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ComEd

September 2, 1997

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

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

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

Response to Request for Additional Information

- References:
- (1) R. Assa (NRC) to I. Johnson (Commonwealth Edison) letter dated August 5, 1997.
 - (2) G. Stanley and K. Graesser (Commonwealth Edison) to NRC letter dated December 13, 1996.

The purpose of this letter is to transmit the Commonwealth Edison (ComEd) response to the NRC's request for additional information (RAI). The response to the RAI questions are contained in Attachment 1. A list of Reference (2) pages affected by this RAI response is provided in Attachment 2.

The RAI contains questions and comments stemming from the NRC's partial review of a ComEd request (Reference (2)) to amend the Current Technical Specifications (CTS) for Byron Units 1 and 2 and Braidwood Units 1 and 2. The amendments were requested in order to adopt the Improved Technical Specifications (ITS) of NUREG -1431 Revision 1. The questions and comments involve only Sections 1.0, 2.0, 3.1, and 3.2 of the Reference (2) submittal.

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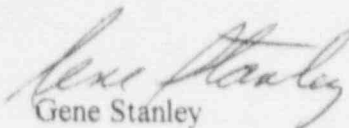
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September 2, 1997

As discussed with NRC Staff in an August 12, 1997 teleconference, this submittal does not include any replacement or marked-up CTS pages. The required page changes and mark-ups will be submitted at a later date when the NRC review of the amendment request is near completion. As stated above, a list of ITS submittal pages affected by this response is provided in Attachment 2

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

Sincerely,



Gene Stanley
Site Vice President
Braidwood Nuclear Generating Station

Attachment 1: Response to NRC RAI Report

Attachment 2: ComEd Response to August 5, 1997 NRC RAI , ITS Submittal Affected
Page List

cc: Regional Administrator-RIII
Byron Project Manager-NRR
Braidwood Project Manager-NRR
Senior Resident Inspector-Braidwood
Senior Resident Inspector-Byron
Office of Nuclear Safety-IDNS

Attachment 1

Response to NRC RAI Report
on the ComEd ITS Submittal

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
1.0-01	8/3/97	Open - NRC Action Required

NRC Description of Issue

1.0-01 DOC-A19
CTS 1.0 - Definition for Shutdown Margin

The definition in the CTS has been revised to conform to the definition in the STS. However, there are two markup errors in the CTS. The CTS markup does not contain "With any RCCA not capable of being fully inserted, the reactivity worth of the RCCA must be accounted for in the determination of SDM; and" which is contained in the ITS. Also, the definition markup does not reference DOC A19, which justifies this change. The only reference to DOC A19 appears on CTS pages 3/4 1-1 and 3/4 1-3. These pages follow the CTS 1.0 markup pages. Comment: Revise the submittal to correct these markup errors.

ComEd Response to Issue

Revised the ITS submittal to correct the markup errors: The CTS markups were revised to add the missing text "With any RCCA not capable of being fully inserted, the reactivity worth of the RCCA must be accounted for in the determination of SDM; and." In addition, CTS DOC 1.0-A19 was added to the CTS markups for the definition of Shutdown Margin.

NRC RAI Number	NRC Issued Date	RAI Status
1.0-02	8/5/97	Open - NRC Action Required

NRC Description of Issue

1.0-02 JFD-P2
ITS 1.2 Logical Connectors, Examples 1.2-1 and 1.2-2
ITS 1.3 Completion Times, Examples 1.3-1 through 1.3-7
ITS 1.4 Frequency, Examples 1.4-1 through 1.4-3

Titles have been added to these examples. The examples in the STS do not contain titles. These changes have been categorized as plant specific changes. Comment: These changes have been categorized incorrectly. These changes are generic. These are not justifiable plant specific or editorial differences.

ComEd Response to Issue

Revised the ITS submittal to omit the titles: ITS and NUREG were revised to delete the titles from the examples in Sections 1.2, 1.3, and 1.4.

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
1.0-03	8/5/97	Open - NRC Action Required

NRC Description of Issue

1.0-03 DOC M2 and DOC A12
JFD C9
TSTF-88
CTS Table 1.2 Note **
ITS Table 1.1-1 Notes (b) and (c)
STS Table 1.1-1 Notes (b) and (c)

The CTS note proposed to be changed by specifying that the "required" bolts be tensioned instead of "all" the bolts as implied by the CTS and specified in the STS. This change and difference is based on TSTF-88 which has not been approved by the NRC. Comment: Revise the submittal to adopt the STS wording of Notes (b) and (c) which is consistent with CTS requirements.

ComEd Response to Issue

No change. The NRC, Owner's Group Chairpersons, and utility management are scheduling a meeting to discuss generic issues (i.e., TSTFs) that involve changes to the Improved Technical Specifications (ITS). The main focus of this meeting is to discuss a schedule for reviewing the TSTFs, who is reviewing the TSTFs, and what direction is to be provided to utilities which have submitted ITS and have taken credit for the TSTFs that have not yet been approved. Therefore, the status of this RAI is pending resolution of these issues.

NRC RAI Number	NRC Issued Date	RAI Status
1.0-04	8/5/97	Open - NRC Action Required

NRC Description of Issue

1.0-04 A13
JFDs C3 and P5 Section 5.0 JFD C9
STS Markup insert 1.1-5A ITS 5.6.6 PTLR
ITS Definition of PTLR
TSTF-4, Revision 1

TSTF-4 proposed placing the PORV lift settings in the PTLR, modifying the PTLR definition to indicate this, and removing the reference to specifications 3.4.3 and 3.4.12 from the PTLR definition. TSTF-4 rejected by NRC on 10/28/96. In addition, JFD P5 states that the LTOP enable temperature, which was added to the PTLR definition by TSTF-4, is not included in the ITS definition of PTLR. Comment: Revise the submittal to adopt the STS definition of PTLR; delete JFDs C3 and P5. Note, DOC A13's statement that the proposed PTLR definition is consistent with the STS is incorrect because the definition is based on TSTF-4. Finally, Section 5.0 JFD C9 should be deleted and ITS 5.6.6 revised to match the STS.

ComEd Response to Issue

By letter dated May 21, 1997, a revision to the Byron and Braidwood CTS was requested to relocate the Pressure and Temperature Limits in accordance with Generic Letter 96-03. At the time of the ITS Revision A submittal, the proposed change to CTS had not yet been submitted. Therefore, the proposed CTS License Amendment Request was incorporated into ITS.

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
1.0-05	8/5/97	Open - NRC Action Required

NRC Description of Issue

1.0-05 Channel Calibration definition

DOC A3 JFD C8 (TSTF-64)

DOC A4 JFD C2 (TSTF-19)

Channel Operational Test (COT) definition

DOC A3 JFD C8 (TSTF-64)

DOC L3 JFD C7 (TSTF-39, Rev.1)

Trip Actuating Device Operational Test (TADOT) definition

DOC A3 JFD C8 (TSTF-64)

DOC L3 JFD C7 (TSTF-39, Rev.1)

The listed definitions in the CTS are proposed to be revised as described by the DOCs and JFDs listed. The following markup of these CTS definitions shows the proposed changes; the justification for each change is noted in bold typeface in brackets following the change. Language common to the corresponding STS definition is underlined.

A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel such that it responds within the required range and accuracy to known values of [A1] inputs. [A1 and P1] The CHANNEL CALIBRATION shall encompass the entire channel including the required sensors and alarm, interlock, display and/or trip functions and [A3 and C8] The CHANNEL CALIBRATION shall encompass those components, such as sensors, alarms, displays, and trip functions, required to perform the specified safety function(s). [A3 and C8] Calibration of instrument channels with Resistance Temperature Detector (RTD) or thermocouple sensors may consist of an in-place qualitative assessment of sensor behavior and normal calibration of the remaining adjustable devices in the channel. [A4] Whenever a sensing element is replaced, the next required CHANNEL CALIBRATION shall include an in-place cross calibration that compares the other sensing elements with the recently installed sensing element. [C2] The CHANNEL CALIBRATION [A4] may be performed by means of [A1] any series of sequential, overlapping calibrations [A1], or total channel steps such that the entire channel is calibrated.

