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ComEd

October 23, 1998

United States Nuclear Regulatory Commission
Attn: Document Control Desk
Washington D. C. 20555 - 0001

Subject: Revision N to the Improved Technical Specifications (ITS) Submittal

Byron Nuclear Power Station, Units 1 and 2
Facility Operating Licenses NPF-37 and NPF-66
NRC Docket Numbers: 50-454 and 50-455

Braidwood Nuclear Power Station, Units 1 and 2
Facility Operating Licenses NPF-72 and NPF-77
NRC Docket Numbers: 50-456 and 50-457

Reference: G. Stanley and K. Graesser (Commonwealth Edison) letter to NRC Document Control Desk, "Conversion to the Improved Standard Technical Specifications," dated December 13, 1996

The purpose of this letter is to provide Revision N to the referenced ITS submittal. ITS Revision N (Enclosure 1) contains Commonwealth Edison's (ComEd's) final Package Closeout for ITS Section 3.7. Attachment 1 contains ITS Section 3.7 RAI Revised Responses. Attachment 2 contains ITS Section 3.7 SER Tables.

1/1

A001

These Revisions are being provided in the same ten-section format as the initial ITS submittal:

1. Byron ITS
2. Braidwood (Brwd) ITS
3. Byron CTS Markups
4. Brwd CTS Markups
5. CTS Discussion of Changes (DOCs)
6. LCO Markups
7. LCO Justification for Differences (JFDs)
8. Bases Markups
9. Bases JFDs
10. No Significant Hazards Consideration (NSHC)

Please address any comments or questions regarding this matter to our Nuclear Licensing Department.

Sincerely,

Timothy J. Tulon
Site Vice President
Braidwood Nuclear Generating Station

Enclosure 1: ITS Revision N
Attachment 1: RAI Revised Responses
Attachment 2: SER Tables

cc: NRC Regional Administrator - Region III
Senior Resident Inspector - Braidwood
Senior Resident Inspector - Byron
Office of Nuclear Facility Safety – IDNS

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ATTACHMENT 1

ITS SECTION 3.7
RAI REVISED RESPONSES

Response to NRC RAI For ITS Section 3.7

21-Oct-98

NRC RAI Number	NRC Issued Date	RAI Status
3.7.1-01	12/5/97	Closed

NRC Description of Issue

3.7.1-1 DOC A.1
DOC A.3
DOCL.1
JFD B.1
JFD B.2
JFD B.22
JFD C.3
JFD Bases B.1
JFD Bases B.21
JFD Bases C.2
JFD Bases P.1
CTS 3.7.1.1
CTS 3.7.1.1 ACTIONS
CTS Table 3.7-1
STS LCO 3.7.1
STS 3.7.1 ACTION A
STS 3.7.1 TABLE 3.7.1-1
ITS LCO 3.7.1
ITS 3.7.1 ACTION A
ITS 3.7.1 TABLE 3.7.1-1 and Associated Bases

CTS 3/4.7.1.1 has been modified by a number of changes designated as A.3. These changes were approved by the Staff in Amendment 79 for Braidwood and Amendment 87 for Byron dated 4/15/97. CTS 3.7.1.1, and its associated ACTION statements as modified by the approved A.3 and CTS TABLE 3.7-1 have been further modified to reflect the changes made to STS LCO 3.7.1, STS 3.7.1 ACTION A and STS 3.7.1 TABLE 3.7.1-1 by WOG-83. These changes are designated as A.1 and L.1 in the CTS markup and B.1., B.2, B.22, C.3, Bases B.1, Bases B.21, Bases C.2 and Bases P.1 in the ITS markup. WOG-83 has not been submitted to the staff by the Owner's Group for review and is thus, considered to be a beyond scope of review item for this conversion. Comment: Delete this generic change, revise the CTS and STS/ITS markups to either reflect the current CTS as modified by A.3 or the STS, and provide the appropriate discussions and justifications for the changes.

ComEd Response to Issue

10/23/98 Revised Response: ComEd withdrew the changes associated with TSTF-235 (WOG-83) from the ITS submittal. This change is provided in our comprehensive ITS Section 3.7 closeout submittal Revision N.

2/6/98 Corrected Response: No change. Byron/Braidwood originally introduced the changes proposed in WOG-83 to the Westinghouse Owner's Group (WOG) in October 1996. Based on input from Westinghouse and other Westinghouse plants, WOG-83, Revision 1, was created and is currently under TSTF review. ComEd continues to pursue the Westinghouse-specific generic changes proposed in WOG-83 on a plant specific basis.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.1-02	12/5/97	Closed

NRC Description of Issue

3.7.1-2 JFD Bases C.4
STS B3.7.1 Bases - BACKGROUND
ITS B3.7.1 Bases - BACKGROUND

ITS B3.7.1 Bases - BACKGROUND modifies STS B3.7.1 Bases - BACKGROUND in accordance with TSTF-44 Revision 1. TSTF-44 Rev. 0 was rejected by the staff and TSTF-44 Revision 1 has not been submitted for staff review. Thus this change is considered a beyond scope of review item for this conversion. See Item Number 3.6.3-1. Delete this generic change.

ComEd Response to Issue

10/23/98 Revised Response: Per discussions with the NRC Reviewer, TSTF-44 was withdrawn from the ITS submittal. Bases JFD 3.7-C4 was deleted and Bases JFD 3.7-P51 was created for the corresponding Bases changes for ITS B 3.7.1 and 3.7.4. This change is provided in our comprehensive ITS Section 3.7 closeout submittal Revision N.

Original Response: No change. ComEd disagrees that the paragraphs added to the Background and Applicable Safety Analysis Sections of the Bases for LCO 3.7.1 are beyond scope. The CIV function of the MSSVs is addressed by LCO 3.6.3 in both CTS and ITS. One of the several changes TSTF-44 proposed, provided additional information in Bases B.3.7.1. The specific statements ComEd added were, "The MSSVs also serve as Containment Isolation Valves (CIVs); however, the CIV function is addressed in LCO 3.6.3, "Containment Isolation Valves"," and "The MSSVs are also credited as CIVs (refer to LCO 3.6.3)." These statements are being maintained in the Bases since they do not change any technical information or intent as provided by NUREG-1431. The changes do not alter any Required Actions, Completion Times, or Surveillance Testing Frequencies. The only intent is to provide a more accurate description of both the Byron and Braidwood plant designs and to better assist the operators in locating associated LCOs. Although originally part of TSTF-44, the human factors benefit and enhancement obtained from these changes justifies them being pursued on a plant specific basis. Bases JFD 3.7-C4 will be deleted and a 'P' Bases JFD created to justify these changes. ComEd continues to pursue this change. (See RAI 3.7.4-3.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.1-03	12/5/97	Closed

NRC Description of Issue

3.7.1-3 None
STS B3.7.1 Bases - LCO
ITS B3.7.1 Bases - LCO
ITS B3.7.1 Bases SR 3.7.1.1

ITS B3.7.1 Bases - LCO relocates the third paragraph of STS B3.7.1 Bases - LCO which states "The lift settings, ... and pressure" to ITS B3.7.1 Bases SR 3.7.1.1. No justification is provided for this generic change. Comment: Delete this generic change or provide a discussion and justification for the relocation based on current licensing basis, system design or operational constraints.

ComEd Response to Issue

10/23/98 Revised Response: ComEd adopted the STS. This change is provided in our comprehensive ITS Section 3.7 closeout submittal Revision N.

Original Response: ComEd will develop a 'P' Bases JFD to describe moving the third paragraph of the LCO Section of the Bases to the end of the second paragraph of the Bases for SR 3.7.1.1 in the Surveillance Requirements Section of the Bases for LCO 3.7.1. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.2-01	12/5/97	Closed

NRC Description of Issue

3.7.2-1□DOC A.2
□□DOC A.10
□□DOC M.2
□□DOC L.6
□□DOC L.7
□□JFD C.6
□□JFD C.8
□□JFD Bases B.2
□□JFD Bases C.7
□□JFD Bases C.8
□□CTS 3.7.1.5 ACTIONS
□□STS 3.7.2 ACTIONS and Associated Bases
□□ITS 3.7.2 ACTIONS and Associated Bases

CTS 3.7.1.5 ACTIONS have been modified by a number of changes designed A.2, A.10, M.2, L.6, L.7 to reflect the changes made to STS 3.7.2 ACTIONS and Associated Bases by TSTF-102 and WOG-64. These changes are designed C.6 and Bases C.7 for TSTF 102 and C.8, Bases B.2 and Bases B.8 for WOG-64. TSTF-102 has been rejected by the staff while it is our understanding that WOG-64 has been withdrawn. Comment: Revise the CTS/ITS markups to delete these generic change and provide the appropriate CTS/ITS markups to reflect the CTS or the STS. Provide any additional discussions and justifications for the changes.

ComEd Response to Issue

10/23/98 Revised Response: ComEd withdrew the changes associated with TSTF-281 (WOG-64) from the ITS submittal. This change is provided in our comprehensive ITS Section 3.7 closeout submittal Revision N.

Original Response: ComEd will revise the ITS submittal to delete the changes proposed by TSTF-102. However, WOG-64 is under TSTF consideration and ComEd continues to pursue the change on a plant specific basis. WOG-64 was created for consistency with the changes to NUREG LCO 3.6.3 (CIVs) Condition C for extending the Completion Time to 72 hours. This change was approved by the NRC in TSTF-30, Revision 2, in May 1997. The justification is that the MSIVs fall into the same classification of valves that NUREG LCO 3.6.3 Condition C valves fall into. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.2-02	12/5/97	Closed

NRC Description of Issue

3.7.2-2□DOC A.10
□□CTS 3.7.1.5 ACTION - MODE 1
□□ITS 3.7.2 ACTION B

CTS 3.7.1.5 ACTION MODE 1 requires that if one MSIV cannot be restored to OPERABLE status in 4 hours, then be in HOT STANDBY (MODE 3) in 6 hours and in HOT SHUTDOWN in another 6 hours. ITS 3.7.2 ACTION B only requires the unit in MODE 2 for one inoperable MSIV not restored within the Completion Time. This is not an administrative change as identified by A.10 but a less restrictive change. Comment: Revise the submittal, provide additional discussion and technical justification for this Less Restrictive change.

ComEd Response to Issue

No change. ComEd disagrees. CTS 3.7.1.5 "Action for MODE 1" requires that if one MSIV cannot be restored to OPERABLE status in 4 hours, then action must be taken to place the unit in HOT STANDBY (MODE 3) in 6 hours. Once the unit reaches MODE 2, CTS 3.7.1.5 "Action for MODES 2 and 3" allows subsequent operation in MODE 2 or 3 provided the MSIV is closed. Otherwise, the unit must continue shutting down in accordance with the Action for MODE 1. ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.2-03	12/5/97	Closed

NRC Description of Issue

3.7.2-3□DOC M.3
□□JFD P.6
□□JFD Bases P.7
□□CTS 4.7.1.5
□□STS SR 3.7.2.1
□□ITS SR 3.7.2.1
□□ITS SR 3.7.2.2 and Associated Bases

CTS 4.7.1.5 requires the verification of full closure of each MSIV in 5 seconds when tested in accordance with CTS 4.0.5. The equivalent STS SR for this CTS requirement is STS 3.7.2.1. The ITS markup breaks STS SR 3.7.2.1 into two SRs - ITS SR 3.7.2.1 (verification of closure is 5 seconds) and ITS SR 3.7.2.2 (verification of closure by actual or simulated signal). The justification for this change (P.6) is that if the valve fails the closure time SR, there is no need to perform a full actuation test (ITS SR 3.7.2.2) since closure time can be measured without this test. This change is considered to be a generic change which is beyond the scope of review for this conversion. See Item Number 3.7.3-2. Comment: Delete this generic change.

ComEd Response to Issue

10/23/98 Revised Response: TSTF-289 (WOG-98) was approved by the NRC.

Original Response: No change. ComEd disagrees that this is a beyond scope change since it does not change any technical requirements, testing procedures, or isolation times supporting the UFSAR analysis. This change is consistent with current licensing basis and the methodology currently used to test the subject valves. The CTS requires, Each MSIV shall be demonstrated OPERABLE by verifying full closure within 5 seconds when tested pursuant to Specification 4.0.5. This provided the means of testing the full closure of the MSIVs within their UFSAR required time. The CTS testing did not restrict this testing solely on using the actuated or simulated signals. Based on the Braidwood and Byron design basis, verifying that the valves fully close within the required time is adequate. STS SR 3.7.2.1 requires verifying that each MSIV actuates to the isolation position on an actual or simulated actuation signal. Although an approved method, this requirement is by no means the only test verifying that the MSIVs close within the time supporting the accident analysis. ComEd chose to divide the STS SR into two separate SRs. The reason is that if an alternate, but reliable and accepted, method is used and the valves do not met the required stroke time, then it is unnecessary to cycle the MSIVs an additional time just for the sake of using an actual or simulated actuation signal. Both ITS SR 3.7.2.1 and 3.7.2.2 provide the same level of assurance and verification that the MSIVs are OPERABLE with regard to their closure time. ComEd continues to pursue this change. (See RAIs 3.7.3-02 and 3.7.3-03.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.2-04	12/5/97	Closed

NRC Description of Issue

3.7.2-4 JFD P.28
JFD Bases P.5
JFD Bases P.6
CTS 3/4.6.3
CTS 3/4.7.1.5
ITS 3.6.3 APPLICABILITY
STS 3.7.2 APPLICABILITY
ITS 3.7.2 APPLICABILITY and Associated Bases.

The APPLICABILITY of CTS 3.6.3 and ITS 3.6.3 is MODES 1, 2, 3, and 4. The APPLICABILITY of CTS 3.7.1.5 is MODES 1, 2, and 3. The APPLICABILITY of STS 3.7.2 is MODE 1 and MODES 2 and 3 except when the ... valves are closed and de-activated. ITS 3.7.2 APPLICABILITY changes the STS APPLICABILITY to MODES 1, 2 and 3. Contrary to P.28 this is not consistent with CTS 3.6.3 or ITS 3.6.3. Also, this doe snot address the importance of the phrase "except when ... deactivied" which means the valves are performing their isolation function when they are closed and hence the LCO does not apply. This change is considered to be a generic change and is a beyond scope of review item for this conversion. See Item No. 3.7.3-5. Comment: Delete this generic change.

ComEd Response to Issue

10/23/98 Revised Response: Per discussions with the NRC Reviewe , ComEd adopted the STS Applicability. This change is provided in our comprehensive ITS Section 3.7 closeout submittal Revision N.

Original Response: Consistent with the ComEd Response to RAI 3.6.3-01, TSTF-44 will be withdrawn from the ITS submittal. ComEd is deleting LCO 3.7.3, "FW Isolation Valves," from the ITS submittal and retaining the requirements for feedwater valves in ITS LCO 3.6.3, "Containment Isolation Valves," consistent with Byron/Braidwood Current Licensing Basis. In addition, LCO JFD 3.7-P28 will be revised to read "Consistent with CTS LCO 3.7.1.5, the Applicability of ITS LCO 3.7.2 is revised to MODES 1, 2, and 3, with no provisions for exclusion if all the valves are closed." This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.2-05	12/5/97	Closed

NRC Description of Issue

3.7.2-5 JFD Bases C.4
ITS B3.7.2 Bases

Comment: See Item Number 3.6.3-1

ComEd Response to Issue

10/23/98 Revised Response: TSTF-44 does not apply. TSTF-44 was withdrawn from the ITS submittal. See RAI 3.6.3-01. This change is provided in our comprehensive ITS Section 3.7 closeout submittal Revision N.

Original Response: ComEd will develop a 'P' Bases JFD for the justification of adding the paragraph to the Background Section of the Bases for LCO 3.7.1. This is still a true statement even with TSTF-44 withdrawn. In addition, Bases JFD C4 will be deleted. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.2-06	12/5/97	Closed

NRC Description of Issue

3.7.2-6 STS B3.6.2 Bases - SR 3.7.2.1
ITS B3.7.2 Bases - SR 3.7.2.1

STS B3.7.2 Bases - SR 3.7.2.1 states the following in the last paragraph: "The test is conducted in MODE 3 with the unit at operating temperature and pressure as discussed in Reference 5 exercising requirements." ITS B3.7.2 Bases - SR 3.7.2.1 deletes the last part of this sentence "as discussed ... requirements." No justification is provided for this deletion. Comment: Provide a discussion and justification for this deletion based on current licensing basis, system design, or operational constraints.

