

October 10, 2001

Mr. David A. Christian
Senior Vice President and
Chief Nuclear Officer
Virginia Electric and Power Company
Innsbrook Technical Center-2SW
5000 Dominion Blvd.
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SUBJECT: NORTH ANNA POWER STATION, UNITS 1 AND 2: REQUEST FOR
ADDITIONAL INFORMATION REGARDING SECTION 3.7 OF THE IMPROVED
TECHNICAL SPECIFICATIONS (ITS) (TAC NOS. MB0799 AND MB0800)

Dear Mr. Christian:

The NRC staff reviewed your application dated December 11, 2000, to change the format and content of the Current Technical Specifications to be consistent with NUREG-1431, "Standard Technical Specifications - Westinghouse Plants," Revision 1, and certain generic changes to the NUREG.

On the basis of our review of the proposed changes for ITS Section 3.7, "Plant Systems," we find that additional information identified in the enclosure is needed. This inquiry was discussed with Ms. Regina Borsh of your staff on September 27, 2001, who agreed to provide the staff with a response within 60 days of the date of this letter.

Sincerely,

/RA/

Stephen R. Monarque, Project Manager, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-338 and 50-339

Enclosure: Request for Additional Information

cc w/encl: See next page

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Virginia Electric and Power Company

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REQUEST FOR ADDITIONAL INFORMATION (RAI)
NORTH ANNA POWER STATION, UNITS 1 AND 2
IMPROVED TECHNICAL SPECIFICATIONS (ITS)
SECTION 3.7 PLANT SYSTEMS

3.7-1 Discussion of Changes (DOC) LA.1 Title

Explain the meaning of the term "Related Reporting Problems."

3.7.1-1 DOC A.3

The last sentence states the change is administrative because it involves no technical changes. This may be an insufficient reason because not all Technical Specification (TS) requirements are "technical"; some are administrative. What makes a change administrative is that it involves no change in Current Technical Specifications (CTS) restrictions. Comment: Take note of summary tables to be attached to the Safety Evaluation (SE). No response needed from Virginia Electric and Power Company (VEPCO).

3.7.1-3 DOC LA.1

The DOC says the details being removed from CTS page 3/4 7-4 are going to the Inservice Inspection Interval and Inservice Testing (IST) Programs. Provide the name of the specific program, as well as the regulation and or TS requirements that will control changes to this information.

3.7.1-5 DOC L.4
ITS SR 3.7.1.1 Note

The DOC categorizes this change as a "Relaxation of Surveillance Frequency." Either ensure the general justification for this category addresses the addition of such notes, or create a new category with its own justification for such changes. It also seems that this change is related to the removal of CTS 3.7.1.1 ACTION b, the exception to CTS 3.0.4, which is addressed by DOC M.1. Thus DOC L.4 may be unnecessary because the frequency has not changed, just the plant conditions or modes when the Surveillance Requirement (SR) must be current before an upward mode change is allowed. (Currently, there is no restriction because of CTS ACTION b. ITS allows entry into Modes 1 and 2 only when the SR is current. ITS allows entering Mode 3, with the SR not current, only when there is reasonable assurance the acceptance criteria are met and the SR would pass if performed, and the reason for entry into Mode 3 is, in part, to perform the SR.)

3.7.3-1 Justification for Deviations (JFD) 3
Beyond-Scope Issue (BSI)-14 ITS 3.7.3 ACTIONS & Bases

Allowing verification that specified inoperable feedwater valves are closed once per 7 days "by administrative means" in ITS 3.7.3 ACTIONS is a general proposal that is being reviewed by the NRC staff. The reason for this deviation from the STS is that there is no control room valve position indication of the feedwater valves. Explain why local direct valve position verification is not possible, such that administrative controls must be relied upon. Then describe the

administrative controls that would be employed. Also, the Bases say "by direct or administrative means," and this appears to conflict with the ITS action statements.

This comment is associated with beyond-scope item number 14 on Attachment 4 to the submittal cover letter and is being reviewed under TACs MB1430 and MB1434.