An ANALOG CHANNEL OPERATIONAL TEST COT [A.1] shall be the injection of a simulated or actual [A2] signal into the channel as close to the sensor as practicable to verify the [A3 and C8] OPERABILITY of required alarm, interlock, display, and/or trip functions [A3 and C8], including all components in the channel, such as alarms, interlocks, displays, and trip functions, required to perform the specified safety function(s). [A3 and C8] The COT may be performed by means of any series of sequential, overlapping, or total channel steps so that the entire channel is tested. [L3 and C7] The ANALOG CHANNEL OPERATIONAL TEST [A1] COT shall include adjustments, as necessary, of the required [A3] alarm, interlock and/or [A1] Trip Setpoints such that the Setpoints are within the required range and accuracy.

A TRIP ACTUATING DEVICE OPERATIONAL TEST TADOT [A1] shall consist of operating the trip actuating device and verifying the OPERABILITY of required alarm, interlock, display, and/or trip functions, including all components in the channel, such as alarms, interlocks, displays, and trip functions, required to perform the specified safety function(s). [A3 and C8] The TADOT may be performed by means of any series of sequential, overlapping, or total channel steps so that the entire trip actuating device is tested. [L3 and C7] The TRIP ACTUATING DEVICE OPERATIONAL TEST TADOT [A1] shall include adjustment, as necessary, of the trip actuating device such that it actuates at the required setpoint within the required accuracy.

a. DOC L3 and JFD C7 are based on TSTF-39, Revision 1, which adds to the CTS and STS definitions of COT and TADOT the sentence, "The COT (TADOT) may be performed by means of any series of sequential, overlapping, or total channel steps so that the entire channel (trip actuating device) is tested." TSTF-39, Rev. 1, has not yet been approved by the NRC. Comment: Revise the submittal to withdraw this proposed allowance from the definitions for COT and TADOT if TSTF-39, Rev. 1, is rejected by the NRC.

b. DOC A3 and JFD C8 are based on TSTF-64 which attempts to clarify the CTS and STS definitions of Channel

Calibration, COT, and TADOT. TSTF-64 replaces the CTS and STS wording describing the components that must be tested in each channel. TSTF-64 has not yet been approved by the NRC. Comment: Revise the submittal to adopt the STS wording for this part the definitions for Channel Calibration, COT, and TADOT if TSTF-64 is rejected by the NRC.

v. DOC A4 and JFD C2 are based on TSTF-19 which revises the STS definition of Channel Calibration. TSTF-19 proposes to remove language describing how to perform a Channel Calibration for RTDs and thermocouples following replacement of a sensing element. The NRC approved TSTF-19 with modifications; NRC received TSTF-19, Revision 1, on April 7, 1997, but have not yet approved it. Comment: Revise the submittal to adopt the STS wording for this part the definition for Channel Calibration if TSTF-19, Rev. 1, is rejected by the NRC. Note: Adopting the language added by DOC A4 would be acceptable because the CTS definition currently does not specifically address calibration of RTDs and thermocouples.

ComEd Response to Issue

No change. In a meeting between the NRC and the NEI Technical Specifications Task Force (TSTF) on April 17, 1997, the NRC described problems that had been found with the ISTS definitions of Channel Calibration, Channel Operational Test (COT), Trip Actuating Device Operational Test (TADOT), and related definitions. Based on the NRC's suggestions, the BWROG developed revised definitions of these terms (BWROG-38). The NEI TSTF has reviewed this Traveler and agreed to the proposed changes. The traveler is currently under review by the individual Owner's Groups. Therefore, the status of this RAI is pending resolution of the traveler and review by the NRC.

NRC RAI Number	NRC Issued Date	RAI Status
1.0-06	8/5/97	Open - NRC Action Required

NRC Description of Issue

1.0-06 ITS 1.4 Frequency examples 1.4-3 and 1.4-4
 WOG-74
 JFD C10

a. WOG-74 changes "were" of the STS to "was" in example 1.4-3; the use of "were" in the STS is an intentional use of the subjunctive mood. Comment: Adopt the STS verb form.

b. WOG-74 adds a fourth example to illustrate the use of a surveillance note that says, "Only required to be performed in Mode 1." This is in contrast to the note that says, "Only required to be met in Mode 1," which is addressed in example 1.4-3. Comment: List all occurrences of this note in the ITS, and explain why the Bases explanation in each case is inadequate for understanding how the note modifies the Frequency. In addition, the proposed example fails to state the time limit for performing (and meeting) the surveillance following entry into Mode 1 (this would be the Completion Time of the applicable Required Action). NRC acceptance of this example would require prior owners group and TSTF approval of a corresponding generic change to all five STS NUREGs. Recommend withdrawal of example 1.4-4.

ComEd Response to Issue

Item a: ITS and NUREG were revised to adopt the word "were" in Section 1.4, Frequency Examples 1.4-3 and 1.4-4. Item b: No change. WOG-74 adds a fourth example (Example 1.4-4) to illustrate the use of a Surveillance Requirement (SR) Note that states "Only required to be performed in MODE 1." As the example states, the assumed Applicability of the associated LCO is MODE 1, 2, or 3. As the example also states "Should the 7 day interval be exceeded while operation is not in MODE 1, this Note allows entry into and operation in MODES 2 and 3 to perform the Surveillance." Therefore, the time limit for performing the SR is prior to (not following) entry into MODE 1. In Example 1.4-3, if the SR were not performed within the "specified Frequency" (plus the extension allowed by SR 3.0.2), the use of "Not required to be performed..." permits entry into the specified condition in the Note for a specified time stated in the Note to perform the SR. In contrast, in Example 1.4-4, if the SR were not performed within the "specified Frequency" (plus the extension allowed by SR 3.0.2), the use of "Only required to be performed..." prohibits entry into the specified condition in the Note until the SR were performed. This kind of Note appears in the following ITS SRs: 3.1.2.2, 3.3.1.3, 3.4.3.1, 3.4.11.1 Note 2, 3.4.11.2, 3.4.14.1, 3.4.16.2, 3.5.1.5, 3.5.4.1, 3.5.4.2, 3.7.1.1, and 3.7.2.1. Example 1.4-4 was added to avoid Operator confusion and a potential SR 3.0.4 or SR 3.0.3 violation. ComEd continues to pursue this change.

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
1.0-07	3/1/97	Open - NRC Action Required

NRC Description of Issue

1.0-07 JFD C11
ITS 5.5.16 Containment Leakage Rate Testing Program
STS definition of La
TSTF-52

The definition of La is proposed to be omitted from the ITS and its value specified in ITS 5.5.16. JFD11 states this is consistent with the STS changes proposed by TSTF-52, which TSB modified on 10/24/96 for TSTF consideration. No revisions to TSTF-52 have been submitted to date. However, defining La in the administrative controls program may be acceptable - it was acceptable in the Vogtle Units 1 and 2 conversion to the ITS. Comment: The purpose of this comment is solely to track resolution of TSTF-52 as it relates to the adoption of Appendix J Option B for Byron and Braidwood. It may be repeated (with different emphasis) in comments for ITS Section 3.6.

ComEd Response to Issue

The purpose of this comment is solely to track resolution of TSTF-52 as it relates to the adoption of Appendix J Option B for Byron and Braidwood. No response required.

NRC RAI Number	NRC Issued Date	RAI Status
2.0-01	8/5/97	Open - NRC Action Required

NRC Description of Issue

2.0-01 JFD P1
ITS Figure 2.1.1-1, (page 1 of 1) Reactor Core Safety Limits
CTS Figure 2.1-1, Reactor Core Safety Limit - Four Loops in Operation

CTS Figure 2.1-1, x-axis is titled "Power (Fraction of Nominal)". ITS Figure 2.1.1-1, (page 1 of 1) Reactor Core Safety Limits, x-axis is titled "THERMAL POWER (PERCENT)". The STS and correct x-axis name is "PERCENT OF RATED THERMAL POWER". The Figure should state the safety limit for a given thermal power level that is based on a percentage with respect to the "RATED" THERMAL POWER. The percentage must be based upon a distinctive value such as RTP to be determined as a percent of the accepted value. Comment: Revise the submittal as described.

ComEd Response to Issue

Revised the ITS submittal as described: The titles of the x-axes for the Byron and Braidwood Reactor Core Safety Limits Figure 2.1-1 and the ITS Reactor Core Safety Limits Figure 2.1.1-1 were revised to read "PERCENT OF RATED THERMAL POWER" consistent with NUREG-1431 Revision 1.

