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J. Stephen Perry
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December 15, 1992

Docket No. 50-461

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

Subject: Clinton Power Station
Proposed Amendment of Facility
Operating License No. NPF-62

Dear Sir:

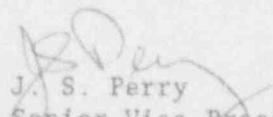
Pursuant to 10CFR50.90, Illinois Power (IP) hereby applies for amendment of Facility Operating License No. NPF-62, Appendix A - Technical Specifications, for Clinton Power Station (CPS). This request consists of proposed changes to Technical Specifications 3/4.7.1.1, "Shutdown Service Water System (Loops A, B, C)," and 3/4.7.2, "Control Room Ventilation System." These proposed changes would add exceptions to Technical Specification 3.0.4 to allow tensioning and detensioning the reactor pressure vessel head with one of the required divisions of the systems addressed by these Technical Specifications inoperable. These proposed changes will reduce the duration of an average refueling outage by approximately two days.

For each of these proposed Technical Specification changes, a description, the associated justification (including a Basis For No Significant Hazards Consideration), and marked-up copies of pages from the current Technical Specifications are provided in Attachment 2. In addition, an affidavit supporting the facts set forth in this letter and its attachments is provided in Attachment 1.

IP has reviewed the proposed changes against the criteria of 10CFR51.22 for categorical exclusion from environmental impact considerations. The proposed changes do not involve a significant hazards consideration, or significantly increase the amounts or change the types of effluents that may be released offsite, nor do they significantly increase individual or cumulative occupational radiation exposures. Based on the foregoing, IP concludes the proposed changes meet the criteria given in 10CFR51.22(c)(9) for a categorical exclusion from the requirement for an Environmental Impact Statement.

IP is requesting that these proposed changes be reviewed on a schedule sufficient to support the fourth refueling outage at CPS which is currently scheduled to begin on September 26, 1993.

Sincerely yours,


J. S. Perry
Senior Vice President

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Attachments

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

STATE OF ILLINOIS
COUNTY OF DEWITT

J. Stephen Perry, being first duly sworn, deposes and says: That he is Senior Vice President of Illinois Power Company; that the application for 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 application and the facts contained therein are true and correct.

DATED: This 15 day of December 1992

Signed: _____

J. Stephen Perry
J. Stephen Perry

Subscribed and sworn to before me this 15 day of December 1992.

Linda S. French
Notary Public

"OFFICIAL SEAL"
Linda S. French
Notary Public, State of Illinois
My Commission Expires 9/1/98

BACKGROUND

Technical Specification (TS) 3.0.4 states that entry into an Operational Condition or other specified condition shall not be made unless the conditions for the Limiting Condition for Operation (LCO) are met without reliance on provisions contained in the Action requirements. Effectively, this TS prohibits a "mode" change from one plant operational mode to another mode or specified condition if entry into the new plant operating mode results in a condition not meeting a particular LCO and thus requires operating under the Action Statement for that LCO. A "3.0.4 exception" (i.e., a statement such as, "The provisions of Specification 3.0.4 are not applicable") allows entry into a particular Operational Condition when the plant is operating according to the provisions of an Action Statement that is applicable during the new Operational Condition. The Technical Specification changes proposed in this request would insert 3.0.4 exceptions into the Action Statements of Clinton Power Station (CPS) TS 3.7.1.1, "Shutdown Service Water System (Loops A, B, C)," and 3.7.2, "Control Room Ventilation System." The requirements of these TS are briefly described below. Additional details and justification for the proposed changes to these TS are also provided below.

CPS TS 3.7.1.1 currently requires Shutdown Service Water system (SX) loops to be operable when systems or components which are cooled by the associated SX loop are required to be operable. If a required SX loop is inoperable, the Action Statement requires those systems and components that rely on the inoperable SX loop for cooling to be declared inoperable and the associated Action Statement(s) for those systems and components to be entered.

The Action Statement for TS 3.7.1.1 identifies the TS for only some of these affected systems or components. With an SX loop(s) declared inoperable, the remaining affected system or components must be declared inoperable and their respective TS Action Statements entered, as appropriate, notwithstanding the lack of specific references to their TS in the Action Statement of TS 3.7.1.1. The systems and components having TS specifically identified in the Action Statement of TS 3.7.1.1 are as follows: (1) the shutdown cooling mode of the Residual Heat Removal (RHR) system (3.4.9.1, "Residual Heat Removal-Hot Shutdown;" 3.4.9.2, "Residual Heat Removal-Cold Shutdown;" 3.9.11.1, "Residual Heat Removal and Coolant Circulation-High Water Level;" and 3.9.11.2, "Residual Heat Removal and Coolant Circulation-Low Water Level"); (2) emergency core cooling systems (ECCS) (3.5.1, "ECCS-Operating," and 3.5.2, "ECCS Shutdown"); and (3) AC Sources of the Electrical Power Systems (3.8.1.1, "AC Sources-Operating," and 3.8.1.2, "AC Sources-Shutdown").