3.7.5-1 ITS 3.7.5 Required Action A.1

The proposed ITS adopts TSTF-340, Revision 3, approved by the NRC on March 6, 2000. Standard Technical Specification (STS) Revision 2 incorporates this STS improvement. However, in ITS 3.7.5 Required Action A.1, the licensee proposes using "inoperable equipment" instead of the TSTF-340 words "affected equipment." The submittal contains no explicit justification for this difference. The ITS should adopt the TSTF-340 language for consistency with STS Revision 2.

3.7.8-1 DOC A.1 CTS 3.7.4.1 Action d ITS 3.7.8 Required Action C.1, 7-day Completion Time Note

Suggest deleting the first Completion Time note and presenting the 7-day Completion Time note as a three-part Required Action (C.1.1 and C.1.2 and C.1.3) with "AND" logical connectors and 72-hour Completion Times. Then present the loop restoration action with an "AND" logical connector as Required Action C.2 with a 7-day Completion Time. Less cryptic wording should be used for Required Actions C.1.1, C.1.2, and C.1.3, each of which should say "Verify that" This presentation accomplishes the same thing as the notes in the Completion Time column and is easier to follow using the rules of Section 1.3. (Note that DOC LA.5 would require changing for consistency with the use of actions in place of completion time notes.)

3.7.8-2 ITS SR 3.7.8.1 Note DOC A.5

The staff will ensure that the SE table states that adding this note simply clarifies current operating practice not explicitly stated in nor prohibited by CTS, and is, therefore, an administrative change.

3.7.8-3 DOC A.8 CTS 4.7.4.1.d

Although CTS 4.0.5 IST program requirement is retained in ITS 5.5.8, the removal of specific CTS listings of components, subject to IST and that are not retained in explicit ITS SRs, should be characterized as LA-type changes, not administrative. The IST programmatic document, which is required by 10 CFR 50.55a and clarified by ITS 5.5.8 with regard to ITS SR frequency conventions, contains the list of components subject to IST requirements. Therefore, moving this SR detail (service water pump IST) to the IST Program (for which changes are controlled by ITS 5.5.8 and 10 CFR 50.55a) is an LA-type change.

3.7.8-4 DOC 3.7.8 - LA.2
and 3/4.7.12-1 DOC 3/4.7.12 - R.1
 CTS 4.7.4.1.b
 CTS 3/4.7.12, Settlement of Class I Structures
 CTS Table 3.7-5 Item Nos. 2, 3, 6, and 7

- a. DOC 3.7.8 - LA.2 is correct in saying that CTS 4.7.4.1.b has no explicit "acceptance criteria"; however, the requirements of CTS 3/4.7.12 provide such criteria and action requirements as well. The removal of CTS 4.7.4.1.b seems associated with the relocation of CTS 3/4.7.12. Neither referenced DOC describes the inspection results or historical trends of the settlement of the plant's Class I structures to demonstrate that settlement poses no immediate threat to operability of affected systems, service water being one of them. Revise DOC 3.7.8 - LA.2 to reference DOC 3/4.7.12 - R1, and revise DOC 3/4.7.12 - R.1 to describe such historical trends to strengthen the basis for relocating these requirements to the Technical Requirements Manual (TRM).
- b. CTS 3/4.7.12 Action b requires a shutdown. Under this TS, describe how the plant would restore conformance to the limiting condition for operation (LCO) so that a startup is permitted. Under the TRM, how would the licensee arrive at such a startup decision?
- c. DOC 3.7.8 - LA.2 does not appear to fit the Type 3 description or justification.

3.7.8-5 DOC L.2
 CTS 3/4.7.4.1 Action a

Deletion of the phrase "in accordance with approved procedures" does not seem to be a relaxation of action requirements, rather a deletion of a TS requirement redundant to regulations that require using procedures for activities affecting safety. Thus this relaxation should have a different L-categorization and justification than proposed.

3.7.8-6 JFD 1
 STS 3.7.8 Required Action A.1 Note 2

Explain the statement in JFD 1, "RHR [residual heat removal] loops are not made inoperable directly by SW [service water] system inoperabilities." Alone, this appears insufficient to justify not adopting STS 3.7.8 Required Action A.1 Note 2. Since SW is the heat sink for Component Cooling Water (CCW) (which ITS proposes to relocate from CTS) and CCW is the heat sink for RHR, isn't a CCW loop and an RHR loop made inoperable when one SW loop is inoperable? See JFD 2 regarding proposed ACTION E.