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
2.0-02	8/5/97	Open - NRC Action Required

NRC Description of Issue

2.0-02 JFD BP1
Bases ITS 2.1.1

In the Applicable Safety Analyses, second paragraph, first sentence states that RTS setpoints are from the UFSAR analyses and the setpoint methodology study which are then used in ITS 3.3.1. Ref. 2 is correct and should not be deleted. In the last paragraph, the deletion of the UFSAR Ref. 2 appears incorrect. These deletions are per BP1 which does not explain the specific technical reasons for these deletions. Comment: Revise the submittal as described.

ComEd Response to Issue

Revised the ITS submittal as described: ITS and NUREG were revised to include "(Ref.2)" consistent with NUREG-1431 Revision 1.

NRC RAI Number	NRC Issued Date	RAI Status
2.0-03	8/5/97	Open - NRC Action Required

NRC Description of Issue

2.0-03 JFD BP5
Bases ITS 2.1.1, page B 2.0-3

In the Safety Limits, first sentence, the reference to the figure should be to the actual figure used in the SL. Including the figure in the Bases is optional, and easy to update if included. Comment: Revise JFD BP5 as noted.

ComEd Response to Issue

No change. The Background Section of the Bases for NUREG LCO 3.1.7 (page B 3.1-39) states "An example is provided for information only in Figure B 3.1.7-1" and Figure B 3.1.7-1 states "This figure for illustration only. Do not use for operation." Similarly, Figure B 2.1.1-1 states "For illustration only. Do not use for operation." RAI 3.1.6-03, states "Figure in STS is for illustrative purposes". In addition, the LCO Section of the Bases for NUREG LCO 3.2.3 (page B 3.2-31) states that "Figure B 3.2.3A-1 shows a typical target band and typical AFD acceptable operation limits" (also Ref. RAI 3.2.3-03); Figure B 3.2.3A-1 states "This figure for illustration only. Do not use for operation." Including "illustration only" figures in the Bases is consistent with NUREG-1431 Revision 1. The convention adopted in the Byron and Braidwood ITS submittal was to delete "illustration only" figures in the Bases to eliminate the possibility of an Operator inadvertently using a Bases figure in place of an actual figure. However, because Bases Figure B 2.1.1-1 contains more information than the LCO Figure, the figure was retained. ComEd continues to pursue this change.

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
2.0-04	8/5/97	Open - NRC Action Required

NRC Description of Issue

2.0-04 JFD BP7
Bases ITS 2.1.2, page B 2.0-7

In the Background discussion, second paragraph, the justification of the text is acceptable. However, the JFD BP7 justification implies there are approved exemptions to the ASME Code. Comment: Revise JFD BP7 with a more detailed explanation and technical basis for this difference.

ComEd Response to Issue

Revised the ITS submittal to expand Bases JFD 2.0-P7 as follows: "Per 10 CFR 50.55a (3) relief from ASME Code requirements can be granted by NRR if alternative methods provide an acceptable level of quality and safety or if compliance with Code requirements would result in hardship or unusual difficulty without a compensating increase in safety and quality. These exemptions from ASME code requirements are common for both inservice inspection of components and inservice testing of pumps and valves. In addition, 10 CFR 50.55a(g)(5)(ii) states that if a revised inservice inspection program conflicts with the Technical Specifications, the Licensee shall apply to the NRC for amendment to the Technical Specifications to the revised program."

NRC RAI Number	NRC Issued Date	RAI Status
2.0-05	8/5/97	Open - NRC Action Required

NRC Description of Issue

2.0-05 JFD BP2
Bases ITS 2.1.2, page B 2.0-9

In the discussion of Safety Limit Violations, the difference justified by JFD BP2 deletes the words "the RCS pressure" in lieu of SL "2.1.2". This change is equivalent but it eliminates a clear identification that the safety limit under discussion is the one concerning the "RCS pressure" SL rather than using a numerical identification. Comment: Revise the submittal to adopt the STS wording.

ComEd Response to Issue

Revised the submittal to adopt Byron and Braidwood ITS wording for referencing Specifications: ITS and NUREG have been revised to replace NUREG wording "the RCS Pressure SL" in the Safety Limit Violations Section of the Bases for NUREG SL 2.1.2 with "SL 2.1.2, "RCS Pressure SL, """. This change is consistent with the convention used throughout the ITS submittal for referencing ITS SLs/LCOs.

NRC RAI Number	NRC Issued Date	RAI Status
2.0-06	8/5/97	Open - ComEd Action Required

NRC Description of Issue

2.0-06 JFD BP11
Bases ITS 2.1.2, page B 2.0-9

In the discussion of Safety Limit Violations, JFD BP11 provides guidance if the SL CT is exceeded. Comment: Submit TSTF to incorporate BP11 change into STS.

ComEd Response to Issue

ComEd will submit a traveler at the next Westinghouse Owner's Group (WOG) ITS meeting scheduled for November 19 and 20, 1997 to propose the Byron and Braidwood plant specific change to the WOG. In the interim, ComEd continues to pursue this change.

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
3.1-01	8/5/97	Open - ComEd Action Required

NRC Description of Issue

3.1-01 JFD-P19

SR 3.1.6.1, the verification of the estimated critical control bank position.

The word "Once" has been added to the frequency which specifies an interval "Within" a particular time frame ("Within 4 hours prior to criticality"). Comment: This is a legitimate use of the word "Once" in an SR frequency, and it is a generic change. This should be brought to the Tech Spec Task Force for future action.

ComEd Response to Issue

ComEd will submit a traveler at the next Westinghouse Owner's Group (WOG) ITS meeting scheduled for November 19 and 20, 1997 to propose the Byron and Braidwood plant specific change to the WOG. In the interim, ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.1.1-01	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.1.1-01 Bases discussion of ITS SR 3.1.1.1, page B 3.1-6

The sentence "The SDM is specified in the COLR." has been added to the Bases. Comment: Revise this insert to read "The SDM limits are specified in the COLR."

ComEd Response to Issue

ITS and NUREG were revised to reword the Bases insert (Ref. Bases JFD 3.1-P2 on page B 3.1-6) to read "The SDM limits are specified in the COLR."

NRC RAI Number	NRC Issued Date	RAI Status
3.1.2-01	8/5/97	Open - ComEd Action Required

NRC Description of Issue

3.1.2-01 JFD-P4

JFD-BP9

ITS SR 3.1.2.1 and SR 3.1.2.2

STS SR 3.1.3.1

In lieu of adopting STS SR 3.1.3.1, verification of core reactivity - with two frequencies, the ITS specifies two SRs, SR 3.1.2.1 and SR 3.1.2.2. Comment: This is an editorial change. Submit a TSTF change request.

ComEd Response to Issue

ComEd will submit a traveler at the next Westinghouse Owner's Group (WOG) ITS meet'ng scheduled for November 19 and 20, 1997 to propose the Byron and Braidwood plant specific change to the WOG. In the interim, ComEd continues to pursue this change.

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
3.1.3-01	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.1.3-01 JFD-BP6

Bases discussion for ITS SR 3.1.3.2, page B 3.1-23

The discussion about the 300 ppm surveillance limit for the MTC has not been adopted. The reason given for this difference is that the discussion is at a level of detail not actually in the SR. This material is relevant to understanding the development of the 300 ppm MTC Surveillance limit. Comment: This is not a justifiable plant specific or editorial difference from the STS. Revise the submittal to adopt the STS discussion.

ComEd Response to Issue

ITS and NUREG were revised to include in the Surveillance Requirements Section of the Bases for ITS LCO 3.1.3 "Because the RTP MTC value will gradually become more negative with further core depletion and boron concentration reduction, a 300 ppm SR value of MTC should necessarily be less negative than the EOL LCO limit. The 300 ppm SR value is sufficiently less negative than the EOL LCO limit value to ensure that the LCO limit will be met when the 300 ppm Surveillance criterion is met." As a result, Bases JFD 3.1-P6 was changed to "Not used."

NRC RAI Number	NRC Issued Date	RAI Status
3.1.4-01	8/5/97	Open - ComEd Action Required

NRC Description of Issue

3.1.4-01 DOC-A6

JFD-P7

ITS 3.1.4, Required Action B

CTS 3.1.3.1.b.1

STS 3.1.5, Required Action B.1

The CTS and STS contain the required action to restore rod alignment. The ITS deletes this action, since complying with the LCO is always an option. Approved.