ComEd Response to Issue

ComEd will conform to the STS. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.3-01	12/5/97	Closed

NRC Description of Issue

3.7.3-1 DOC A.5
DOC A.37
DOC A.38
DOC A.39
DOC A.41
DOC A.47
DOC M.11
DOC LA.34
DOC LA.35
DOC LA.37
DOC L.25
DOC L.26
JFD C.6
JFD P.6
JFD P.20
JFD P.27
JFD P.28
JFD Bases C.4
JFD Bases C.7
JFD Bases P.6
JFD Bases P.7
JFD Bases P.36
JFD Bases P.48
CTS 3/4.6.1.1
CTS 3/4.6.3
STS 3.7.3 and Associated Bases
ITS 3.6.3
ITS 3.7.3 and Associated Bases

CTS 3/4.6.1.1 and 3/4.6.3 contain the requirements for all feedwater valves which perform a containment isolation function. These requirements have been retained in the ITS in ITS 3.6.3 (See Item Number 3.6.3-1). The CTS does not contain a feedwater isolation valve LCO that addresses the other safety function OPERABILITY requirements. (See STS B3.7.3 Bases). It is acceptable to add ITS 3.7.3 under the guidance of NUREG-1431, based on these other safety function OPERABILITY requirements, not the containment isolation function, even though some of the ACTIONS and SRs may be the same as required by CTS 3/4.6.1.1, and 3/4.6.3, and ITS 3.6.3. In addition, this new LCO as described by justifications A.5 and M.11 have been altered by rejected generic changes - TSTF-44 (see Item Numbers 3.6.3-1, 3.7.1-2, 3.7.2-5, and 3.7.4-3) and TSTF-102 (see Item Number 3.7.2-1), as well as other changes which the staff considers to be generic. Comment: Revise the CTS /ITS markup to delete the reference to and markups of CTS 3/4.6.1.1 and 3/4.6.3 and TSTF- 44 and TSTF-102. Refer to Item Numbers 3.7.3-2, 3.7.3-3, 3.7.3-4, and 3.7.3-5 for additional comments that reflect changes to the CTS markup of justification M.11 (CTS Insert 3.6.1-A).

ComEd Response to Issue

10/23/98 Revised Response: ComEd is not adopting NUREG 3.7.3 based on Current Licensing Basis (CLB). The feedwater isolation valves will continue to be covered under ITS 3.6.3, CIVs. Since the FW Isolation Valve specification has been deleted from the Byron/Braidwood ITS submittal, ITS 3.7.17, "Secondary Specific Activity," has been moved from the end of Section 3.7 to the position of ITS 3.7.3. The RAI associated with the Secondary Specific Activity specification continues to be numbered as 3.7.17-01, although the specification number has changed. This change is provided in our comprehensive ITS Section 3.7 closeout submittal Revision N.

Original Response: Consistent with the ComEd Response to RAI 3.6.3-01, TSTF-44 will be withdrawn from the ITS submittal. ComEd is deleting LCO 3.7.3, "FW Isolation Valves," from the ITS submittal and retaining the requirements for feedwater valves in ITS LCO 3.6.3, "Containment Isolation Valves," consistent with Byron/Braidwood Current Licensing Basis. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's

concurrence with the ComEd Responses to the ITS Section 3.7 RAI. (See RAI 3.6.3-01.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.3-02	12/5/97	Closed

NRC Description of Issue

3.7.3-2□DOC M.11
□□DOC L.25
□□JFD P.6
□□JFD Bases P.7
□□STS SR 3.7.3.1
□□ITS SR 3.7.3.1
□□ITS SR 3.7.3.2 and Associated Bases

The ITS markup breaks STS SR 3.7.3.1 into two SRs - ITS SR 3.7.3.1 (verification of closure in specified time limit) and ITS SR 3.7.2.2 (verification of closure by actual or simulated signal). The justification for this change (P.6) is that if the valve fails the closure time SR, there is no need to perform a full actuation test (ITS SR 3.7.3.2) since closure time can be measured without this test. This change is considered to be a generic change which is beyond the scope of review for this conversion. See Item Number 3.7.2-3. Comment: Delete this generic change.

ComEd Response to Issue

See ComEd Response to RAI 3.7.3-01.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.3-03	12/5/97	Closed

NRC Description of Issue

3.7.3-3□DOC M.11
□□JFD P.6
□□JFD P20
□□JFD Bases P.36
□□STS SR 3.7.3.1 and Associated Bases
□□ITS SR 3.7.3.1 and Associated Bases

STS SR 3.7.3.1 and its Associated Bases specifies the closure time of [7] seconds for each main feedwater isolation valve. Justification P.6 separates STS 3.7.3.1 into two SRs (see Item 3.7.3-2). Justification P.20 and Bases P.36 relocates the closure time for the FW isolation valves to the TRM. While the staff finds the modification made by ITS SR 3.7.3.1 of STS SR 3.7.3.1 in which the specific closure time is changed to "within limits" due to the number of valves involved and the different closure times, we do not find the relocation of the times to the TRM as acceptable. The times should be listed in the ITS B3.7.3 Bases - SR 3.7.3.1 as is specified in the STS and to be consistent with other multi-limit components in other LCOs. In addition the staff finds that the relocation of the closure times to the TRM and associated changes to the Bases (Bases P.36) to be generic. Comment: Revise ITS B3.7.3 Bases - SR 3.7.3.1 to include the closure times for each FW isolation valve.

ComEd Response to Issue

See ComEd Response to RAI 3.7.3-01.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.3-04	12/5/97	Closed

NRC Description of Issue

3.7.3-4□DOC M.11
□□JFD P.27
□□JFD Bases P.48
□□STS 3.7.3 ACTIONS Note
□□ITS 3.7.3 ACTIONS Note 2 and Associated Bases

ITS 3.7.3 adds the following Note to the ACTIONS section: "2. Flow path(s) may be unisolated intermittently under administrative controls." While this statement is acceptable in STS/ITS 3.6.3, it has not been approved for STS 3.7.3, nor according to CTS 4.6.1.1a and CTS Table 3.6-1 have the FW isolation valves been granted this exception. Thus the staff considers this change to be generic and beyond the scope of review for this conversion. Comment: Delete this generic change.

ComEd Response to Issue

See ComEd Response to RAI 3.7.3-01.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.3-05	12/5/97	Closed

NRC Description of Issue

3.7.3-5□DOC M.11
□□JFD P.28
□□JFD Bases P.6
□□CTS 3/4.6.3
□□ITS 3.6.3 APPLICABILITY
□□STS 3.7.3 APPLICABILITY
□□ITS 3.7.3 APPLICABILITY and Associated Bases

The APPLICABILITY of CTS 3.6.3 and ITS 3.6.3 is MODES 1,2,3, and 4. The APPLICABILITY of STS 3.7.3 is MODES 1, 2, and 3 except when ... is closed and [de-activated][or isolated by a closed manual valve]. ITS 3.7.3 APPLICABILITY changes the STS APPLICABILITY to MODES 1, 2 and 3. Contrary to P.28 this is not consistent with CTS 3.6.3 or ITS 3.6.3. Also this does not address the importance of the phrase "except when ... valve." which means the valves are performing their isolation function when they are closed and hence the LCO does to apply. This change is considered to be a generic change and is a beyond the scope review item for this conversion. See Item Number 3.7.2-4. Comment: Delete this generic change.

ComEd Response to Issue

See ComEd Response to RAI 3.7.3-01.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.3-06	12/5/97	Closed

NRC Description of Issue

3.7.3-6□JFD Bases P.36
□□STS B 3.7.3 Bases - LCO
□□ITS B 3.7.3 Bases - LCO

STS B 3.7.3 Bases - LCO the last sentences in the first paragraph states the following: "These valves will also isolate the non-safety related portions from the safety related portions of the system." ITS B 3.7.3 Bases - LCO deletes this sentence. No justification is provided except for the general justification (Bases P.36) on system design. This is an inadequate justification for the change. The deletion of this statement implies that all of the main feedwater system is safety related. Comment: Provide additional discussion and justification for this deletion based on current licensing basis, system design, or operational constraints.

ComEd Response to Issue

See ComEd Response to RAI 3.7.3-01.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.3-07	12/5/97	Closed

NRC Description of Issue

3.7.3-7□JFD Base P.36
□□STS B 3.7.3 Bases - SR 3.7.3.1 and REFERENCES
□□ITS B 3.7.3 Bases - SR 3.7.3.1 and REFERENCES

STS B 3.7.3 Bases - SR 3.7.3.1 states the following in the first paragraph: "These valves should not be tested at power .... ASME Code, Section XI (Ref.2) ... operation in MODES 1 and 2." ITS B 3.7.3 Bases - SR 3.7.3.1 deletes these sentences and Reference 2 from the REFERENCE Section. No justification is provided except for the general justification (Base P.36) on system design. This is an inadequate justification for this change. Comment: Provide additional discussion and justification for this deletion based on current licensing basis, system design, or operational constraints.

ComEd Response to Issue

See ComEd Response to RAI 3.7.3-01.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.4-01	12/5/97	Closed

NRC Description of Issue

3.7.4.1 DOC M.11
JFD B.19
JFD P.2
JFD Bases P.2
JFD Bases B.15
STS 3.7.4 APPLICABILITY
STS 3.7.4 RA C.2 and Associated Completion Time
ITS 3.7.4 APPLICABILITY and Associated Bases
ITS 3.7.4 RA C.2, Associated Completion Time and Associated Bases

STS 3.7.4 APPLICABILITY and the APPLICABILITY of a number of other 3.7 STS require the SG PORVs to be OPERABLE in "MODE 4 when the steam generator is relied upon for heat removal." STS 3.7.4 RA C.2 requires if the Required Action and Associated Completion Times are not met, the plant must "Be in MODE 4 without reliance upon steam generator for heat removal" in a Completion Time of 18 hours. The other 3.7 STS either have similar ACTIONS or different ACTIONS as well as additional notes to LCOs and SRs which relate to the system's OPERABILITY in MODE 4 when the steam generator is relied upon for heat removal. ITS 3.7.4 and the other 3.7 STS have been modified to delete this OPERABILITY requirement and change the associated ACTIONS, Completion Times and Notes. These changes in ITS 3.7.4 are designated as B.19, P.2, Bases P.2 and Bases B.15 (see Item Numbers 3.7.5-3 and 3.7.6-1 for applicable DOCs and JFDs). This proposed change was submitted to the staff in TSTF-29 and rejected, based on the fact that the change over from Auxiliary Feedwater (AF) System to Residual Heat Removal (RHR) System does not take place exactly at the MODE 3 to MODE 4 change over but at some time into MODE 4, as well as the fact that the AF System is also used for startup in MODE 4. Comment: Delete this change.

ComEd Response to Issue

No change. ComEd disagrees. The proposed changes discussed by the reviewer are not as a result of TSTF-29 although many of the ComEd changes are also addressed in the subject TSTF. The changes made by ComEd are current licensing basis changes and reflect the design and operation of our plant. The proceduralized point for RHR initiation and the design of the RHR System is such that RHR is placed in shutdown cooling at the MODE 3/MODE 4 transition point. ComEd continues to pursue these changes on a plant specific basis. (See RAI 3.7.5-03 and RAI 3.7.6-01.) (Correction Note: Auxiliary Feedwater is not used for startup at Byron and Braidwood Stations.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.4-02	12/5/97	Closed

NRC Description of Issue

3.7.4-2□DOC M.11
□□JFD P.24
□□JFD Bases P.44
□□STS 3.7.4 RA A.1 Completion Time
□□ITS 3.7.4 RA A.1 Completion Time

With one SG PORV line inoperable, ITS 3.7.4 RA A.1 Completion Time has been extended from the STS specified 7 days to 30 days. The basis is that it has taken longer than 7 days in the past to restore a SG PORV line to OPERABLE status. This is an inadequate justification because the issue not addressed should be re-establishing in a timely manner the safety assumption for an SGTR event. In addition no information is provided to show that the SG PORVs at Byron/Braidwood are any different than the PORVs/ADVs at other plants that would require this 4 fold increase in the Completion Time. Comment: Delete this change or provide additional discussion and technical justification to show that the valves are sufficiently different from the PORVs/ADVs at other plants.

ComEd Response to Issue

ComEd disagrees. NUREG LCO 3.7.4 Required Action A.1 Completion Time was changed from 30 days to 7 days. The 30 days was based on past history to perform maintanence and Environmental Qualification overhauls on the SG PORVs. In addition, ComEd has performed a plant specific PRA which was approved by NRC letter dated October 27, 1997. Contained in the PRA was an evaluation of the SG PORVs being out-of-service for 30 days which was documented in Probabilistic Safety Assessment (PSA) sensitivity calculation BWR-97-0938. The risk associated with having the SG PORV out-of-service for 30 days every 2 years was 1.14E-05. This value shows that there is no significant difference in the probability or severity of core damage that would result during an accident. This 30 days out-of-service time has also been incorporated into the ComEd Maintenance Rule Program. There are only four (4) plants that have similar actuators as the Braidwood/Byron BW/IP, Elector-Hydraulic Operator. The four plants are Beaver Valley, Nine Mile, River Bend, and Vogtle. Of the four plants, only Beaver Valley & Nine Mile have these actuators installed in similar applications. Beaver Valley & Nine Mile have seen the same performance problems as Braidwood & Byron. River Bend and Vogtle have the actuator installed in continuously modulating applications. ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.4-03	12/5/97	Closed

NRC Description of Issue

3.7.4-3□JFD C.4
□□ITS B3.7.4 Bases - BACKGROUND AND APPLICABLE SAFETY ANALYSES

ITS B3.7.4 Bases add words to the BACKGROUND and APPLICABLE SAFETY ANALYSES section that states that the SG PORVs are containment isolation valves (CIV) and the CIV function is addressed ITS 3.6.3 "Containment Isolation Valves." While the statements are true the justification (C.4) used to add the statements is unacceptable. C.4 refers to TSTF-44, Rev. 1. TSTF-44 Rev. 0 has been rejected by the staff and TSTF-44 Rev. 1 has not been submitted for staff approval. This change is considered a beyond scope of review item for this conversion. See Item Number 3.6.3-1. Comment: Delete this generic change.

ComEd Response to Issue

10/23/98 Revised Response: See RAI 3.7.1-02.

Original Response: No change. ComEd disagrees that the paragraphs added to the Background and Applicable Safety Analysis Sections of the Bases for LCO 3.7.4 are beyond scope. The CIV function of the SG PORVs is addressed by LCO 3.6.3 in both CTS and ITS. One of the several changes TSTF-44 proposed, provided additional information in Bases B.3.7.4. The specific statements ComEd added were, "The SG PORVs also serve as Containment Isolation Valves (CIVs); however, the CIV function is addressed in LCO 3.6.3, "Containment Isolation Valves"," and "The SG PORVs are also credited as CIVs (refer to LCO 3.6.3)." These statements are being maintained in the Bases since they do not change any technical information or intent as provided by NUREG-1431. The changes do not alter any Required Actions, Completion Times, or Surveillance Testing Frequencies. The only intent is to provide a more accurate description of both the Byron and Braidwood plant designs and to better assist the operators in locating associated LCOs. Although originally part of TSTF-44, the human factors benefit and enhancement obtained from these changes justifies them being pursued on a plant specific basis. Bases JFD 3.7-C4 will be deleted and a 'P' Bases JFD created to justify these changes. ComEd continues to pursue this change. (See RAI 3.7.1-02.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.5-01	12/5/97	Closed

NRC Description of Issue

3.7.5-1□DOC A.29
□□JFD P.14
□□JFD Bases P.40
□□CTS 4.7.1.2.2
□□STS SR 3.7.5.5
□□ITS SR 3.7.5.5 and Associated Bases

CTS 4.7.1.2.2 requires "an auxiliary feedwater flow path to each steam generator shall be demonstrated OPERABLE following each COLD SHUTDOWN..." STS SR 3.7.5.5 requires this SR be performed whenever the unit has been in MODE 5 or MODE 6 for greater than 30 days. ITS SR 3.7.5.5 adds "or defueled for a cumulative period of" to the STS SR Frequency. This is a generic change which is a beyond scope of review item for this conversion. Comment: Delete this generic change.

ComEd Response to Issue

10/23/98 Revised Response: TSTF-268 (WOG-96) was approved by the NRC.

Original Response: No change. Byron/Braidwood Stations presented this generic change to the Westinghouse Owner's Group. The traveler is under TSTF consideration as WOG-96. The STS does not provide any specific guidance when the unit is in an undefined condition such as "defueled." Adding the phrase, "whenever unit has been in MODE 5, MODE 6, or defueled for a cumulative period of greater than 30 days," clarifies when the SR is applicable. ComEd continues to pursue this change on a plant specific basis.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.5-02	12/5/97	Closed

NRC Description of Issue

3.7.5-2□DOC LA.4
□□CTS 3.7.1.2.b
□□CTS 4.7.1.2.3

CTS 3.7.1.2.b specifies the minimum diesel day tank volume of the diesel-driven AF system pump and CTS 4.7.1.2.3 specifies the SR needed to be performed and the frequency to demonstrate that the AF system diesel-driven pump is OPERABLE. The justification (LA.4) states that these OPERABILITY requirements are to be relocated to the TRM. The staff finds this unacceptable. The discussion and justification used would also allow the OPERABILITY requirements for the Emergency Diesel Generator (EDG) Fuel Oil System in ITS 3.8 to be relocated to the TRM. The staff finds that CTS 4.7.1.2.3.c may be relocated to the TRM, based on the justifications in the staff Safety Evaluation issued with Amendments 71 for Braidwood and 79 for Byron dated 2/16/97 which relocated the similar EDG requirement (CTS 4.8.1.1.2.f.1)). Based on STS/ITS 3.8, CTS 3.7.1.2.b (day tank volume only) and CTS 4.7.1.2.3.a needs to be retained as SRs in ITS 3.7.5. In addition the fuel oil testing for CTS 4.7.1.2.3.b needs to be retained as an SR in ITS 3.7.5, however the details of the testing (ASTM Standards) may be relocated to ITS 5.5.13. Comment: Revise the CTS and ITS submittals accordingly and provide any additional discussion and justification to support these changes.