3.7.10-1 DOC M.2
 ITS 3.7.10 Conditions A, B and D

Suggest revising the wording of these conditions for clarity as follows:

- Condition A: "One of the three MCR [Main Control Room]/ESGR [Emergency Switchgear Room] EVS [Emergency Ventilation System] trains required by LCO 3.7.10.a and LCO 3.7.10.b inoperable."
- Condition B: "More than one of the three MCR/ESGR EVS trains required by LCO 3.7.10.a and LCO 3.7.10.b inoperable due to inoperable MCR/ESGR boundary."
- Condition C: "More than one of the three MCR/ESGR EVS trains required by LCO 3.7.10.a and LCO 3.7.10.b inoperable for reasons other than Condition B."
-

3.7.10-2 DOC M.3
 ITS 3.7.10 ACTION B
 ITS 3.7.13 ACTIONS B and C
 DOCs 3.7.13 M.2 and M.3

The DOC states that ITS will require "compensatory measures" to be taken during the Completion Time of Required Action B.1. This action requirement is proposed to reside in the Bases, however. Follow reviewers' note for TSTF-287, R.5 regarding a commitment to procedural compensatory measures when in Action B. In addition, this comment applies to ITS 3.7.13 ACTIONS B and C and DOCs M2 and M3.

3.7.11-1 DOCs M.1, M.3
*BSI-18a JFD 3
 ITS 3.7.11 ACTIONS D and E
 CTS 3/4.7.7.1 Action d

The ITS proposes to only require entry into ACTION A, for one air conditioning (AC) subsystem inoperable, as long as 100% air conditioning system (ACS) cooling equivalent to a single operable AC subsystem is available. This would allow components from both subsystems to be used to meet this capability. Although STS 3.5.2 ACTIONS contain a similar allowance, the Rev. 2 STS 3.7.11 ACTIONS do not allow this; neither do the CTS. Therefore, this is a new beyond-scope change.

*This comment is for tracking purposes and no response to it is required. This item was not contained in Attachment 4 to the submittal cover letter, but has been numbered 18a by the staff as a BSI.

The following points should be addressed in the resolution of this item:

- (a) DOC M.1 and M.3 are not as clear as JFD 3 about what the ITS would allow if components from both subsystems are inoperable.
- (b) Comparing the ITS 3.7.11 ACTIONS to the STS 3.5.2 ACTIONS, it seems that ACTION A should read "One or more required MCR/ESGR ACS subsystems inoperable."
- (c) This change may be generic and should be considered for the STS.

3.7.11-2 DOC M.2
BSI-18 JFD 4
 ITS SR 3.7.11.1

The explicit acceptance criteria of the proposed SR differ from the corresponding SR in CTS and STS, and the frequency of once per 54 months (same as 18 months on a staggered test basis for three trains) also differs from STS and CTS. Therefore, this is a beyond-scope change being reviewed under TACs MB1445 and MB1446.

This comment is for tracking purposes and no response to it is required. This item is numbered 18 on Attachment 4 to the submittal cover letter.

Note that DOC M.2 should discuss the frequency change.

3.7.12-1 ITS LCO 3.7.12 Note
BSI-19 JFD 4
 DOC M.2

The note contains the phrase "not open by design," which is not included in CTS or STS. Therefore, this is a beyond-scope change.

This comment is for tracking purposes and no response to it is required. This item is numbered 19 on Attachment 4 to the submittal cover letter.

3.7.12-2 ITS SR 3.7.12.2 and SR 3.7.12.4
BSI-20 JFD 7
 DOC M.1
 CTS 4.7.8.1.a

The referenced SRs differ from the corresponding SR in CTS and STS. Therefore, this is a beyond-scope change being reviewed under TACs MB1447 and MB1448.

This comment is for tracking purposes and no response to it is required. This item is numbered 20 on Attachment 4 to the submittal cover letter.

