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New York Power Authority

September 27, 2000
IPN-00-071

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

SUBJECT: Indian Point 3 Nuclear Power Plant
Docket No. 50-286
Proposed Improved Technical Specifications
Reply to NRC Request for Additional Information

REFERENCE:
1. NRC letter, "Request for Additional Information Regarding STS Conversion," G. Wunder to J. Knubel, dated July 9, 1999.
2. NYPA letter IPN-98-139, "Proposed Technical Specification Change, Conversion to ITS," J. Knubel to NRC, dated December 15, 1998.
3. NYPA letter IPN-00-059, Proposed ITS - Reply to NRC RAI," J. Knubel to NRC, dated August 16, 2000.
4. NYPA letter IPN-00-069, Proposed ITS - Reply to NRC RAI," J. Knubel to NRC, dated September 14, 2000.

Dear Sir:

The Authority is providing responses to Requests for Additional Information (Reference 1) regarding Revision 0 of the proposed Improved Technical Specifications for Indian Point 3 (Reference 2). This transmittal addresses the following ITS Sections.

3.3 Instrumentation (consists of 8 subsections)
3.6 Containment Systems (consists of 10 subsections)

A001

In addition, an update of the Relocated Items is provided in this transmittal.

Attachment I outlines the revision status for each of the ITS sections based on the following change categories.

- Changes required to address NRC RAIs
- Changes required to incorporate new amendments to the IP3 current Technical Specifications
- Changes or corrections proposed by the Authority

Attachment I identifies whether Revision 1 of the proposed ITS conversion package is needed based on the scope of the above changes. An update of the Relocated Items is also summarized in Attachment I. Attachment II is the Authority's reply to each of the RAIs for the ITS sections addressed by this transmittal. Attachment III contains Revision 1 pages for the proposed ITS conversion packages and Relocated Items, if needed.

Similar information for other ITS sections was previously transmitted in References 3 and 4.

The Authority is making no new commitments in this letter. If you have any questions, please contact Mr. Ken Peters.

Very truly yours,

William Josiger
Vice President
Special Activities

STATE OF NEW YORK
COUNTY OF WESTCHESTER
Subscribed and sworn to before me
this 27th day of Sept. 2000

EILEEN E. O'CONNOR
Notary Public, State of New York
No. 4991062
Qualified in Westchester County
Commission Expires January 21, 2002

cc: next page

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REVISION STATUS FOR PROPOSED IMPROVED TECHNICAL SPECIFICATIONS

ITS NUM	ITS SECTION TITLE	NRC RAIs	New Amendment	NYPA Changes	COMMENT
3.3	**INSTRUMENTATION**	**50**			
3.3.1	RPS Instrumentation	20	Yes No impact	Yes	Various changes to Spec and Bases to address RAIs and incorporate additional changes proposed by NYPA. Affected Revision 1 pages submitted for review.
3.3.2	ESFAS Instrumentation	8	Yes No impact	Yes	Various changes to Spec and Bases to address RAIs and incorporate additional changes proposed by NYPA. Affected Revision 1 pages submitted for review.
3.3.3	PAM Instrumentation	7	No	Yes	Overall revision to Spec and Bases to be consistent with STS and NYPA commitments for Reg Guide 1.97. Revision 1 of ITS submitted for review.
3.3.4	Remote Shutdown	0	No	No	No changes to Revision 0; submittal of ITS revision 1 not required.
3.3.5	LOP DG Start Instrumentation	3	Yes No impact	Yes	Change to Spec to incorporate a NYPA change. No change to Spec or Bases resulted from RAI replies. Affected Revision 1 pages submitted for review.
3.3.6	Containment Purge System and Pressure Relief Line Isolation Instrumentation	2	Yes No impact	No	No changes to Revision 0 proposed ITS. Submittal of Revision 1 proposed ITS not required.
3.3.7	CRVS Actuation Instrumentation	5	Yes No impact	No	Changes reflect response to RAIs. Affected Revision 1 pages submitted for review.
3.3.8	FSBEVS Actuation Instrumentation	5	Yes No impact	Yes	Changes reflect response to RAIs. NYPA changes reflect changes to the bases. Affected Revision 1 pages submitted for review.

REVISION STATUS FOR PROPOSED IMPROVED TECHNICAL SPECIFICATIONS

ITS NUM	ITS SECTION TITLE	NRC RAIs	New Amendment	NYPA Changes	COMMENT
3.6	**CONTAINMENT SYSTEMS**	**69**			
3.6.1	Containment	3	Yes	No	Changes reflect response to RAIs and NRC comments and incorporates amendment 195. Affected Revision 1 pages submitted for review.
3.6.2	Containment Air Locks	4	Yes No impact	Yes	Changes reflect response to RAIs and NRC comments. NYPA changes reflect changes to bases. Affected Revision 1 pages submitted for review.
3.6.3	Containment Isolation Valves	22	Yes	Yes	Changes reflect response to RAIs and incorporate amendment 195. NYPA changes reflect changes to the specification and bases. Revision 1 of proposed ITS submitted for review.
3.6.4	Containment Pressure	2	Yes No impact	No	No changes to Spec or Bases required. Revised DOCs, per RAI, submitted for review.
3.6.5	Containment Air Temperature	2	Yes No Impact	Yes	Changes reflect response to RAIs. NYPA changes reflect a change to the bases. Affected Revision 1 pages submitted for review.
3.6.6	Containment Spray System and Fan Cooler Units	15	Yes No impact	No	Changes reflect response to RAIs. Affected Revision 1 pages submitted for review.
3.6.7	Spray Additive System	10	Yes No impact	No	Changes reflect response to RAIs. Affected Revision 1 pages submitted for review.
3.6.8	Hydrogen Recombiners	3	No	No	No changes to Spec or Bases required. Revised DOCs, per RAI, submitted for review.
3.6.9	IVSW System	8	No	Yes	Revised DOCs, per RAI, and NYPA proposed changes to Spec and Bases submitted for review.
3.6.10	WCCPP System	n/a	No	No	New section added for Rev 1. Proposed ITS submitted for review

REVISION STATUS FOR PROPOSED IMPROVED TECHNICAL SPECIFICATIONS

SUMMARY OF RELOCATED ITEMS

ID	NAME	CTS SECTIONS	DESTINATION	CHANGE TO REV. 0?	CHANGE DESCRIPTION (see Note A)
R1	Reactor Vessel Head Vents	3.1.A.7 Table 4.1-3, Item 16	TRM	YES	Change destination from FSAR to TRM.
R2	SG Secondary Side Minimum Temperature for Pressurization	3.B.3	FSAR	NO	n/a
R3	Pressurizer Heatup and Cooldown	3.1.B.4	TRM	YES	Change destination from FSAR to TRM.
R4	Maximum Reactor Coolant Oxygen, Chloride, and Fluoride Concentration	3.1.E Table 4.1-2	TRM	YES	Change destination from FSAR to TRM and add discussion of sampling requirement for RWST chlorides.
R5	Chemical and Volume Control Sys.	3.2	N/A	YES, deleted	Replaced by TS Amend 200
R6	Weld Channel and Penetration Pressurization System (WC & PPS)	3.3.D	N/A	YES, deleted	Requirement retained as ITS 3.6.10
R7	Steam and Power Conversion System (Turbine Generator)	3.4.D	TRM	YES	Change destination from FSAR to TRM.
R8	Area Radiation Monitoring and Plant Effluent Radioiodine/Particulate Sampling; Plant Wide Range Vent Monitor	3.8.A.3 3.8.C.1 TABLE 3.5-4 TABLE 4.1-1	ODCM and FSAR	YES	Revised to retain containment area radiation monitor in ITS 3.3.3 and add ODCM as destination document.
R9	Auxiliary Electrical Systems (A.C. Circuit Inside Containment)	3.7.E	TRM	YES	Change destination from FSAR to TRM.
R10	Refueling, Fuel Handling and Storage (Communications)	3.8.A	FSAR	NO	n/a
R11	Refueling, Fuel Handling and Storage (Decay Time)	3.8.A	FSAR	NO	n/a
R12	Refueling (Manipulator Cranes and Spent Fuel Cask)	3.8	FSAR	Yes	Revised to address cask and crane movement over fuel pool.

