

May 21, 2001

Mr. David A. Christian
Senior Vice President and
Chief Nuclear Officer
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5000 Dominion Blvd.
Glen Allen, Virginia 23060-6711

SUBJECT: NORTH ANNA POWER STATION, UNITS 1 AND 2: REQUEST FOR
ADDITIONAL INFORMATION REGARDING SECTION 3.8 OF THE IMPROVED
TECHNICAL SPECIFICATIONS (ITS) FOR NORTH ANNA POWER STATION,
UNITS 1 AND 2 (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 3.8, we find that additional information identified in the enclosure is needed. This inquiry was discussed with Ms. Regina Borsh of your licensing staff on May 8, 2001, who agreed to provide the staff with a response within 90 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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Units 1 and 2

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REQUEST FOR ADDITIONAL INFORMATION (RAI)
NORTH ANNA POWER STATION, UNITS 1 AND 2
IMPROVED TECHNICAL SPECIFICATIONS (ITS)
ITS SECTION 3.8.1, ELECTRICAL SYSTEMS

3.8.1-01 Unit 1 Current Technical Specification (CTS) 3.8.1.1 Action b (Discussion of Changes)
DOC L.3 and L.14

There seems to be a misunderstanding in the DOCs. A diesel generator (DG) cannot be returned to OPERABLE status until the cause of the failure is determined and corrected. If the cause of the failure is not determined within 24 hours, the OPERABLE DG must be tested. The DOC statement about the corrective action program continuing to assess the common cause evaluation for the inoperable DG is misleading because, as stated above, a DG cannot be considered OPERABLE unless the cause of the inoperability is determined and corrected. The licensee should consider revising the DOC to reflect the above.

3.8.1-02 Unit 1 CTS 4.8.1.1.1.b DOC L.10

The proposed change is beyond scope. The licensee will have to provide more information on the proposed changes to allow for a thorough staff review. The information should include details on system design and how the transfer to the alternate offsite is made, specific details regarding the single largest load reject test, information on how it is determined that EDG trips are bypassed, and a discussion of why it is safe to conduct the 24-hour run at power.

3.8.1-03 Unit 1 CTS 4.8.1.2.2a.3 DOC L.16

The DOC does not provide an adequate justification for changing the test frequency from 31 days to 92 days. The purpose of the surveillance requirement (SR) is to test the system as well as the pump. As such, it is not part of the safety-related pump testing program. The licensee should provide adequate justification, or retain the NUREG for 31 days. In responding to this RAI, the licensee should also consider the North Anna fuel oil system design. There are two pumps per EDG, each pump taking suction on a separate storage tank. Are both pumps required in order to supply adequate fuel for 7 days of operation? If so, when are the second pumps and control systems tested?

3.8.1-04 Unit 1 CTS 4.8.1.1.1c DOC A.12

The DOC appears to be incorrect for the following reasons: 1) The proposed change is not Administrative. The CTS Note says manufacturer's recommendations shall be followed whereas ITS say may. This is a less restrictive change. 2) For this CTS SR, the manufacturer's recommendations regarding warmup and loading can be followed because there is no requirement for the EDG to be loaded in 10 seconds. The licensee should revise the DOC to address the above comments.

3.8.1-05 Unit 1 CTS 4.8.1.1.2.d DOC L.10

See RAI 3.8.1-02

3.8.1-06 Unit 1 CTS 4.8.1.1.2.d.5.c and 4.8.1.1.2.d.6 DOC L.10

See RAI 3.8.1-02

3.8.1-07 Unit 1 CTS 4.8.1.1.2.d.6 DOC A.12

See RAI 3.8.1-04

3.8.1-08 Unit 1 CTS 4.8.1.1.2.d.7 DOC L.13

Instead of being deleted, this CTS requirement should be relocated to a licensee-controlled document, such as the Technical Requirements Manual (TRM).