ComEd Response to Issue

10/23/98 Revised Response: CTS SRs 4.7.1.2.3.a and 4.7.1.2.3.b were retained in ITS as SRs 3.7.5.2 and 3.7.5.7. This change is provided in our comprehensive ITS Section 3.7 closeout submittal Revision N.

Original Response: No change. ComEd disagrees that CTS 3.7.1.2.b and 4.7.1.2.3 need to be incorporated into the ITS. The information contained in these two CTS subparts require that in order for the auxiliary feedwater pump diesel to be demonstrated OPERABLE, the diesel day tank shall maintain a volume of 420 gallons of diesel fuel oil. This is to be verified every 31 days. In addition, every 18 months the diesel shall be inspected in accordance with the manufacturer's recommendations. The NRC reviewer states that the staff finds relocating these requirements to the TRM is unacceptable and they are needed to demonstrate OPERABILITY of the diesel pump. Essentially all CTS SRs make a generic introductory statement that a specific component or piece of equipment shall be demonstrated OPERABLE by the successful performance of a specific SR. Almost all of the CTS SRs relocated to the TRM contain the exact same statement of demonstrating OPERABILITY through the performance of the SR. The difference between retaining specific requirements in the ITS or relocating them to a licensee controlled document (i.e., TRM) is if the requirement meets the NRC criteria as stated in 10CFR50.36(c)(2)(ii). In this specific case, the requirements being relocated do not meet the NRC acceptance criteria as stated in 10CFR50.36(c)(2)(ii). Relocating the subject SRs to a licensee controlled document does not eliminate these requirements, does not change frequency of verifying the diesel fuel oil volume, nor eliminate any inspections being performed in accordance with the manufacturer's recommendations. ComEd feels that these requirements are still essential and relocating them to a licensee controlled document does not in any way lessen their importance. Once these requirements are maintained in a licensee controlled document any changes would be subject to a 10CFR50.59 evaluation. In addition, all the STS 3.7.5 SRs as stated in NUREG-1431, are maintained in the ITS with minor changes made to accommodate plant design and current licensing basis. These SRs have been identified by the NRC and industry as adequate to demonstrate OPERABILITY from a STS point of view. Based on the fact that the subject requirements are maintained in a licensee controlled document as required by he NRC 10CFR50.36(c)(2)(ii) the ITS will not be revised to incorporate these requirements. ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.5-03	12/5/97	Closed

NRC Description of Issue

3.7.5-3□DOC L.2
□□JFD P.2
□□JFD Bases B.2
□□JFD BasesP.2
□□JFD Bases P.8
□□CTS 3.7.1.2 ACTION b.
□□ITS LCO 3.7.5 Note
□□ITS 3.7.5 APPLICABILITY
□□ITS 3.7.5 ACTIONS
□□ITS SR 3.7.5.3 Note
□□ITS SR 3.7.5.4 Note and Associate Bases

Comment: See Item Number 3.7.4-1.

ComEd Response to Issue

Reference ComEd response to RAI 3.7.4-01.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.5-04	12/5/97	Closed

NRC Description of Issue

3.7.5-4□JFD B.6
□□JFD C.1
□□ITS 3.7.5 Condition B

ITS 3.7.5 Condition B contains a C.1 change identifier; however, the justifications listing states that C.1 was not used. This appears to be an error since B.6 deletes this portion of the Condition statement. Comment: Revise the submittal to correct this discrepancy.

ComEd Response to Issue

ComEd will delete the 'C1' designator in Condition B of LCO 3.7.5. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.6-01	12/5/97	Closed

NRC Description of Issue

3.7.6-1□JFD B.2
□□JFD P.2
□□JFD Bases B.2
□□JFD Bases P.2
□□ITS 3.7.6 APPLICABILITY
□□ITS 3.7.6 RA B.2 and Associated Bases

Comment: See Item 3.7.4-1

ComEd Response to Issue

See ComEd response to RAI 3.7.4-01.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.6-02	12/5/97	Closed

NRC Description of Issue

3.7.6-2□JFD Bases P.1
□□STS B.37.6 Bases - APPLICABLE SAFETY ANALYSES
□□ITS B3.7.6 Bases - APPLICABLE SAFETY ANALYSES

ITS B3.7.6 Bases - APPLICABLE SAFETY ANALYSES deletes from the third paragraph, second sentence of STS B3.7.6 the following words: "since the Emergency Feedwater Actuation System would not detect a difference in pressure between the steam generators for this break location." This deletion is justified as an editorial change when it is a technical change. No justification provided for this change. Comment: Provide additional discussion and justification to explain this deletion or adopt the STS text.

ComEd Response to Issue

Revised Response: Refer to Bases JFD 3.7-P62. This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: ComEd will provide additional justification for deleting the statement, since Emergency Feedwater Actuation System would not detect a difference in pressure between the steam generators for this break location. This justification will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.6-03	12/5/97	Closed

NRC Description of Issue

3.7.6-3□JFD Bases P8
□□STS B3.7.6 Base LCO
□□ITS B3.7.6 Bases LCO

ITS B3.7.6 Bases - LCO deletes from STS B3.7.6 the entire second paragraph. However, the last sentence in this paragraph which states: "This basis is established in Reference 4 and exceeds the volume required by the accident analysis" appears to be applicable. Comment: Revise the submittal to adopt the STS wording, or provide additional discussion or justification to support its deletion.

ComEd Response to Issue

No change. ComEd disagrees. Reference 4 was deleted from the ITS submittal since there is no Reference 4 listed in the NUREG References Section of the Bases for LCO 3.7.6. The proposed insert B 3.7-33A reflects both the Braidwood and Byron designs. Without being able to verify what the reference is or the analysis it uses, ComEd cannot make the generic statement in the NUREG Bases, "and exceeds the volume required by the accident analysis." ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.7-01	12/5/97	Closed

NRC Description of Issue

3.7.7-1 DOC A.12
DOC M.4
DOC LA.6
JFD P.1
JFD P.7
JFD P.25
JFD Bases P.15
CTS 3.7.3
CTS 3.7.3 ACTIONS
STS 3.77 ACTIONS
ITS LCO 3.7.7
ITS 3.7.7 ACTIONS and Associated Bases

ITS B3.7.7 Bases - BACKGROUND states that the CC System is a shared system consisting of five pumps (four unit-specific and one common), three heat exchangers (two unit specific and one common), and two unit-specific surge tanks. There are no indications in the CTS or ITS associated Bases that this system is shared between the units and no indication of inter-unit dependence in the CTS. For example when the common heat exchanger is inoperable and regardless of which MODE each unit may be in, both units must simultaneously enter the appropriate ACTIONS. The STS did not consider shared unit operation of a system. ITS LCO 3.7.7 and its associated Bases seems to address shared system OPERABILITY, however, ITS 3.7.7 ACTIONS still are based on a per unit basis with no indication of the various system alignments or of inter-unit dependence. Based on the staff's review of the information submitted and the FSAR we believe that CTS 3.7.3 ACTIONS and the proposed ITS 3.7.7. ACTIONS do not seem to cover all potential system configurations, unit operational MODES and inoperabilities. Comment: In order to fully understand the system and the proposed ITS, provide a complete listing of all possible system configurations. The listing for the plant (both units) is to include the following for each configuration.

a. The pumps, heat exchangers and loops required to be OPERABLE.
b. The operating MODE for each unit (both operating and one unit operating with the other unit shutdown.
c. The ACTIONS to be taken with one or more components inoperable.

Revise ITS 3.7.7 ACTIONS based on the results of the above listing and unit inter-dependence. The items that may have to be considered in the revised ACTIONS are loss of function (LCO 3.0.3 entry), entering more than one ACTION currently (STS 1.3 Example 1.3-3 and correct placement of Notes. Note: A Note such as that proposed for ITS 3.7.10, ITS 3.7.11, and ITS 3.7.12 (see Item Numbers 3.7.10-1, 3.7.11-1 and 3.7.12-1 respectively) may not be adequate to resolve this concern. Provide any additional discussions and justifications as appropriate.

ComEd Response to Issue

Revised Response: Per discussions with the NRC Reviewer, the Surveillance Requirements Section of the Bases for ITS LCO 3.7.7 for SR 3.7.7.2 has been revised to include the sentence, "This includes the ability to align the SX system as required to support unit-specific or opposite unit operations. It also includes assuring that the requirements of the ISI and IST programs are satisfied." This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: No change. ComEd disagrees that "there are no indications in ITS Bases that this system is shared between the units." The first sentence in the ITS Bases for LCO 3.7.7 states, "The CC System is a shared system which ... ", the first sentence in Insert B 3.7-36A states, "The shared CC system consists of ... ", among several other places in the ITS Bases. The pumps, heat exchangers, and loops required to be operable are delineated in Insert B 3.7-37A in the LCO Section of the Bases. The operating mode for each unit is specified in the LCO Applicability, and pertains to each unit individually and independently. The actions to be taken with one or more components inoperable are delineated in the Required Actions for the corresponding Conditions. Again, the Conditions apply to each unit individually and independently. ComEd does not believe that any changes need to be made to the ITS LCO or Bases. Each affected unit would independently enter the applicable LCO for this shared system LCO just like each unit would independently enter the applicable LCO for non-shared system LCOs. ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.7-02	12/5/97	Closed

NRC Description of Issue

3.7.7-2□DOC A.40
□□JFD P.17
□□JFD Bases P.15
□□CTS 4.7.3.3.b
□□ITS SR 3.7.7.2 and Associated Bases

CTS 4.7.3.3.b requires verifying that the Essential Service Water (SX) system is available to each CC Heat Exchanger. The ITS adds this requirement at ITS SR 3.7.7.2 and modifies it to verify correct SX system valve position. ITS B3.7.7 Bases - SR 3.7.7.2 states that the SR verifies that the valves are in the correct position or can be aligned to the correct position. In light of the SX system serving a shared system as well as being a shared system with regards to CTS 3.7.4.1, the Bases for SR 3.7.7.2 should be modified to describe what is meant by" can be aligned to the correct position" with regard to the shared portions of the CC and SX Systems. Comment: Revise the Bases for SR 3.7.7.2 accordingly, and provide any additional discussion and justification as necessary.

ComEd Response to Issue

No change. ComEd disagrees. The structure and wording of the SR Bases is consistent with other statements concerning valve alignments in other Bases. ComEd has procedures that identify the correct valve position of each associated valve for a specific plant/valve alignment. With plant procedures maintaining this level of detail, ComEd does not believe that the Bases also need to maintain this level of detail. For consistency, the entire ITS Bases would require review and revision to add this level of detail for similar SRs. ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.7-03	12/5/97	Closed

NRC Description of Issue

3.7.7-3□DOC M.4
□□JFD P.25
□□CTS 3.7.3 ACTIONS - Insert 3.7-11A
□□STS 3.7.7 RA A.1 Note
□□ITS 3.7.7 ACTIONS Note

Justification M.4 states that a Note is added to CTS 3.7.3 ACTIONS consistent with NUREG-1431 STS 3.7.7 RA A.1 Note. The Note requires that the applicable Required Actions be entered if the residual Heat Removal (RHR) System is made inoperable by the inoperable CC system. While the addition of this type of Note is acceptable, M.4 states that this change represents an additional restriction on plant operation. The staff disagrees. The Note does not represent an additional restriction on plant operation. Since the CTS requires cascading with regards to inoperable support systems (CC system is a support system to the RHR system), the NOTE represents current requirements and therefore is an Administrative change. See Item Numbers 3.7.7-1 for Note location and 3.7.7-4 for concerns on Note wording). Comment: Provide additional discussion and justification for this Administrative change.

ComEd Response to Issue

Revised Response: Refer to CTS DOC 3.7-A53. See RAI 3.7.8-05. This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: No change. ComEd disagrees. Due to the alignment of Allowed Outage Times within the CTS, cascading for single train inoperabilities is not necessary and only creates an administrative burden without a compensating increase in safety. For redundant train inoperabilities, the cumulative effect is considered and LCOs are entered commensurate with the level of degradation experienced. Situations which result in a loss of safety function absent a single failure are not permitted. ComEd continues to pursue this change. (See RAI 3.7.8-05 and RAI 3.7.13-04.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.7-04	12/5/97	Closed

NRC Description of Issue

3.7.7-4 DOC M.4
JFD P.25
CTS 3.7.3 ACTIONS - Insert 3.7.11A
STS 3.7.7 RA A.1 Note
ITS 3.7.7 ACTIONS Note

STS 3.7.7 RA A.1 Note states the following: "Enter applicable Conditions and Required Actions of LCO 3.4.6, 'RCS Loops-MODE 4', for residual heat removal loops made inoperable by CCW." ITS 3.7.7 moves the Note from RA A.1 to under ACTIONS (See Item Number 3.7.7-1 for concern on location) and changes the wording from "loops made inoperable" to "loops if made inoperable..." The staff finds this change to be generic and beyond the scope of review for this conversion. See Item Number 3.7.8-3. Comment: Delete this generic change.

ComEd Response to Issue

The relocation of the Note is neither a generic nor beyond scope change, but rather a plant specific change based on the Byron/Braidwood CC system design. The CC system is a shared system that employs two CC pumps per unit, one common CC pump, one CC heat exchanger per unit, and one common heat exchanger. The NUREG was developed based on a stand-alone two train CC system. The proposed change reflects current design which resulted in NUREG Condition A being split into two separate conditions (i.e., Conditions A and B) in ITS. However, the Note was revised to adopt the STS wording. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI. (See RAIs 3.4.14-02, 3.6.2-02, 3.7.8-06, and 3.8.1-22.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.7-05	12/5/97	Closed

NRC Description of Issue

3.7.7-5 JFD P.7
CTS 4.7.3.2.b
STS SR 3.7.7.3
ITS SR 3.7.73 and Associated Bases

CTS 4.7.3.2.b requires verifying that each CC pump starts automatically on a SI test signal at least once per 18 months. STS SR 3.7.7.3 performs the same surveillance on each pump. ITS SR 3.7.7.3 changes the STS wording from "each CC pump" to "required CC pump." This change is not in accordance with the CTS requirements of each pump and no justifications is provided. In addition this change would allow one of the five CC pumps to be inoperable indefinitely. This is unacceptable to the staff. Comment: Revise ITS SR 3.7.7.3 to conform to CTS 4.7.3.2.b with regards to testing of all the CC pumps.

ComEd Response to Issue

No change. ComEd disagrees. CTS 4.7.3.2 states, "At least two component cooling water pumps shall be demonstrated OPERABLE by performing the following: Verifying ... that each component cooling water pump starts ... on a SI test signal." Therefore, by each unit testing its associated unit-specific CC pumps the CTS SR is satisfied. Although not good operating practice, the common CC pump would not be required to be tested per CTS. Therefore, the addition of the word "required" in ITS SR 3.7.7.3 is in accordance the CTS requirements. Additionally, the Staff commented that " ... this change would allow one of the five CC pumps to be inoperable indefinitely." Again, while not good operating practice, CTS LCO 3.7.3 does not require a fifth CC pump to be operable as long as each unit has two operable CC pumps. ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.7-06	12/5/97	Closed

NRC Description of Issue

3.7.7-6□JFD P.8
□□STS SR 3.7.7.2
□□ITS SR 3.7.7.3

ITS SR 3.7.7.3 shows that changes were made to this SR as a result of P.8. Justification P.8 deals with the deletion of STS SR 3.7.7.2 and no changes are show in ITS SR 3.7.7.3 which relate to P.8. Comment: Correct this discrepancy.

