



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MAR 16 1987

MEMORANDUM FOR: Sholly Coordinator
Office of Nuclear Reactor Regulation

FROM: George W. Knighton, Director
PWR Project Directorate No. 7
Division of PWR Licensing-B

SUBJECT: REQUEST FOR PUBLICATION IN BI-WEEKLY FR NOTICE - NOTICE OF
CONSIDERATION OF ISSUANCE OF AMENDMENT TO FACILITY
OPERATING LICENSE AND PROPOSED NO SIGNIFICANT HAZARDS
CONSIDERATION DETERMINATION AND OPPORTUNITY FOR HEARING

Louisiana Power and Light Company, Docket No. 50-382, Waterford Steam Electric
Station, Unit 3, St. Charles Parish, Louisiana.

Date of amendment request: February 23, 1987

Description of amendment request: This change is requested to eliminate an unnecessary value in the Technical Specifications. Table 3.3-4 identifies trip values for the Emergency Feedwater (EFW) Control Valve Logic Lo Level. Two levels are given for this parameter; 36.3% wide range with a safety injection actuation signal (SIAS) or 30.0% without a SIAS signal. The operability for this system is required for Modes 1 through 3 as protection against design basis events such as a Small Break Loss of Coolant Accident (LOCA), Steam Generator Tube Rupture or a Steam Line or Feedwater Line Break. (The 36.3% setpoint is necessary only for the large Feedwater Line Break event.) In order to simplify the Technical Specifications, the requested change will redefine the 30.0% wide range setpoint to 36.3%, removing the dependence upon the SIAS.

Currently, under automatic control in the absence of SIAS, the EFW control valve positions are determined based on steam generator level and EFW flow (see FSAR Section 7.3.1.1.6). For instance, at the critical level, 55.0% wide range, one control valve opens to allow 200 gpm to the steam generators,

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and the other valve is controlled by the flowmeter to ensure that at least 175 gpm is delivered should the first valve fail to function properly. At the Lo Level, 45% wide range, the flow controller setpoint increases to 400 gpm. However, with a SIAS, the control valves are no longer controlled by flow, but rather by steam generator level only. In this level mode, when the steam generator level falls below 68% (and a SIAS is present), the EFW control valves are modulated to drive the level back to 68%. The rate at which the valves open and close is a function of the difference between the setpoint (68%) and the actual level, and the length of time that difference exists. For example, with SIAS present and steam generator level at the critical level, 55.0% wide range, the EFW control valves should be full open.

Currently, when the steam generator level drops to the "Lo-Lo" Level (30.0% without a SIAS, 36.3% with a SIAS), a priority open signal is sent to the valves which overrides all automatic or manual controls. Once the level raises above the applicable value, the control returns to its previous mode; either "automatic" as summarized above, or "manual" under operator control.

The proposed change will increase the 30.0% setpoint to 36.3% resulting in one Lo Level setpoint, thereby simplifying the Technical Specifications. Because the setpoint increase is in the conservative direction, additional safety margin will be provided for the design basis events of concern with the exception of the Large Feedwater Line Break, which will be unaffected by the change.

Basis for Proposed No Significant Hazards Considerations Determination:

The NRC staff proposes to determine that the proposed change does not involve a significant hazards consideration because, as required by the criteria of 10 CFR 50.92(c), 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 the margin of safety. The basis for this proposed finding is given below.

- (1) Raising the EFW control valve logic Lo Level setpoint has no effect on the probability of occurrence of the initiating event itself. The setpoint comes into play only when an analyzed event progresses to the point of reducing the steam generator level to the setpoint value. By raising the setpoint, feedwater will be available earlier than previously analyzed for most events thus mitigating the consequences of the event.
- (2) Raising the EFW trip setpoint in a conservative direction does not create any new failure or accident path. Therefore, the proposed change does not create the possibility of occurrence of any new or different kind of accident from any accident previously evaluated.
- (3) By raising the EFW setpoint, feedwater flow will be provided earlier than assumed in the analysis for most events, resulting in an additional margin of safety for those events.

The Commission has provided guidance concerning the application of standards for determining whether a significant hazards consideration exists

by providing certain examples (51 CFR 7751) of amendments that are considered not likely to involve significant hazards considerations. Example (ii) relates to a change that constitutes an additional limitation, restriction, or control not presently included in the Technical Specifications; for example, a more stringent surveillance requirement.

In this case, the proposed change is similar to Example (ii) since the EFW setpoint increase provides a more conservative operating range.

The staff has reviewed the licensee's no significant hazards consideration analysis. Based on the review and the above discussions, the staff proposes to determine that the proposed changes do not involve a significant hazards consideration.

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