3.8.1-09 Unit 1 CTS 4.8.1.1.2.e DOC L.10

See RAI 3.8.1-02

3.8.1-10 Unit 2 CTS 3.8.1.1 Action b DOC L.14

The DOC appears to be incorrect. The DOC states that a EDG test is required when a common mode failure affects the OPERABLE EDG. In the NUREG, an EDG test is required only when the absence of a common mode failure cannot be established. This means that the OPERABLE EDG will have to be tested if the cause of the one EDG inoperability cannot be determined. This difference between the NUREG and the DOC should be resolved.

3.8.1-11 Unit 2 CTS 3.8.1.1 DOC L.3

See RAI 3.8.1-01

3.8.1-12 Unit 2 CTS 4.8.1.1.1.b DOC L.7

The following is the staff interpretation of what the licensee is saying in DOC L.7. Closing breaker 25H1 in Modes 1-4 would inop buses 2H and 2J, and put the unit into 3.0.3. Therefore, breaker 25H1 cannot be closed in Modes 1-4. Since breaker 25H1 cannot be closed, effectively there is no alternate offsite source for buses 2H and 2J, and the SR is meaningless. Therefore, it should be deleted. If this staff interpretation is correct, it is suggested that the DOC be revised to reflect it. In looking at the DOC, the licensee should also address why the SR was included in the TS to begin with, given the plant design. This should also be addressed in the DOC.

3.8.1-13 Unit 2 CTS 4.8.1.1.2.a.3 DOC L.16

See RAI 3.8.1-03

3.8.1-14 Unit 2 CTS 4.8.1.1.2.a.5 DOC A.12

This markup indicates the CTS will become ITS SR 3.8.1.6. However, the DOC and the Unit 1 markup indicate it will be SR 3.8.1.5. Is this an error in the Unit 2 markup?

3.8.1-15 Unit 2 CTS 4.8.1.2.c DOC A.12

See RAI 3.8.1-04

3.8.1-16 Unit 2 CTS 4.8.1.1.2.c Footnote** DOC A.12

This footnote applies to CTS 4.8.1.1.a.4 as well as to 4.8.1.1.2.C. In the Unit 1 markup, this Note is deleted using DOC A.10 as the justification. In the Unit 2 markup, the Note is deleted using DOC A.12. The DOCs are substantially different. The licensee is requested to resolved the apparent discrepancy.

3.8.1-17 Unit 2 CTS 4.8.1.1.2.d DOC L.10

See RAI 3.8.1-02

3.8.1-18 Unit 2 CTS 4.8.1.1.2.d.5.c DOC L.10

See RAI 3.8.1-02

3.8.1-19 Unit 2 CTS 4.8.1.1.2.d.6 DOC L.10, L.9

See RAI 3.8.1-02

DOC L.9 is written such that it appears to apply to ITS SR3.8.1.11. The corresponding CTS is 4.8.1.1.2.d.4. The licensee shall determine if this DOC is applicable to this CTS requirement, and if this DOC is in fact applicable provide a response as to why is Unit 1 not marked up the same.

3.8.1-20 Unit 2 CTS 4.8.1.1.2.d.7 DOC L.13

See RAI 3.8.1-08

3.8.1-21 Unit 2 CTS 4.8.1.1.2.e DOC L.10

See RAI 3.8.1-02

3.8.1-22 NUREG Markup Proposed Condition C Justification for Deviation (JFD) 6

The Note in Condition C reads Alternate AC DG or EDGs on other unit inoperable. The Required Actions, however, have AND between C.1 and C.2, indicating both Actions must be completed. Should AND be changed to OR? Also, provide the required Action if both the Alternate AC DG and one or both opposite unit EDG are inoperable at the same time. Is this addressed anywhere in the Limiting Condition for Operation (LCO)?

3.8.1-23 NUREG Markup Proposed Condition D JFD 12

Condition D includes a Note allowing separate condition entry for the opposite unit's offsite circuits. Condition D also allows one or both opposite unit offsite circuits to be inoperable at the same time, without any additional requirements. What is the justification for these LCO allowances? Why is the loss of both opposite unit offsite circuits not more of a concern than the loss of only one offsite circuit? Given the wording of Condition D, what is the purpose of Required Action D.1? Note that Required Actions D.1 and D.2 are worded the same as the Actions in Condition A. To avoid confusion, these Required Actions should be revised to make it clear they are associated with offsite power for shared systems/components.