REVISION STATUS FOR PROPOSED IMPROVED TECHNICAL SPECIFICATIONS

SUMMARY OF RELOCATED ITEMS (continued)

ID	NAME	CTS SECTIONS	DESTINATION	CHANGE TO REV. 0?	CHANGE DESCRIPTION (see Note A)
R13	Service Water Isolation Valve Leakage (0.36 GPM Leakage Limit)	4.4.E.3	N/A	YES, deleted	Retained as ITS 3.6.3.10 and ITS 5.5.15.d.
R14	Radioactive Materials Management	3.9	FSAR	NO	n/a
R15	Movable Incore Instrumentation	3.11	FSAR	NO	n/a
R16	River Level (Flooding Protection)	3.12	TRM	YES	Change destination from FSAR to TRM.
R17	Safety-Related Shock Suppressors (Snubbers)	3.13 3.14	TRM	YES	Change destination from FSAR to TRM.
R18	Toxic Gas Monitoring	3.3.H	TRM	YES	Change destination from FSAR to TRM.
R19	Reactor Coolant System Integrity Testing	4.3.A.b 4.3.A.a	IST Program	YES	Add discussion of leak test prior to startup from each refueling.
R20	Seismic Instrumentation	4.10	TRM	YES	Change destination from FSAR to TRM.

NOTE A: Revision 1 of 'Relocation Justification' is provided in Attachment III for Relocated Items R.4, R.8, R.12, and R.19.

ATTACHMENT II TO IPN-00-071

NEW YORK POWER AUTHORITY REPLIES TO

NRC REQUESTS FOR ADDITIONAL INFORMATION

REGARDING REVISION 0 OF

PROPOSED IMPROVED TECHNICAL SPECIFICATIONS

The following ITS Sections are addressed:

ITS	TITLE	RAIs
3.3	Instrumentation	50
3.6	Containment Systems	69

NEW YORK POWER AUTHORITY
INDIAN POINT 3 NUCLEAR POWER PLANT
DOCKET NO. 50-286
DPR-64

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--00**

RAI STATEMENT:

--DOC 3.3.1 L.1
--DOC 3.3.2 L.1
--DOC 3.3.5 L.1

The ITS proposes to revise trip settings for most RPS instrument functions and allowable values for most ESFAS functions. These changes are beyond the scope of changes needed to convert to the ITS. As such, they have been referred to the appropriate technical branches for review. Specific comments on these changes will be forwarded if the technical branches need additional information to complete their review. At present, this comment is only for tracking purposes. No response by the licensee is required.

NYPA RESPONSE:

NYPA revised the IP3 ITS conversion submittal so that DOC 3.3.1 L.1, DOC 3.3.2 L.1 and DOC 3.3.5 L.1 indicate that the revised allowable values were calculated using methodologies that conform to Regulatory Guide 1.105, Instrument Setpoints for Safety-Related Systems, Rev.2, dated February 1986, and ISA-RP67.04, Part II, Draft 9, Methodologies for the Determination of Setpoints for Nuclear Safety Related Instrumentation, dated 3/22/91. This information was transmitted to the NRC in letter IPN-99-086 dated 08/12/99.

The SER for CTS Amendment 140, 24-Month Operating Cycle-Reactor Protection System dated 12/1/93, and the SER for CTS Amendment 150, 24-Month Operating Cycle - Engineered Safety Features Actuation System Instrumentation dated 9/11/94, document the NRC's evaluation and approval of NYPA's application of this methodology.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--01**

RAI STATEMENT:

--Pending TSCRs

A review of Rev. 0 of Part 2 of the ITS submittal, and its supplement (forwarded in a letter dated 5/17//99) indicates that the following Section 3.3.1-related TSCRs are still pending. If a TSCR is not approved or is revised, the submittal may need revising. This list is for tracking purposes only and requires no response:

-TSCR--CTS Pages-Affected ITS Function-ITS Requirements

-99-008-T 3.5-2(1)-15 Rx. trip on turbine trip-3.3.1 Applicability Note (h)
--T 4.1-1(3)----& Required Action J.2

-98-113-T 4.1-1(2)-Not Applicable (relocates CVCS specification)-
--4.1-5

NYPA RESPONSE:

NYPA revised the ITS conversion submittal to incorporate all approved TSCRs through Amendment 201 to the current Technical Specifications. Refer to the Part 2 (CTS Markup) cover sheet for tracking and disposition of CTS Amendments and TSCRs.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--02**

RAI STATEMENT:

--DOC 3.3.1 A.37
--CTS 3.5.4 (CTS page 3.5-2)
--ITS 3.3.1, Actions Note 2
--ITS 3.3.1 Note to Required Actions D.1.1, E.1, H.1, I.1,& K.1
--ITS 3.3.1 Bases Insert B 3.3-37-02 (See RAI 3.3.1-12)

Proposed Actions Note 2 represents a generic difference from the STS that is not acceptable. The provision in CTS 3.5.4 to delay taking action requirements for 8 hours to accommodate surveillance testing in the event of an inoperable channel can be adequately maintained in the ITS in the individual note specified with each of the appropriate action requirements. The individual notes are consistent with the STS, except that the CTS's 8-hour allowance is used in place of 4 hours.

Comment: Revise the submittal to withdraw ITS 3.3.1 Actions Note 2.

NYPA RESPONSE:

NYPA revised the IP3 ITS conversion submittal to delete ITS 3.3.1, Actions Note 2, and associated Bases.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--03**

RAI STATEMENT:

--DOC 3.3.1 A.5.c
--JFD 3.3.1 CLB.1
--CTS 3.10.2.9
--ITS Required Actions D.1.2 and D.2.2 and D.3

In the event of one inoperable channel of the power range neutron flux-high instrument function with the inoperable channel placed in trip, CTS 3.10.2.9 appears to support a 24-hour Completion Time for reducing power below 75% RTP (Required Action D.1) or a 24-hour periodic Completion Time for determining QPTR with the incore detectors (Required Action D.2). However, with a 24-hour Completion Time, it is not clear how the "OR" logic between Required Actions D.1, D.2, and D.3 works, because Required Action D.3 has a 12-hour Completion Time to reach Mode 3 (apparently if the inoperable channel cannot be placed in trip). If the channel is placed in trip but neither of the 24-hour action requirements are met, then LCO 3.0.3 would apply because the 12-hour Completion Time of Required Action D.3 would have already expired. It would require reaching Mode 3 within 13 hours.

Comment: Explain how IP3 would interpret the above scenario and what its actions would be. In other words, is 12 hours appropriate for Required Action D.3?

NYPA RESPONSE:

The ambiguity described in this RAI exists whether or not Required Actions D.1.2 and D.2.2 have 12 hour or 24 hour Completion Times. Note that D.3 does not apply if Required Actions D.1.2 and D.2.2 are not completed within the specified Completion Time whether that Completion Time is 12 hours or 24 hours. In either case, LCO 3.0.3 applies. Therefore, NYPA believes a 12 hour Completion Time for Required Action D.3 is consistent with the AOTs established by WCAP-10271.

NYPA agrees that LCO 3.3.1, Required Actions D.1.2, D.2.1 and D.2.2, create some inconsistencies and ambiguities. The ambiguity is created because LCO 3.3.1, Required Actions D.1.2, D.2.1 and D.2.2, are being used to meet LCO 3.2.4 surveillance requirements for periodic verification of QPTR. NYPA revised the ITS conversion submittal to clarify this situation. Required Actions for Condition D were revised to read as follows: D.1 Place channel in trip within 6 hours OR D.2 Be in Mode 3 within 12 hours. The Note associated with these Action now states: "Requirements of SR 3.2.4.2 are applicable if the Power Range Neutron Flux input to QPTR is inoperable." This would ensure that 3.3.1 Actions apply if RPS requirements are not met (i.e., place channel in trip within 6 hours or be in Mode 3 in 12 hours) and 3.2.4 Actions apply if QPTR monitoring requirements are not met (i.e., the proposed note will ensure that LCO 3.0.6 is not used to avoid meeting the requirements of LCO 3.2.4).