Comment: Provide a TSTF change request for this change.

ComEd Response to Issue

ComEd will submit a traveler at the next Westinghouse Owner's Group (WOG) ITS meeting scheduled for November 19 and 20, 1997 to propose the Byron and Braidwood plant specific change to the WOG. In the interim, ComEd continues to pursue this change.

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
3.1.4-02	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.1.4-02 DOC-LA9
JFD-C10
ITS SR 3.1.4.1
CTS SR 4.1.3.1.1
STS SR 3.1.5.1

The CTS and STS have an increased SR frequency to verify rod alignment when the rod position deviation monitor is inoperable. This change has been submitted in TSTF traveller 110. TSTF-110 final disposition is pending, and has been recommended for rejection.

Comment: Retain increased SR frequency when the rod position deviation monitor is inoperable.

ComEd Response to Issue

No change. TSTF-110 Revision 1 relocates conditional Surveillance Requirements (SRs) for functions with inoperable alarms from the Technical Specifications (TSs) to plant procedures or programs. The TSTF justifies this by stating that the alarms do not directly relate to the LCO limits. Inoperable alarms do not affect the operability of the TS function. This justification was used and accepted by the Staff during the development of the BWR NUREGs to allow relocation of the alarm functions from the BWR Technical Specifications to plant procedures. This justification was accepted by the Staff prior to the issuance of Revision 0 of the NUREGs. Typically these alarms are monitoring parameters which must be verified met on a specified Frequency (e.g., 12 hours). The basis for this Frequency is justified due to the operability of the alarm function. Whenever this alarm function becomes inoperable, a more frequent SR Frequency interval is performed on the parameter (e.g., 4 hours). This Frequency continues until the alarm function is restored to operable status. Relocating this detail to plant procedures or programs would not impact the safety significance of the TS requirement since the parameter being monitored is presumed to be operable whenever the alarm becomes inoperable. The inoperable alarm function does not impact operability of the monitored parameter. In addition, other ITS SR Frequencies are stated in the ITS Bases to be based on associated alarms or indications which are assumed to be operable or available. (e.g., The Actions Section of the Bases for ITS LCO 3.2.4 for Required Action A.2 states "A 12 hour Completion Time is sufficient because any additional change in QPTR should be relatively slow. Further, this Completion Time is consistent with the Frequency required for the Surveillances with an inoperable alarm or instrumentation." The Surveillance Requirements Section of the Bases for ITS LCO 3.8.1 discussing SR 3.8.1.4 states "The 31 day Frequency is adequate to assure that a sufficient supply of fuel oil is available, since low level alarms are provided and facility operators would be aware of any large uses of fuel oil during this period." The Surveillance Requirements Section of the Bases for ITS LCO 3.9.5 discussing SR 3.9.5.1 states "The Frequency of 12 hours is sufficient, considering the flow, temperature, pump control, and alarm indications available to the operator in the control room for monitoring the RHR System." The Surveillance Requirements Section of the Bases for ITS LCO 3.9.6 discussing SR 3.9.6.1 states "The Frequency of 12 hours is sufficient, considering the flow, temperature, pump control, and alarm indications available to the operator for monitoring the RHR System.") These alarms/indications are not specified in the TSs but typically require additional actions within plant procedures to account for the alarm/indication not being available. Typically alarm response procedures provide guidance for any necessary actions whenever alarms are inoperable. Placing this detail in these procedures ensures that the operator has sufficient guidance to respond to the inoperable alarm function and to perform the necessary conditional SRs. (See RAIs 3.1.6-05 and 3.2.3-04) ComEd continues to pursue this change.

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
3.1.5-01	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.1.5-01 JFD-P12
JFD-P14
ITS 3.1.5, Applicability
Bases for ITS 3.1.5, Applicability - page B 3.1-36
STS 3.1.6 Applicability Note

The STS Applicability Note states, "This LCO is not applicable while performing SR 3.1.5.2." This note is adopted in corresponding ITS 3.1.5, with changes, but is placed with the LCO statement to prevent a possible misinterpretation of SR 3.0.4. The ITS note states "Shutdown banks may be outside the limit when required for performance of SR 3.1.4.2." Comment: These are not justifiable plant specific or editorial differences from the STS. The STS presentation is clear. Revise the submittal to adopt the STS presentation.

ComEd Response to Issue

ITS and NUREG have been revised to adopt the NUREG wording for the Note. As a result, LCO JFD 3.1-P13 was changed to "Not used." However, the relocation of the Note from the Applicability to the LCO has not changed. ComEd continues to pursue this change. All of the Notes in the Applicability section of the NUREG LCOs have been moved to the LCO section of the ITS LCOs either plant specifically or as a result of a TSTF that was incorporated. The Note applies to exceptions to the entire LCO and not to exceptions to the Applicability. Having a Note that modifies the Applicability requirements could imply an exception to the Applicability and thus, could lead to a misinterpretation of SR 3.0.4. Placing the Note in the LCO Section prevents misinterpretation of SR 3.0.4. The following is a list of ITS LCOs in which this convention was adopted. LCOs in which the Note was moved by a plant specific change: 3.1.5, 3.1.6, 3.3.9, 3.4.1, 3.4.10, 3.4.12, and 3.9.6 (SR Note moved to LCO); LCOs in which the Note was moved by a TSTF: 3.2.3, 3.5.2, and 3.5.3 (SR Note moved to LCO); LCOs in which the Note was added by a plant specific change: 3.7.12, 3.8.5, and 3.9.4; LCOs in which the Note was added by a TSTF: 3.6.3. (See RAI 3.1.6-01.)

NRC RAI Number	NRC Issued Date	RAI Status
3.1.5-02	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.1.5-02 JFD-C12
ITS 3.1.5 Applicability
(recurring editorial changes)

The ITS incorporates editorial changes to the presentation of the Applicability paragraph (semi-colons and the word "and" have been added). Comment: Revise the submittal to adopt the STS presentation.

ComEd Response to Issue

WOG-81 was withdrawn from the ITS submittal. ITS and NUREG were revised to adopt the ISTS presentation in the Applicability section of ITS LCOs 3.1.1, 3.1.3, 3.1.5, and 3.1.6. As a result, LCO JFD 3.1-C12 was changed to "Not used."

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
3.1.6-01	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.1.6-01 JFD-P12

JFD-P14

ITS 3.1.6, Applicability

Bases discussion for ITS 3.1.6, Applicability - page B 3.1-42

STS 3.1.7, Applicability Note

The STS Applicability Note states, "This LCO is not applicable while performing SR 3.1.5.2." This note is adopted in corresponding ITS 3.1.6, with changes, but is placed with the LCO statement to prevent a possible misinterpretation of SR 3.0.4. The ITS note states, "Shutdown banks may be outside the limit when required for performance of SR 3.1.4.2." Comment: These are not justifiable plant specific or editorial differences from the STS. The STS presentation is clear. Revise the submittal to adopt the STS presentation.

ComEd Response to Issue

ITS and NUREG have been revised to adopt the NUREG wording for the Note. As a result, LCO JFD 3.1-P14 was changed to "Not used." However, the relocation of the Note from the Applicability to the LCO has not changed. ComEd continues to pursue this change. All of the Notes in the Applicability section of the NUREG LCOs have been moved to the LCO section of the ITS LCOs either plant specifically or as a result of a TSTF that was incorporated. The Note applies to exceptions to the entire LCO and not to exceptions to the Applicability. Having a Note that modifies the Applicability requirements could imply an exception to the Applicability and thus, could lead to a misinterpretation of SR 3.0.4. Placing the Note in the LCO Section prevents misinterpretation of SR 3.0.4. The following is a list of ITS LCOs in which this convention was adopted. LCOs in which the Note was moved by a plant specific change: 3.1.5, 3.1.6, 3.3.9, 3.4.1, 3.4.10, 3.4.12, and 3.9.6 (SR Note moved to LCO); LCOs in which the Note was moved by a TSTF: 3.2.3, 3.5.2, and 3.5.3 (SR Note moved to LCO); LCOs in which the Note was added by a plant specific change: 3.7.12, 3.8.5, and 3.9.4; LCOs in which the Note was added by a TSTF: 3.6.3. (See RAI 3.1.5-01.)