3.7.13-1 See RAI 3.7.10-2

3.7.13-2 DOCs M.5 and LA.2
 ITS SR 3.7.13.3
 CTS 4.7.7.1.d.2

The CTS explicitly requires verifying that the normal air supply and exhaust are shut down on a safety injection signal. DOC M.5 says that verifying automatic actuation of each MCR/ESGR bottled air system train encompasses the CTS requirement, and does not, therefore, need to be stated in the ITS explicitly. However, the Bases for SR 3.7.13.3 do not make this statement.

Revise the Bases to make clear the scope of the SR. (It is noted that the Bases Background discussion does point this out, but the SR should also state this.)

3.7.13-3 ITS 3.7.13

The Bases speak of four trains, while the LCO requires three. This is for tracking purposes of an assumed but not yet completed plant modification. This item may be closed upon notifying the staff the modification is complete.

3.7.13-4 ITS 3.7.13 ACTIONS
BSI-24 ITS 3.7.10 ACTIONS
CTS 3/4.7.7.1 Actions a and b
DOCs 3.7.10 M.2, M.3, and especially L.4
DOCs 3.7.13 M.2 and especially L.1

(a) CTS Action b does not discriminate which train(s) of the MCR/ESGR EVS and Bottled Air System are inoperable at the same time if parts of both systems are inoperable. Provide additional discussion to justify the ITS maintaining this allowance.

(b) CTS Action a does not specifically allow 7 days to restore an inoperable train of the EVS when one train of the Bottled Air System is also inoperable. But the ITS, by placing these systems in separate Specifications, would allow this. Provide additional discussion to justify the ITS adding this allowance. Should a shorter time be specified in each Specification if one EVS subsystem and one opposite train Bottled Air Subsystem are inoperable at the same time?

Note. Because the STS doesn't consider the Bottled Air System, it is uncertain whether the above-noted differences from CTS are beyond scope. However, the ACTIONS for these two Specifications will be referred to Plant Systems Branch for review.

This item is numbered 24 on Attachment 4 to the submittal cover letter.

Additional questions may follow from NRC staff review.

3.7.15 -1 DOC L.2
BSI-27 CTS 3/4.9.12
ITS 3.7.15

ITS omits the CTS filtration functional requirements for the fuel building ventilation system, which is contrary to corresponding STS 3.7.13. Therefore, this change is a beyond-scope change being reviewed under TACs MB1449 and MB1450.

This comment is for tracking purposes and no response to it is required. This item is numbered 27 on Attachment 4 to the submittal cover letter.

3.7.15-2 DOCs A.3, L.1 and L.3
 CTS 3/4.9.12 Applicability

ITS 3.7.15 Applicability adds the word "recently" to CTS Applicability a, and deletes CTS Applicability b. DOC L.3 justifies the former change; DOC L.3 justifies the later change. Delete DOC A.3.

3.7.15-3 DOC L.3
 CTS 3/4.9.12 Applicability b

Explain the removal of this Applicability in the context of relocating the heavy loads requirements from CTS.

3.7.16-1 CTS 3/4.9.11 Actions regarding suspending the movement of loads over the spent
 fuel pool
 DOC L.2

Explain the removal of this action requirement in the context of relocating the heavy loads requirements from CTS

3/4.7.3-1 DOC R.1 for CTS 3/4.7.3.1 and CTS 3/4.7.3.2
BSI-15

The non-adoption of STS 3.7.7, Component Cooling Water, and relocation of CTS 3/4.7.3.1 and 3/4.7.3.2 for the CCW system (operating and shutdown), is a beyond-scope change being reviewed under TACs MB1439 and MB1440.

This comment is for tracking purposes and no response to it is required. This item is numbered 15 on Attachment 4 to the submittal cover letter.

3/4.7.5-1 3.7.5.1.b; 3.7.5.1 Actions; and 4.7.5.1 for the North Anna Reservoir
BSI-16

The CTS consider the North Anna Reservoir to be one of two ultimate heat sinks at North Anna. Relocating it is considered a beyond-scope change being reviewed under TACs MB1451 and MB1452.

This comment is for tracking purposes and no response to it is required. This item is numbered 16 on Attachment 4 to the submittal cover letter.

3/4.7.12-1 DOC R.1 for CTS 3/4.7.12, Settlement of Class 1 Structures

See RAI 3.7.8-4 regarding this relocation.