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--04**

RAI STATEMENT:

Three instrument functions which are not included in the CTS LCO list are added to ITS 3.3.1 in Table 3.3.1-1. Issues are the following: (a) less than the design number of channels are specified to be operable, and (b) the allowable values are stated in the Bases. Details:

(1)--DOCs 3.3.1 A.6 & 3.3.1 A.7
--CTS 3.5.6 (page 3.5-7)
--CTS Bases (page 2.3-5)
--CTS Bases (page 3.5-8)
--CTS Table 4.1-1 Items:
--2. Nuclear Intermediate Range
--3. Nuclear Source Range
--ITS Table 3.3.1-1 Functions:
--3. Intermediate Range Neutron Flux
--4. Source Range Neutron Flux
--ITS 3.3.1 Bases (STS markup pages B 3.3-12 thru B 3.3-15)
--ITS 3.3.1 Action F Bases (STS markup page B 3.3-42)
--ITS 3.3.1 Action G Bases (STS markup page B 3.3-43)
--STS 3.3.1 Actions F, G, H (intermediate range) & Actions I and J (source range)
---and associated Bases

-CTS 3.5.6 requires at least one source range and one intermediate range nuclear instrument channel to be operable prior to reactor startup. The Bases for CTS 2.3, LSSS Protective Instrumentation, states that both these trips provide protection during reactor startup. And CTS Table 4.1-1, Minimum Frequencies for Checks, Calibrations, and Tests of Instrument Channels, specifies surveillances for these instrument channels. However, these instruments are not listed in CTS 2.3 or CTS Table 3.5-2, Reactor Trip Instrumentation LCOs. The CTS Bases explain why: these instrument channels are not required to be operable because they were not used in the FSAR Section 14 transient and accident analyses. (This is likely the case for most 4-loop Westinghouse plants.) The trip settings (apparently equivalent to allowable values) for these functions are contained in the CTS Bases for the LSSS, CTS 2.3.
-The ITS adds LCO and surveillance requirements for these functions, but only for one channel, not both. These functions produce a reactor trip that serves to backup the Power Range Neutron Flux-Low trip in the event of an uncontrolled RCCA bank rod withdrawal accident from subcritical conditions. In addition, the allowable values are contained in the ITS 3.3.1 Bases instead of in the specification itself. These proposed requirements conflict with the STS requirements for these functions.

Comment: Revise ITS 3.3.1 Table 3.3.1-1 so that it requires both channels to be operable, and states the associated allowable values. In addition, make appropriate changes to the ITS

3.3.1 Actions table; in particular STS Actions F, G, H, I, J and K and L (accounting for TSTF-135 Rev 3, of course). Also, make appropriate changes to the ITS Bases for these instrument functions and Actions.

(2)-DOC 3.3.1 A.20
-Table 3.3.1-1 Function:
--14. Steam Generator Water Level - Low Low with Steam Flow / Feedwater Flow Mismatch
-Insert B 3.3-26-01 (STS markup page B 3.3-26)

The allowable values for Function 3.3.1.14 are contained in the ITS 3.3.1 Bases instead of in the specification itself. Comment: The allowable values must be in the specification. Add these criteria to Table 3.3.1-1.

NYPA RESPONSE:

(1.a) NYPA will maintain current licensing basis to require Operability of one of the two SRM trip channels and one of the two IRM channels when in the Applicable Mode or conditions. This is consistent with the Improved Technical Specifications previously approved for another facility.

(1.b) NYPA will maintain current licensing basis and specify nominal trip settings or surveillance acceptance criteria for SRM and IRM reactor trip functions in the ITS Bases. Allowable Value is only meaningful when there is a corresponding Analytical Limit on which to base the Allowable Value. Because there is no safety analysis which takes credit for the action of these trip funtions, there is no Analytical Limit and hence no Allowable Value. Acceptance criteria for purposes of evaluating operability are specified in plant procedures based on nominal trip settings.

(2) The Allowable Value for ITS Table 3.3.1 Function 14 (SG water level low; coincident with steamflow / feedflow mismatch) is 'NA' for the same reasons discussed in item 1 above. There is not a specific safety analysis which takes credit for the action of this trip function. Therefore no Analytical Limit is established for which an Allowable Value can be calculated. The IP3 safety analysis for the Loss of Normal Feedwater Flow depends on the protective action of the Low-Low Steam Generator Water Level trip (Function 13). The Allowable Value for Function 13 is stated in ITS Table 3.3.1-1.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--05**

RAI STATEMENT:

--DOC 3.3.1 M.5
--DOC 3.3.1 A.21.c (this is just an example of numerous A-type DOCs)
--CTS Table 3.5-2 (footnote *)
--CTS Table 3.5-2 Functional Unit:
--12. Turbine Trip: Low auto stop oil pressure
--ITS Table 3.3.1-1 Function:
--15: Turbine Trip - Low auto stop oil pressure
--ITS 3.3.1 Required Action J.2 (STS 3.3.1 Required Action P.2)
--ITS 3.3.1 Action J Bases (STS markup page 3.3-47)

-In the event one turbine trip channel is inoperable, column 5 of CTS Table 3.5-2 for Item 12 states "maintain reactor power below 10% of full power." The CTS supply no explanation of what this phrase means in terms of time to get below 10% power if the inoperability occurs above 10% RTP.
-For most other RPS functions, in the event of an inoperable channel, column 5 states "maintain hot shutdown." (Subcritical with Tavg 555 F). Footnote * of CTS Table 3.5-2 explains what is meant. It says "Maintain hot shutdown means maintain or proceed to hot shutdown within 4 hours using normal operating procedures, if the unacceptable condition arises during operation." In DOC M.5, the licensee states its interpretation of this footnote: reactor shutdown must commence within 4 hours and be completed (i.e., Mode 3 - in ITS parlance) within the following 4 to 6 hours.
-It is not clear that the licensee's interpretation of Footnote * is correct. In the case of Item 12, it seems to say that if the plant is already below 10% RTP, then it should remain there; if above 10% RTP, then 4 hours are allowed for reducing power below 10%. For the other RPS functions, likewise, only 4 hours are permitted for reaching hot shutdown. In the CTS, the hot shutdown condition is reached when the reactor is subcritical below 555 F. This corresponds to the hot standby condition (MODE 3) in the ITS.
-STS 3.3.1 Action P allows 6 hours to place the inoperable turbine trip channel in trip and an additional 4 hours to reach Mode 3 if this action cannot be completed. Corresponding Action J of ITS 3.3.1 proposes to allow 6 hours to place the channel in trip (discussed in DOC L.3), consistent with the STS, but an additional 6 hours to reach Mode 3, instead of 4 hours. This 6-hour proposed shutdown time is based on the licensee's liberal interpretation of Footnote *.

-Comment: The STS's 10-hour Completion Time for reaching Mode 3 is consistent with IP3's CTS and should be adopted. This change is thus not more restrictive, but administrative. DOC M.5 can be eliminated. CTS Table 3.5-2 Footnote * applies to all the RPS instrument functions. Therefore, paragraph c of each A-type DOC for Specification 3.3.1 should be revised to correct the licensee's incorrect interpretation.

NYPA RESPONSE: (3.3.1-05)

CTS Table 3.5-2, Note *, applies if Table 3.5-2 requirements are not met and specifies "Maintain hot shutdown means maintain or proceed to hot shutdown within 4 hours using normal operating procedures, if the unacceptable condition arises during operation." A literal reading of the requirement allows 4 hours before a reactor shutdown is required to commence. Therefore, by a literal reading of the Note, adopting the ITS AOTs and Completion Times is a more restrictive change (3.3.1, DOC M.5).

Note that Amendment 192, dated 9/8/99, changed the Applicability for this function from above P-7 (10%) to above P-8 (50%). In conjunction with this change, the Completion Time for ITS 3.3.1 Required Action J.2 (STS 3.3.1 Required Action P.2) reverted to the STS value of 10 hours.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--06**

RAI STATEMENT:

(1) -ITS 3.3.1 Action L Note 1
--STS 3.3.1 Action P (see TSTF-135) Note 1 (STS markup page 3.3-8)
--DOC 3.3.1 A.23

The referenced note in the STS allows one RTB train to be bypassed for up to 2 hours for surveillance testing provided the other RTB train is operable. The submittal does not state whether this note is consistent with the CTS or is a new explicit restriction/allowance. In addition, the ITS omits the word surveillance, and thus deviates from the STS.

Comment: Revise the submittal to adopt the language of the STS for this note and to explain how the note compares to the CTS.

