

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 102 TO FACILITY OPERATING LICENSE NO. NPF-62 ILLINOIS POWER COMPANY. ET AL.

CLINTON POWER STATION, UNIT NO. 1

DOCKET NO. 50-461

1.0 INTRODUCTION

Amendment No. 95 to the Clinton Power Station Technical Specifications, issued on December 2, 1994, approved implementation of the Improved Technical Specifications (ITS). The ITS were based on NUREG-1434, Rev O, "Standard Technical Specifications, General Electric Plants, BWR/6." The Clinton Power Station was the lead plant for the four BWR/6 facilities and was the first to receive approval by the staff. During subsequent reviews of the remaining BWR/6 facilities, improvements to the ITS were identified and incorporated.

By letter dated October 27, 1995, Illinois Power requested a number of changes to their technical specifications (TSs). These changes would be consistent with those approved for other BWR/6 facilities. In addition, the licensee proposed to correct a number of administrative typographical errors resulting from Amendment No. 95.

2.0 EVALUATION

The licensee requested six separate changes to their TSs. The proposed changes, along with the staff's evaluation follows:

1. LCO 3.1.3, "Control Rod OPERABILITY"

Prior to Amendment No. 95, TS Surveillance Requirement (SR) 4.1.3.1.2 required "moving each control rod at least one notch at least once per 7 days." The ITS modified this SR and differentiated between control rods that are fully withdrawn as opposed to control rods that are only partially withdrawn. New SR 3.1.3.2 requires that each fully withdrawn control rod be inserted at least one notch once every 7 days whereas SR 3.1.3.3 requires that each partially withdrawn control rod be inserted at least one notch once every 31 days. As indicated, the ITS differs from the previous TSs in that it requires control rods to be "inserted" rather than just "moved."

Control rod positioning must be continually adjusted during the fuel cycle and individual rods will periodically change from the "partially withdrawn" to the "fully withdrawn" position or vice versa. When making this transition, the individual rods fall under different SRs. A partially withdrawn rod, which must be inserted at least one notch at least once per 31 days per SR 3.1.3.3, falls under SR 3.1.3.2 (which requires that the rod be inserted at least one notch at least once per 7 days) when it becomes fully withdrawn. Maintaining a tracking system for all 145 individual control rods at the Clinton Power Station would become an administrative burden. Therefore, the licensee has chosen to track control rods by SR as opposed to tracking them individually.

During the development of the ITS, it was recognized that the requirement for control rods to be "inserted" as opposed to just "moved" had the potential to impose unnecessary testing. As an example, if a partially withdrawn rod (which must be tested at least once per 31 days) is fully withdrawn (which must be tested at least once per 7 days), the rod may have to be initially inserted just to be current with the SR. The ITS attempted to resolve this situation by inserting Notes into SRs 3.1.3.2 and 3.1.3.3. The Note in SR 3.1.3.2 states that the surveillance need not be performed within 7 days. Similarly, the Note in SR 3.1.3.3 states that the surveillance need not be performed within 31 days. These Notes were intended to prevent unnecessary testing and would further assist the licensee in tracking control rods by SR as opposed to individually.

Subsequent to the Clinton Power Station implementation of the ITS, it was recognized that the Notes inserted into SRs 3.1.3.2 and 3.1.3.3 may not always provide the intended flexibility. SR 3.0.2 of the ITS allows up to 25% extension to surveillance frequencies. Therefore, the 7 day surveillance frequency of SR 3.1.3.2 could be extended upwards to 8 days 18 hours whereas the 31 day surveillance frequency of SR 3.1.3.3 could be extended upwards to 38 days 18 hours. However, during the review of the remaining BWR/6 facilities, it was recognized that the 25% extension was only applicable to surveillance frequencies and not to times identified in Notes. Thus, the potential still exists for unnecessary testing of control rods whose test frequency has changed.

