfer System (IFTS) penetration when the associated primary containment blind flange is removed, provided that the fuel building fuel transfer pool water level is maintained ≥ el. 753 ft. and the IFTS transfer tube drain valve(s) remain(s) closed, except that the IFTS tube drain valve(s) may be opened under administrative controls.

INSERT for B 3.6.1.3 (SR 3.6.1.3 3)

A third note is added to allow removal of the Inclined Fuel Transfer System (IFTS) blind flange when primary containment operability is required. This provides the option of operating the IFTS system when primary containment operability is required. Requiring the fuel building fuel transfer pool water level to be ≥ el. 753 ft. ensures a sufficient depth of water over the highest point on the transfer tube outlet valve in the fuel building fuel transfer pool to prevent direct communication between the containment building atmosphere and the fuel building atmosphere via the inclined fuel transfer tube. Since the IFTS transfer tube drain line does not have the same water seal as the transfer tube, and the motor-operated drain valve remains open when the carriage is in the lower pool, administrative controls are required to ensure the drain line flow path is quickly isolable in the event of a LOCA. In this instance, administrative control of the IFTS transfer tube drain line isolation valve(s) include stationing a dedicated individual, who is in continuous communication with the control room, at the IFTS control panel in the fuel building. This individual will initiate closure of the IFTS transfer tube drain line motor-operated isolation valve (1F42-F003) and the IFTS transfer tube drain line manual isolation valve (1F42-F301) if a need for primary containment isolation is indicated. The pressure integrity of the IFTS transfer tube, the seal created by water depth of the fuel building fuel transfer pool, and the administrative control of the drain line flow path create an acceptable barrier to prevent the post-accident containment building atmosphere from leaking into the fuel building.