(2) -ITS 3.3.1 Action L Note 2
--ITS 3.3.1 Action O (STS 3.3.1 Action S - see TSTF-135) Bases (STS markup
----------page 3.3-50)

The referenced Bases discussion adds the phrase "or testing" to the second sentence of the next to last paragraph under the Bases for ITS 3.3.1 Action O. However, the referenced Note 2 for ITS 3.3.1 Action L only mentions "maintenance" on diverse features.

Comment: Explain why the addition of testing is needed. If it is, why not propose a generic change to Note 2 of STS Action P (ITS Action L)?

NYPA RESPONSE:

(1) NYPA revised the ITS submittal for ITS 3.3.1. Required Action L, Note 1, (STS 3.3.1 Action P, Note 1) to include the word surveillance so that the ITS matches NUREG-1431. This allowance in not currently found in CTS. NYPA added DOC L.7 to justify addition of Required Action L, Notes 1 and 2.

(2) NYPA deleted "or testing" from the Bases for Required Action O.1 because it is not needed. Testing is already covered by Note 1 to Required Action L.1.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--07**

RAI STATEMENT:

--DOC 3.3.1 A.4.c (example)
--CTS 3.5.4
--ITS 3.3.1 Action D Note
--ITS 3.3.1 Action D Bases, STS markup page B 3.3-40

The submittal states that the CTS allowance of 8 hours for testing is supported by WCAP-10271-P-A. However, it appears that this topical report only addressed a 6-hour testing window, the value found in the STS.

Comment: Revise the submittal to correct this error in all the DOCs where it occurs. If referencing the topical report, the 6-hour time period should be adopted.

NYPA RESPONSE:

NYPA revised the ITS conversion submittal to revise paragraph 'c' of each affected Admin. DOC to state that the 8 hour bypass allowance is maintained based on CLB established by CTS 3.5.4. The following A-DOCs are affected:
A.4, A.5, A.8, A.10, A.11, A.13, A.15, A.16, A.17, A.18, A.19, A.21, A.22, and A.37

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--08**

RAI STATEMENT:

--DOC 3.3.1 A.8.d.iii
--ITS SR 3.3.1.3 Note 2
--ITS SR 3.3.1.6 Note & Bases
--CTS 3.11.B
--ITS SR 3.3.1.3 Note 2 Bases insert B 3.3-52-02 (STS markup page B 3.3-52)
--ITS SR 3.3.1.6 Note Bases insert B 3.3-54-01 (STS markup page B 3.3-54)

The referenced DOC states that comparing the results of the incore detector measurements to NIS AFD is only required when thermal power is > 90% RTP because this is what CTS 3.11.B requires. ITS SR 3.3.1.3 Note 2 says this surveillance is "only required to be performed when thermal power is > 90% RTP." Comments:
-(1) Referring to STS 1.4 Example 1.4-3, the meaning of proposed ITS SR 3.3.1.3 Note 2 is uncertain. Does it mean that the comparison must be completed prior to exceeding 90% RTP? Or must it be done within 31 EFPD of exceeding 90% RTP? Revise the note so it clearly states the time frame for doing the surveillance.
-(2) The referenced Bases insert alludes to the relaxed requirements of ITS 3.2.3 below 90% RTP as the reason for not requiring the comparison below 90% RTP. Please elaborate.
-(3) The Bases insert for B 3.3-52-02 references "CLB.2" which doesn't exist. Please clarify what JFD applies.
-(4) The preceding comments (1) and (2) also apply to SR 3.3.1.6 Note and its Bases.
-(5) The Frequency of ITS SR 3.3.1.6 is 31 EFPD but the associated Bases says 92 EFPD.

NYPA RESPONSE:

(1) ITS SR 3.3.1.3 Note 2 says this surveillance is "Only required to be performed when thermal power is > 90% RTP." The intent is that the SR 3.3.1.3 and SR 3.3.1.6 must be met at all times in the applicable mode but must be performed only when thermal power is greater than or equal to 90% RTP. Since no time allowance for performance is provided (e.g., within 12 hours after exceeding 50% RTP), the SR must be performed prior to exceeding 90% RTP. This is consistent with CTS 3.11.B.

The wording selected for this Note is consistent with the wording previously approved for the ITS for another facility instead of the wording used in NUREG-1431 because IP3 personnel believed it is more clear than the alternate presentation: Not required to be performed until THERMAL POWER is greater than 90% RTP.

(2) SR 3.3.1.3 and SR 3.3.1.6 are performed to ensure that the AFD input to the Overtemperature delta T and the system used to monitor LCO 3.2.3, AFD, are within acceptable limits. In both cases, the limiting AFD is established to provide the required margin when operating at the highest power level. As power level decreases, thermal limits become less sensitive to AFD because the overall margin to the thermal limits increases.

NYPA revised Inserts B 3.3-52-02 and B 3.3-54-01 to include the explanation provided above.

(3) NYPA added JFD CLB.2 to include the explanation provided above.

(4) The responses above address both SR 3.3.1.3 and SR 3.3.1.6.

(5) Typo in NUREG markup corrected. ITS SR 3.3.1.6 Frequency is 31 EFPD.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--09**

RAI STATEMENT:

--DOC 3.3.1 A.7.d.ii
--DOC 3.3.1 M.4
--ITS SR 3.3.1.7, Channel Operational Test, Note (STS markup page 3.3-11)
--CTS Table 4.1-1, Item 3, Nuclear Source Range (SR)
--ITS Table 3.3.1-1, Function 4, SR Neutron Flux (STS markup page 3.3-16)

The referenced ITS note differs from the STS by allowing 8 hours instead of 4 hours to perform a COT after entering Mode 3 from Mode 2. The submittal does not justify this difference.

Comment: Revise the submittal to adopt the STS time limit.

NYPA RESPONSE:

NYPA revised the ITS to adopt the NUREG-1431 allowance of a 4 hour delay (versus 8 hours) in the performance of the COT on the SRM trip function during an reactor shutdown.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--10**

RAI STATEMENT:

--DOC 3.3.1 A.6.d (intermediate range)
--DOC 3.3.1 A.7.d.i (source range)
--DOC 3.3.1 M.4
--ITS SR 3.3.1.8 Frequency (STS markup page 3.3-12)
--Bases for ITS SR 3.3.1.8 & Bases inserts B 3.3-54-02, 3.3-55-01, 3.3-55-02
--(STS markup pages B 3.3-54 and B 3.3-55)

The ITS Frequencies for the SRM and IRM COTs differ from those given by the STS. For the IRM, the ITS gives 16 hours instead of 4 hours after reducing power below P-10 (10% RTP); for the SRM, the ITS gives 8 hours instead of 4 hours after reducing power below P-6 (3.1E-11 amps). The submittal does not justify these deviations from the STS, except for the words of the referenced Bases insert, which are unconvincing and insufficient. Comment: Revise the submittal to adopt the STS Frequency values.

NYPA RESPONSE:

NYPA revised the ITS to adopt the NUREG-1431 allowance of a 4 hour delay (versus 8 hours) in the performance of the COT on the SRM as stated in the reply to RAI 3.3.1-09. TSTF-242 (approved in Feburary 2000) provides for a relaxation of the time allowed to perform the COT on the Power Range and Intermediate Range instrumentation, from 4 hours to 12 hours. Therefore NYPA revised the ITS submittal to adopt the 12-hour limit and associated Bases from the TSTF instead of the 16-hour limit proposed in Revision 0 of the IP3 ITS.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--11**

RAI STATEMENT:

--DOC 3.3.1 A.9
--Insert 3.3-13-02 (STS markup page 3.3-13)
--ITS SR 3.3.1.12 Note
--ITS SR 3.3.1.12 Bases insert B 3.3-57-01 (STS markup page B 3.3-57)

The referenced STS SR note is replaced by the referenced insert. However, the submittal does not explain or justify this difference. The associated Bases also does not explain this note. The referenced Bases insert is not explained either. What is meant by a "qualitative assessment of sensor behavior"?

Comment: Revise the submittal to justify these inserts and differences from the STS.

NYPA RESPONSE:

NUREG-1431, SR 3.3.1.12 includes the note: "This Surveillance shall include verification of Reactor Coolant System resistance temperature detector bypass loop flow rate." This note was deleted because IP3 does not have resistance temperature detector bypass loops.