ComEd Response to Issue

ComEd agrees that LCO JFD 3.7-P8 is not applicable to ITS SR 3.7.7.3. The LCO markup for ITS SR 3.7.7.3 will be revised in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.8-01	12/5/97	Closed

NRC Description of Issue

3.7.8-1 DOC A.14
DOC M.6
DOC LA.12
JFD P.9
JFD Bases P.18
CTS 3.7.4.1
CTS 3.7.4.1 APPLICABILITY
ITS LCO 3.7.8.b and Associated Bases

CTS 3.7.4.1 and ITS LCO 3.7.8.b require the opposite unit SX train to be OPERABLE for the unit-specific support when the opposite unit is in MODES 5 or 6 or defueled. With the opposite unit in MODE 5 or 6, the SX system serves as a support system with no TS imposed requirements for opposite unit. Thus, its OPERABILITY is determined by the definition of OPERABLE and the system(s) it supports. It is unclear which opposite unit train is required to be OPERABLE for the unit specific support. For example, ITS 3.8.2 requires a Emergency Diesel Generator to be OPERABLE in MODES 5 and 6. By the definition of OPERABLE-OPERABILITY, the associated SX train would be required to be OPERABLE to support EDG operations. Would this opposite unit SX train also be considered as the opposite-unit SX train required to be OPERABLE per ITS LCO 3.7.8.b for the unit specific requirement or would the other opposite unit SX train be the one used. This may involve a reevaluation of the CTS/ITS APPLICABILITY (see Item Number 3.7.8-2). Comment: Provide additional discussion and justification for this concern. Revise the submittal as appropriate.

ComEd Response to Issue

Revised Response: No change to the existing requirements is necessary. The SX System for each unit consists of two separate and independent trains with 100% capacity to satisfy the normal or post-accident requirements associated with the unit. These two trains are normally operated with the cross-tie valves open. In addition, the two units on each site have the capability to cross-tie the SX Systems which exist for each unit. Hence, any pump can be aligned to provide flow to any train on either unit. The ITS requires an opposite-unit SX train to be OPERABLE while in MODES 1, 2, 3, and 4 to enhance the reliability and minimize the risk associated with a total loss of SX. This RAI questions the need to assure that the appropriate SX pump is specified and available on the opposite-unit. However, the design of the plants is such that either opposite-unit pump can be aligned to supply the required flow to the unit-specific SX System. Therefore, no specific requirement for a particular SX train to be available on an opposite-unit is needed to satisfy the reliability requirement for the specific-unit. This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: No change. Since the SX trains are cross-tied, it is not necessary nor desirable to specify in the LCO or Conditions which SX pump is the designated "opposite-unit SX pump." ComEd believes that through continuing operator training, approved plant procedures, and the requirements of CTS, the ITS LCO is not confusing and is understandable as written. ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.8-02	12/5/97	Closed

NRC Description of Issue

3.7.8-2□DOC A.14
□□DOC LA.12
□□CTS 3.7.4.1
□□CTS 3.7.4.1 ACTION

In CTS 3.7.4.1 ACTION, LA.12 indicates a change has been made to refer to the Essential Service Water pump as the "SX trains" in two places; whereas the same change is justified in CTS 4.7.4.1 under A.14. A.14 is acceptable while LA.12 already applies to the relocation of CTS 3.7.4.1. Therefore, the CTS markup should be changed to be consistent. Comment: Revise the CTS markup and provide additional discussion and technical justification for this Administrative change.

ComEd Response to Issue

ComEd agrees that in the CTS 3.7.4.1 markup, the 'LA12' in the Actions should be changed to 'A13', consistent with the change made to CTS SR 4.7.4.1. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.8-03	12/5/97	Closed

NRC Description of Issue

3.7.8-3□DOC A.15
□□DOC M.6
□□JFD Bases P.18
□□CTS 3.7.4 APPLICABILITY
□□CTS 3.7.4.1 APPLICABILITY
□□CTS 3.7.4.2 APPLICABILITY□
□□STS 3.7.8 APPLICABILITY
□□ITS 3.7.8 APPLICABILITY and Associate Bases

CTS 3.7.4 APPLICABILITY specifies that the unit-specific SX System shall be OPERABLE in MODES 1, 2, 3, and 4. CTS 3.7.4.1 includes an APPLICABILITY for the opposite-unit SX system when the opposite-unit is shut down to support the requirements for the specific unit. CTS 3.7.4.2 APPLICABILITY specifies that the unit cross-tie shall be OPERABLE when either unit is in MODES 1, 2, 3 or 4. These three CTS show an inter-unit dependence as well as a sharing of the two units SX system. In converting from the CTS to the ITS the licensee used STS 3.7.8 APPLICABILITY. Thus, ITS 3.7.8 APPLICABILITY is only for MODES 1, 2, 3, and 4. The STS did not consider shared unit operation or inter-unit dependence of a system. Thus, ITS 3.7.8 APPLICABILITY is not equivalent and could lead to confusion since the ITS is presented as a combined TS. Insert B.3.7-2C in ITS B3.7.8 Bases - APPLICABILITY seems to describe the intent of the CTS. Thus, the following is proposed in order to make ITS 3.7.8 APPLICABILITY fit the situation, as claimed by M.6: "APPLICABILITY: MODES 1, 2, 3 and 4 for the Unit-Specific SX; and at all times for the Opposite-unit SX train unit-specific support." The change to the nomenclature of "opposite-unit" and "specific-unit" is accepted. SX performs many functions but foremost is to support the RHR heat exchangers. In a GL 91-13 search for alternate SX water sources, it is reasonable that opposite-unit requirements would apply at power in order have another SX train available to achieve a COLD SHUTDOWN, when required. This is the object of the requirements in the new proposed APPLICABILITY. See Item Number 3.7.8-1 for additional concerns in this area. Comment: Revise the CTS/ITS markup and provide additional discussion and technical justification for changes.

ComEd Response to Issue

Revised Response: Per discussions with the NRC Reviewer, no change is necessary to the Applicability. This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: ITS LCO 3.7.8 Applicability will be modified to read, MODES 1, 2, 3, and 4 for the specific unit. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI. (Correction Note: Insert B 3.7 -2C should be Insert B 3.7-42C.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.8-04	12/5/97	Closed

NRC Description of Issue

3.7.8-4□DOC A.17
□□JFD P.9
□□JFD Bases P.18
□□CTS 4.7.4.2.b
□□ITS 3.7.8 and Associated Bases

CTS 4.7.4.2.b states that the provision of CTS 4.0.4 does not apply which allows entry into the specified MODE without CTS 4.7.4.2.a having been performed. ITS 3.7.8 does not contain this provision, but A.17 states that "precise requirements for performance of SRs are specified in the ITS such that exceptions to SR 3.0.4 are not necessary." These requirements can not be located in ITS 3.7.8 and associated Bases. Comment: Identify what these requirements are and where they are located to verify this justification. Provide additional discussion and technical justification for this Administrative change as necessary.

ComEd Response to Issue

Revised Response: Refer to CTS DOC 3.7-A17. This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: No change. CTS SR 4.7.4.2.b states that the provision of CTS 4.0.4 does not apply. DOC 3.7-A17 states, "... The CTS has been revised to delete this surveillance requirement provision since precise requirements for performance of SRs are specified in the ITS such that exceptions to SR 3.0.4 are not necessary ... ." ITS LCO 3.7.8 applies to unit-specific SX trains and opposite-unit SX trains. Further, ITS SR 3.7.8.3 surveils opposite-unit SX crosstie valves. Therefore, failure to meet SR 3.7.8.3 would constitute failure to meet LCO 3.7.8, and Condition B would be entered for an opposite-unit SX train inoperable. However, since Condition B Note states, "LCO 3.0.4 is not applicable," the unit can change modes while in Condition B. This translates into the unit being able to change modes with SR 3.7.8.3 not met. Therefore, an exception to SR 3.0.4 is not necessary for SR 3.7.8.3. ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.8-05	12/5/97	Closed

NRC Description of Issue

3.7.8-5 DOC M.5
JFD P.25
CTS 3.7.4 ACTIONS Insert 3.7-12 A
STS 3.7.8 RA A.1 Notes
ITS 3.7.8 RA A.1 Notes

Justification M.5 states that two Notes are added to CTS 3.7.4 ACTIONS consistent with NUREG-1431 STS 3.7.8 RA A.1 Notes. The Notes require that the applicable Required Actions be entered if the Residual Heat Removal (RHR) System and Emergency Diesel Generator (EDG) are made inoperable by the inoperable SX System. While the addition of these Notes is acceptable, M.5 states that this change represents an additional restriction on plant operation. The staff disagrees. The Notes do not represent an additional restriction on plant operation. Since the CTS requires cascading with regards to inoperable support system (SX system is a support system to the RHR system and EDG), the Note represents current requirements and therefore is an Administrative change. See Item Number 3.7.8-6 for concerns on Note wording). Comment: Proivde additonal discussion and justification for this Administrative change.

ComEd Response to Issue

Revised Response: Refer to CTS DOC 3.7-A53. See RAI 3.7.7-03. This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: No change. ComEd disagrees. Due to the alignment of Allowed Outage Times within the CTS, cascading for single train inoperabilities is not necessary and only creates an administrative burden without a compensating increase in safety. For redundant train inoperabilities, the cumulative effect is considered and LCOs are entered commensurate with the level of degradation experienced. Situations which result in a loss of safety function absent a single failure are not permitted. ComEd continues to pursue this change. (See RAI 3.7.7-03 and RAI 3.7.13-04.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.8-06	12/5/97	Closed

NRC Description of Issue

3.7.8-6 DOC M.5
JFD P.25
CTS 3.7.3 ACTIONS - Insert 3.7.12A
STS 3.7.8 RA A.1 Note
ITS 3.7.8 RA A.1 Note

STS 3.7.8 RA A.1 Notes state the following: "Enter applicable Conditions and Required Actions ...made inoperable by SWS. ITS 3.7.8 changes the wording from "made inoperable" to "if made inoperable..." The staff finds this change to be generic and beyond the scope of review for this conversion. See Item Number 3.7.7-5. Comment: Delete this generic change.

ComEd Response to Issue

The Note was revised to adopt the STS wording. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI. (See RAIs 3.4.14-02, 3.6.2-02, 3.7.7-04, and 3.8.1-22.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.8-07	12/5/97	Closed

NRC Description of Issue

3.7.8-7□DOC M.6
□□CTS 3.7.4
□□CTS 3.7.4.1 ACTIONS

Justification M.6 states the following: "ITS 3.7.8 Condition B allows a 7 day Completion Time while CTS would allow a total of 7 days and 37 hours." This was based on CTS 3.7.4 ACTIONS (37 hours) and 3.7.4.1 ACTIONS (7 days). The basis for the statement is incorrect. CTS 3.0.3 not CTS 3.7.4 is the correct action to Reference. Comment: Correct this discrepancy in justification M.6.

ComEd Response to Issue

DOC 3.7-M6 will be revised to state, "... If for example, Unit 1 and Unit 2 were operating and both Unit 1 pumps became inoperable, CTS 3.7.4.1 would not be applicable to Unit 2 until Unit 1 had shutdown in accordance with CTS 3.0.3 Actions (37 hours) and then Unit 2 would have 7 days from the time Unit 1 reached Mode 5 ... ." This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.8-08	12/5/97	Closed

NRC Description of Issue

3.7.8-8 DOC LA.12
JFD Bases P.18
CTS 3.7.4.2 ACTION a
ITS 3.7.8 ACTION B
ITS B 3.7 8 Bases - LCO

CTS 3.7.4.2 ACTION a states "With one or both of the crosstie valves(s) closed and not capable of being opened from the Main Control Room, within 7 days restore the valve(s) to available status or open the affected valve(s) and maintain the affected valve(s) open..." ITS 3.7.8 Condition B changes this to opposite-unit SX train inoperable". There is no discussion provided as to why an explicit ITS Required Action is not retained to "...or open the affected valve(s), and maintain the affected valve(s) open;..." This is not covered in LA.12 and there should be a justification for this change. ITS B3.7.8 Bases - LCO states that the flow path from the unit is established or capable or being established. This statement would suffice to meet the CTS ACTION requirement since it would allow the valve to remain inoperable indefinitely. Comment: Revise the CTS/ITS markup to include this CTS ACTION requirement and provide additional discussion and technical justification for these changes.

ComEd Response to Issue

ComEd disagrees. DOC 3.7-LA12 discusses why a specific ITS Required Action is not required for this level of detail and states, "CTS 3.7.4.1 and 3.7.4.2 include details of what constitutes operability of the opposite-unit SX System (pump, and crosstie either open or capable of being opened from the main control room). In addition CTS SR 4.7.4.2 lists equipment part numbers for the crosstie valves. These details are relocated to the ITS Bases. These details are not necessary to ensure the SX System is Operable. The definition of Operability suffices. The requirements of ITS LCO 3.7.8 are adequate for ensuring the SX System is operable. These details are not necessary to be in the TS to ensure the SX System can perform its intended safety function. As such, these details are not required to be in the TS to provide adequate protection of the public health and safety. Including this level of detail in the Bases rather than the Specifications is consistent with ITS format guidelines. Any change to these details is made in accordance with the Bases Control Program described in ITS Section 5.5." The crosstie valve is only one example of what would require entry into ITS LCO 3.7.8 Condition B. In addition, Insert B 3.7-42B (Item b.) to the LCO Section of the Bases states, "An opposite-unit SX train is considered OPERABLE during MODES 1, 2, 3, and 4 when: ... b. A flow path from the opposite unit is established, or capable of being established (including the opposite-unit crosstie valves 1SX005 and 2SX005) ... ." Inherent in the phrase, "A flow path from the opposite unit is established " is the fact that the valve(s) are open and maintained open. Further, ITS SR 3.7.8.3 surveils this requirement. ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.8-09	12/5/97	Closed

NRC Description of Issue

3.7.8-9 DOC LA.13
JFD P.18
CTS 4.7.4.1.a.1
ITS SR 3.7.8.2 and Associated Bases

CTS 4.7.4.1.a.1 requires that the opposite-unit SX pump is capable of being manually started from the Main Control Room at least once per 24 hours. Justification LA.13 states that this requirement is relocated to the TRM, since these requirements consist of panel checks and verification that the pump can be stated. This is not entirely true. ITS B 3.7.8.2 Bases SR 3.7.8.2 states that the pump shall be started from the main control room on a 31 day frequency. Thus, CTS 4.7.4.1.a.1 is included in ITS SR 3.7.8.2 but with a Less Restrictive frequency. Comment: Revise the CTS markup to reflect this Less Restrictive change, and provide additional discussion and justification for this Less Restrictive change.

ComEd Response to Issue

Revised Response: Per discussions with the NRC Reviewer, "started from the control room and" has been deleted from Bases INSERT B 3.7-44A for ITS SR 3.7.8.2. This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: ComEd disagrees. CTS 4.7.4.1.a.1 only requires a verification that the SX pump is capable of being manually started from the Main Control Room every 24 hours (i.e., an indication and availability check only). This SR does not require starting the pump. The SR that requires the pump to run is CTS 4.7.4.1.b which is consistent with ITS SR 3.7.8.2. The ITS nor the NUREG require any verification that the pump can be started from the Main Control Room. This requirement in the CTS did not meet the NRC 10CFR50.36(c)(2)(ii) criteria for inclusion into the ITS and therefore, is relocated to the TRM. Verifying the pump can start every 24 hours and actually running the pump every 31 days are two different requirements. ComEd continues to pursue this change. DOC 3.7-LA13 will be revised to state, "... These requirements consist of panel checks and verification that the opposite-unit pump can be started from the control room, and verification that a flowpath is established or capable of being established from the control room ... ." This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to
the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.8-10	12/5/97	Closed

NRC Description of Issue

3.7.8-10 DOC LA.13
CTS 4.7.4.1.a.2
ITS SR 3.7.8.1
ITS SR 3.7.8.3 and Associated Bases

CTS 4.7.4.1.a.2 requires verifying that the SX system crosstie is established or capable of being established from the Main Control Room at least once per 24 hours. This requirement is shown as being relocate by LA.13. LA.13 only discusses the relocation of CTS 4.7.1.a.1 (SX pump availability), not the cross-tie. This requirement is encompassed by ITS SR 3.7.8.1 and ITS SR 3.7.8.3 but not specifically stated in the associated Bases. In addition, the following would be Less Restrictive (24 hours to 31/92 days). Comment: Revise the CTS/ITS markup to reflect this Less Restrictive change and provide additional discussion and justification for this Less Restrictive change.

ComEd Response to Issue

DOC 3.7-LA13 will be revised to state, "... These requirements consist of panel checks and verification that the opposite-unit pump can be started from the control room, and verification that a flowpath is established or capable of being established from the control room ... ." This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.8-11	12/5/97	Closed

NRC Description of Issue

3.7.8-11□DOC L.9
□□CTS 3.7.4.1
□□ITS 3.7.8 RA B.1

CTS 3.7.4.1 is associated with opposite-unit SX pump requirements. An exception to CTS 3.0.4 exists in CTS 3.7.4.2 for the SX crosstie, which provides the flow path for the opposite-unit pump. Therefore, the ITS 3.7.8 RA B.1 adds a Note which states "LCO 3.0.4 is not applicable". This is acceptable, however, the Note should additionally state that this is applicable "for the unit-specific SX System only", as is stated in the L.9. Since the Note as written could apply to both units when in this conditon, which is not the intent. Also, is the last sentence of L.9 correct in referencing ACTION A, rather that ACTION B; or, is there more than one subject being addressed? It appears there should be a new ACTIONS Note to keep the opposite-unit SX train from being used for opposite-unit MODE changes while supporting the "remaining" unit-specific SX train. Comment: Provide the additional discussion and technical justification as required for this change.