As noted above, the operability of other systems and components may also potentially be impacted by inoperability of an SX loop. Specifically, as a result of loss of cooling to the RHR heat exchangers, the containment spray mode of RHR (TS 3.6.3.2, "Containment Spray") and the suppression pool cooling mode of RHR (TS 3.6.3.3, "Suppression Pool Cooling") would be inoperable. Additionally, as a result of loss of cooling to air handling unit cooling coils and safety-related chiller condensing coils, the operability of the following systems would also be potentially impacted: (1) main steam line isolation valve leakage control system (MSIV-LCS) (TS 3.6.1.4, "MSIV Leakage

Control System"); (2) standby gas treatment system (SGTS) (TS 3.6.6.3, "Standby Gas Treatment System"); (3) containment hydrogen recombiners (TS 3.6.7.1, "Containment Hydrogen Recombiner Systems"); (4) containment and drywell hydrogen mixing system (TS 3.6.7.2, "Containment/Drywell Hydrogen Mixing System"); (5) main control room air conditioning filter train system (VC) (TS 3.7.2, "Control Room Ventilation System"); (6) Reactor Core Isolation Cooling (RCIC) system (TS 3.7.3, "Reactor Core Isolation Cooling System"); (7) safety-related battery DC power sources (TS 3.8.2.1, "DC Sources-Operating," and TS 3.8.2.2, "DC Sources-Shutdown"); and (8) onsite power distribution systems (TS 3.8.3.1, "Distribution-Operating," and TS 3.8.3.2, "Distribution-Shutdown").

Many of the above-noted systems are only required to be operable while the plant is in Operational Condition 1, 2 or 3. In addition, the Action Statement for TS 3.8.2.1 requires system restoration within two hours or the plant must be in Hot Shutdown within the next 12 hours and in Cold Shutdown within the following 24 hours. These time limits are too short to allow preventive maintenance and testing of the Division 1 and Division 2 SX loops (loops A and B) during plant operation. As a result, routine preventive maintenance and testing of the Division 1 and Division 2 SX loops and their connected systems must be performed during plant shutdowns for refueling outages.

With respect to shutdown conditions, unless all of the fuel has been removed from the reactor vessel, a number of systems which are cooled by SX are still required to be operable. These include: (1) the shutdown cooling mode of RHR (TS 3.4.9.1, 3.4.9.2, 3.9.11.1 and 3.9.11.2), (2) ECCS [TS 3.5.2 (unless reactor water level is greater than 23 feet above the reactor pressure vessel (RPV) flange)], (3) AC power sources (TS 3.8.1.2), (4) DC power sources (TS 3.8.2.2), (5) onsite electrical power distribution (TS 3.8.3.2), and (5) the main control room air conditioning/filter train system (TS 3.7.2). In addition, redundant loops/subsystems of RHR shutdown cooling, ECCS, and main control room air conditioning (VC) are required to be operable when the plant is in a shutdown condition. As a result, both the Division I and II SX loops are required to be operable at all times unless all of the fuel has been removed from the reactor vessel.

During routine preventive maintenance and testing of an SX loop during refueling outages the RHR shutdown cooling loop, ECCS, and main control room air conditioning subsystem associated with a particular SX loop must be declared inoperable during the preventive maintenance or testing of that SX loop. This, in turn, results in unnecessary restrictions on the refueling outage schedule by preventing removal and reinstallation of the RPV head during this required preventive maintenance and testing. Critical path time must be added to the refueling outage schedule to account for the requirement to delay the start of required activities on the SX system until the RPV head has been removed and to account for delaying RPV reassembly until required activities on the SX system have been completed. Illinois Power (IP) estimates that elimination of these restrictions will result in an approximate two-day savings in the duration of an average refueling outage.

Description of Proposed Changes

In accordance with 10CFR50.90, the following changes to the CPS TS are being proposed:

- (1) For TS 3.7.1.1, the Action Statement is being revised to add an exception to the provisions of TS 3.0.4 for entry into Operational Condition 4 or 5 when one required SX loop is inoperable, and
- (2) For TS 3.7.2, Action Statement b.1 is being revised to add an exception to the provisions of TS 3.0.4 for entry into Operational Condition 4 or 5 when one main control room ventilation subsystem is inoperable.