NYPA replaced the Note in SR 3.3.1.12 to state: "This Surveillance shall include verification that the electronic dynamic compensation time constants are set at the required values." This was done because ITS 3.3.1, Functions 5 and 6, allowable values explicitly require that Laplace transform operators that model system response and the associated Tau values (i.e the electronic dynamic compensation time constants) are set at the required values. NYPA believes that this note is necessary because electronic dynamic compensation time constants are not explicitly required by the CTS. This note ensures the requirement is properly implemented.

The ITS definition of CHANNEL CALIBRATION includes the statement: "Calibration of instrument channels with resistance temperature detector (RTD) or thermocouple sensors may consist of an inplace qualitative assessment of sensor behavior and normal calibration of the remaining adjustable devices in the channel. Whenever a sensing element is replaced, the next required CHANNEL CALIBRATION shall include an inplace cross calibration that compares the other sensing elements with the recently installed sensing element." ITS SR 3.3.1.12 Bases insert B 3.3-57-01 (STS markup page B 3.3-57) is a restatement of an acceptable deviation from the normal calibration requirements as stated in the ITS definition.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--12**

RAI STATEMENT:

--Insert 3.3-16-01 (STS markup page 3.3-16)
--ITS Table 3.3.1-1 (page 2 of 8) Note (a)
--STS Table 3.3.1-1 page 2 of 8) Note (b) as revised by TSTF-135, Rev. 3
-&
--Insert 3.3-20-01 (STS markup page 3.3-20)
--ITS Table 3.3.1-1 (page 6 of 8) Note (a)
--STS Table 3.3.1-1 (page 6 of 8) Note (b) as revised by TSTF-135, Rev. 3
-&
--DOC 3.3.1 L.6
--DOCs 3.3.1 A.23.a and A.24.a
--ITS Table 3.3.1-1, Function 18, Reactor Trip Breakers
--ITS Table 3.3.1-1, Function 19, Reactor Trip Breaker Undervoltage and Shut Trip
-------Mechanisms
--ITS 3.3.1 Action L
--ITS 3.3.1 Bases Insert B 3.3-37-02

(1) The ITS note differs from the corresponding STS note by using "and" instead of "or" in the phrase 'with the Rod Control System capable of withdrawal or one or more rods not fully inserted.' This generic difference is not justified in the submittal.

Comment: Revise the note to conform to the STS language. Note that Bases inserts B 3.3-7-01 and B 3.3-38-01 conform to the STS, as do the applicability discussions of DOCs A.23.a and A.24.a. There are probably other places, such as insert 3.3-15-01 that are also correct. In resolving this comment, all references to this applicability must be reviewed for possible correction and for consistency (including all Bases inserts such as B 3.3-36-01 & 02, B 3.3-37-01, B 3.3-38-02, and
B 3.3-43-01 for example).

(2) The second paragraph of the discussion in Bases insert B 3.3-37-02, which is apparently derived from WCAP-14384 (Reference 9), cannot be used because the staff has not approved this topical report for IP3. It implies a RTB can be bypassed for up to 8 hours while the associated logic train is being surveillance tested. I&C branch reviewer disagrees.

NYPA RESPONSE:

(1) NYPA revised the ITS submittal to conform to TSTF-135, Rev 3.

(2) NYPA revised the ITS conversion submittal to delete Bases insert B 3.3-37-02.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--13**

RAI STATEMENT:

--DOCs 3.3.1 A.13 & A.14
--TSTF-169
--JFD 3.3.1 T.2
--ITS Table 3.3.1-1 Function 9, Reactor Coolant Flow - Low, Note (e)
---(STS markup page 3.3-17)
--STS Table 3.3.1-1 Function 10, Reactor Coolant Flow - Low, Notes (g) & (h)
---(In the TSTF-135 markup, these are STS notes (f) & (g))

Following items need to be clarified and discussed:
-(1)-Omission of STS note (h) conflicts with TSTF-169 markup.
-(2)-Wish to see licensee drawing 113E301, Rev. 9

NYPA RESPONSE:

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(1) TSTF-169, Rev 1, shows that notes (h) and (i) are deleted and replaced by note (g). IP3 ITS appropriately incorporates this change.

(2) The subject drawing was provided separately from this transmittal. In addition, refer to the next page for an excerpt from the IP3 Design Basis Document for RPS / ESFAS (DBD-312) which supports the statement in DOCs A.13 and A.14: "CTS Table 3.5-2, Function 8(b), Low Flow Two Loops (Power < P-8 and > P-10) should read (Power < P-8 and > P-7) as shown in Dwg 113E301."

3.1.8.2 Accident Mitigating Functions

The primary function of the RCS low flow protection is to protect the core from exceeding DNB limits during loss of reactor coolant flow by tripping the reactor. Reactor coolant flow would be lost following loss of power to one or more RCPs, a station blackout, or similar events. A reactor trip is also required to ensure RCS cooling capability following an RCP locked rotor or shaft break. Since core flow decreases quickly during these transients, the OTΔT trip does not respond fast enough to provide protection for loss of coolant flow events. The following methods are used to detect a loss of coolant flow event:

- Measured low flow in the reactor coolant piping
- RCP circuit breakers open
- Undervoltage on an RCP bus
- Underfrequency on an RCP bus

The first item is primarily directed at single loop loss of flow events, while the others address multiple loop loss of flow events.

Each reactor coolant loop has three associated reactor coolant flow channels. Low reactor coolant flow in two out of three channels generates a low flow signal for the loop. These loop low flow signals are interlocked by permissives P-7 and P-8 (Section 3.1.4). Below permissive P-7 (approximately 10 percent power), the reactor trip on low flow is blocked. Between permissives P-7 and P-8 (approximately 30 percent power), a reactor trip is generated on low flow in two out of four reactor coolant loops. Above permissive P-8, reactor trip occurs on low flow in a single loop.

Reactor trip also occurs when two out of four RCP breakers are open. The breaker position trip is interlocked with permissive P-7 so that the trip signal is blocked when

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--14**

RAI STATEMENT:

--ITS Table 3.3.1-1 (page 3 of 8) Note (j) (STS markup page 3.3-17)
--ITS Table 3.3.1-1 (page 4 of 8) Note (k) (STS markup page 3.3-18

Referenced notes (j) and (k) state separate condition entry is allowed for each loop or each steam generator, respectively. These notes appear to be a generic deviation from the STS. The submittal does not justify these notes or explain why they are necessary. Comment: Add discussion to the submittal to justify these notes on a plant-specific basis, or withdraw them. It is acceptable to state the obvious in the Bases, as is already proposed to be done, for example, by inserts B 3.3-21-01 & 02, and also inserts B 3.3-22-01 & B 3.3-23-01.

NYPA RESPONSE:

NYPA revised the IP3 ITS submittal to delete the Table 3.3.1-1 Notes regarding separate condition entry and provided this clarification in the Bases.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--15**

RAI STATEMENT:

--DOCs 3.3.1 A.26 & A.27
--ITS Table 3.3.1-1 (page 5 of 8) Functions 17.a and 17.b; Required Channels
---(STS markup page 3.3-19)

The ITS replaces the number of required channels given in the STS with the words "2 trains."

Comment: The submittal does not explain the reason for this deviation.

NYPA RESPONSE:

NUREG-1431 provides the following description: "The P-7 interlock is a logic Function with train and not channel identity. Therefore, the LCO requires one channel per train of Low Power Reactor Trips Block, P-7 interlock to be OPERABLE in MODE 1." NYPA believes the same description is true for the P-6 interlock. Describing the requirement for these interlock as "2 trains" is more descriptive of the requirement than the NUREG-1431 presentation. There is no concern about requirements for separate condition entry because Conditions M and N apply to "one or more."

NYPA REPLY TO NRC RAI
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ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--16**

RAI STATEMENT:

--ITS 3.3.1 Bases Background discussion

-(1) On STS markup page B 3.3-2, the phrase "Signal Process ... System" is omitted, yet very similar words are retained in an underlined header on the next page.

-(2) On STS markup page B 3.3-5, the sentence in the third paragraph "The magnitudes of these uncertainties ... Setpoint." is omitted.

-Comment: What is the benefit of each omission?

NYPA RESPONSE:

(1) NYPA revised the Bases for 3.3.1 to include the generic description of the RPS used in NUREG-1431. This change includes adding back the statement: "Signal Process Control and Protection System, including Analog Protection System, Nuclear Instrumentation System (NIS), field contacts..."