ComEd Response to Issue

ComEd disagrees. As stated in DOC 3.7-L9, the LCO 3.0.4 exception is associated with the opposite-unit, not the specific unit. Therefore, the Note is appropriately located in ITS LCO 3.7.8 Condition B Required Actions. However, in the last sentence of DOC 3.7-L9, a typo was corrected to change "Action A" to "Action B." The sentence now reads, "This will allow the unit-specific unit to change modes while relying on Action B of ITS 3.7.8 which requires restoration of the opposite-unit pump in 7 days." This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.9-01	12/5/97	Closed

NRC Description of Issue

(Byron only) 3.7.9-1□DOC A.1
(Byron)□JFD Bases P.41
□□CTS 3.7.5 ACTIONS
□□ITS 3.7.9 ACTIONS and Associated Bases

The UHS is shared between Units 1 and 2. There are no indications in the CTS that this system is shared between the units and no indication of inter-unit dependence in the CTS. For example, when the system or a component in the system is inoperable and regardless of which MODE each unit may be in both units must simultaneously enter the appropriate ACTIONS. The STS did not consider shared unit operation of a system. Therefore, this ITS needs an ACTIONS Note to clarify that both units will enter the appropriate ACTIONS. The new ACTIONS Note should state: "These ACTIONS shall apply to both units simultaneously." This note will create the inter-unit dependence of the design. Comment: Revise the CTS/ITS markups and Bases to include this ACTIONS Note and provide the appropriate discussions and justifications.

ComEd Response to Issue

Revised Response: ITS LCO 3.0.8 and SR 3.0.5 were added to the submittal consistent with CTS LCO 3.0.5 and CTS ST 4.0.6 for the application of the single set of Technical Specifications to dual units(see Revised Response for RAI 3.0-01). This change was provided in our comprehensive ITS Section 3.0 closeout submittal Revision F.

Original Response: No change. ComEd disagrees. There are several systems that are shared between the two units which do not have any such note added. Operators are trained that if a common system between the two units becomes inoperable, a unit specific OPERABILITY determination is made. In this case, if the UHS becomes inoperable, both units will be made aware and appropriate unit specific action will be taken. This is consistent with other commonly shared systems, structures, or components. ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.9-02	12/5/97	Closed

NRC Description of Issue

(Byron only) 3.7.9-2□DOC A.1
(Byron)□DOC A.34
□□DOC A.35
□□DOC A.48
□□DOC LA.30
□□DOC LA.31
□□DOC L.22
□□DOC L.23
□□DOC L.24
□□JFD P.21
□□JFD Bases P.42
□□CTS 3.7.5 ACTIONS

A number of CTS 3.7.5 ACTIONS have been overlooked and/or modified by the lack of a complete definition of OPERABILITY for the UHS. Some of these CTS requirements have no equivalent ITS 3.7.9 ACTION requirements, others have been proposed as ITS 3.7.9 SRs, and others have been included in plant specific ITS 3.7.9 ACTIONS. These changes have been proposed and justified as Administrative (A), Less Restrictive - Relocated (LA) and Less Restrictive (L) changes some of which have inadequate justifications, are beyond scope or review items, or constitute major changes in the operation of the UHS. The succeeding comments highlight the major concerns and problems found by the staff. See Item Numbers 3.7.9-3, 3.7.9-4, 3.7.9-5, 3.7.9-6, 3.7.9-10, 3.7.9-11 and 3.7.9-13. Comment: In light of the above and the succeeding comments (see Item Numbers 3.7.9-3, 3.7.9-4, 3.7.9-5, 3.7.9-6, 3.7.9-10, 3.7.9-11, and 3.7.9-13). Licensee should re-evaluate or rethink the CTS ACTIONS and the ITS ACTIONS to assure that all the CTS UHS OPERABILITY requirements have been addressed.

ComEd Response to Issue

ComEd has reviewed the NRC RAIs and corrected the ITS ACTIONS where applicable. See ComEd responses to RAI 3.7.9-03, 04, 05, 06, 10, 11, and 13. These changes will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI. (See RAIs 3.7.9-03, 04, 05, 06, 10, 11, and 13.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.9-03	12/5/97	Closed

NRC Description of Issue

(Byron only) 3.7.9-3□DOC A.34
(Byron)□JFD P.21
□□JFD Bases P.42
□□CTS 3.7.5 ACTION a.
□□ITS 3.7.5 ACTION B and Associated Bases

CTS 3.7.5 ACTION a specifies that with a water level of less than 50% in either UHS cooling tower basin, restore the water level to at least 50% in each UHS cooling tower basin within 6 hours. The CTS markup changes "either to "one" and "each" to "the" so that ITS 3.7.5 Condition B would read "One basin level <50%" with a Required Action and Completion Time of "Restore basin level to >50% in "6 hours" respectively. This change has been characterized as an Administrative change (A.34). This change is not an administrative change but a More Restrictive change. As currently written CTS 3.7.5 ACTiON a would allow one or both UHS cooling tower basins to be inoperable due to water level. In that situation, particularly with both basins out, 6 hours is allowed to restore both basins to OPERABLE status, before a shutdown is required. The ITS would require an immediate shutdown per ITS LCO 3.0.3. Comment: Provide a discussion and justification for this more Restrictive change.

ComEd Response to Issue

Revised Response: Included Tech Spec amendment #95 to change basin level from 50 to 60%.

2/6/98 Corrected Response: ComEd will revise ITS 3.7.9 Condition B and Required Action B.1 to address basin levels consistent with CTS 3.7.5 Action a. Condition B will be revised to state, "One or more basin levels < 50%." Required Action B.1 will be revised to state, "Restore both basin levels to 50%." These changes will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI. (See RAIs 3.7.9-02, 04, 05, 06, 10, 11, and 13.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.9-04	12/5/97	Closed

NRC Description of Issue

(Byron only) 3.7.9-4□DOC A.35
(Byron)□DOC LA.30
□□DOC L.22
□□DOC L.23
□□JFD P.21
□□JFD Bases P.42
□□CTS 3.7.5 ACTIONS c and d.1.
□□ITS 3.7.9 ACTION C and Associated Bases

CTS 3.7.5 ACTION C requires the restoration of the inoperable essential service water (SX)makeup pump in either 72 hours (ACTION c.1) or 7 or 14 days depending on the plant conditions specified in ACTION c.2. A.35 states that the restoration time of 72 hours is not included in the ITS 3.7.9 ACTION C, because ITS 3.0.2 allows restorative of the affected component within the time limits of the specified Required Action. L.22 states that the 7/14 day restoration time is based on the availability of other basin makeup sources. Thus, ITS 3.7.9 ACTION C is based on ITS. ACTION e.1 for an inoperable cooling tower basin switch (Automatic SX makeup pump start switch) which allows indefinite operation with an inoperable switch. This is unacceptable to the staff, however, the change in CTS 3.7.5 Action e from cooling tower basin switch to SX makeup pump is acceptable since the switch is a support component necessary for pump OPERABILITY. The current licensing basis requires pump restoration, which ITS 3.7.9 ACTION C does not require. In addition certain assumptions are made with regards to the alternate makeup sources which were not part of the initial staff review. Therefore, the change based on L.22 is considered to be a beyond scope of review item for this conversion. Comment: Revise ITS 3.7.9 ACTION C to include the restoration of the inoperable SX makeup pump to OPERABLE status in accordance with the CTS and provide additional discussions and justifications to support these required changes.

ComEd Response to Issue

Revised Response: ComEd will revise ITS 3.7.9 Required Action C to include the restoration of the SX makeup pump to the OPERABLE status as Required Action C.3. This will require that the SX makeup pump be restored to the OPERABLE status within 7 days if both units are in MODE 1-4, or 14 days if either unit is in MODE 5, 6, or defueled. DOC L22 was modified to clarify the basis for deleting the restriction on use of the 14 day allowed outage time is merely that the cause for an inoperability has no effect on overall plant ability to respond to a design basis event. . This change is provided in our comprehensive ITS Section 3.7 closeout submittal Revision N.

Original Response: ComEd will revise ITS 3.7.9 Required Action C to include the restoration of the SX makeup pump to the OPERABLE status as Required Action C.3. This will require that the SX makeup pump be restored to the OPERABLE status within 7 days if both units are in MODE 1-4, or 14 days if either unit is in MODE 5 or 6. The ITS Bases will be enhanced for RA C.3 to include the reason for the 14 day allowance with either unit in MODE 5 or 6 and a pump inspection and extended maintenance work window scheduled. CTS DOC L22 will be deleted. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI. (See RAIs 3.7.9-02, 03, 05, 06, 10, 11, and 13.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.9-05	12/5/97	Closed

NRC Description of Issue

(Byron only) 3.7.9-5□DOC A.48
(Byron)□DOC L.24
□□JFD P.21
□□JFD P.22
□□JFD Bases P.42
□□JFD Bases P.43
□□CTS 3.7.5 ACTION g
□□ITS ACTION D
□□ITS SR 3.7.9.1
□□ITS SR 3.7.9.4 and Associated Bases

CTS LCO 3.7.5 ACTION g provides one hour to confirm river level and flow, if river level is below 670.6 feel MSL. ITS SR 3.7.9.4 confirms river level on a 24 hour basis, while SR 3.7.9.1 confirms river level and flow on a 12 hour basis if ITS SR 3.7.9.4 is not met. The justification (A.48) states that "If SR 3.7.9.4 is not met. ITS LCO 3.7.9 Condition D would be entered. Condition D requires verification of basin levels and operability of one makeup source within 1 hour. There is always the option to restore compliance with the LCO within the stated Completion Time. Therefore, within the 1 hour, ITS SR 3.7.9.1 could be performed and if the SR was met, Condition D exited." This is not true. If ITS SR 3.7.9.4 is not met, then ITS SR 3.7.9.1 must be met, which would require the immediate performance of this SR. It is conceivable at this time that ITS SR 3.0.3 could apply thus allowing 12 hours to perform this SR, before entering ITS 3.7.9 ACTION D. This is not the intent of the CTS or the ITS. The staff believes that CTS 3.7.5 ACTION g.1 should be retained as a separate ITS ACTION, ITS SR 3.7.9.1 be deleted and ITS ACTION D be modified to include an additional condition for Required Action and Associated Completion Time of the river level ITS ACTION not met. Comment: Revise the CTS/ITS submittal along the lines suggested and provide appropriate additional discussions and justifications.

ComEd Response to Issue

Revised Response: ITS LCO Condition E and F were added to address the CTS action requirements to verify Rock River level within 1 hour and every 12 hours thereafter if the level were to decrease less than or equal to 670.6 ft MSL. This change is provided in our comprehensive ITS Section 3.7 closeout submittal Revision N.

Original Response: ComEd agrees that the requirement to verify river level and flow within one hour in accordance with the requirements of CTS 3.7.5.g should be included in SR 3.7.9.1 and not depend on the Required Action of Condition D. SR 3.7.9.1 would require an initial 1 hour, and every 12 hours thereafter, surveillance frequency if river level is below 670.6 feet MSL. Com Ed does not agree that ITS Required Action D should be modified to include the additional actions for river level. ITS SR 3.7.9.4 will continue to confirm river level on a 24 hour basis, while SR 3.7.9.1 confirms river level and flow within 1 hour from the failure to meet the requirements of ITS SR 3.7.9.4 and every 12 hours thereafter if ITS SR 3.7.9.4 is not met. DOC A48 will be deleted and JFD P22 will be revised to include the requirements of CTS 3.7.5.g. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI. (See RAIs 3.7.9-02, 03, 04, 06, 10, 11, and 13.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.9-06	12/5/97	Closed

NRC Description of Issue

(Byron only) 3.7.9-6□DOC LA.24
(Byron)□DOC L.22
□□CTS 4.7.5 e.4
□□CTS 4.7.5.i

CTS 4.7.5.e.4 and CTS 4.7.5.i require starting the deep well pumps every 31 days and verifying the flow rate once per 18 months. The deep well pumps are not included in ITS 3.7.9 since they are consider as the backup to the SX makeup pumps. The CTS requirements are relocated to the TRM which is acceptable. However, the justification (LA.24) states that the pumps are not directly related to UHS OPERABILITY. This is incorrect. Even though this backup system is a Class II system (per L.22), it serves as a support system to the UHS, thus is directly related to UHS OPERABILITY in that if it is directly related to UHS OPERABILITY in that if it is inoperable ITS 3.7.9 ACTION E would have to be entered. Comment: Corrected this error in justification LA.24.

ComEd Response to Issue

2/6/98 Corrected Response: ComEd disagrees that the deep well pumps are directly related to UHS OPERABILITY. If a deep well pump was declared inoperable with the SX makeup pumps OPERABLE, there would be no reason to enter ITS 3.7.9 Condition E and conduct a plant shutdown. The deep well pumps are only required to be OPERABLE when one of the SX makeup pumps is inoperable, or when weather conditions require a backup source to be operable. ComEd continues to pursue this change. (See RAIs 3.7.9-02, 03, 04, 05, 10, 11, and 13.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.9-07	12/5/97	Closed

NRC Description of Issue

(Byron only) 3.7.9-7 DOC LA.25
(Byron) CTS 4.7.5.e.1
CTS 4.7.5.f
CTS 4.7.5.h

CTS 4.7.5.e.1, 4.7.5.f and 4.7.5.h detail requirements for the OPERABILITY of the diesel portions of the diesel driven SX makeup pumps. These requirements are not included in ITS 3.7.9 but have been relocated to TRM. While the diesel inspection requirement for CTS 4.7.5.h (see Item Number 3.7.9-8 for valve requirements) can be relocated (See Item Number 3.7.5-2), the other diesel requirements must be maintained in the ITS. See Item Number 3.7.5-2 for the reasons for retention. Comment: Revise the CTS and ITS submittals according the discussion in Item Number 3.7.5-2 and provide any additional discussion and justification to support these changes.

ComEd Response to Issue

Revised Response: ITS LCO 3.7.9 was revised to include SR 3.7.9.7 for the level requirement in the SX makeup pump fuel oil supply on a 31 day frequency. Also SR 3.7.9.9 was added to the LCO to verify fuel oil properties tested in accordance with the Diesel Fuel Oil Testing program requirements. These changes are provided in our comprehensive ITS Section 3.7 closeout submittal Revision N.

Original Response: No change. ComEd disagrees that CTS 4.7.5.e.1, 4.7.5.f and 4.7.5.h need to be incorporated into the ITS. The information contained in these CTS SRs require that in order for the diesel powered essential service water makeup pump to be demonstrated OPERABLE, the fuel supply tank shall maintain a volume of 36% diesel fuel oil. This is to be verified every 31 days. Every 92 days the drain sample of diesel fuel from the fuel storage tank is obtained and tested in accordance with a specified ASTM. In addition, every 18 months the diesel shall be inspected in accordance with the manufacturer's recommendations. The NRC reviewer states that the staff finds relocating these requirements to the TRM is unacceptable and they are needed to demonstrate OPERABILITY of the diesel pump. Essentially all CTS SRs make a generic introductory statement that a specific component or piece of equipment shall be demonstrated OPERABLE by the successful performance of a specific SR. Almost all of the CTS SRs relocated to the TRM contain the exact same statement of demonstrating OPERABILITY through the performance of the SR. The difference between retaining specific requirements in the ITS or relocating them to a licensee controlled document (i.e., TRM) is if the requirement meets the NRC criteria as stated in 10CFR50.36(e)(2)(ii). In this specific case, the requirements being relocated do not meet the NRC acceptance criteria as stated in 10CFR50.36(c)(2)(ii). Relocating the subject SRs to a licensee controlled document does not eliminate these requirements, does not change frequency of verifying the diesel fuel oil volume, nor eliminate any inspections being performed in accordance with the manufacturer's recommendations. ComEd feels that these requirements are still essential and relocating them to a licensee controlled document does not in any way lessen their importance. Once these requirements are maintained in a licensee controlled document any changes would be subject to a 10CFR50.59 evaluation. In addition, all the STS 3.7.5 SRs as stated in NUREG-1431, are maintained in the ITS with minor changes made to accommodate plant design and current licensing basis. These SRs have been identified by the NRC and industry as adequate to demonstrate OPERABILITY from a STS point of view. Based on the fact that the subject requirements are maintained in a licensee controlled document as required by 10CFR50.36(c)(2)(ii) the ITS will not be revised to incorporate these requirements. ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.9-08	12/5/97	Closed

NRC Description of Issue

(Byron only) 3.7.9-8 DOC LA.25
(Byron) CTS 4.7.5.h

CTS 4.7.5.h in addition to requiring an 18 month inspection of the SX pump diesel also requires "cycling each testable valve in the flow path through at least one complete cycle of full travel." The CTS markup shows this requirement as being relocated (LA.25), but no justification is provided to show that it can be relocated or to which licensee controlled document. Since other CTS LCOs which require valve cycling have included this requirement in the associated ITS SRs, this requirement should also be included in ITS 3.7.9. Comment: Revise the CTS/ITS markup to retain this valve cycling require and provide appropriate discussion and justification.

