

Tennessee Valley Authority, Post Office Box 2000, Soddy-Daisy, Tennessee 37379-2000

February 13, 1998

TVA-SON-TS-97-03

10 CFR 50.90

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D. C. 20555

Gentlemen:

In the Matter of Docket Nos. 50-327 Tennessee Valley Authority 50-328

SEQUOYAH NUCLEAR PLANT (SQN) - UNITS 1 AND 2 - TECHNICAL SPECIFICATION (TS) CHANGE NO. 97-03, "LIMITING CONDITION FOR OPERATION (LCO) FOR MAIN FEEDWATER ISOLATION FUNCTION"

Reference: TVA letter to NRC dated June 5, 1997 "Generic Letter 96-01, Testing of Safety-Related Logic Circuits (TAC Nos. M94732 and M94733)"

In accordance with the provisions of 10 CFR 50.4 and 50.90, TVA is submitting a request for an amendment to SQN's licenses DPR-77 and 79 to change the TSs for Units 1 and 2. The proposed change adds a new LCO that addresses requirements for the main feedwater isolation, regulating, and bypass valves. This LCO is applicable in Modes 1, 2, and 3. Included in the proposed change is the necessary revisions to the index and bases sections to support the new LCO.

This change is being driven by our review of Generic Letter (GL) 96-01. The above reference provides the status of our review for GL 96-01. In this reference, TVA indicated that our review concluded that the testing of four functions should be added to the TSs. TVA has now determined that only two of the four functions require a change to the TSs. TVA is processing the change to the one remaining TS amendment that is necessary based on the GL 96-01 review for SQN. D030





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TVA has determined that there are no significant hazards considerations associated with the proposed change and that the change is exempt from environmental review pursuant to the provisions of 10 CFR 51.22(c)(9). The SQN Plant Operations Review Committee and the SQN Nuclear Safety Review Board have reviewed this proposed change and determined that operation of SQN Units 1 and 2, in accordance with the proposed change, will not endanger the health and safety of the public. Additionally, in accordance with 10 CFR 50.91(b)(1), TVA is sending a copy of this letter to the Tennessee State Department of Public Health.

Enclosure 1 to this letter provides the description and evaluation of the proposed change. This includes TVA's determination that the proposed change does not involve a significant hazards consideration, and is exempt from environmental review. Enclosure 2 contains copies of the appropriate TS pages from Units 1 and 2 marked-up to show the proposed change. Enclosure 3 forwards the revised TS pages for Units 1 and 2 which incorporate the proposed change.

TVA requests that the revised TS be made effective within 45 days of NRC approval. If you have any questions about this change, please telephone me at (423) 043-7170 or J. D. Smith at (423) 843-6672.

Sincerely

Pedro Salas Licensing and Industry . ffairs Manager

Subscribed and sworn to before me on this 13 2 day of Filmary pleif= t. 21, 1998 Notary'

My Commission Expires

Fnclosure cc: See page 3 U.S. Nuclear Regulatory Commission Page 3 February 13, 1998

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cc (Enclosures): Mr. R. W. Hernan, Project Manager Nuclear Regulatory Commission One White Flint, North 11555 Rockville Pike Rockville, Maryland 20852-2739

> Mr. Michael H. Mobley, Director (w/o Enclosures) Division of Radiological Health Third Floor L&C Annex 401 Church Street Nashville, Tennessee 37243-1532

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ENCLOSURE 1

TENNESSEE VALLEY AUTHORITY SEQUOYAH NUCLEAR PLANT (SQN) UNITS 1 and 2 DOCKET NOS 327 AND 328

PROPOSED TECHNICAL SPECIFICATION (TS) CHANGE 97-03 DESCRIPTICA AND EVALUATION OF THE PROPOSED CHANGE

I. DESCRIPTION OF THE PROPOSED CHANGE

TVA proposes the addition of a new Limiting Condition for Operation (LCO) that addresses the requirements for the main feedwater isolation valve functions required by the SQN accident analysis. These functions include the main feedwater isolation valves (MFIVs), main feedwater regulating valves (MFRVs), and MFRV bypass valves.