3.8.1-24 NUREG Markup Proposed Condition D JFD 12

The licensee is requested to provide a justification for waiting 72 hours to implement Required Action D.3.

3.8.1-25 NUREG Markup Proposed Condition E JFD 12

Proposed Condition E addresses inoperability of an EDG associated with the opposite unit. Assume you are in the Unit 1 TS, and an EDG on Unit 2 becomes inoperable. Proposed Required Actions E.1 and E.2 would be covered by Condition B and/or Condition C for Unit 2. There does not appear to be any need for these Actions in Condition E. The licensee should consider deleting these Actions from Condition E since, in the staff's view, they could be confusing. Also, what is the justification for waiting 14 days to implement Required Action E.3?

3.8.1-26 NUREG Markup Proposed Condition E JFD 12

The licensee is requested to provide a justification for waiting 14 days to implement Required Action E.3.

3.8.1-27 NUREG Markup Proposed Condition F JFD 12

The licensee is requested to provide a justification for waiting 72 hours to implement Required Action F.2.

3.8.1-28 ITS LCO 3.8.1 No JFD

Proposed Condition J addresses two LCO 3.8.1c EDGs inoperable. However, the LCO does not address two LCO 3.8.1.c offsite circuits inoperable, or one LCO 3.8.1.C offsite and one LCO 3.8.1.c EDG inoperable. These plant conditions could lead to LCO 3.0.3. Should these possible plant conditions be included in the ITS?

3.8.1-29 ITS SR 3.8.1.6 JFD 12

See RAI 3.8.1-03

3.8.1-30 ITS SR 3.8.1.8, sr 3.8.1.9, sr 3.8.1.12, sr 3.8.1.15

See RAI 3.8.1-02

3.8.1-31 ITS SR 3.8.1.16 JFD 8

The staff does not understand the revised wording of this SR. Provide the tolerances the SR is verifying for the sequencing timing relays. The licensee should consider adding something to this SR to make it more explicit.

3.8.1-32 Bases Pg. B3.8-10 Action B.4 JFD 5

In the second paragraph the licensee has added "AAC OG and the other unit EDGs." The staff questions if this is correct. The proposed ITS is a combined document, but the LCOs, Conditions, and Required Actions are applied to each unit independently. When in Condition B on one unit, the EDGs of the other unit are not capable of providing power to the class IE buses of the affected unit as the proposed Bases indicate. The licensee should revise the Bases to delete this incorrect addition.

3.8.1-33 (Blank)

(Intentionally left blank)

3.8.1-34 Bases Insert to Pg. B3.8-11 Action E.1, E.2, E.3 JFD 5

The Bases discussion of Required Action E.1 states that if SR 3.8.1.1 is failed (offsite circuit inoperable), additional Conditions and Required Actions must be entered. What Conditions and Required Actions are being referred to here? There is no Condition covering the combined inoperability of opposite unit offsite circuits and EDGs.

3.8.1-35 Insert to Pg. B3.8-11 Required Action E.2, E.3

The Bases discussion is confusing. The Bases state that the Completion Time begins when a) the required shared component with an inoperable EDG, and b) more than one shared component in the same system is inoperable. The Required Action states that the systems supported by the inoperable EDG be declared inoperable when a

redundant shared system is inoperable. Stated differently, only one redundant shared system need be inoperable in order to invoke Required Action E.2. This is different than b) above. The licensee should revise the Bases to more accurately reflect the Required Action. Also, to avoid possible confusion, the Condition and Required Actions should be revised to indicate they are applicable only to the shared systems. See also RAI regarding 14-day Completion Time for Required Action E.3.