ComEd Response to Issue

Revised Response: ITS UHS LCO 3.7.9 was revised to include SR 3.7.9.8 to cycle each testable valve in the SX makeup pump flow path on an 18 month frequency. This change is provided in our comprehensive ITS Section 3.7 closeout submittal Revision N.

Original Response: This requirement is being relocated to the TRM in accordance with the NRC 10CFR50.36(c)(2)(ii). DOC LA25 will be revised to specifically state this relocation. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.9-09	12/5/97	Closed

NRC Description of Issue

(Byron only) 3.7.9-9 DOC LA.28
(Byron) CTS 4.7.5.d
ITS B3.7.9 Bases - SR 3.7.9.5

CTS 4.7.5.d details design attributes of how to perform the UHS fan surveillance (e.g., by starting from the control room). These items are to be relocated to the TRM and to the ITS Bases. The detail on starting the fan from the control room for this surveillance has not been relocated to ITS B 3.7.9 Bases SR 3.7.9.5 as stated above. Comment: Include this item in the discussion of ITS B 3.7.9 Bases - SR 3.7.9.5 or provide additional discussion and justification to show why it should not be relocated there.

ComEd Response to Issue

ComEd will relocate the detail of starting the fan from the control room for the performance of SR 3.7.9.5 to the Surveillance Requirements Section of the Bases for ITS LCO 3.7.9. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.9-10	12/5/97	Closed

NRC Description of Issue

(Byron only) 3.7.9-10□DOC LA.30
(Byron)□DOC L.24
□□JFD P.21
□□JFD Bases P.42
□□CTS 3.7.5 ACTION e.2
□□CTS 3.7.5 ACTION g.2
□□ITS 3.7.9 ACTION D and Associated Bases

CTS 3.7.5 does not include specific ACTIONS for the case of two inoperable SX makeup pumps except for inoperability due to river water level and cooling tower basin switches. Therefore, CTS LCO 3.0.3 would apply for all other SX makeup pump inoperabilities. ITS 3.7.9 ACTION D tries to combine the modified CTS 3.7.5 ACTIONS e.2 and g.2 for two SX makeup pumps inoperable. LA.30 changes the words in CTS 3.7.5 ACTION e.2 from "cooling tower level basin switches" to SX makeup pumps." While this may be an acceptable change for one switch/one pump inoperable, it may not be for two switches/two pumps inoperable. With 2 cooling tower level basin switches inoperable, the Required Actions of CTS 3.7.5 ACTION e.2 takes into account the manual start/stop capabilities of the SX makeup pumps, and the alternate makeup source. This particular aspect of CTS 3.7.5 Action e.2 has not been addressed in either LA.30 or L.24. See Item Numbers 3.7.9-13. Comment: Provide additional discussion and justification on this aspect of CTS 3.7.5 ACTION e.2 and its effect on the conversion to ITS 3.7.9 ACTION D. See Item Number 3.7.9-13.

ComEd Response to Issue

ComEd disagrees. As stated in DOC 3.7-LA30 the level switch function is considered part of the SX makeup pumps OPERABILITY and discussed in the LCO Section of the Bases for pump OPERABILITY with changes justified by Bases JFDs P41 and P42 and LCO JFD P21. If one of the level switches were to become inoperable and unable to perform its intended function, then one SX makeup pump would be declared inoperable and Condition C entered. With two level switches inoperable, two SX makeup pumps would be inoperable and Condition D would be entered. With two cooling tower level basin switches inoperable, Required Actions of Condition D of ITS 3.7.9 take into account the manual start/stop capabilities of the SX makeup pumps with the definition of an associated makeup source discussed in the Actions Section of the Bases for Required Action C. ComEd continues to pursue this change. (See RAIs 3.7.9-02, 03, 04, 05, 06, 11, and 13.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.9-11	12/5/97	Closed

NRC Description of Issue

(Byron only) 3.7.9-11□DOC LA.31
(Byron)□JFD P.21
□□JFD Bases P.41
□□JFD Bases P.42
□□CTS 3.7.5.f
□□CTS 3.7.5.h
□□CTS 3.7.5 ACTION f
□□CTS 3.7.5 ACTION h
□□ITS 3.7.9 ACTION D and Associated Bases

CTS 3.7.5.f and 3.7.5.h specify that UHS OPERABILITY is dependent on the National Weather Service (NWS) forecasts of Rock River flood level and tornados respectively. CTS 3.7.5 ACTIONS f and h are the remedial actions that are taken when the NWS forecasts high river level (>702 ft.) and tornados respectively. While the staff agrees in part that these anticipatory actions can be relocated from the CTS to licensee controlled documents, the staff does believe that these anticipatory actions should be relocated to the plant emergency procedures or operating procedures due to the safety significance of the conditions. However, it is also the staff's position that CTS 3.7.5 ACTIONS f and h be retained in some form in the ITS. The reason for this is even though both ACTIONS are anticipatory actions to be taken prior to the occurance of the conditions or event, both ACTIONS also apply after the event has occurred and exiting the ACTIONS will depend on when the event ends. Even though both ACTIONS deal with two SX makeup pumps inoperable (CTS 3.7.5 ACTION f river water level > 702 ft and CTS 3.7.5 ACTION h river water level< 664.7 ft) the CTS ACTIONS are either More Restrictive or Less Restrictive than ITS ACTION D. Comment: Revise the CTS/ITS markup to include CTS 3.7.5 ACTIONS f and h in ITS 3.7.9 and provide the appropriate discussions and justifications for the proposed changes.

ComEd Response to Issue

Revised Response: ITS LCO 3.7.9 was revised to include Condition F to address the CTS requirement for 3.7.5 on UHS operability requirements as weather information is received from the National Weather Service. The new action requirements includes 3 conditions requiring actions for changing Rock River level conditions and the possibility of turbulent weather conditions due to a tornado watch being issued. These actions are to verify the UHS basin level within 1 hour and every 2 hours thereafter, to verify the OPERADILITY of one deep well pump within one hour and verify that both deep well pumps are restored to the OPERABLE status within 72 hours. This structure assures that within one hour, at least one UHS supply is available, and adequate time exists to initiate action to make the second deep well pump available to supply the UHS basins if necessary. The 72 hour period provided to assure the second deep well pump is available is consistent with the allowed outage time for other dual train safe shutdown systems. This change is provided in our comprehensive ITS Section 3.7 closeout submittal Revision N.

Original Response: ComEd disagrees. As the staff has suggested, current Byron Operating Abnormal procedures , 0BOA ENV-1 Adverse Weather Conditions and 0BOA ENV-2 Rock River Abnormal Water Level contain all of the Required Actions of CTS 3.7.5 Actions f and h. When contacted by the NWS of the issuance of a tornado watch or warning or of the Rock River exceeding the flood level requirements for SX makeup pumps OPERABILITY, these procedures are entered and the appropriate actions taken. Once the event is declared, the procedures and Actions are in effect until the event has been terminated and the BOA exited. The NRC reviewer states that the Staff finds relocating these requirements to the TRM is acceptable but may be exited prior to the event ending; however, the original condition to enter the TRM Specification would not have been declared as over not allowing exiting of the requirement. Essentially all CTS SRs make a generic introductory statement that a specific component or piece of equipment shall be demonstrated OPERABLE by the successful performance of a specific SR. Almost all of the CTS SRs relocated to the TRM contain the exact same statement of demonstrating OPERABILITY through the performance of the SR. The difference between retaining specific requirements in the ITS or relocating them to a licensee controlled document (i.e., TRM) is if the requirement meets the NRC criteria as stated in 10CFR50.36(c)(2)(ii). ComEd continues to pursue this change. (See RAIs 3.7.9-02, 03, 04, 05, 06, 10, and 13.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.9-12	12/5/97	Closed

NRC Description of Issue

(Byron only) 3.7.9-12□DOC L.5
(Byron)□JFD P.30
□□JFD Bases P.43
□□CTS 4.7.5.e.2
□□ITS SR 3.7.9.7

CTS 4.7.5.e.2 verifies every 31 days the starting of the diesel from ambient conditions on a low basin level test signal. ITS SR 3.7.9.7 has changed this Frequency to be consistent with the IST Program. The justification for this change is unacceptable; consistency with the NUREG is not a justification for changing a Frequency. Comment: Revise the submittal to provide the additional discussion and technical justification for this Less Restrictive change.

ComEd Response to Issue

Revised Response: ITS SR 3.7.9.6 was revised to include verification that the SX makeup pump would automatically start an actual or simulated signal on a 31 day frequency instead of in accordance with the IST program. This change is provided in our comprehensive ITS Section 3.7 closeout submittal Revision N.

Original Response: No change. The 31 day Frequency did not change. The Frequency statement in the NUREG of , "In accordance with the Inservice Inspection Testing Program" was used in ITS 3.7.9.7. The 31 days has been incorporated into the IST Program. ComEd has not made any Frequency changes for this SR. ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.9-13	12/5/97	Closed

NRC Description of Issue

(Byron only) 3.7.9-13□DOC L.24
(Byron)□JFL P.30
□□JFD Bases P.43
□□CTS 3.7.5 ACTON e.2
□□CTS 3.7.5 ACTION g.2
□□ITS 3.7.9 ACTION D and Associated Bases

CTS 3.7.5 ACTIONS e.2 and g.2 are modified by justification L.24 and combined into ITS 3.7.9 ACTION D. L.24 states that the modification places the plant in a condition where the safety function assumed in the design basis analysis can be satisfied and is consistent with CTS 3.7.5 ACTIONS e.2 and g.2. This is not true. See Item 3.7.9-10 for one aspect of this problem. CTS 3.7.9 ACTION g.2.a requires that both deep well pumps be verified OPERABLE within 1 hour not one pump in one hour and the other in 72 hours as proposed in ITS 3.7.9 ACTION D. CTS 3.7.5 ACTION g.2.b specifies the requirements with one deep well pump inoperable. Implicit in this ACTION is that the cooling tower basin levels could be below 82%. Thus 72 hours would be allowed to not only restore the pump to OPERABLE status but also the basin water level. ITS 3.7.5 ACTION D does not allow this, ITS 3.7.5 ACTION E, immediate shutdown, would have to be entered. In addition ITS 3.7.5 ACTION D has a Note which states that "LCO 3.0.4 is not applicable." This note applies to all of ACTION D. In the CTS the provisions of CTS LCO 3.0.4 only apply if both deep well pumps are OPERABLE, the ITS would allow this to apply if one deep well pump is inoperable. Based on the above as well as other items, ITS 3.7.5 ACTION D needs major rework. See Item Number 3.7.9-11. Comment: Revise CTS/ITS markup to correcity reflect the design and current licensing basis for two SX makeup pumps inoperable and provide the appropriate additional discussions and justifications to support the proposed changes.

ComEd Response to Issue

Revised Response: ITS UHS LCO 3.7.9 was revised to include a Condition D addressing two SX makeup pumps inoperable. With Condition D, required action D.1 and D.2 verify that the basin level for each cooling tower is greater than or equal to 90% and the OPERABILITY of at least one makeup source. The allowance for LCO 3.0.4 has been deleted. During the revision for the UHS LCO for the ITS conversion, the inclusion of Tech Spec amendment #95 to change basin level requirements from 82 % to 90% was also incorporated in ITS specification 3.7.9. This change is provided in our comprehensive ITS Section 3.7 closeout submittal Revision N.

Original Response: ComEd agrees that in order to correctly apply the Note for 3.0.4 not applicable another Condition (Condition E) should be added. This would allow Condition D to address the inoperability of two SX makeup pumps by verifying both SX basin levels at greater than 82% and the OPERABILITY of both makeup sources within one hour. To be consistent with CTS 3.7.5.g.2.b), if one of the deep well pumps were inoperable, a Condition E would address both SX basin levels at greater than 82% and also would require verification of the OPERABILITY of at least 1 makeup sources, with the requirement to restore the inoperable makeup source to OPERABLE status within a 72 hours. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI. ComEd disagrees: As stated in DOC 3.7-LA33 for CTS 3.7.5.g, the level and flow of the river is considered part of the SX makeup pumps OPERABILITY and is discussed in the LCO Section of the Bases for pump OPERABILITY. As directed by CTS 3.7.5.g, if the level of the Rock River were to go to 664.7 feet MSL or less, both SX makeup pumps would be declared inoperable and Condition D entered. With two inoperable SX makeup pumps, Condition D would require that both SX basin levels be verified at greater than or equal to 82% and also would require verification of the OPERABILITY of both makeup sources (i.e., only deep well pumps Operable). Consistent with CTS 3.7.5.g.2.b) the proposed Condition E would define if one of the deep well pumps were inoperable, a 72 hour Completion Time is granted to restore both deep well pumps to the OPERABLE status. (See RAIs 3.7.9-02, 03, 04, 05, 06, 10, and 11.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.9-14	12/5/97	Closed

NRC Description of Issue

(Byron only) 3.7.9-14 □DOC L.24
(Byron) □CTS 3.7.5 ACTION g.2).c)

CTS 3.7.5 ACTION g.2).c) requires the plant to be placed "in at least HOT STANDBY within the next 6 hours and at least HOT SHUTDOWN within the following 6 hours and at least COLD SHUTDOWN within the subsequent 24 hours. The C . S markup deletes the words "and at least HOT SHUTDOWN within the following 6 hours." The deletion is designated L.24. Justification L.24 does not address this deletion. Comment: Provide a discussion and justification for this deletion.

ComEd Response to Issue

Revised Response: DOC L35 was prepared to address removing the requirement to go to Hot shutdown within the second 6 hour period. This change is provided in our comprehensive ITS Section 3.7 closeout submittal Revision N.

Original Response: ComEd will revise DOC L24 to include a discussion on deleting the requirement for going to HOT SHUTDOWN. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.9-15	12/5/97	Closed

NRC Description of Issue

(Byron only) 3.7.9-15 □JFD Bases B.20
(Byron) □CTS 3.7.5.d
□□CTS 4.7.5.b
□□ITS SR 3.7.9.3 and Associated Bases

CTS 3.7.5.d and 4.7.5.b specifies the UHS temperature limits which are to be taken at the discharge of the SX pump. ITS 3.7.9.3 and its Associated Bases specifies the temperature limits, but does not specify the location (SX pump discharge). This should be reflected in the Bases discussion for ITS SR 3.7.9.3 since it is a plant-specific detail. Comment: Revise the CTS/ITS markup to show the relocation from the CTS and the inclusion in the ITS Bases of this detail and provide the appropriate discussions and justifications for this Less Restrictive change.

ComEd Response to Issue

ComEd will revise Bases SR 3.7.9.3 to specify the UHS temperature(s) are to be taken at the discharge of the SX pump. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.9-16	12/5/97	Closed

NRC Description of Issue

(Braidwood only) 3.7.9-16□DOC A.1
(Braidwood)□JFD Bases P.19
□□CTS 3.7.5 ACTIONS
□□ITS 3.7.9 ACTIONS and Associated Bases

The UHS is shared between Units 1 and 2. There are no indications in the CTS that this system is shared between the units and no indication of inter-unit dependence in the CTS. For example, when the system is inoperable and regardless of which MODE each unit may be in both units must simultaneously enter the appropriate ACTIONS. The STS did not consider shared unit operation of a system. Therefore, the ITS needs an Actions Note to clarify that both units will enter the appropriate ACTIONS. The new ACTIONS Note should state: "These ACTIONS shall apply to both units simultaneously." This Note will create the inter-unit dependence of the design. Comment: Revise the CTS/ITS markups and Bases to include this ACTIONS Note and provide the appropriate discussions and justifications.