It should be noted that the TS associated with RHR shutdown cooling loops (TS 3.4.9.2 and 3.9.11.2) currently contain exceptions to TS 3.0.4 for entry into Operational Conditions 4 and 5 with one (or both) RHR shutdown cooling mode loop(s) inoperable. As a result, no further changes to these TS are required. The changes proposed in this request are reflected on the marked-up pages from the current CPS TS are included as pages 6 and 7 of this attachment.

Justification for Proposed Changes

The proposed changes will only allow RPV head removal and installation with one required SX loop inoperable and will not alter the requirements to have all three SX loops operable prior to plant startup from the refueling outage. With respect to the main control room air conditioning/filter train system, the proposed changes will continue to prevent the initiation of handling irradiated fuel in the secondary containment (Operational Condition "*") with one or more main control room ventilation systems inoperable (since Operational Condition "*" was not included in the proposed exception to TS 3.0.4). In addition, the CPS TS will continue to prevent removal or installation of the RPV head with an inoperable SX loop associated with a diesel generator, safety-related battery, or electrical power distribution system required operable, since TS 3.8.1.2, 3.8.2.2, and 3.8.3.2 do not include exceptions to TS 3.0.4. Consequently, at least one operable main control room ventilation train supported by an operable SX system and an operable diesel generator will continue to be required while the RPV head is being removed or installed.

The primary design basis accident analyses [Updated Safety Analysis Report (USAR) Chapter 15] which are applicable to plant shutdown conditions (Operational Condition 4 and 5) are those addressing fuel handling accidents (USAR Section 15.7.4) and inadvertent criticality (USAR Section 15.4.1.1). The proposed changes do not affect the probability of occurrence of these events because their prevention is ensured by other requirements, design features, and controls, such as the one-rod-out interlock, shutdown margin requirements, crane physical stops, etc. In addition, removal or reinstallation of the RPV head has no effect on decay heat generation or removal. As a result, these proposed changes maintain an equivalent level of safety during removal or installation of the RPV head. Further, these proposed changes are consistent with the allowances for plant mode changes provided in NRC Generic Letter 87-09 [and the new Improved Technical Specifications (NUREG-1434)].

Basis For No Significant Hazards Consideration

In accordance with 10CFR50.92, a proposed change to the operating license or Technical Specifications involves no significant hazards consideration if operation of the facility in accordance with the proposed change would not: (1) involve a significant increase in the probability or consequences of any accident previously evaluated, (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. The proposed changes are evaluated against each of these criteria below.

- (1) The probability of occurrence of postulated accidents associated with plant shutdown conditions (inadvertent criticality and fuel handling accidents) is not increased by the proposed changes since those accidents are prevented or mitigated by other controls, design features, and requirements, such as the one-rod-out interlock, shutdown margin, crane physical stops, etc. Further, the applicable mode changes (RPV head removal/installation) do not affect the probability of occurrence of such accidents. Since the proposed changes will still require one SX loop associated with an operable diesel generator, DC power source, electrical power distribution system, and main control room ventilation system to be operable during the applicable mode changes, these proposed changes will not increase the consequences of any accident previously evaluated. Therefore, the proposed changes do not involve a significant increase in the probability or the consequences of any accident previously evaluated.
- (2) The proposed changes do not involve any changes to plant design nor do they involve a significant change in plant operation from what is currently allowed by the CPS Technical Specifications. The impact of the proposed changes is limited to the potential effect on main control room air conditioning system availability and core decay heat removal during removal or installation of the RPV head. At least one main control room air conditioning subsystem associated with an operable SX loop must continue to be operable and two RHR shutdown cooling mode loops (or their alternates) must also be operable while removing or installing the RPV head. Therefore, IP believes that the proposed changes do not involve a significant change to the requirements for these safety functions during these conditions. Based on the above, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.
- (3) As noted above, at least one main control room air conditioning subsystem associated with an operable SX loop must continue to be operable and two RHR shutdown cooling mode loops (or their alternates) must also be operable while removing or installing the RPV head. As a result, the proposed changes do not involve a significant reduction in core decay heat removal capability or protection for main control room personnel during the period of time the RPV head is being removed or

installed. Therefore, the proposed changes do not involve a significant reduction in a margin of safety assumed or required in any accident or transient analysis.

Based on the foregoing, IP has concluded that these proposed changes do not involve a significant hazards consideration.

(TBE5/DAS6)