3.8.1-36 Bases Pg. B3.8-16 SR 3.8.1.1

The Bases discussion includes the wording “buses and loads are connected to their preferred power source.” The licensee has revised the Bases by including the words “or alternate” following “preferred.” What is the intent of this change? Does this mean that unrestricted plant operation is allowed if the safety buses are connected to either the preferred or the alternate offsite power source? The licensee is requested to explain the change. Note that the staff considers the offsite power sources to be the preferred power source. Note also that Unit 2 does not have alternate offsite power source.

3.8.1-37 Bases Pg. B3.8-20 SR 3.8.1.6 JFD 7

The Bases have been revised to indicate the fuel oil transfer pumps must be started manually. Does this accurately reflect the system design? The staff is of the impression that the fuel oil transfer pumps are controlled by level switches in the day tank. The licensee is requested to provide clarification.

3.8.1-38 Bases Pg. B3.8-30 SR 3.8.1.16 JFD5

The phrase “and loss of offsite power” is deleted from the Bases discussion. JFD 5 does not provide an adequate justification for this change. The licensee is requested to provide a discussion of the North Anna design with emphasis on whether or not loads are sequenced onto the EDGs during a loss of offsite power. If the loads are sequenced onto the EDGs, the Bases will require correction.

ITS SECTION 3.8.2, ELECTRICAL SYSTEMS

3.8.2-01 Unit 1 CTS 3.8.1.2 Applicability b and Action DOC L.5

Deletion of the CTS requirement will be considered acceptable when the licensee confirms that load handling at North Anna is conducted in accordance with the recommendations of NUREG-0612, "Control of Heavy Loads at Nuclear Power Plants."

3.8.2-02 Unit 1 CTS 3.8.1.2 Action a DOC L.1

Proposed ITS Action A.1 would allow declaring inoperable those features associated with an inoperable offsite source. The NUREG Bases clearly indicate that this allowance is acceptable because the LCO requires two trains to be powered from offsite power. The licensee has deleted the reference to a second train in the North Anna ITS. Therefore, this allowance to declare features inoperable is no longer valid. It should be deleted from the ITS.

3.8.2-03 Unit 2 CTS 3.8.1.2 Applicability b and Action DOC L.5

See RAI 3.8.2-01

3.8.2-04 Unit 2 CTS 3.8.1.2 Action a DOC L.1

See RAI 3.8.2-02

3.8.2-05 NUREG Markup SR 3.8.21

The staff does not agree with the classification of LCO 3.8.1 SRs in SR 3.8.2.1. The following is the staff's view of how the 3.8.1 SRs should be classified. The following SR are applicable and are required to be performed: SR 3.8.1.1, SR 3.8.1.2, SR 3.8.1.4, SR 3.8.1.5, and SR 3.8.1.7. The following SRs are applicable, but are not required to be performed: SR 3.8.1.3, SR 3.8.1.6, SR 3.8.1.9, SR 3.8.1.10, SR 3.8.1.12, SR 3.8.1.13, SR 3.8.1.14, SR 3.8.1.15, and SR 3.8.1.16. The following SRs are not applicable: SR 3.8.1.8, SR 3.8.1.11, SR 3.8.1.17, and SR 3.8.1.18. The licensee is to revise the submittal accordingly.

3.8.2-06 Bases Pg. B3.8-37 LCO JFD 2

The Bases discussion regarding offsite circuits and EDGs is proposed to be deleted. JFD 2 does not provide an adequate justification for the proposed deletions. The licensee is requested to provide a specific justification for why the Bases discussions on offsite power and EDGs are not applicable to North Anna, and can, therefore, be deleted.

3.8.2-06 Bases Pg B.3.8-37 LCO JFD 4

The Bases discussion regarding sequencing is proposed to be deleted. JFD 4 does not provide an adequate justification for the proposed deletions. The licensee is requested to provide a specific discussion on why sequencing, which is required in LCO 3.8.1 and is part of the North Anna design, is not applicable in shutdown, and discussion of sequencing can be deleted from the Bases.