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
3.1.6-02	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.1.6-02 CTS 4.1.3.6
ITS SR 3.1.6.1

SR 3.1.6.1 provides the Surveillance Requirement and the associated Frequency for the verification of the estimated critical control bank position. Corresponding CTS 4.1.3.6 does not show this material. Comment: This material does not appear in the markup of CTS 3/4.1.3.6. Revise the submittal to show the addition of this Surveillance Requirement to the CTS.

ComEd Response to Issue

CTS markup pages 3/4 1-1 for CTS SR 4.1.1.1.1.b and 4.1.1.1.1.c were revised to include the material originally deleted by CTS DOC 3.1-R1. CTS SR 4.1.1.1.1.b was annotated with "SR 3.1.6.2" in the margin and CTS SR 4.1.1.1.1.c was annotated with "SR 3.1.6.1" in the margin. In addition, CTS markup pages 3/4 1-21 and Insert 3.1-21C were revised to add SR 3.1.6.1 to CTS Insert 3.1-21C. CTS DOC 3.1-A23 was created to document this change and reads "CTS SR 4.1.1.1.1.b requires that the SDM shall be determined to be within the limits specified in the COLR when in MODE 1 or 2 with keff greater than or equal to 1 at least once per 12 hours by verifying that control bank insertion is within the limits of Specification 3.1.3.6. This requirement has been retained in ITS as SR 3.1.6.2. In addition, CTS SR 4.1.1.1.1.c requires that the SDM shall be determined to be within the limits specified in the COLR when in MODE 2 with keff less than 1 within 4 hours prior to achieving reactor criticality by verifying that the predicted critical control rod position is within the limits of Specification 3.1.3.6. This requirement has been retained in ITS as SR 3.1.6.1. Since the SRs have been changed in format and presentation only, and the original intent was not changed, this is considered to be an administrative change and is consistent with NUREG-1431."

NRC RAI Number	NRC Issued Date	RAI Status
3.1.6-03	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.1.6-03 BP34
Bases for ITS 3.1.6, Background - page B 3.1-39

Figure B 3.1.7-1, Control Bank Insertion vs. Percent RTP, has not been adopted. The justification for this difference is that the figure in the Bases duplicates the figure contained in the COLR, and to prevent misapplication and misinterpretation of the figure in the COLR. Comment: Figure in STS is for illustrative purposes. Consider using figure identical to figure in COLR.

ComEd Response to Issue

No change. The convention adopted in the Byron and Braidwood ITS submittal was to delete "illustration only" figures in the Bases to eliminate the possibility of an Operator inadvertently using a Bases figure in place of an actual figure. (See RAI 2.0-03.) ComEd continues to pursue this change.

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
3.1.6-04	8/5/97	Open - ComEd Action Required

NRC Description of Issue

3.1.6-04 JFD-P19
ITS SR 3.1.6.1
STS SR 3.1.7.1

The word "Once" has been added to the frequency which specifies an interval "Within" a particular time frame ("Within 4 hours prior to criticality"). Comment: This is a legitimate use of the word "Once" in an SR frequency, and it is a generic change. This should be brought to the Tech Spec Task Force for future action.

ComEd Response to Issue

ComEd will submit a traveler at the next Westinghouse Owner's Group (WOG) ITS meeting scheduled for November 19 and 20, 1997 to propose the Byron and Braidwood plant specific change to the WOG. In the interim, ComEd continues to pursue this change.

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
3.1.6-05	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.1.6-05 JFD-C10
ITS SR 3.1.6.2
CTS SR 4.1.3.6
STS SR 3.1.7.2

The CTS and STS have an increased SR frequency to verify rod alignment when the rod position deviation monitor is inoperable. This change has been submitted in TSTF traveller 110. TSTF-110 final disposition is pending, and has been recommended for rejection.

Comment: Retain increased SR frequency when the rod position deviation monitor is inoperable.

ComEd Response to Issue

No change. TSTF-110 Revision 1 relocates conditional Surveillance Requirements (SRs) for functions with inoperable alarms from the Technical Specifications (TSs) to plant procedures or programs. The TSTF justifies this by stating that the alarms do not directly relate to the LCO limits. Inoperable alarms do not affect the operability of the TS function. This justification was used and accepted by the Staff during the development of the BWR NUREGs to allow relocation of the alarm functions from the BWR Technical Specifications to plant procedures. This justification was accepted by the Staff prior to the issuance of Revision 0 of the NUREGs. Typically these alarms are monitoring parameters which must be verified met on a specified Frequency (e.g., 12 hours). The basis for this Frequency is justified due to the operability of the alarm function. Whenever this alarm function becomes inoperable, a more frequent SR Frequency interval is performed on the parameter (e.g., 4 hours). This Frequency continues until the alarm function is restored to operable status. Relocating this detail to plant procedures or programs would not impact the safety significance of the TS requirement since the parameter being monitored is presumed to be operable whenever the alarm becomes inoperable. The inoperable alarm function does not impact operability of the monitored parameter. In addition, other ITS SR Frequencies are stated in the ITS Bases to be based on associated alarms or indications which are assumed to be operable or available. (e.g., The Actions Section of the Bases for ITS LCO 3.2.4 for Required Action A.2 states "A 12 hour Completion Time is sufficient because any additional change in QPTR should be relatively slow. Further, this Completion Time is consistent with the Frequency required for the Surveillances with an inoperable alarm or instrumentation." The Surveillance Requirements Section of the Bases for ITS LCO 3.8.1 discussing SR 3.8.1.4 states "The 31 day Frequency is adequate to assure that a sufficient supply of fuel oil is available, since low level alarms are provided and facility operators would be aware of any large uses of fuel oil during this period." The Surveillance Requirements Section of the Bases for ITS LCO 3.9.5 discussing SR 3.9.5.1 states "The Frequency of 12 hours is sufficient, considering the flow, temperature, pump control, and alarm indications available to the operator in the control room for monitoring the RHR System." The Surveillance Requirements Section of the Bases for ITS LCO 3.9.6 discussing SR 3.9.6.1 states "The Frequency of 12 hours is sufficient, considering the flow, temperature, pump control, and alarm indications available to the operator for monitoring the RHR System.") These alarms/indications are not specified in the TSs but typically require additional actions within plant procedures to account for the alarm/indication not being available. Typically alarm response procedures provide guidance for any necessary actions whenever alarms are inoperable. Placing this detail in these procedures ensures that the operator has sufficient guidance to respond to the inoperable alarm function and to perform the necessary conditional SRs. (See RAIs 3.1.4-02 and 3.2.3-04) ComEd continues to pursue this change.

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
3.1.6-06	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.1.6-06 JFD-P1
ITS SR 3.1.6.3
STS SR 3.1.7.3

ITS SR 3.1.6.3 has been editorially rewritten.

Comment: These are not justifiable plant specific or editorial differences from the STS. The STS presentation is clear. Revise the submittal to adopt the STS presentation.

ComEd Response to Issue

No change. The change was for consistency in parallel construction within the LCO, the Required Actions, and the other two SRs. The LCO states "{Each control bank} shall be within the {insertion, sequence, and overlap} limits specified in the COLR." The Required Actions and the SRs were constructed similarly (i.e., "Verify {...} is within the {...} limits specified in the COLR."). Required Acitons A.1.1 and B.1.1 state "Verify {SDM} is within the limits specified in the COLR." SR 3.1.6.1 states "Verify {estimated critical control bank position} is within the limits specified in the COLR." SR 3.1.6.2 states "Verify {each control bank} is within the {insertion} limits specified in the COLR." Likewise, SR 3.1.6.3 states "Verify {each control bank not fully withdrawn from the core} is within the {sequence and overlap} limits specified in the COLR." This change has been previously approved by the NRC as documented in the Ginna and Vogtle Safety Evaluation Reports. ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.1.7-01	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.1.7-01 DOC-L11
DOC-L4
JFD-C13
JFD-P10
ITS 3.1.7
CTS 3.1.3.2
STS 3.1.8

CTS 3.1.3.2 contains provisions for one Digital Rod Position Indication (DRPI) per bank inoperable. The STS relaxes this requirement by allowing one DRPI per group inoperable. The ITS attempts to take this a step further and allow all DRPI to be inoperable for up to 24 hours; by rewording the ACTIONS NOTE, and replacing CONDITION B. DOCs L4 and L11 do not adequately or accurately address these changes. Justification for these changes is based upon WOG-73, which has not been approved through the TSTF process. These changes are not consistent with NUREG-1431 as stated. Comment: Revise the submittal to adopt the STS wording. Revise the CTS markup to show the entire proposed change.