In response to this concern, the staff modified the Notes to SRs 3.1.3.2 and 3.1.3.3 for both the Grand Gulf and River Bend facilities to include the 25% extension. Thus, for these two facilities, SR 3.1.3.2 states that the surveillance need not be performed within 8 days 18 hours and SR 3.1.3.3 similarly states that the surveillance need not be performed within 38 days 18 hours. Illinois Power has requested to make these identical changes and the staff finds their proposal acceptable. These changes will provide the scheduling flexibility originally intended for these Notes. In addition, the licensee proposed to insert the word "fully" into SR 3.1.3.2 to clarify that the time allowance of the Note begins when the control rod is fully withdrawn rather than upon its initial (partial) withdrawal. This change was previously included for both the Grand Gulf and River Bend facilities and the staff also finds it acceptable for the Clinton Power Station.

2. LCO 3.3.1.1. "Post Accident Monitoring (PAM) Instrumentation"

Technical Specification Table 3.3.3.1-1, "Post Accident Monitoring Instrumentation," lists the PAM instrumentation that must remain operable. Function 7 of this table lists "Penetration Flow Path, PCIV Position." As described in the Bases of the technical specifications, primary containment isolation valve (PCIV) position is required for verification of containment integrity. The Bases clearly states that valve position indication is only necessary for each automatic PCIV in a containment penetration flow path and that position indication is not needed for valves in an isolated penetration. The Bases specifically excludes penetrations having a closed and deactivated automatic valve, a closed manual valve, blind flange, or check valve with flow through the valve secured.

The licensee has proposed inserting the word "automatic" such that Function 7 of Table 3.3.3.1-1 will read "Penetration Flow Path, Automatic PCIV Position." This change will clarify that only PCIVs with automatic actuation need to have PAM position indication. This change reflects the staff's original intention for this TS and was previously included for the Grand Gulf facility. Therefore, the staff also finds it acceptable for the Clinton Power Station.

<u>LCO 3.3.4.1. "End of Cycle Recirculation Pump Trip (EOC-RPT)</u> Instrumentation"

Due to an oversight during the conversion of the CPS technical specifications to the ITS, SR 3.3.4.1.5 contains an incorrect reference. SR 3.3.4.1.5 requires periodic verification of the EOC-RPT response time and makes reference to the RPT breaker interruption time of SR 3.3.4.1.7. However, as a result of Amendment No. 94 which was issued on November 3, 1994, the surveillance associated with the RPT breaker interruption time was renumbered as 3.3.4.1.6 and SR 3.3.4.1.7 was deleted.

The licensee's letter proposes to delete reference to SR 3.3.4.1.7 (which no longer exists) and insert the correct reference of SR 3.3.4.1.6. This modification is administrative in nature and eliminates an incorrect reference. Therefore, the staff finds this proposed change acceptable.

4. LCO 3.3.6.1. "Primary Containment and Drywell Isolation Instrumentation"

Due to an oversight during the conversion of the CPS technical specifications to the ITS, the header to Table 3.3.6.1-1, "Primary Containment and Drywell Isolation Instrumentation," incorrectly states that the table consists of seven pages. Table 3.3.6.1-1 only consists of six pages.

The licensee has proposed to revise the header of each page of Table 3.3.6.1-1 to correctly state that the table consists of six pages. This modification is administrative in nature and eliminates incorrect information. Therefore, the staff finds this proposed change acceptable.

5. LCO 3.3.8.2. "Reactor Protection System (RPS) Electric Power Monitoring"

Due to an oversight during the conversion of the CPS technical specifications to the ITS, a formatting error was included under the APPLICABILITY section. The licensee has proposed to insert an indentation in order to maintain uniformity within the technical specifications. This formatting change is editorial in nature and is acceptable to the staff.

6. LCO 3.6.5.2. "Drywell Air Lock"

Due to an oversight during the conversion of the CPS technical specifications to the ITS, an editorial error was included under the ACTIONS section. The Notes section title block is currently identified as "NOTE" when, in fact, the section contains two Notes. The licensee has proposed revising the word "NOTE" to the plural form of "NOTES". This change is editorial in nature and is acceptable to the staff.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Illinois state official was notified of the proposed issuance of the amendment. The state official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

This amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards (60 FR 65680). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Douglas V. Pickett

Date: February 29, 1996