3.8.2-07 Bases Pg. B3.8-38 Action A.1 JFD 2

As proposed, the revised Bases are not acceptable. The NUREG discussion is developed around the concept that more than one train is required to be OPERABLE, and that offsite power is not available to one of the trains. The proposed Bases wording indicates an offsite circuit is inoperable when it is not available to "the necessary portions of the electrical power distribution subsystem(s);" i.e., not available to any safety bus. Under this condition, Required Action A.1 is not applicable because no bus would have offsite power.

3.8.2-08 Bases Pg. B3.8-40 Insert JFD 5

See RAI 3.8.2-05

The licensee is requested to provide the basis for why the loss of offsite power signals and the sequencing timing relays are not required to be OPERABLE in shutdown. The statement that no ESF loads are assumed to be powered from the emergency buses does not appear to be adequate. As a minimum, RHR must be powered from the emergency buses, as are any other systems/components required to mitigate the consequences of an accident during shutdown.

ITS SECTION 3.8.3, ELECTRICAL SYSTEMS

3.8.3-01 Unit 1 CTS 4.8.1.1.4 DOC L.2

Technical Specifications Task Force (TSTF)-002 was approved for inclusion in the NUREG on the basis that this CTS requirement would be relocated to a licensee-controlled document such as the TRM. Complete deletion of this SR is not acceptable. The licensee should revise the submittal accordingly.

3.8.3-02 Unit 1 CTS 3.8.1.2 Action b. DOC L.2

As noted in comments on CTS 4.8.1.1.4, deletion of this SR is not acceptable. The SR should be relocated to a licensee-controlled document, but the activity (tank cleaning) will be expected to be done. In light of this, the licensee may want to reconsider changes to this CTS with a view of retaining the CTS permissive related to tank cleaning.

3.8.3-03 Unit 1 CTS 3.8.1.2.b.2 DOC LA.2

The CTS requirement proposed for deletion is not a detail of system design such as the fuel oil tanks being underground. The CTS has a specific requirement for 50,000 gallons of fuel oil and the ability to transport the fuel oil. DOC LA.2 does not provide an adequate justification for relocating this requirement. The licensee should revise the DOC to provide an adequate justification, or retain the CTS.

3.8.3-04 Unit 2 CTS 4.8.1.1.4 DOC L.2

See RAI 3.8.3-01

3.8.3-05 Unit 2 CTS 3.8.1.2 Action b DOC L.2

See RAI 3.8.3-02

3.8.3-06 Unit 2 CTS 3.8.1.2.b.2 DOC LA.2

See RAI 3.8.3-03

3.8.3-07 NUREG Markup LCO 3.8.3 Condition A

Required Action A.3 requires verification that the aboveground tank contains $\geq 100,000$ gallons of fuel. Provide the relationship of the aboveground tank to the EDG fuel oil systems, and indicate whether the new fuel is delivered to the aboveground tank and transferred to the underground tanks. In addition, describe how the fuel oil in the aboveground tanks is verified for acceptability for use in the EDGs.

3.8.3-08 NUREG Markup SR 3.8.3.6

See RAI 3.8.3-01

3.8.3-09 Bases Pg. B 3.8-41 Background

The second paragraph of the Background discussion does not appear to reflect the North Anna design. At North Anna, there is one pump per EDG on each of the two storage tanks, not two per tank for each EDG as indicated in the NUREG Bases. This Bases discussion should be revised to reflect the North Anna design.

3.8.3-10 Bases Pg. B.8-42 LCO Insert JFD 2

The Bases discussion of Actions A.1, A.2, A.3, and A.4 includes a requirement to verify 50,000 gallons of fuel and transportation are available. This requirement is not covered by the Actions of Condition A. This needs to be corrected. See RAI 3.8.3-03.

3.8.3-11 Bases Pg. B3.8-44 Condition E

The proposed changes to this Bases discussion make it inconsistent with LCO Condition E. Condition E is entered when it is determined that the “other” properties of new fuel are not within limits. The Required Action is to determine whether or not the new fuel, when mixed with the stored fuel already in the tank, causes the combined volume to be not within limits. This is what the NUREG Bases is explaining, and what has been eliminated because of the proposed changes. The licensee should withdraw the proposed changes and retain the NUREG Bases.