ComEd Response to Issue

No change. The NRC, Owner's Group Chairpersons, and utility management are scheduling a meeting to discuss generic issues (i.e., TSTFs) that involve changes to the Improved Technical Specifications (ITS). The main focus of this meeting is to discuss a schedule for reviewing the TSTFs, who is reviewing the TSTFs, and what direction is to be provided to utilities which have submitted ITS and have taken credit for the TSTFs that have not yet been approved. Therefore, the status of this RAI is pending resolution of these issues.

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
3.1.7-02	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.1.7-02 Bases discussion for ITS 3.1.7 Background, page B 3.1-47

Bases Insert B 3.1-47A states that the Bank Demand Position Indication System is "not very reliable..." No additional quantification has been provided. In contrast with this, Bases Insert B 3.1-47B provides substantially more information about the Digital Rod Position Indication System. Comment: Revise the submittal to provide additional information about the reliability of the Bank Demand Position Indication System.

ComEd Response to Issue

No change. Clarifying information about the reliability of the Bank Demand Position Indication System is found in the Background Section of the Bases for ITS LCO 3.1.7. In the Bases Markups section, page B 3.1-47, second paragraph, last sentence, it states "For example, if a rod does not move one step for each demand pulse, the step counter will still count the pulse and incorrectly reflect the position of the rod." ComEd continues to pursue this change.

NRC RAI Number	NRC Issued Date	RAI Status
3.1.8-01	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.1.8-01 Bases discussion for ITS 3.1.8 Background, page B 3.1-63

An insert has been proposed that discusses the beginning of life (BOL) and end of life (EOL) moderator temperature coefficient (MTC) tests that are performed and the associated Surveillance Requirements that they fulfill. Comment: The EOL MTC test is not performed in Mode 2, it is performed at power. The physics test exceptions provided by ITS 3.1.8 do not relate to the EOL MTC test. Revise the submittal and delete the reference to the EOL MTC test from the insert.

ComEd Response to Issue

ITS and NUREG were revised to delete the reference to the EOL MTC test from the insert and to delete the reference to SR 3.1.3.2 from the insert. The insert now reads "The Moderator Temperature Coefficient (MTC) at Beginning Of Life (BOL) is determined from the measured ITC. This test satisfies the requirement of SR 3.1.3.1."

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
3.2.1-01	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.2.1-01 JFD P4
ITS SR 3.2.1.1 and SR 3.2.1.2
Bases discussion for ITS SR 3.2.1.1 and SR 3.2.1.2

In the STS the Frequency for these Surveillances state in part, "Once within [12] hours after achieving equilibrium conditions after exceeding, by greater than or equal to 10% RTP, the Thermal Power at which Fcq(Z) was last verified." In contrast, the ITS proposes to utilize 20% instead of 10%. The explanation that has been provided for this difference is that the current licensing basis which utilizes Fxy methodology for a similar surveillance utilizes the 20% value. STS SR 3.2.1.2 Note 2 of STS 3.2.1A (Fxy methodology) utilizes 20%. However, the FQ methodology has been proposed for the STS not the Fxy methodology. Comment: This is not a justifiable plant specific or editorial difference. Revise the submittal to conform to the STS.

ComEd Response to Issue

ITS and NUREG LCOs and Bases were revised to change "20% RTP" in ITS SR 3.2.1.1 and SR 3.2.1.2 to "10% RTP." As a result, LCO JFD 3.2-P4 and Bases JFD 3.2-P7 were changed to "Not used."

NRC RAI Number	NRC Issued Date	RAI Status
3.2.1-02	8/5/97	Open - ComEd Action Required

NRC Description of Issue

3.2.1-02 JFD P9
ITS 3.2.1 Required Action B.1.1

The ITS proposed Required Action B.1.1 states, "Reduce Thermal Power below the Allowed Power Limit (APL)." This proposed statement is provided as an option to the STS Required Action of, "Reduce Thermal Power greater than or equal to 1% RTP for each 1% FWQ(Z) exceeds limit." Comment: The proposed Required Actions for Condition B are under review. Submit a TSTF change request for this change.

ComEd Response to Issue

ComEd will submit a traveler at the next Westinghouse Owner's Group (WOG) ITS meeting scheduled for November 19 and 20, 1997 to propose the Byron and Braidwood plant specific change to the WOG. In the interim, ComEd continues to pursue this change.

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
3.2.1-03	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.2.1-03 JFD P9

ITS 3.2.1 Condition A Note

Bases discussion for ITS 3.2.1 Actions, page B 3.2-15, insert B 3.2-15A

A note has been added to Condition A of ITS 3.2.1B and associated Bases that stipulates that Required Action A.4 must be completed whenever Condition A is entered. Comment: This proposed NOTE is redundant to the Completion Time for Required Action A.4, and is unnecessary.

ComEd Response to Issue

ITS and NUREG LCO 3.2.1 and Bases, and CTS Markups, were revised to delete the Note that was added in Revision A of the ITS submittal. As a result, LCO JFD 3.2-P9 and Bases JFD 3.2-P9 were revised to delete the first sentence which states "NUREG Condition A of LCO 3.2.1B and associated Bases were revised to add a note requiring that Required Action A.4 be completed whenever Condition A is entered even though the requirements of the LCO may have been met."

NRC RAI Number	NRC Issued Date	RAI Status
3.2.2-01	8/5/97	Open - ComEd Action Required

NRC Description of Issue

3.2.2-01 JFD P5

ITS 3.2.2

STS 3.2.2

ITS deletes Required Action to restore Hot Channel Factor to within limits.

Comment: Submit TSTF request to adopt change.

ComEd Response to Issue

ComEd will submit a traveler at the next Westinghouse Owner's Group (WOG) ITS meeting scheduled for November 19 and 20, 1997 to propose the Byron and Braidwood plant specific change to the WOG. In the interim, ComEd continues to pursue this change.

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
3.2.3-01	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.2.3-01 JFD P8

ITS 3.2.3 Actions, Note for Condition C
Bases discussion for ITS 3.2.3 Actions, page B 3.2-33

In the STS Condition C contains a note that states, "Required Action C.1 must be completed whenever Condition C is entered." This note has not been adopted in the ITS. The corresponding STS Bases discussion also has not been adopted. Comment: This is not a justifiable plant specific or editorial difference. Revise the submittal to conform to the STS.

ComEd Response to Issue

ITS and NUREG LCO 3.2.3 and Bases, and CTS Markups, were revised to adopt the Note in Condition C. As a result, LCO JFD 3.2-P8 and Bases JFD 3.2-P16 were changed to "Not used." In addition, CTS DOC 3.2-M1 was created to document this change and reads "CTS Action 3.2.1.b.1 requires with THERMAL POWER less than 90% but equal to or greater than 50% of RATED THERMAL POWER, reduce THERMAL POWER to less than 50% of RATED THERMAL POWER within 30 minutes. ITS 3.2.3, Required Action C contains the same requirement but adds a Note stating, "Required Action C.1 must be completed whenever Condition C is entered." The ITS also provides an additional part to Condition C stating, "OR THERMAL POWER <90% RTP and greater than or equal to 50% RTP with AFD not within the acceptable operation limits, reduce THERMAL POWER to < 50% RTP within 30 minutes." Although an "OR" statement, this is considered to be more restrictive since, if chosen, will require THERMAL POWER to be reduced to less than or equal to 50% RTP, even if the AFD is restored to within limits prior to completing the RTP reduction to less than or equal to 50%. This change is consistent with the NUREG-1431."

NRC RAI Number	NRC Issued Date	RAI Status
3.2.3-02	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.2.3-02 Bases discussion for ITS 3.2.3 Background, page B 3.2-28

The STS description of target flux difference determinations states that Control Bank D should be inserted near its normal position (i.e., greater than or equal to 210 steps withdrawn) for steady state operation at high power levels. The ITS has not adopted the parenthetical phrase "(i.e., greater than or equal to 210 steps withdrawn)". Comment: This is neither a justifiable plant specific difference nor a change that adds clarity. Revise the submittal to conform to the STS.