ComEd Response to Issue

Revised Response: See RAI 3.0-01 Revised Response. This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: No change. ComEd disagrees. There are several systems that are shared between the two units which do not have any such note added. Operators are trained that if a common system between the two units becomes inoperable, a unit-specific OPERABILITY determination is made. In this case, if the UHS becomes inoperable, both units will be made aware and appropriate unit-specific action will be taken. This is consistent with other commonly shared systems, structures, or components. ITS is consistent with the meaning and intent of CTS, and the licensed Operators are very well trained in, and familiar with, the application of technical specifications to shared system inoperabilities. ComEd continues to pursue this change. (See RAIs 3.7.10-01, 3.7.11-01, and 3.7.12-01.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.9-17	12/5/97	Closed

NRC Description of Issue

(Braidwood only) 3.7.9-17□DOC LA.14
(Braidwood)□CTS 4.7.5.2
□□ITS 3.7.9

CTS 4.7.5.2 requires the performance of a hydrographic survey every 18 months to verify no degradation of the UHS. ITS 3.7.9 does not contain this plant specific surveillance. The stated justification (LA.14) for relocating this requirement is based upon the STS does not contain a similar requirement or this level of detail. This is technically inadequate. While the staff agrees that CTS 4.7.5.2.b (UHS slope degradation) can be relocated to the TRM, it does not agree that CTS 4.7.5.2.a can be relocated. While slope degradation is important to UHS OPERABILITY, it is a subjective verification and is less critical than maintaining the necessary depth to assure an adequate water supply for the UHS. The depth verification (CTS 4.7.5.2.a) is analogous to maintaining a specific UHS water level (CTS 4.7.5.1 and ITS SR 3.7.9.1). Therefore the staff requires this requirement to be retained. Comment: Revise the CTS/ITS markup to retain CTS 4.7.5.2.a and provide additional discussion and justifications to support the retention of CTS 4.7.5.2.a and the relocation of CTS 4.7.5.2.b.

ComEd Response to Issue

Revised Response: CTS SR 4.7.5.2.a has been retained as ITS SR 3.7.9.3. See LCO JFD 3.7-P35 and Bases JFD 3.7-P60. This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: No change. ComEd disagrees. ITS SR 3.7.9.1 only requires that the UHS water level be verified every 24 hours. This is in full compliance with NUREG 1431. The NRC reviewer is requesting ComEd to deviate from the NUREG by incorporating the bottom level of the Ultimate Heat Sink (UHS) into the SR. The CTS currently contains the bottom level however, in accordance with the NRCs 10CFR50.36(c)(2)(ii) criteria, this information is relocated into the TRM. Relocating this requirement into the TRM does not lessen the need or importance of monitoring the bottom level of the UHS or reduce its frequency. Once in the TRM, any changes to the requirement must be made in accordance with the 50.59 process. Relocating this requirement to the TRM is consistent with other important parameters that need to be retained in a licensee controlled document and not the ITS. ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.10-01	12/5/97	Closed

NRC Description of Issue

3.7.10-1 DOC A.1
JFD Bases P.21
CTS 3.7.6 ACTIONS
ITS 3.7.10 ACTIONS and Associated Bases

The Control Room Ventilation System is two independent trains which serve one control room envelope that is shared between Units 1 and 2. There are no indications in the CTS that this system is shared between the units and there is not indication of inter-unit dependence in the CTS. For example, when one train is inoperable and regardless of which MODE each unit may be in, both units must simultaneously enter the appropriate ACTIONS. The STS did not considered shared unit operation of a system therefore, the ITS needs an ACTIONS Note to clarify that both units will enter the appropriate ACTIONS. The new ACTIONS Note should state: "These ACTIONS shall apply to both units simultaneously." This Note will create the inter-unit dependence of the design. Comment: Revise the CTS/ITS markups and Bases to include this ACTIONS Note and provide the appropriate discussions and justifications.

ComEd Response to Issue

Revised Response: See RAI 3.0-01 Revised Response. This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: No change. ComEd disagrees. There are several systems that are shared between the two units which do not have any such note added. Operators are trained that if a common system between the two units becomes inoperable, a unit-specific OPERABILITY determination is made. In this case, if the control room ventilation becomes inoperable, both units will be made aware and appropriate unit-specific action will be taken. This is consistent with other commonly shared systems, structures, or components. ITS is consistent with the meaning and intent of CTS, and the licensed Operators are very well trained in, and familiar with, the application of technical specifications to shared system inoperabilities. ComEd continues to pursue this change. (See RAIs 3.7.9-16, 3.7.11-01, and 3.7.12-01.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.10-02	12/5/97	Closed

NRC Description of Issue

3.7.10-2 DOC LA.17
CTS 4.7.6.b
ITS B3.7.10 Bases

LA.17 specifies that the details of system OPERABILITY, design and methods of performing SRs are relocated to the ITS B3.7.10 Bases. CTS 4.7.6.b specifies that the VC Filtration System be tested "at least once per 31 days on a STAGGERED TEST BASIS by initiating from the control room... and verifying that the system operates for at least 10 continuous hours...." the "by initiating from the control room" is to be relocated by LA.17 to ITS B3.7.10 Bases. This detail has not been relocated to ITS B 3.7.10 Bases. Comment: Revise ITS B.3.7.10 Bases to include this detail.

ComEd Response to Issue

ComEd will revise the Surveillance Requirements Section of the Bases for ITS LCO 3.7.10 to include that flow shall be initiated from the control room for SR 3.7.10.1. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.10-03	12/5/97	Closed

NRC Description of Issue

3.7.10-3□JFD C.9
□□STS 3.7.10 APPLICABILITY
□□ITS 3.7.10 APPLICABILITY
□□

ITS 3.7.10 APPLICABILITY modifies STS 3.7.10 APPLICABILITY to place semicolons between MODES and specified conditions and to use "and"s between APPLICABILITY specified conditions. This generic change is described in C.9 as WOG-81. It is the staff's understanding that WOG-81 has been rejected by the Owners Group. Comment: Delete this generic change.

ComEd Response to Issue

WOG-81 will be withdrawn in its entirety throughout the ITS submittal. The submittal will be revised to adopt the STS presentation in the Applicability Section. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI. (See RAIs 3.7.11-02, RAI 3.7.13-06, 3.8.2-02, 3.9.4-06, and 3.9.7-05.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.10-04	12/5/97	Closed

NRC Description of Issue

3.7.10-4□JFD Bases P.21
□□STS B3.7.10 Bases - BACKGROUND
□□ITS B3.7.10 Bases - BACKGROUND
□□

STS B3.7.10 Bases - BACKGROUND, the last sentence of the eighth paragraph states "The CREFS is designed in accordance with Seismic Category requirements." This sentence has not been adopted in the ITS. Bases P.21 does not explain this deletion. Comment: Provide additional discussion and justification to explain why this STS text was not adopted.

ComEd Response to Issue

ComEd will conform to the STS. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI. (See RAI 3.7.11-3.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.11-01	12/5/97	Closed

NRC Description of Issue

3.7.11-1 DOC A.1
JFD Bases P.21
CTS 3.7.6 ACTIONS
ITS 3.7.11 ACTIONS and Associated Bases

Comment: See Item Number 3.7.10-1

ComEd Response to Issue

Revised Response: See RAI 3.0-01 Revised Response. This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: No change. ComEd disagrees. There are several systems that are shared between the two units which do not have any such note added. Operators are trained that if a common system between the two units becomes inoperable, a unit-specific OPERABILITY determination is made. In this case, if the control room ventilation temperature control system becomes inoperable, both units will be made aware and appropriate unit-specific action will be taken. This is consistent with other commonly shared systems, structures, or components. ITS is consistent with the meaning and intent of CTS, and the licensed Operators are very well trained in, and familiar with, the application of technical specifications to shared system inoperabilities. ComEd continues to pursue this change. (See RAIs 3.7.9-16, 3.7.10-01, and 3.7.12-01.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.11-02	12/5/97	Closed

NRC Description of Issue

3.7.11-2 JFD C.9
STS 3.7.11 APPLICABILITY
ITS 3.7.11 APPLICABILITY

ITS 3.7.11 APPLICABILITY modifies STS 3.7.11 APPLICABILITY in accordance with WOG-81. See Item Number 3.7.10-3. Comment: See Item Number 3.7.10-3.

ComEd Response to Issue

WOG-81 will be withdrawn in its entirety throughout the ITS submittal. The submittal will be revised to adopt the STS presentation in the Applicability Section. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI. (See RAIs 3.7.10-03, RAI 3.7.13-06, 3.8.2-02, 3.9.4-06, and 3.9.7-05.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.11-03	12/5/97	Closed

NRC Description of Issue

3.7.11-3□JFD Bases P.21
□□STS B3.7.11 Bases - APPLICABLE SAFETY ANALYSES □
□□ITS B3.7.11 Bases APPLICABLE SAFETY ANALYSES

The fourth sentence of the second paragraph in STS B3.7.11 Bases - APPLICABLE SAFETY ANALYSES states "The CREATCS is designed in accordance with Seismic Category I requirements." This sentence has not been adopted in the ITS. Bases P.21 does not explain this omission. Comment: Provide additional discussion to explain why this STS text was not adopted.

ComEd Response to Issue

ComEd will conform to the STS. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI. (See RAI 3.7.10-4.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.12-01	12/5/97	Closed

NRC Description of Issue

3.7.12-1□DOC A.1
□□JFD Bases P.28
□□CTS 3.7.7 ACTIONS
□□ITS 3.7.12 ACTIONS and Associated Bases

According to ITS B3.7.12 Bases - BACKGROUND the description of the Nonaccessible Area Exhaust Filter Plenum Ventilation System, states that this system is a subsystem of the common Auxiliary Building Heating Ventilation and Air Conditioning System, and is also a shared system between the Units 1 and 2. There are no indications in the CTS that this system is shared between the Units and is no indication of inter-unit dependence in the CTS. The STS did not consider shared unit operation of a system and therefore, the ITS needs to be modified to take this into account. Insufficient information on system design and operational alignments has been provided to determine if a Note similar to that proposed for ITS 3.7.10 ACTIONS and ITS 3.7.11 ACTIONS (See Item Numbers 3.7.10-1 and 3.7.11-1) is sufficient to correct the concern or a total revision of the ACTION statements is necessary. Comment: Revise the submittal to account for the inter-unit dependence of the shared Nonaccessible Area Exhaust Filter Plenum Ventilation System and provide additional discussion and justifications, as appropriate.

ComEd Response to Issue

Revised Response: See RAI 3.0-01 Revised Response. This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: No change. ComEd disagrees. There are several systems that are shared between the two units which do not have any such note added. Operators are trained that if a common system between the two units becomes inoperable, a unit-specific OPERABILITY determination is made. In this case, if the nonessential area exhaust filter plenum ventilation system becomes inoperable, both units will be made aware and appropriate unit-specific action will be taken. This is consistent with other commonly shared systems, structures, or components. ITS is consistent with the meaning and intent of CTS, and the licensed Operators are very well trained in, and familiar with, the application of technical specifications to shared system inoperabilities. (See RAIs 3.7.9-16, 3.7.10-01, and 3.7.11-01.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.12-02	12/5/97	Closed

NRC Description of Issue

3.7.12-2□DOC A.44
□□DOC A.45
□□DOC LA.38
□□JFD P.12
□□JFD P.13
□□JFD Bases P.28
□□CTS 3.7.7
□□ITS LCO 3.7.12
□□ITS B3.7.12 Bases - LCO

CTS 3.7.7 has been modified by a TS amendment request dated August 23, 1996. This CTS change is under review by the staff, and is expected to be issued in October, 1997. This beyond scope of review item will be evaluated for inclusion in the conversion upon issuance of the amendment in October, 1997. Comment: Review of this beyond scope of review item is pending resolution of the August 23, 1996 TS amendment request.

ComEd Response to Issue

Revised Response: No change. The NRC has issued Byron and Braidwood Amendment 105 and Amendment 97, respectively, for these changes.

Original Response: No change. This amendment was submitted at the request of NRR in an effort to further clarify the requirements for the standby plenum. This is an open issue until the NRC has reviewed and approved ComEd amendment request dated August 23, 1996.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.13-01	12/5/97	Closed

NRC Description of Issue

3.7.13-1□DOC M.9
□□JFD P.16
□□JFD Bases P.38
□□CTS 4.9.4.2
□□ITS SR 3.7.13.3 Note and Associated Bases

A Note has been added to CTS 4.9.4.2 to state when this SR shall be performed. It is acceptable to add this new Note; however, in order to limit its performance when the equipment hatch is not intact during refueling, then the ITS B3.7.13 Bases - SR 3.7.13.3 should state that the SR is only required during movement of irradiated fuel assemblies (whether inside containment or inside the fuel handling building) or Core alternations with the equipment hatch not intact. This change will bring the Bases discussion into conformance with the interpretation of this Note as stated in M.9, P.16, and Bases P.38. Comment: Revise the submittal and CTS markup and provide additional discussion and technical justification for this change.

ComEd Response to Issue

The Surveillance Requirements Section of the Bases for LCO 3.7.13 has been revised for SR 3.7.13.3 from the original wording, "This SR is modified by a Note that requires this SR only during movement of irradiated fuel assemblies or CORE ALTERATIONS when the equipment hatch is not intact," to read, "This SR is modified by a Note that requires this SR only during movement of irradiated fuel assemblies (in the fuel building or in the containment) or CORE ALTERATIONS when the equipment hatch is not intact." This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.13-02	12/5/97	Closed

NRC Description of Issue

3.7.13-2 DOC M.9
JFD Bases P.38
CTS 3.9.4
CTS 4.9.4.2
ITS B3.7.13 Bases - APPLICABILITY

The CTS markup for CTS 4.9.4.2 changes the words "with the equipment hatch removed" to "with the equipment hatch not intact." While this change is considered acceptable, the justification provided in M.9 and the description provided in ITS B3.7.13 Bases - APPLICABILITY defining "not intact" as including both personnel air lock doors opened is unacceptable. CTS 3.9.4 specifies containment OPERABILITY during CORE ALTERNATIONS and movement of irradiated fuel in containment. Under these conditions CTS 3.9.4 requires that the personnel hatch (air lock) and the personnel emergency exit hatch (air lock) have at least one door closed. CTS 4.9.4.2 which verifies that the FHB Ventilation System can maintain a negative pressure in the fuel building with the equipment hatch removed (not intact) would require this SR be performed under the conditions of the CTS 3.9.4, that is the air locks closed by a minimum of one door. The proposed definition of not intact (both air lock doors open) is not in accordance with current licencing basis as described in CTS 3/4.9.4, and would require a NRC technical staff review of this change. This would constitute a beyond scope of review item for this conversion. Comment: Delete from the definition of equipment hatch not intact the words describing both personnel air lock doors open from M.9 and ITS B3.7.13 Bases - APPLICABILITY.

ComEd Response to Issue

Revised Response: INSERT B 3.7-68A in the Applicability Section of the Bases for ITS LCO 3.7.13 has been revised to state, "The equipment hatch is considered not intact if both personnel air lock doors associated with the equipment hatch are open or the hatch is not held in place with at least four bolts." This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: DOC 3.7-M9 will be revised to include the following justification. "The proposed change is bounded by the CTS allowance which permits CORE ALTERATIONS or movement of irradiated fuel with the equipment hatch removed. This allowance is contingent upon the FHB Ventilation System's ability to maintain a negative pressure in the fuel building. Because the airlock is contained within the equipment hatch, the release pathway to the FHB is much smaller and restoration to an intact condition is much easier and quicker to attain than reinstalling the equipment hatch. This change poses less of a relaxation than that which is currently permitted. This change is not applicable to the emergency hatch since it provides a direct pathway to the environment without the charcoal filtration available via the FHB Ventilation System." This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.13-03	12/5/97	Closed

NRC Description of Issue

3.7.13-3 DOC M.12
JFD B.18
JFD P.16
JFD Bases P.38
CTS 4.9.4.2
CTS 4.9.12.d.3)
ITS SR 3.7.13.3 and Associated Bases
ITS SR 3.7.13.5 and Associated Bases

Justification M.12 states the following: "ITS SR 3.7.13.5 adds a flow rate requirement to CTS 4.9.12.d.3). This SR verifies the ability of the FHB Ventilation System to maintain the fuel building at a negative pressure. If the system were to run at a flow rate greater than design, the negative pressure may be met, but the larger flow rate could be indicative of system degradation." CTS 4.9.4.2 and ITS SR 3.7.13.3 perform the same test, but the enclosure now is the fuel building and containment. No flow rate requirement is included in ITS SR 3.7.13.3. Based on M.12 above, a flow rate requirement should also be provided for ITS SR 3.7.13.3. Comment: Revise ITS SR 3.7.13.3 to include a flow rate requirement or provide a discussion and justification based on system design or operational constraints to show that a flow rate requirement is not needed in this case.

ComEd Response to Issue

Revised Response: It is an operational constraint to include a flow rate requirement every 7 days as part of ITS SR 3.7.13.3. It takes several days to set up for testing the FHB Ventilation System flow rate. Performing a flow rate test every 7 days would require the plants to install a modification to support this effort. In addition, the Operating Department would unnecessarily be swapping trains of FHB Ventilation several times per week. In addition, verification of the FHB System flow rate every 7 days not only creates an operational constraint, but also ALARA concerns during outages. Lining up the FHB for verification of flowrates in the emergency mode has created contamination events for personnel in the FHB crosstown area and for the physical area itself, causing outage delays. This is due to the high dp created in the FHB/containment relative to atmosphere during the emergency mode of operation. The most recent solution for the short term has been to shutdown the main VA supply and exhaust fans along with FHB booster fans during times of potentially high contamination activities in containment (e.g., reactor head lift, reactor cavity drain down, etc.). This reduces the dp in the FHB to virtually 0" w.g. relative to atmosphere. ComEd is evaluating different long term solutions, and is minimize running times on surveillances such as these during outages because of the potential affects to the outage schedule. Therefore, due to operational constraints and due to ALARA concerns, ComEd is maintaining current licensing basis.