3.8.3-12 Bases Pg. B3.8-45 Condition G JFD 1

In this Bases discussion as well as in the Background discussion, the licensee states that only one air start subsystem per EDG is required to be OPERABLE. This is acceptable provided the licensee has test data which shows that one subsystem is capable of starting the EDG within the 10 seconds required. The licensee is requested to verify that such test data exist.

ITS SECTION 3.8.4, ELECTRICAL SYSTEMS

3.8.4-01 Unit 1 CTS 4.8.2.3.2b DOC L.2

The DOC does not adequately explain why the proposed change is acceptable. The DOC should be revised to provide an adequate justification. Some things to consider when revising the DOC include whether or not a battery discharge or an overcharge would in any way affect battery terminal corrosion, and whether or not the CTS requirement provides any meaningful data following a discharge or an overcharge.

3.8.4-02 Unit 1 CTS 4.8.1.3.b DOC L.2

See RAI 3.8.4-01

3.8.4-03 Unit 2 CTS 4.8.2.3.2b DOC L.2

See RAI 3.8.4-01

3.8.4-04 Unit 2 CTS 4.8.1.1.3.b DOC L.2

See RAI 3.8.4-01

3.8.4-05 NUREG Markup LCO 3.8.4 JFD 1

What is the purpose of changing "subsystem" to "source" in the beginning of the LCO while maintaining the term subsystem in the remainder of the LCO? Should this be changed back to "subsystem"?

3.8.4-06 NUREG Markup SR 3.8.4.4

The SR contains a requirement that the terminal connections be "tight." This requirement has been deleted from the NUREG (unless the batteries are Ni-Cad). The licensee may wish to invoke this change for North Anna.

3.8.4-07 NUREG Markup SR 3.8.4.7 JFD 1

Is there a spare battery charger for each of the EDG batteries? If not, the Note regarding not performing the SR in Modes 1-4 from SR 3.8.4.6 must be included here.

3.8.4-08 Bases Pg. B3.8-51 Background JFD 2

The last part of the second paragraph is deleted. JFD 2 does not provide an adequate justification for the deletion. The licensee is requested to provide an adequate justification, or retain the NUREG.

3.8.4-09 Bases Pg. B3.8-52 LCO

The Bases for the LCO does not include any discussion of the opposite unit's DC subsystems. The Bases should be revised to include this discussion.

3.8.4-10 Bases Pg. B3.8-54 SR 3.8.4.2 JFD 2

The second paragraph of the Bases discussion is deleted. JFD 2 does not provide an adequate justification for this deletion. The licensee is requested to provide an adequate justification, or retain the NUREG.

3.8.4-11 Bases Pg. B3.8-55 sr 3.8.4.4, SR 3.8.4.5 JFD 2

The next to last paragraph of this Bases discussion is deleted, but JFD 2 does not provide an adequate justification for this deletion. The licensee should provide an adequate justification, or retain the NUREG.

3.8.4-12 Bases Pg. B3.8-56 SR 3.8.4.6 SR 3.8.4.7 JFD 5

See RAI 3.8.4-07 regarding the EDG battery charger. This applies to the next to last paragraph in the Bases discussion.

3.8.4-13 Bases Pg. B3.8-57 SR 3.8.4.8

The Bases discussion that states that the modified performance discharge test consists of just two rates is changed to state the test “may” consist of just two rates. Provide the purpose of this change and the justification. Absent an adequate justification, the licensee should retain the NUREG.

3.8.4-14 Bases Pg. B3.8-58 sr 3.8.4.9 JFD 2

The portion of the Bases discussion that states the test is “normally done in the as found condition” is deleted. JFD 2 does not provide an adequate justification for this change. The Bases is consistent with IEEE-450(95). Therefore, the licensee should provide an adequate justification for the change, or retain the NUREG.

3.8.4-15 Bases discussion of Battery Tests

The LCO and the Bases do not address any testing of the EDG batteries. The licensee is requested to provide a discussion on why no tests are required for the EDG batteries. The emphasis of the discussion should be on performance testing to demonstrate battery capacity.

