



Commonwealth Edison

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September 25, 1989

Director of Nuclear Reactor Regulation
US Nuclear Regulatory Commission
Mail Station P1-137
Washington, DC 20555

Subject: Zion Nuclear Power Station Units 1 and 2
License Nos. DPR-39 and DPR-48
Proposed Amendment to Technical Specification
Section 3/4.9 "Containment Isolation System"
NRC Docket Nos. 50-295 and 50-304

Gentlemen:

Attachment 1 to this letter outlines a proposed amendment to Facility Operating License Numbers DPR-39 and DPR-48 Technical Specifications, Appendix A, Section 3/4.9 "Containment Isolation System". The proposed Amendment would add a requirement to address containment purge and vent operations while above Cold Shutdown (Mode 5). This amendment would add Section 3/4.9.6 entitled "Containment Ventilation System", to the existing Technical Specification. The proposed change to the Technical Specifications would allow containment purge and vent operations above Cold Shutdown, subject to certain limiting safety-related conditions.

The issue of containment vent and purge operations has had a long history of interaction between Commonwealth Edison and NRC personnel. For the purpose of providing a justification for the wording of the proposed amendment, a short chronology is provided below:

1. A January 2, 1979 letter from Cordell Reed to D.L. Ziemann, T.A. Ippolito and A. Schwencer submitted an evaluation of the radiological consequences of a design basis LOCA coincident with a containment purge in progress. The evaluation concluded that the 10 CFR 100 guidelines will not be exceeded during the period of time required to close the purge valves.
2. A September 9, 1981 letter from S.A. Varga to L.O. DelGeorge requested Zion Station to review an example of the requirement related to operation of the purge valves above Cold Shutdown as provided by guidance in the Standardized Technical Specifications. Zion Station responded in a November 9, 1981 letter from F.G. Lentine to H.R. Denton and acknowledged that they would propose a Tech Spec amendment similar to the example provided by the NRC.

3. The April 3, 1984 letter from S.A. Varga to D.L. Farrar transmitted the SER related to "Containment Vent and Purge Operability". This document specified that the purge valves must be modified to limit their travel to a 50 degree opening, to ensure that the valve will close against high containment pressure scenarios. The valves have been modified to limit their travel through the use of a mechanical stop.
4. A February 21, 1986 letter from P.C. LeBlond to H.R. Denton transmitted the original proposed amendment to address purge and vent valve operability.

Subsequent to the February, 1986, submittal, several questions were raised by NRC personnel in the course of their review and new guidance regarding purge and vent valve operations was generated. The attached proposed amendment incorporates this more recent information and supercedes our February 21, 1986 submittal.

A summary of the proposed amendment is provided below:

1. Page 202, Section 3.9.6.A

The statement in the proposed amendment states that the purge or vent line shall be isolated by at least one isolation valve, rather than stating that the purge or vent isolation valves are closed. This wording was chosen because routine surveillance of the control function of the radiation monitoring system and reactor protection automatic functions require the Station to open one isolation valve at a time, verify the other valve is closed, and then simulate a signal to close the open valve and verify that it closes. The surveillances are Technical Specification requirements that are performed to ensure that protective control functions would actuate if required. The Station feels that the proposed wording reflects actual plant evolutions that are perhaps unique to Zion.

2. Page 202, Section 3.9.6.B

This statement ensures that only one potential release path from the containment will be opened at any point in time.

3. Page 210, Section 3.9, Bases

This section contains the safety-related reasons that are used to govern the operation of the purge and vent valves when the unit is above cold shutdown (Mode 5).

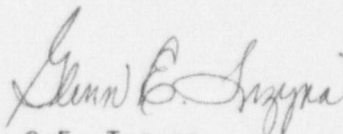
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Attachment 2 of this submittal contains an evaluation of significant hazards consideration, and provides a demonstration that the issue involves no significant hazards consideration. Commonwealth Edison regards the changes contained in this submittal to be conservative in nature because more restrictive controls will be implemented regarding containment purge and vent operations.

As provided by 10 CFR 50.91, the State of Illinois is being notified of this amendment request by transmittal of a copy of this letter and the attachments.

Please direct any questions that you may have to this office.

Very truly yours,



G.E. Trzyna
Nuclear Licensing Administrator

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