ComEd Response to Issue

ITS and NUREG were revised to adopt the phrase "(i.e., > or = 210 steps withdrawn)" and the Bases Markup referencing Bases JFD 3.2-P11 was deleted. It should be noted that Byron and Braidwood do not necessarily operate with Control Bank (CB) D at 210 steps withdrawn. The CB D position varies with core flux.

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
3.2.3-03	8/5/97	Open - ComEd Action Required

NRC Description of Issue

3.2.3-03 Bases discussion for ITS LCO 3.4.3, page B 3.2-31
STS Bases Figure B 3.2.3A-1, Axial Flux Difference Acceptable Operation
Limits and Target Band Limits as a Function of Rated Thermal Power

The STS states that Figure B 3.2.3A-1 shows a typical target band and typical AFD acceptable operation limits. This statement and the figure have not been adopted by the ITS. Instead, the ITS proposes the COLR to contain the figure showing the target band and AFD acceptable operating limits. Comment: Suggest including copy of actual figure in Bases.

ComEd Response to Issue

No change. The convention adopted in the Byron and Braidwood ITS submittal was to delete "illustration only" figures in the Bases to eliminate the possibility of an Operator inadvertently using a Bases figure in place of an actual figure. (See RAI 2.0-03.) ComEd continues to pursue this change. (Correction Note to NRC Description of Issue: Reference should be to ITS LCO 3.2.3, not 3.4.3.)

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
3.2.3-04	8/5/97	Open - ComEd Action Required

NRC Description of Issue

3.2.3-04 DOC LA4
JFD C9
JFD C1
ITS SR 3.2.3.2
CTS SR 4.2.1.4
STS SR 3.2.3.2 & SR 3.2.3.3

ITS combines details of STS SR 3.2.3.2 & SR 3.2.3.3 into one SR 3.2.3.2. Some STS details are removed from the ITS. These changes are based upon TSTF-110.

Comments: TSTF-110 has not been approved and is recommended for rejection. TSTF-24 has been rejected. Retain STS detail in ITS.

ComEd Response to Issue

Regarding TSTF-24: TSTF-24 was withdrawn from the ITS submittal. Action Item #31 of the generic traveler tracking system used by the Westinghouse Owner's Group (WOG) revises NUREG LCO 3.2.1 to correct errors and to reflect the majority of the core monitoring methodology used by Westinghouse plants. WOG members have reviewed this traveler and agreed to the proposed changes. The traveler is currently under review by the other Owner's Groups (OGs). Therefore, the status of this RAI is pending review by the OGs. Regarding TSTF-110: No change. TSTF-110 Revision 1 relocates conditional Surveillance Requirements (SRs) for functions with inoperable alarms from the Technical Specifications (TSs) to plant procedures or programs. The TSTF justifies this by stating that the alarms do not directly relate to the LCO limits. Inoperable alarms do not affect the operability of the TS function. This justification was used and accepted by the Staff during the development of the BWR NUREGs to allow relocation of the alarm functions from the BWR Technical Specifications to plant procedures. This justification was accepted by the Staff prior to the issuance of Revision 0 of the NUREGs. Typically these alarms are monitoring parameters which must be verified met on a specified Frequency (e.g., 12 hours). The basis for this Frequency is justified due to the operability of the alarm function. Whenever this alarm function becomes inoperable, a more frequent SR Frequency interval is performed on the parameter (e.g., 4 hours). This Frequency continues until the alarm function is restored to operable status. Relocating this detail to plant procedures or programs would not impact the safety significance of the TS requirement since the parameter being monitored is presumed to be operable whenever the alarm becomes inoperable. The inoperable alarm function does not impact operability of the monitored parameter. In addition, other ITS SR Frequencies are stated in the ITS Bases to be based on associated alarms or indications which are assumed to be operable or available. (e.g., The Actions Section of the Bases for ITS LCO 3.2.4 for Required Action A.2 states "A 12 hour Completion Time is sufficient because any additional change in QPTR should be relatively slow. Further, this Completion Time is consistent with the Frequency required for the Surveillances with an inoperable alarm or instrumentation." The Surveillance Requirements Section of the Bases for ITS LCO 3.8.1 discussing SR 3.8.1.4 states "The 31 day Frequency is adequate to assure that a sufficient supply of fuel oil is available, since low level alarms are provided and facility operators would be aware of any large uses of fuel oil during this period." The Surveillance Requirements Section of the Bases for ITS LCO 3.9.5 discussing SR 3.9.5.1 states "The Frequency of 12 hours is sufficient, considering the flow, temperature, pump control, and alarm indications available to the operator in the control room for monitoring the RHR System." The Surveillance Requirements Section of the Bases for ITS LCO 3.9.6 discussing SR 3.9.6.1 states "The Frequency of 12 hours is sufficient, considering the flow, temperature, pump control, and alarm indications available to the operator for monitoring the RHR System.") These alarms/indications are not specified in the TSs but typically require additional actions within plant procedures to account for the alarm/indication not being available. Typically alarm response procedures provide guidance for any necessary actions whenever alarms are inoperable. Placing this detail in these procedures ensures that the operator has sufficient guidance to respond to the inoperable alarm function and to perform the necessary conditional SRs. (See RAIs 3.1.4-02 and 3.1.6-05) ComEd continues to pursue this change.

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
3.2.3-05	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.2.3-05 JFD C8
ITS 3.2.3 Action D
CTS 3/4.2.3
STS 3.2.3 Action D
TSTF-112

ITS 3.2.3 omits STS 3.2.3 Action D as proposed by TSTF-112 which was superseded by TSTF-112 Revision 1; Revision 1 to TSTF-112 has been approved but retains a modified Action D in STS 3.2.3 (the Note was removed). Comment: Revise the submittal to adopt the modified Action D.

ComEd Response to Issue

ITS and NUREG LCO 3.2.3 and Bases, and CTS Markups, were revised to incorporate TSTF-112 Revision 1 which retains Condition D, but deletes the Condition D Note. As a result, CTS DOC 3.2-M2 was created to document this change and reads "NUREG LCO 3.2.3, Condition D has been added. NUREG Condition C requires that with THERMAL POWER < 90% RTP and greater than or equal to 50% RTP with cumulative penalty deviation time > 1 hour during the previous 24 hours, OR THERMAL POWER < 90% RTP and greater than or equal to 50% with the AFD not within the acceptable operation limits, reduce THERMAL POWER to < 50% RTP within 30 minutes. In the event that Condition C cannot be met, Condition D is entered. Condition D states, "Required Action and associated Completion Time for Condition C not met, reduce THERMAL POWER to < 15 % RTP within 9 hours." CTS Action 3.2.1.c requires, "With the indicated AFD outside of the required target band for more than 1 hour of cumulative penalty deviation time during the previous 24 hours and with THERMAL POWER less than 50% but greater than 15% of RATED THERMAL POWER, the THERMAL POWER shall not be increased equal to or greater than 50% of RATED THERMAL POWER until the indicated AFD is within the required target band." The CTS would allow indefinite operation in this condition until the AFD is restored to within the target band. The ITS however, would require that the RTP be < 15% RTP within 9 hours. This is a more restrictive change since the ITS only allows operation in this condition for 9 hours instead of an indefinite period of time. This change represents a more restrictive change and is consistent with NUREG-1431 as modified by NRC approved TSTF-112, Revision 1." In addition, Bases JFD 3.2-C8 was revised to reference TSTF-112, Revision 1. (Correction Note to NRC Description of Issue: Reference should be to CTS 3/4.2.1, not CTS 3/4.2.3.)

NRC RAI Number	NRC Issued Date	RAI Status
3.2.3-06	8/5/97	Open - ComEd Action Required

NRC Description of Issue

3.2.3-06 JFD C10
ITS 3.2.3
CTS 3.2.3

The ITS combines LCO NOTES per proposed WOG-75. Comment: Submit TSTF request for approval.

ComEd Response to Issue

No change. No action required. This revision is in accordance with NRC Approved generic traveler TSTF-164 (WOG-75 Revision 1).