(2) NYPA added the statement "The Allowable Values listed in Table 3.3.1-1 and the Trip Setpoints calculated to ensure that Allowable Values are not exceeded during the calibration interval are based on the methodology described in Reference 6, which incorporates all of the known uncertainties applicable for each channel." This statement eliminates the need for the following statement which was deleted: "The magnitudes of these uncertainties are factored into the determination of each Trip Setpoint."

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--17**

RAI STATEMENT:

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a. ITS 3.3.1 Bases Applicable Safety Analysis, LCO, and Applicability discussion

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(1) STS markup page B 3.3-7, in the fourth paragraph, the phrase "in each logic Function" is omitted without explanation. Comment: Explain why this omission is needed.

(2) STS markup page B 3.3-8, third paragraph, third sentence under Manual Reactor Trip; the ITS omits the words "one or more" that precede "shutdown rods or control rods ... " These words are included in the TSTF-135 markup. Comment: Revise the sentence to conform to TSTF-135 Rev. 3.

(3) STS markup page B 3.3-9, third paragraph, end of fifth sentence under Manual Reactor Trip; instead of adding TSTF-135's phrase "and if all rods are fully inserted" the ITS adds "or if all rods are fully inserted." Comment: Revise the sentence to conform to TSTF-135 Rev. 3.

(4) STS markup page B 3.3-9, first paragraph, third sentence under Power Range Neutron Flux; the ITS omits the STS phrase "which may then require the protection function actuation" without explanation. Comment: Explain why this omission is needed.

(5) Insert B 3.3-9-01 states that the Power Range Neutron Flux - High channels can be considered operable during surveillance testing under specific circumstances.

Comment: For which surveillances would this insert apply, and how?

(6) Insert B 3.3-13-02 states that the source range neutron flux trip provides "backup" core protection below P-6 for reactivity accidents. This conflicts with TSTF-135 Rev. 3 which says this "trip provides the core protection for reactivity accidents." Comment: Adopt the TSTF-135 Rev.3 (i.e., the STS) language.

(7) STS markup page B 3.3-14, third paragraph under Source Range Neutron Flux; the ITS omits boron dilution and control rod ejection as events protected by the source range trip function without explanation. These transients or events appear to be addressed in Chapter 14 of the FSAR (pages 14.1-7 and 14.1-39, for example). Comment: Explain why this omission is needed.

(8) STS markup page B 3.3-15, under discussion of Overtemperature deltaT; the ITS omits the sentence, "The Function monitors both variation in power and flow ... power increase." No explanation is given. Comment: Explain why this omission is needed.

(9) STS markup page B 3.3-16, third bullet under discussion of Overtemperature delta T; the ITS refers to the Technical Specification limit instead of the design limit on axial (flux) peaks. The submittal offers no explanation. The ITS is also at variance with the CTS Bases (CTS page 2.3-5)

Comment: Explain why this choice of words is needed.

(10) STS markup page B 3.3-23, first paragraph third sentence under b. Reactor Coolant Pump Position (Two Loops); the ITS omits the phrase "and below the P-8 setpoint" without explanation. This phrase is needed and should not be omitted. Comment: Adopt the omitted phrase.

(11) STS markup page B 3.3-25, the last paragraph under 12. Underfrequency Reactor Coolant Pumps is omitted without explanation. Comment: Adopt the omitted paragraph.

(12) STS markup page B 3.3-25, first paragraph under 14. SG Water Level - Low Low omits the next to last sentence without explanation. The following sentence omits the acronym "ESFAS" without explanation. Comment: Adopt the omitted text

(13) STS markup page B 3.3-34, first bullet under 18.d Power Range Neutron Flux, P-10; the ITS omits the last sentence "Note that blocking the reactor trip also blocks the signal to prevent automatic and manual rod withdrawal." No explanation is given. Comment: Adopt the omitted sentence.

b. ITS 3.3.1 Actions Bases

(1) STS markup page B 3.3-44, last paragraph under ITS Action G. The ITS omits the entire last sentence of the referenced paragraph; the STS as revised by TSTF-135 Rev. 3 only removes the last phrase, "and the unit enters Condition L," from the bases for corresponding STS Action J." Comment: Conform to the STS language.

c.-ITS 3.3.1 Surveillance Requirements Bases

(1) STS markup page 3.3-58, first paragraph under SR 3.3.1.14, third sentence. The ITS omits the word "independently" without explanation. Comment: Explain why this omission is needed.

NYPA RESPONSE: (3.3.1-17)

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a.(1) NYPA revised the Bases to delete the phrase "in each logic Function" from the following statement: "The LCO generally requires OPERABILITY of ... two channels of Manual Reactor Trip in each logic Function...." The IP3 ITS 3.3.1 Bases adopts a preferred wording which is a more precise statement of the requirement for the reactor manual trip in a more appropriate location as shown on page B 3.3-8 of NUREG-1431: "The LCO requires two Manual Reactor Trip channels to be OPERABLE. Each channel is controlled by a manual reactor trip switch. Each channel activates the reactor trip breaker in both trains." NYPA revised the ITS submittal to mark the deleted phrase as JFD PA.1 to mark it as a minor editorial improvement.

a.(2) Added phrase "one or more" to conform to TSTF-135 Rev. 3.

a.(3) The subject section conforms to TSTF-135 Rev. 3.

a.(4) Revised to conform to NUREG-1431, Rev 1.

a.(5) Channel Functional Tests and Calibrations impose a signal that is added to the neutron flux signal. Therefore, per Insert B 3.3-9-01, "These channels are considered OPERABLE during required Surveillance tests that require insertion of a test signal if the channel remains untripped and capable of tripping due to an increasing neutron flux signal."

a.(6) This change is consistent with NYPA's position that source range and intermediate range trips are not credited in the IP3 accident analysis (i.e., they provide backup protection).

a.(7) This change is consistent with TSTF-135. Rev. 3.

a.(8) NUREG 1431, page B 3.3-15, states:
"The inputs to the Overtemperature delta T trip include all pressure, coolant temperature, axial power distribution, and reactor power as indicated by loop T assuming full reactor coolant flow. Protection from violating the DNBR limit is assured for those transients that are slow with respect to delays from the core to the measurement system. The Function monitors both variation in power and flow since a decrease in flow has the same effect on T as a power increase." NYPA deleted the third sentence because it contradicts the first sentence statement "assuming full reactor coolant flow" and because there is no flow measurement input into this trip function (i.e., full flow is assumed).

a.(9) The setpoint adjustment being discussed is the f delta I adjustment to the Overtemperature delta T setpoint in Note 1 to ITS Table 3.3.1-1. It is the Technical Specification requirement that determines the magnitude of the setpoint adjustment. The Technical Specification limit is chosen to conservatively bound the design limits. NYPA believes that the reference to the Tech Spec limit is more accurate.

a.(10) NUREG-1431 states: Above the P-7 setpoint and below the P-8 setpoint, a loss of flow in two or more loops will initiate a reactor trip. NYPA deleted the phrase "and below the P-8 setpoint" because a loss of flow in two or more loops will initiate a reactor trip both above P-7 (10%) and above P-8 (50%). Note that a loss of flow in one loop will also cause a trip above P-8 (50%). See RAI 3.3.1-13 and Dwg 113E301, Rev 9.

a.(11) Revised to conform to NUREG-1431, Rev 1.

a.(12) Revised to conform to NUREG-1431, Rev 1.

a.(13) Although true, this statement was deleted because NYPA believes that if this non safety function is described in the Safety Analysis section of the Bases then the function is inoperable even if only the non safety portion of the circuit is not operable.

b.(1) Revised to conform to TSTF-135 Rev. 3.

c.(1) Revised to conform to NUREG-1431, Rev 1.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--18**

RAI STATEMENT:

--DOC 3.3.1 A.21.d
--DOC 3.3.1 M.8
--ITS SR 3.3.1.15 (TADOT)
--ITS SR 3.3.1.15 Bases (STS markup page 3.3-58)
--CTS Table 4.1-1 Item 21
--CTS Table 3.5-2 Functional Unit:
--12. Turbine Trip: Low auto stop oil pressure
--ITS Table 3.3.1-1 Function:
--15: Turbine Trip - Low auto stop oil pressure

The submittal claims that the Frequency of 24 months for the referenced SR is current licensing basis. But in fact it is not because CTS do not currently require a TADOT. The associated ITS Bases clearly states this SR cannot be done at power, but this is not reflected in the SR Frequency. The ITS also does not adopt the STS requirement to perform this test "prior to reactor startup if not performed within the previous 31 days."

