

March 19, 2003

MEMO TO: John A. Nakosk

FROM: Karen Cotton */RA/*

The following questions will be forwarded to V.C. Summer to support a conference call regarding revisions to ESFAS Technical Specifications - TAC NO. MB7978.

V. C. Summer Nuclear Station  
Revisions to ESFAS Technical Specifications  
TAC NO. MB7978  
Request for Additional Information

RAI #1

VCSNS Technical Specifications page 3/4 3-23, Table 3.3-3, Action Statement 16 states:

“With the number of OPERABLE channels one less than the Total Number of Channels operation may proceed provided the inoperable channel is placed in the bypassed condition and the Minimum Channels OPERABLE requirement is met. One additional channel may be bypassed for up to 4 hours for surveillance testing per Specification 4.3.2.1.”

The licensee stated that Action Statement 16 applies to channels that energize to actuate and currently these channels are permitted by TS to be placed in a bypassed state indefinitely. Specifically these are level channels for the Refueling Water Storage Tank that initiate the semi-automatic swap-over to the Reactor Building recirculation sumps; the pressure channels in the suction piping to the Emergency Feedwater pumps that initiate the swap-over to the safety -related source of water; and the Reactor Building pressure channels that initiate the containment spray system. The licensee proposes to change Action Statement 16 to meet its commitment as reported in LER 2000-004-00. The purpose of the Action Statement 16 changes is to resolve a condition where, due to a newly identified single failure consideration, the above functions may not occur when needed.

The licensee proposes to retain the ability to proceed with plant operations provided the inoperable channel is place in channel bypass, but not for an indefinite period. The revised Action Statement 16 will add requirements to restore the bypassed inoperable channel to operable status in 6 hours, otherwise; place the affected channel in trip (*emphasis added*) within the following hour OR be in Mode 3 in within the next 6 hours and in Mode 4 within the following 30 hours.

The staff notes that the purpose of placing one inoperable channel of the above functions in bypass rather than trip is to decrease the probability of inadvertent actuations of containment spay or premature swap-over to safety related sources of water, as appropriate. The STS (NUREG-1431) action requirements for the above functions establishes a precedent that is consistent with current VCSNS Action Statement 16. The STS permit only one channel to be bypassed indefinitely. Upon a second channel becoming inoperable, LCO 3.0.3 must be entered. Furthermore, the STS Bases note that none of these signals has input to a control function, thus, two-out-of-three logic is necessary to meet acceptable protective requirements. Provide a discussion of the VCSNS design to explain why the proposed action to place an

inoperable channel in trip will not increase the probability of inadvertent actuations of containment spray or premature swap-over to safety related sources.

RAI #2

Action 25 is added to VCSNS Technical Specifications to describe an action for inoperable channels of Table 3.3-3, function 5.b, "Turbine Trip and Feedwater Isolation Automatic Actuation and Actuation Relays." Function 5.b is required to be OPERABLE in Modes 1, 2 and 3. The proposed Action 25 requires the plant to be in Mode 5 if inoperable channels are not restored within 6 hours. The staff notes that exiting the mode of applicability (i.e., placing the plant in Mode 4) is a sufficient remedial action to comply with current TS LCO 3.0.1 requirements. Provide a revised TS Action 25. In a separate proposed change the staff notes that the proposed change to remove "s" from requirements in Action Statement 19.b was not made in the revised VCSNS TS pages.