Response to NRC RAI Report

02-Sep-97

NRC RAI Number	NRC Issued Date	RAI Status
3.2.4-01	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.2.4-01 JFD P14
ITS 3.2.4
STS 3.2.4

The ITS revises Required Action A.4 Completion Time by adding detail about the need for achieving equilibrium conditions. Comment: P14 adds unnecessary detail to the CT. Remove detail and include in Bases.

ComEd Response to Issue

WOG-95 Revision 1 revises NUREG LCO 3.2.4 and associated Bases to provide more appropriate Required Actions and Surveillance Requirements when QPTR is exceeded. A proposed change in WOG-95 Revision 1 modifies the first performance Frequency (i.e., NUREG Required Action A.3 Completion Time) to require the peaking factors to be verified within "24 hours after achieving equilibrium conditions from a THERMAL POWER reduction per Required Action A.1." A significant fraction of the 24 hours could be spent waiting for the plant to stabilize at the new power level, leaving insufficient time to measure and analyze the peaking factors or resulting in the peaking factors being measured when the plant is not stable, thereby yielding inaccurate information. Since the peaking factors are of prime importance, the proposed change will allow sufficient time to obtain an accurate measurement. Furthermore, literal compliance with ITS and ITS rules of usage would not permit this allowance to achieve equilibrium to be added as detail to the Bases only. WOG members have reviewed this traveler and agreed to the proposed changes. The traveler is currently under review by the other Owner's Groups (OGs). In the interim, ComEd will continue to pursue this change. (Correction Note to NPC Description of Issue: Reference should be to Required Action A.3, not Required Action A.4)

NRC RAI Number	NRC Issued Date	RAI Status
3.2.4-02	8/5/97	Open - NRC Action Required

NRC Description of Issue

3.2.4-02 JFD C2
JFD C11
ITS 3.2.4
STS 3.2.4

The ITS incorporates editorial changes in the wording of Required Actions, based upon proposed TSTF-25. Comment: TSTF-25 has been rejected. Retain STS wording of QPTR Required Actions. Proposed changes do not add clarity.

ComEd Response to Issue

No change. Regarding TSTF-25: TSTF-25 was withdrawn from the ITS submittal. WOG-95 Revision 1 revises NUREG LCO 3.2.4 and associated Bases to provide more appropriate Required Actions and Surveillance Requirements when QPTR is exceeded. A proposed change in WOG-95 Revision 1 modifies NUREG Required Action A.6 Completion Time to require the peaking factors to be verified within "24 hours after achieving equilibrium conditions above the limit of Required Action A.1." A significant fraction of the 24 hours could be spent waiting for the plant to stabilize at the new power level, leaving insufficient time to measure and analyze the peaking factors or resulting in the peaking factors being measured when the plant is not stable, thereby yielding inaccurate information. Since the peaking factors are of prime importance, the proposed change will allow sufficient time to obtain an accurate measurement. WOG members have reviewed this traveler and agreed to the proposed changes. The traveler is currently under review by the other Owner's Groups (OGs). In the interim, ComEd will continue to pursue this change.

Attachment 2

ComEd Response to 8/5/97 NRC RAI
ITS Submittal Affected Page List

Attachment 2

ComEd Response to August 5, 1997 NRC RAI
ITS Submittal Affected Page List

RAI #	BYRON ITS	BRWD ITS	BYRON CTS M/U	BRWD CTS M/U	CTS DOC	LCO M/U	LCO JFD	BASES M/U	BASES JFD
1.0-01	X	X	1-5	1-5	X	X	X	N/A	N/A
1.0-02	1.2-2 1.2-3 1.3-3 1.3-4 1.3-6 1.3-8 1.3-9 1.3-10 1.3-12 1.4-2 1.4-3 1.4-4 1.4-5	1.2-2 1.2-3 1.3-3 1.3-4 1.3-6 1.3-8 1.3-9 1.3-10 1.3-12 1.4-2 1.4-3 1.4-4 1.4-5	Insert 1-9A Pages 2-21	Insert 1-9A Pages 2-21	X	1.2-2 1.2-3 1.3-3 1.3-4 1.3-6 1.3-8 1.3-9 1.3-10 1.3-12 1.4-2 1.4-3 1.4-4 Insert 1.4-4A	P2	N/A	N/A
1.0-03	(3)	(3)	(3)	(3)	(3)	(3)	(3)	N/A	N/A
1.0-04	X	X	Insert 1-5A	Insert 1-5A	A13	1.1-5 Insert 1.1-5A	C3 P6	N/A	N/A
1.0-05	(3)	(3)	(3)	(3)	(3)	(3)	(3)	N/A	N/A
1.0-06	1.4-4	1.4-4	Insert 1-9A Page 20	Insert 1-9A Page 20	X	1.4-4	X	N/A	N/A
1.0-07	(4)	(4)	(4)	(4)	(4)	(4)	(4)	N/A	N/A
2.0-01	2.0-2	2.0-2	2-2	2-2a	X	Insert 2.0-2A	X	X	X
2.0-02	B2.0-2	B2.0-2	X	X	X	X	X	B2.0-2	X
2.0-03	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
2.0-04	X	X	X	X	X	X	X	X	P7
2.0-05	B2.0-9	B2.0-9	X	X	X	X	X	B2.0-9	X
2.0-06	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
3.1-01	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
3.1.1-01	B3.1-6	B3.1-6	X	X	X	X	X	B3.1-6	X
3.1.2-01	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
3.1.3-01	B3.1-22	B3.1-22	X	X	X	X	X	B3.1-23	P6
3.1.4-01	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
3.1.4-02	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)

Attachment 2

ComEd Response to August 5, 1997 NRC RAI ITS Submittal Affected Page List

RAI #	BYRON ITS	BRWD ITS	BYRON CTS M/U	BRWD CTS M/U	CTS DOC	LCD M/U	LCD JFD	BASES M/U	BASES JFD
3.1.5-01	3.1-11 B3.1-41	3.1-11 B3.1-41	X	X	X	3.1-12	P13	B3.1-36 Insert B3.1-36A	X
3.1.5-02	3.1-1 3.1-4 3.1-11 3.1-13	3.1-1 3.1-4 3.1-11 3.1-13	X	X	X	3.1-1 3.1-5 3.1-12 3.1-14	C12	X	X
3.1.6-01	3.1-13	3.1-13	X	X	X	3.1-14	P14	B3.1-42 Insert B3.1-42A	X
3.1.6-02	X	X	3/4 1-1 3/4 1-21 Insert 3.1-21C	3/4 1-1 3/4 1-21 Insert 3.1-21C	A23	X	X	X	X
3.1.6-03	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
3.1.6-04	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
3.1.6-05	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
3.1.6-06	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
3.1.7-01	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
3.1.7-02	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
3.1.8-01	B3.1-63	B3.1-63	X	X	X	X	X	B3.1-63	X
3.2.1-01	3.2-3 3.2-5 B3.2-8 B3.2-9 B3.2-11	3.2-3 3.2-5 B3.2-8 B3.2-9 B3.2-11	Insert 3.2-7A	Insert 3.2-7A	X	3.2-6 3.2-8	P4	B3.2-16 B3.2-17 B3.2-19	P7
3.2.1-02	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
3.2.1-03	3.2-1 B3.2-5	3.2-1 B3.2-5	3/4 2-4	3/4 2-4	X	3.2-4	P9	B3.2-15 Insert B3.2-15A	P9
3.2.2-01	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
3.2.3-01	3.2-10 B3.2-28	3.2-10 B3.2-28	3/4 2-1	3/4 2-1	M1	3.2-13	P8	B3.2-33	P16
3.2.3-02	B3.2-21	B3.2-21	X	X	X	X	X	B3.2-28	X
3.2.3-03	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)

Attachment 2

ComEd Response to August 5, 1997 NRC RAI
ITS Submittal Affected Page List

RAI #	BYRON ITS	BRWD ITS	BYRON CTS M/U	BRWD CTS M/U	CTS DOC	LCO M/U	LCO JFD	BASES M/U	BASES JFD
3.2.3-04	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
3.2.3-05	3.2-10 B3 2-28	3.2-10 B3 2-28	3/4 2-1	3/4 2-1	M2	3.2-14	C8	B3 2-33 B3 2-34	C8
3.2.3-06	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
3.2.4-01	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
3.2.4-02	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)