Comment: Adopt the STS Frequency for the TADOT for the turbine trip function, and also the associated Bases discussion.

NYPA RESPONSE:

The CTS do not define or include any requirements for a TADOT. However, CTS 1.9.3, the definition of calibration, includes the statement: "Calibration shall encompass the entire channel, including alarm or trip, and shall be deemed to include the channel functional test." CTS 1.9.2, definition of a channel functional test, specifies that this test verifies operability of the "trip initiating actions."

The ITS definition of calibration does not require verification of the operability of the trip initiating actions. However, the ITS definition of TADOT specifies that this test is intended to verify the "OPERABILITY of required ... trip functions."

CTS Table 4.1-1, Item 21, requires a channel calibration of the Turbine Trip, Low auto stop oil pressure, every 24 months. Current practice and the CTS 1.9.3 definition of channel calibration requires that this test includes the verification of function Operability described in the ITS as a TADOT. NYPA believes that CTS Table 4.1-1, Item 21, is equivalent to both ITS SR 3.3.1.10 (channel calibration) and SR 3.3.1.15 (TADOT). Therefore, NYPA has elected to establish a 24 month SR Frequency for SR 3.3.1.15 (TADOT) based on CLB.

NYPA revised 3.3.1 DOC A.21.d to include the discussion above and deleted DOC 3.3.1 M.8.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.1 Reactor Protection System (RPS) Instrumentation**

NRC RAI No: **3.3.1--19**

RAI STATEMENT:

--DOC 3.3.1 L.4--(JH)
--CTS Table 4.1-1, Function 3, Nuclear Source Range
--ITS SR 3.3.1.8

The CTS require that the Source Range Monitoring Instrumentation response to a simulated signal (COT) be verified "prior to each startup if not performed in the previous week." The ITS maintains this operational verification test, however, the Frequency is extended to "prior to each startup if not performed in the previous 92 days." This change is annotated as a DOC L.4 change, however, DOC L.4 does not discuss the change.

Comment: Provide applicable discussion and justification for the Less Restrictive Change.

NYPA RESPONSE:

NYPA revised the IP3 ITS conversion submittal so that DOC 3.3.1 L.4 includes the following paragraph from DOC A.7:

CTS Table 4.1-1, Item 3 (Frequency P(2)), requires that SRM response to a simulated signal (i.e., Channel Operational Test) be performed "prior to each startup if not performed in the previous week." ITS SR 3.3.1.8 maintains the requirement to perform a COT; however, the Frequency is extended to 92 days.

Additionally, DOC L.4 was revised to include the fact that the SRM trip, IRM trip, and the power range low power trip provide protection for a subcritical rod withdrawal event. Collectively, the SRM trip, IRM trip and the power range low power trip provide redundant and diverse protection for this event although the FSAR states that the SRM trip and IRM trip are not credited.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.2 Engineered Safety Feature Actuation System (ESFAS) Instrumentation**

NRC RAI No: **3.3.2--01**

RAI STATEMENT:

Not used. This item for tracking pending TSCRs.

NYPA RESPONSE:

None required

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.2 Engineered Safety Feature Actuation System (ESFAS) Instrumentation**

NRC RAI No: **3.3.2--02**

RAI STATEMENT:

--DOC 3.3.2 A.36
--CTS 3.5.4 (CTS page 3.5-2)
--ITS 3.3.2, Actions Note 2
--ITS 3.3.2 Note to Required Actions C.1, D.1, G.1, and H.1

See RAI 3.3.1-02. The proposed Note 2 to the Actions table of ITS 3.3.2 is not acceptable.

NYPA RESPONSE:

NYPA revised the IP3 ITS conversion submittal to delete ITS 3.3.2, Actions Note 2, and associated Bases.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.2 Engineered Safety Feature Actuation System (ESFAS) Instrumentation**

NRC RAI No: **3.3.2--03**

RAI STATEMENT:

--DOCs 3.3.2 A.4.a; A.11.a; A.14.a; A.17.a-(JH18)
--ITS Table 3.3.2-1 Automatic Actuation Logic and Actuation Relay Functions -
--Applicability Note (a); Function Nos:
--1.b-Safety Injection, (STS markup page 3.3-32)
--2.b-Containmment Spray, (STS markup page 3.3-33)
--3.a.(2)-Phase A Containment isolation (STS markup page 3.3-34)----3.b.(2)-Phase B Containment isolation (STS markup page 3.3-34)

The CTS does not list specific requirements for Automatic Actuation Logic and Actuation Relays for the ESFAS Functions. ITS 3.3.2 includes requirements for these Functions in ITS Table 3.3.2-1, consistent with STS 3.3.2. However, ITS Table 3.3.2-1 modifies the STS Mode 4 Applicability with Note (a). It says the Automatic Actuation Logic and Actuation Relays are "Only needed to support Manual Initiation capability when in Mode 4". There is no specific justification for the STS deviation based on plant design. This note is a generic deviation from the STS. Comment: Delete proposed Note (a).

NYPA RESPONSE:

NYPA revised the ITS conversion submittal for ITS 3.3.2 to delete Note (a) to table 3.3.2-1 which affects functions 1.b, 2.b, 3.a and 3.b.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.2 Engineered Safety Feature Actuation System (ESFAS) Instrumentation**

NRC RAI No: **3.3.2--04**

RAI STATEMENT:

--DOCs 3.3.2 A.7, A.8, A.9, A.22, and A.26
--DOC 3.3.2 A.32-(JH21)
--ITS Table 3.3.2-1 Functions:
--Note (h):-1.e, 1.f (first function), 1.g, 4.d (first function),
--Note (i):-1.f (second function), 4.d (second function),
--Note (j):-6.b
--STS mark-up inserts 3.3-32-01, 3.3-33-01, 3.3-35-01, and 3.3-37-01

ITS Table 3.3.2-1, Notes (h), (i), and (j) to the 'Required Channels' explicitly state that Separate Condition entry is allowed for each line, loop, or steam generator respectively, for the referenced ESFAS Functions. These allowances are implied in the CTS Table 3.5-3 by specifying the number of required channels on a per component basis. Similar language is used in the STS. Inclusion of these allowances in the ITS deviates generically from the STS. In addition, neither the referenced A-DOCs nor in the JFDs specifically discuss the proposed notes. DOC 3.3.2 A.32 discusses the ITS Actions Note which provides for separate Condition entry for the ESFAS channels/trains addressed by individual ITS Conditions. Thus, the three referenced notes to Table 3.3.2-1 are not necessary.

Comment: Remove the proposed notes.

NYPA RESPONSE:

NYPA revised the ITS conversion submittal for ITS 3.3.2 to delete ITS Table 3.3.2-1, Notes (h), (i), and (j).

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.2 Engineered Safety Feature Actuation System (ESFAS) Instrumentation**

NRC RAI No: **3.3.2--05**

RAI STATEMENT:

--DOC A.29 & M.4
--ITS Table 3.3.2-1 Function 6.e, aux feed actuation on trip of MBFP - Required
---Channels column and Note (f)
--ITS 3.3.2 Actions I and J
--STS SR 3.3.2.9 - Channel Calibration

(1) Separate condition entry is not appropriate for the 2 channels of the referenced function. But the ITS requires 1 channel per MBFP, which seems to imply this.

Comment: Revise the submittal to preclude the implication of separate condition entry for each MBFP, or explain why the existing presentation is not a problem.

(2) No channel calibration is adopted for the referenced function. Apart from the absence of this surveillance requirement in the CTS, the submittal does not explain why it is not appropriate for the IP3 instrumentation.

Comment: Explain the omission of the channel calibration requirement.

(3) The 48-hour Completion Time for restoring one inoperable channel associated with an operating MBFP does not compare well with the STS. In an equivalent condition - both channels associated with an operating MBFP inoperable (and assuming the failures did not actuate aux feed) - the STS would require a shutdown in accordance with LCO 3.0.3.