The LCO will require the operability of these valves in Modes 1, 2, and 3. TVA proposes actions that will require returning inoperable valves to operable status within 72 hours. This time limit will not apply if actions to close or isolate the feedwater path have been completed. The proposed action will require shutdown to hot shutdown conditions if this action is not satisfied. An act on is provided, for inoperable valves that satisfy the LCO actions by being closed or isolated, that verifies they are in this condition once every seven days. Each valve can enter these actions individually. Mode change is allowed with inoperable valves as an exception to TS 3.0.4. Further, TVA proposes a surveillance requirement that will ensure that the valves will actuate on an actual or simulated automatic actuation signal.

TVA will revise the index and add the applicable TS Bases discussions to support the addition of this LCO.

II. REASON FOR THE PROPOSED CHANGE

TVA identified the need to add the feedwater iso? tion valve function to the TSs during the review for NAC Generic Letter 96-01. TVA will satisfy the current requirements for 10 CFR 50.36 by adding the proposed TS change. TVA proposes this change to ensure the availability of safety systems for accident mitigation.

III. SAFETY ANALYSIS

The main feedwater system isolates flow to the steam generators when required to mitigate the consequences of a steam line break, feedwater line break, excessive feedwater flow, and loss of normal feedwater (and station blackout) accident. Each feedwater line, consisting of the MFIV and the MFRV and its associated bypass valve, has redundant isolation capability. When these valves are closed or isolated by a closed manual isolation valve, the safety function is fulfilled. A high-high steam generator level or safety injection actuation condition will initiate this isolation function.

TVA does not currently have TS requirements for the valves that support the feedwater isolation function. TVA adds a more conservative requirement in this request that will ensure the availability of accident mitigation functions. TVA test procedures verify the operab...ty of these valves consistent with the proposed TS change and the design basis functions. TVA also complies with the expectations of 10 CFR 50.36 by adding this requirement to the SQN TSs. This change meets the intent of the latest version of standard TS (NUREG-1431). Therefore, the addition of a limiting condition for operation to the SQN TS for the main feedwater isolation, regulating, and regulating bypass valves will support the safety functions assumed in the accident analysis to minimize the consequences of an accident.

IV. NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

TVA has concluded that operation of SQN Units 1 ard 2 in accordance with the proposed change to the TSs [or operating license(s)], does not involve a significant hazards consideration. TVA's conclusion is based on its evaluation, in accordance with 10 CFR 50.91(a)(1), of the three standards set forth in 10 CFR 50.92(c).

A. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

TVA will not change plant components, functions, or operating practices by implementing a change that adds a TS requirement for the main feedwater isolation, regulating, and bypass valves. TVA will maintain and verify operability of these valves through the proposed surveillance and actions to ensure the accident mitigation functions are available when applicable. These valves are not considered to be the source of an accident and the conservative addition of a requirement to maintain their safety function will not increase the probability of an accident. TVA will not increase the consequences of an accident by implementing this change because this addition ensures that the isolation of main feedwater is available to mitigate the consequences of an accident.

B. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

TVA will not alter plant equipment or operating activities in the implementation of the proposed TS change. The valves used for the isolation of main feedwater are not a potential source for accidents and are designed for accident mitigation purposes. Therefore, TVA will not create the possibility of an accident of a different kind.

C. The proposed amendment does not involve a significant reduction in a margin of safety.

TVA maintains and ensures the availability of the isolation function for the main feedwater system as assumed in the SQN accident analysis. TVA proposes this TS change to further assure this capability and to meet the requirements of 10 CFR 50.36. TVA will not change the methods of operating the plant or setpoints associated with safety-related equipment in the implementation of this request. Therefore, TVA will not reduce the margin of safety by implementing a TS LCO for the isolation functions of the main feedwater system.

V. ENVIRONMENTAL IMPACT CONSIDERATION

The proposed change does not involve a significant hazards consideration, a significant change in the types of or significant increase in the amounts of any effluents that may be released offsite, or a significant increase in individual or cumulative occupational radiation exposure. Therefore, the proposed change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), an environmental assessment of the proposed change is not required.

ENCLOSURE 2

TENNESSEE VALLEY AUTHORITY SEQUOYAH PLANT (SQN) UNITS 1 and 2

PROPOSED TECHNICAL SPECIFICATION (TS) CHANGE TS 97-03 MARKED PAGES

I. AFFECTED PAGE LIST

Unit 1

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Index Page VIII New Page ¾ 7-10a B ¾ 7-3

Unit 2

Index Page VIII New Page ¾ 7-10a B ¾ 7-3

II. MARKED PAGES

See attached.