DESCRIPTION OF PROPOSED CHANGES NPF-10-64
AND NPF-15-64 AND SAFETY ANALYSIS

This is a request to revise Technical Specification 4.5.2.f, EMERGENCY CORE COOLING SYSTEMS.

Existing Specifications

Unit 2 Technical Specification 4.5.2.f.1:

1. High-Pressure Safety Injection pumps developed head, at an indicated flow rate of 650 gpm, greater than or equal to 2142 feet for P017, 2101 feet for P018 and 2103 for P019.

Unit 3 Technical Specification 4.5.2.f.1:

1. High Pressure Safety Injection pumps developed head, at an indicated flow rate of 650 gpm, greater than or equal to 2093 feet for P017, 2132 feet for P018 and 2099 for P019.

Proposed Specification

Change Unit 2 Technical Specification 4.5.2.f.1 to read as follows:

1. High Pressure Safety Injection (HPSI) Pumps

   (a) With the plant operating at a power level less than or equal to 83%, the HPSI pumps developed head, at an indicated flow rate of at least 650 gpm, is greater than or equal to 1982 feet for P017, 1965 feet for P018 and 1945 feet for P019.

   (b) With the plant operating at a power level greater than 83%, the HPSI pumps developed head, at an indicated flow rate of at least 650 gpm, is greater than or equal to 2142 feet for P017, 2101 feet for P018 and 2103 feet for P019.

Change Unit 3 Technical Specification 4.5.2.f.1 to read as follows:

1. High Pressure Safety Injection (HPSI) Pumps

   (a) With the plant operating at a power level less than or equal to 83%, the HPSI pumps developed head, at an indicated flow rate of at least 650 gpm, is greater than or equal to 1956 feet for P017, 1992 feet for P018 and 1944 feet for P019.

   (b) With the plant operating at a power level greater than 83%, the HPSI pumps developed head, at an indicated flow rate of at least 650 gpm, is greater than or equal to 2093 feet for P017, 2132 feet for P018 and 2099 feet for P019.

Reason for Proposed Change

Technical Specification 4.5.2.f.1 requires surveillance testing of the High Pressure Safety Injection (HPSI) pumps in accordance with ASME Section XI. The surveillance test is to demonstrate that the HPSI pumps develop the required head at the specified flow to satisfy the limiting small break LOCA analysis. The heads listed for the HPSI pumps in Technical Specification 4.5.2.f are those resulting from the small break LOCA analysis at 102% power. The existing margin between measured HPSI pump performance and the Technical Specification requirement is small and SCE experienced difficulty in meeting the requirements for the last surveillance test performed on the Unit 2 HPSI pumps. As a result of this, SCE has requested that Combustion Engineering evaluate means of increasing the margin between pump performance and the small break LOCA accident analysis requirements. Formulation of a long term solution will not be completed prior to the next surveillance on Unit 2 test which is scheduled for January 22, 1983. The proposed change requests reduced developed head requirements for operation at power levels less than 83%. This will allow for increased margin between measured HPSI pump performance and the technical specification required head.

Safety Analysis

Current Technical Specification HPSI pump performance requirements were derived from the small break LOCA analysis at 102% power which is the limiting event. At lower power levels, correspondingly less restrictive requirements can be placed on HPSI pump performance.

The proposed change establishes reduced HPSI pump performance requirements for plant operation at power levels up to 83%. Combustion Engineering (CE) has confirmed the acceptability of these reduced requirements by performing an evaluation for the limiting small break LOCA. The evaluation assumed a power level of 85% and based HPSI pump delivery on meeting the reduced requirements. The results of the evaluation satisfy the NRC's acceptance criteria of 10 CFR 50.46.

The effect of the reduced HPSI pump performance requirements on other potentialy impacted accident analyses has also been reviewed. CE has determined that the reduced requirements will not adversely affect the results of any of those analyses.

Accordingly, it is concluded that: (1) Proposed Changes NPF-10-64 and NPF-15-64 do not present significant hazard considerations not described or implicit in the Final Safety Analysis; (2) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed changes; and (3) this action will not result in a condition which significantly alters the impact of the station on the environment as described in the NRC Final Environmental Statement.

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