ITS SECTION 3.8.5, ELECTRICAL SYSTEMS

3.8.5-01 Not Used

3.8.5-02 Unit 1 CTS 3.8.2.2 Action DOC L.1

Deletion of the CTS requirement will be considered acceptable when the licensee confirms that load handling at North Anna is conducted in accordance with the recommendations of NUREG-0612, “Control of Heavy Loads at Nuclear Power Plants.”

3.8.5-03 Unit 2 CTS 3.8.2.2 Action DOC L.1

See RAI 3.8.5-02

ITS SECTION 3.8.6, ELECTRICAL SYSTEMS

3.8.6-01 Unit 1 CTS Table 4.8-3 DOC LA.2

CTS Note (c) can have both positive and negative effects. With a lower temperature, the voltage can be corrected upward a specific amount for each degree of temperature difference. With a higher temperature, the voltage can be corrected downward a specific amount for each degree of temperature difference. If the licensee wishes retain the positive aspects of the Note, it must be included in TS. It cannot be imposed by the Bases. If the licensee wishes to delete the negative aspects of the Note, the licensee must provide a specific justification for doing so. In either case, however, relocation to the Bases is not acceptable.

3.8.6-02 Unit 1 CTS Table 4.8-3 DOC L.3

There is no DOC L.3 in the submittal. What is the associated change for the DOC? The licensee should provide this DOC.

3.8.6-03 Unit 2 CTS Table 4.8-3 DOC LA.2

See RAI 3.8.6-01

3.8.6-04 NUREG Markup Condition B and SR 3.8.6.3

The EDG batteries are not included in Condition B or SR 3.8.6.3 with respect to electrolyte. The licensee is requested to provide a justification for why the EDG batteries have no associated temperature requirements.

3.8.6-05 Bases Pg. B3.8-67 SR 3.8.6.3

See RAI 3.8.6-04

3.8.4-06 Bases Pg. B3.8-68 Insert JFD4

See RAI 3.8.6-01

ITS SECTION 3.8.8, ELECTRICAL SYSTEMS

3.8.8-01 Unit 1 CTS 3.8.2.2 Applicability b and Action DOC L.1

Deletion of the CTS requirement will be considered acceptable when the licensee confirms that load handling at North Anna is conducted in accordance with the recommendations of NUREG-0612, "Control of Heavy Loads at Nuclear Power Plants."

3.8.8-02 Unit 1 CTS 3.8.2.2 Action No DOC

The change regarding suspension of positive changes is not supported by a DOC. In the Unit 2 markup, this change is supported by DOC L.3. Does this need to be added to the Unit 1 markup?

3.8.8-03 Unit CTS 3.8.2.2 Applicability b and Action DOC L.1

See RAI 3.8.3-01

ITS SECTION 3.8.9, ELECTRICAL SYSTEMS

3.8.9-01 Bases Pg. B3.8-70 Background

The staff understanding of the North Anna offsite power system is as follows. Unit 1 has a normal offsite source and an alternate offsite source. Transfer to the alternate offsite source is a manual operation. Unit 2 has a normal offsite source, and no alternate source. In the event of a loss of offsite power, the EDGs for the affected buses will start and load. The EDGs for Unit 1 will continue to run until a) the safety bus is transferred to the alternate offsite source, or b) the normal offsite source is restored. The Unit 2 EDGs will continue to run until the normal offsite source is restored. If this staff understanding is correct, it should be incorporated into the Bases background discussion. As currently proposed, the background discussion does not accurately reflect the North Anna design.

ITS SECTION 3.8.10, ELECTRICAL SYSTEMS

3.8.10-01 Unit 1 CTS 3.8.2.2 Applicability b and Action DOC L.1

Deletion of the CTS requirement will be considered acceptable when the licensee confirms that load handling at North Anna is conducted in accordance with the recommendations of NUREG-0612, "Control of Heavy Loads at Nuclear Power Plants."

3.8.10-02 Unit 2 CTS 3.8.2.2 Applicability b and Action DOC L.1

See RAI 3.8.10-01