Original Response: No change. Increased flow alone would not indicate system malfunction. The system is equipped with flow control dampers and flow through the plenum is verified by existing surveillances. The flow to/from containment is small in comparison to the FHB exhaust flow. Design flow for the FHB exhaust is near 21,000 cfm while the Containment Mini-Purge Supply and Exhaust fans are designed for 3,000 cfm. Considering that only a small portion of this flow would be available for "leakage" to the FHB, the total flow from the FHB would remain essentially unchanged, and would remain plus or minus 10% of design flow allowed by ANSI test methods. ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.13-04	12/5/97	Closed

NRC Description of Issue

3.7.13-4 DOC L.16
CTS 3.9.4 ACTIONS
CTS 3.9.12 ACTIONS
ITS 3.7.13 ACTIONS

The CTS markup of CTS 3.9.4 ACTIONS adds ITS ACTIONS A, B, and C, and classifies this modification as a Less Restrictive change (L.16). While the addition of ITS ACTION A is considered to be a Less Restrictive change, the additions of ITS ACTIONS B and C are considered as an administrative change. Since the CTS requires cascading, the in operability of the FHB Ventilation System for CTS 3.9.4 would require entry into CTS 3.9.12 ACTIONS which are ITS ACTIONS B and C. Comment: Revise the markup for CTS 3.9.4 ACTIONS to show that ITS ACTIONS B and C are administrative changes rather than Less Restrictive changes. Provide additional discussion and justifications for this Administrative change.

ComEd Response to Issue

Revised Response: See CTS DOC 3.7-A57. This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: ComEd will revise the DOC for Insert 3.9-4A which added Conditions B and C from 3.7-L16 to an 'A' designator, thereby identifying ITS Conditions B and C as administrative changes. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI. The inoperability of the FHB Ventilation System would require entry into CTS LCO 3.9.12, not CTS LCO 3.9.4. CTS LCO 3.9.4 provides an allowance which is contingent upon the proper functioning of the FHB Ventilation System. However, with the FHB Ventilation System inoperable, the LCO statement of CTS LCO 3.9.4 can still be met by maintaining the equipment hatch in place. Therefore, multiple LCO entries are inappropriate. ComEd continues to pursue this change. (See RAI 3.7.7-03 and RAI 3.7.8-05.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.13-05	12/5/97	Closed

NRC Description of Issue

3.7.13-5 JFD C.2
JFD Bases C.3
CTS 3.9.12 ACTON c
STS 3.7.13 ACTIONS
ITS 3.7.13 ACTIONS Note and Associated Bases

TSTF-36 Revision 2 modifies STS 3.7.13 ACTIONS by adding a Note which states that "LCO 3.0.3 is not applicable." The staff has not yet reviewed and approved TSTF 36, but will recommend that this change be modified to locate the Note above STS 3.7.13 RA C.1 and RA D.1 to be consistent with the Standby Gas Treatment System STS in BWR/4 (NUREG 1433) and BWR/6 (NUREG 1434), and as being the more appropriate place for this Note. Comment: Revise the CTS/ITS markups to reflect this proposed change to TSTF-36 and provide additional justification and discussion for this change.

ComEd Response to Issue

No change. ComEd is currently pursuing this change as TSTF-36, Rev. 2 which is currently being reviewed by the NRC. If rejected by the NRC on a generic basis, ComEd will continue to pursue the same change on a plant specific basis.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.13-06	12/5/97	Closed

NRC Description of Issue

3.7.13-6□JFD C.9
□□STS 3.7.13 APPLICABILITY
□□ITS 3.7.13 APPLICABILITY

ITS 3.7.13 APPLICABILITY modifies STS 3.7.13 APPLICABILITY in accordance with WOG-81. See Item Number 3.7.10-3. Comment: See Item Number 3.7.10-3.

ComEd Response to Issue

WOG-81 will be withdrawn in its entirety throughout the ITS submittal. The submittal will be revised to adopt the STS presentation in the Applicability Section. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI. (See RAIs 3.1.5-02, 3.4-01, 3.5-01, 3.7.10-03, 3.7.11-02, 3.8.2-02, 3.9.4-06, and 3.9.7-05.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.14-01	12/5/97	Closed

NRC Description of Issue

3.7.14-1□DOC A.26
□□JFD P.4
□□JFD Bases C.9
□□JFD Bases P.31
□□CTS 3/4.9.11
□□ITS 3.7.14

By letter dated November 5,1996, ComEd Requested a change to CTS LCO 3.9.11, CTS 5.6.1.1 and CTS 6.9.1.10. CTS 3/4.9.11 was marked up to reflect this 11/5/96 request. This request has been approved by the staff, but is only a temporary change which expires in December, 1997. The permanent TS changes have been submitted for staff review and approval in an amendment change package dated June 30, 1997. Thus, the changes associated with this specification and their acceptance is a beyond scope of review item for this conversion. Comment: The review of the conversion of CTS 3/4.9.11 to ITS 3.7.14 is delayed pending staff's approval of the licensee's 6/30/97 TS change request and resubmittal by the licensee of the CTS/ITS markups for ITS 3.7.14.

ComEd Response to Issue

Revised Response: Per discussions with the NRC Reviewer, Bases JFD 3.7-P46 has been deleted. This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: 2/6/98 Corrected Response: By T. Tulon (Commonwealth Edison) to United States Nuclear Regulatory Commission (Document Control Desk) letter dated October 10, 1997, ComEd supplemented the original ITS submittal with ITS Revision B. ITS Revision B contained the ITS versions of the CTS license amendment requests for 1) the Non-Accessible Area Exhaust Filter Plenum and the Fuel Handling Building Ventilation Systems, and 2) Boron Credit in the Spent Fuel Pool. NRC letter dated April 2, 1997 issued Amendment 86 for Byron and Amendment 78 for Braidwood for soluble boron in the spent fuel pool (SFP). Since the license amendments were temporary in nature, ComEd letter dated June 30, 1997 proposed changes to permanently take credit for soluble boron in the SFP. Additionally, ComEd responded to the NRC's request for additional information in ComEd letter dated September 25, 1997. ComEd used the June 30, 1997 and the September 25, 1997 submittal revisions as the CTS markup pages for ITS Revision B. However, a recent Safety Evaluation Report (SER) issued December 4, 1997 approved Amendment 94 for Byron and Amendment 86 for Braidwood for Boron Credit in the Spent Fuel Pool. The changes contained in ITS Revision B were approved in the SER for the Current Technical Specification amendments for Byron and Braidwood. If there are any question after the Staff reviews the CTS SER for Boron Credit in the Spent Fuel Pool and ITS Revision B, ComEd will address them at that time. (See RAI 3.7.15-01 and RAI 3.7.16-01.)

NRC RAI Number	NRC Issued Date	RAI Status
3.7.15-01	12/5/97	Closed

NRC Description of Issue

3.7.15-1 DOC A.26
JFD P.4
JFD Bases C.9
JFD Bases P.31
CTS 3/4.9.11
ITS 3.7.15

See Item Number 3.7.14-1. Comment: The review of the conversion of CTS 3/4.9.11 to ITS 3.7.15 is delayed pending staff's approval of the licensee's 6/30/97 TS change request and resubmittal by the licensee of the CTS/ITS markups for ITS 3.7.15.

ComEd Response to Issue

Revised Response: Per discussions with the NRC Reviewer, ComEd has conformed to the STS for SR 3.7.15.1. In addition, see Bases JFDs 3.7-P56, P57, and P58. This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: 2/6/98 Corrected Response: See ComEd Response to RAI 3.7.14-01. If there are any question after the Staff reviews the CTS SER for Boron Credit in the Spent Fuel Pool and ITS Revision B, ComEd will address them at that time.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.16-01	12/5/97	Closed

NRC Description of Issue

3.7.16-1 JFD P.4
JFD Bases C.9
JFD Bases P.31
ITS 3.7.16

The CTS markup does not show anything for ITS 3.7.16. The justifications provided in the ITS markup are P.4 and Bases P.31. Resolution of ITS 3.7.16 will depend on the resolutions of Item Numbers 3.7.14-1 and 3.7.15-1. Comment: The review of the ITS 3.7.16 is delayed pending staff's approval of the licensee's 6/30/97 TS change request and resubmittal by the licensee of the ITS markup of ITS 3.7.16.

ComEd Response to Issue

Revised Response: Per discussions with the NRC Reviewer, in the Surveillance Requirements Section of the Bases for ITS LCO 3.7.16, the paragraph before SR 3.7.16.1 dealing with all of the 3.7.16 SRs has been made specific for each SR. This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

2/6/98 Corrected Response: See ComEd Response to RAI 3.7.14-01. If there are any question after the Staff reviews the CTS SER for Boron Credit in the Spent Fuel Pool and ITS Revision B, ComEd will address them at that time.

NRC RAI Number	NRC Issued Date	RAI Status
3.7.17-01	12/5/97	Closed

NRC Description of Issue

3.7.17-1 JFD Bases P.20
ITS B3.7.17 Bases - BACKGROUND

The third paragraph, first sentence, references the primary coolant specific activity limits of LCO 3.4.16. The stating of the 1 microcurie per gram limit has been omitted because the limit is different between Braidwood and Byron. This is a legitimate difference and its should be stated clearly rather than disguised by this alternative editorial wording. Comment: Revise the Bases to include the specific activity valves for each facility.

ComEd Response to Issue

10/23/98 Revised Response: Since the FW Isolation Valve specification has been deleted from the Byron/Braidwood ITS submittal, ITS 3.7.17, "Secondary Specific Activity," has been moved from the end of Section 3.7 to the position of ITS 3.7.3. This RAI associated with the Secondary Specific Activity specification continues to be numbered as 3.7.17-01, although the specification number has changed. This change is provided in our comprehensive ITS Section 3.7 closeout submittal Revision N.

Original Response: ComEd will revise the Bases to reflect the specific activity values for Braidwood and Byron. The submittal will be revised to adopt the STS presentation in the Applicability Section. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

Bottom of Report

Response to NRC RAI For ITS Section 3/4

21-Oct-98

NRC RAI Number	NRC Issued Date	RAI Status
3/4.7.8-01	12/5/97	Closed

NRC Description of Issue

3/4.7.8-1 DOC LA.39
CTS 3/4.7.8

CTS 3/4.7.8 is being totally relocated out of the TS to the TRM. The justification used for this is LA.39. The LA justifications are to be used to relocate specific requirements and detailed information from individual specifications. The relocation of entire specifications such as 3/4.7.8 are to be justified using the Relocated (R.x) designation. Comment: Revise the CTS markup to show that this change is a relocated item and provide the appropriate discussion and justification for this relocated CTS.

ComEd Response to Issue

Revised Response: See CTS DOC 3.7-R5 and the two revised Split Report pages attached to this RAI. This change is provided in our comprehensive ITS Section 3.4 closeout submittal Revision K.

Original Response: The Braidwood/Byron ITS Summary Disposition Matrix of the Split Report for CTS LCO 3.7.8, "Snubbers" will be revised to show CTS LCO 3.7.8 as being "relocated" and Note 22 will be deleted. In addition, DOC 3.7-LA39 will be changed to an 'R' designator. This change will be provided in our comprehensive ITS Section 3.7 closeout submittal revision upon NRC's concurrence with the ComEd Responses to the ITS Section 3.7 RAI.

Bottom of Report

BRAIDWOOD/BYRON IMPROVED TECH SPEC SUMMARY DISPOSITION MATRIX

CURRENT TECHNICAL SPECIFICATION	IMPROVED TS	STANDARD TS	NUREG-1431, REV. 1	NRC RESULTS	BYRON/BRAIDWOOD RESULTS - CRITERIA	NOTES
3.7 PLANT SYSTEMS						
3.7.1.1 SAFETY VALVES	3.7.1	3.7.1.1	3.7.1	RETAINED	RETAINED - 3	
3.7.1.2 AUXILIARY FEEDWATER SYSTEM	3.7.5	3.7.1.2	3.7.5	RETAINED	RETAINED - 3	
3.7.1.3 CONDENSATE STORAGE TANK	3.7.6	3.7.1.3	3.7.6	RETAINED	RETAINED - 3	
3.7.1.4 SPECIFIC ACTIVITY	3.7.17	3.7.1.4	3.7.18	RETAINED	RETAINED - 2	
3.7.1.5 MAIN STEAM LINE ISOLATION VALVES	3.7.2	3.7.1.5	3.7.2	RETAINED	RETAINED - 3	
3.7.2 STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION	N/A	3.7.2	N/A	RELOCATED	RELOCATED	See Appendix A
3.7 COMPONENT COOLING WATER SYSTEM	3.7.7	3.7.3	3.7.7	RETAINED	RETAINED - 3	
3.7.4 ESSENTIAL SERVICE WATER SYSTEM (SX TRAINS)	3.7.8	3.7.4	3.7.8	RETAINED	RETAINED - 3	
3.7.4.1 ESSENTIAL SERVICE WATER SYSTEM (SX PUMP SUPPORT FROM OPPOSITE UNIT)	3.7.8	N/A	N/A	N/A	RETAINED - 4	
3.7.4.2 ESSENTIAL SERVICE WATER SYSTEM (UNIT CROSSTIE)	3.7.8	N/A	N/A	N/A	RETAINED - 4	
3.7.5 ULTIMATE HEAT SINK	3.7.9	3.7.5	3.7.9	RETAINED	RETAINED - 3	
3.7.6 CONTROL ROOM VENTILATION SYSTEM	3.7.10, 3.7.11	3.7.7	3.7.10, 3.7.11	RETAINED	RETAINED - 3	
3.7.7 NON-ACCESSIBLE AREA EXHAUST FILTER PLENUM VENTILATION SYSTEM	3.7.12	3.7.8	3.7.12	RETAINED	RETAINED - 3	
3.7.8 SNUBBERS	N/A	3.7.9	N/A	RELOCATED	RELOCATED	
3.7.9 SEALED SOURCE CONTAMINATION	N/A	3.7.10	N/A	RELOCATED	RELOCATED	See Appendix A
3.7.12 AREA TEMPERATURE MONITORING	N/A	3.7.13	N/A	RELOCATED	RELOCATED	See Appendix A
3.8 ELECTRICAL POWER SYSTEMS						
3.8.1.1 A.C. SOURCES - OPERATING	3.8.1	3.8.1.1	3.8.1	RETAINED	RETAINED - 3	
3.8.1.2 A.C. SOURCES - SHUTDOWN	3.8.2	3.8.1.2	3.8.2	RETAINED	RETAINED - 3	
3.8.2.1 D.C. SOURCES - OPERATING	3.8.4	3.8.2.1	3.8.4	RETAINED	RETAINED - 3	
3.8.2.2 D.C. SOURCES - SHUTDOWN	3.8.5	3.8.2.2	3.8.5	RETAINED	RETAINED - 3	
3.8.3.1 ONSITE POWER DISTRIBUTION - OPERATING	3.8.7, 3.8.9	3.8.3.1	3.8.7, 3.8.9	RETAINED	RETAINED - 3	
3.8.3.2 ONSITE POWER DISTRIBUTION - SHUTDOWN	3.8.8, 3.8.10	3.8.3.2	3.8.8, 3.8.10	RETAINED	RETAINED - 3	
3.8.4.1 CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES	N/A	3.8.4.2	N/A	RELOCATED	RELOCATED	See Appendix A
3.8.4.2 MOVs THERMAL OVERLOAD PROTECTION DEVICES	N/A	3.8.4.3	N/A	RELOCATED	RELOCATED	See Appendix A

RAI 3/4.7.8-01

20. The NRC allows relocation of CTS LCO 3.1.2.5, "Borated Water Sources - Shutdown" and LCO 3.1.2.6, "Borated Water Sources - Operating." These Specifications, however, have been retained due to the dilution analysis assumption that the RWST is maintained as a boration source. The associated requirements supporting this analysis have either been retained in LCO 3.3.9 (MODES 3, 4, and 5) or LCO 3.9.2 (MODE 6). Also see the Discussion of Change (LA_{15}) to Section 3.1.

21. The latitude of Special Test Exception, "LCO 3.10.4, "Reactor Coolant Loops" for suspending requirements RCS loop requirements in MODES 1, 2, and 3 is not required. See the Discussion of Change (M_{12}) to Section 3.4.

AAI 3/4.7.8-01

22. Not used.

23. The NRC allows relocation of CTS LCO 3.11.1.4, LCO 3.11.1.5, and LCO 3.11.1.6. These Specifications, however, have been retained since they are retaied as a program in ITS Section 5.0, "Administrative Controls." Also see the Discussion of Change (LA_{20}) to Section 5.0.