Comment: Address this difference and explain further how the 48-hour Completion Time was determined - so future Bases readers will know.

NYPA RESPONSE:

(1) NYPA believes that the requirement "1 per MBFP" with associated Note (f) "Only required for MBFPs that are in operation" for ITS Table 3.3.2-1 Function 6.e, Trip of MBFP, establishes requirements more clearly than the alternate presentation of a requirement for 2 channels. Required Action I.1, Verify one channel associated with an operating MBFP is OPERABLE immediately, precludes any potential for separate condition entry. Additionally, this is clarified in the Bases Insert B 3.3-112-01 which states: "there is no single failure tolerance for this Function unless both MBFPs are operating. Therefore, when a channel is inoperable, Required Action I.1, verifies that one channel associated with an operating MBFP is OPERABLE to ensure that

there is no loss of function. Otherwise, entry into LCO 3.0.3 is required." NYPA believes the requirements are clearly established in the existing presentation. Alternate presentations created some confusion.

(2) The Auxiliary Feedwater Pump on a main feedwater pump trip is actuated by a low pressure signal from the control oil line on the turbine for each MBFP. When the MBFP trips, turbine control oil system pressure drops to zero. The trip signal is acceptable if it occurs at any pressure less than the minimum turbine control oil system pressure needed to keep the pump online and a pressure greater than zero.

NYPA believes that Operability of this function is adequately verified by the TADOT. A TADOT is defined as "operating the trip actuating device and verifying the OPERABILITY of required alarm, interlock, display, and trip functions."

(3) NYPA revised Bases Insert B 3.3-112-01 (i.e. Bases for Required Actions I.1 and I.2) to include the phrase in single quotes in the following excerpt:
"The single channel associated with each operating MBFP will start both motor driven AFW pumps. However, there is no single failure tolerance for this Function unless both MBFPs are operating. Therefore, when a channel is inoperable, Required Action I.1., verifies that one channel associated with an operating MBFP is OPERABLE to ensure that there is no loss of function. Otherwise, entry into LCO 3.0.3 is required. If both MBFPs are operating, Required Action I.2 allows 48 hours to restore redundancy by requiring one channel associated with each operating MBFP to be OPERABLE. Continued operation without redundant channels 'for 48 hours' is acceptable because this is a backup method for starting AFW and other Functions, in particular SG Water Level—Low Low, provide the primary protection against a loss of heat sink."

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.2 Engineered Safety Feature Actuation System (ESFAS) Instrumentation**

NRC RAI No: **3.3.2--06**

RAI STATEMENT:

--DOC 3.3.2 A.28.c & M.3
--ITS Table 3.3.2-1 Function 6.d, AFW - LOOP (Non SI Blackout Sequence)

(1) Separate condition entry is not appropriate for the 2 channels of the referenced function. But the ITS requires 1 channel per bus (there are two busses, 480 V bus 3A and bus 6A), which seems to imply this. Each bus uv will cause a different motor-driven AFW pump to start and the single turbine-driven AFW pump to start.

Comment: Revise the submittal to preclude the implication of separate condition entry for each bus, or explain why the existing presentation is not a problem.

(2) The 48-hour completion time of ITS 3.3.2 Action F, for one channel inoperable, is not adequately justified. Having all channels for one bus inoperable in the STS would lead to LCO 3.0.3.

Comment: Address this difference and explain further how the 48-hour Completion Time was determined - so future Bases readers will know.

NYPA RESPONSE:

(1) NYPA revised the presentation of the requirement for ITS Table 3.3.2-1 Function 6.d, AFW - LOOP (Non SI Blackout Sequence) from "1 per bus (2 busses)" to "2 channels." Note that CTS Table 3.5-3, Item 3.c, specifies that this Function is required to start the turbine driven Auxiliary Feed Pump only (i.e., CTS acknowledges that the loss of power prevents the motor driven AFW pumps from starting).

(2) CTS requires that only one of the two channels is required to be operable. Therefore, there is no time limit if one channel is inoperable. ITS 3.3.2 DOC M.3 changed this requirement to 2 channels with a 48 hour AOT if one of the two channels is inoperable. As explained in DOC M.3, NYPA believes the 48 hour AOT for one inoperable channel (i.e., operating without single failure tolerance during the 48 hour allowable out of service time) is acceptable because the Function is a Non-Safety Injection start of the AFW. Other ESFAS Functions, in particular SG Water Level—Low Low, provide the primary protection against a loss of heat sink (i.e., loss of feedwater) event.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.2 Engineered Safety Feature Actuation System (ESFAS) Instrumentation**

NRC RAI No: **3.3.2--07**

RAI STATEMENT:

--DOC 3.3.2 A.12
--ITS 3.3.2 Condition E
--ITS Table 3.3.2 -1, Function 2.c, Containment Pressure (High High)

The proposed wording of ITS 3.3.2 Condition E and the proposed wording for the number of channels required in ITS Table 3.3.2-1 do not clearly imply that each set of 3 channels is permitted separate condition entry for an inoperable channel.

Comment: Revise the table to state "3 per set" which will ensure separate condition entry is allowed for each set. If you want to add that there are two sets, that's ok, but not necessary because the proposed Bases contains this design detail. With this change, the STS wording of Condition E can be adopted without confusion. So, adopt the STS language. (Note that this comment was previously discussed with the licensee on 7/13/99.)

NYPA RESPONSE:

NUREG-1431 has options for two different logic configurations: a) two-out-of-four; or, b) three sets of two channels, each set combined in a one-out-of-two configuration, with these outputs combined so that two-out-of-three sets tripped initiates. The LCO presentations for these configurations are as follows: a) 4 channels; or, b) 3 sets of 2. In both or these configurations, an inoperable channel is placed in bypass.

The IP3 logic differs from both of these examples by using 2 sets of 3 channels and requires that 2 channels from each set of 3 to energize to actuate. In the IP3 configuration, an inoperable channel is placed in trip.

NYPA believes that clearest LCO presentation for the IP3 design is " 2 sets of 3" with the clarification in the Condition statement that operation may continue with an inoperable channel in one or both sets tripped. The LCO statement "2 sets of 3 channels" is consistent with the NUREG-1431 presentation of "3 sets of 2."

NYPA believes that the LCO presentation and Condition statement proposed by the RAI is not appropriate for the IP3 design.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.2 Engineered Safety Feature Actuation System (ESFAS) Instrumentation**

NRC RAI No: **3.3.2--08**

RAI STATEMENT:

--Bases for ITS 3.3.2 - all comments collected into one RAI

-ITS 3.3.2 Bases discussion of Trip Setpoints and Allowable Values (STS markup --pages B 3.3-63 & 64)
-Insert B 3.3-63-01; item c

(1) The referenced discussion should address AVs as they relate to ESFAS instrumentation, but refers to ITS Table 3.3.1-1. Comment: Suggest tailoring the discussion to the ESFAS instrumentation requirements. (Note, consider this comment for the 6 other instrumentation specification Bases discussions of AVs.)

(2) The discussion does not explicitly address trip setpoints for the instrumentation and their relation to the AVs. Comment: Add such a discussion in keeping with the STS Bases. (Note, this applies to the RPS Bases also.)

(3) Top of STS markup page B 3.3-64, the discussion says all ESFAS instrument channels may be tested on line. Is this in fact true? What about AFW start on MBFP trip? Comment: Verify this; if not so, add a phrase stating the exceptions.

(4) STS bases discussion of uncertainties in determining setpoints has been omitted, but is applicable. Comment: Adopt this discussion. Also note that wording of insert B 3.3-64-01 needs editorial improvement.

(5)-STS markup pages B 3.3-73

Second paragraph of discussion under SI - high dP between steam lines. The discussion refers to trip setpoints. Comment: Verify that the entire Bases for ITS Section 3.3 refers to either trip setpoint or allowable value correctly in each instance. (Examples of other STS markup pages to check: B 3.3-94,

(6)-STS markup page B 3.3-104

Discussion in second paragraph regarding when an instrument setting makes the channel inoperable seems to apply to a 2-column format with trip setpoints and AVs. Comment: Revise Bases as appropriate to support the single column format with AVs.

(7)-STS markup page B 3.3-112 (insert B 3.3-112-01)

Next to last sentence of insert should say "Continued operation ..." , not "operating"

(8)-STS markup page B 3.3-114 (insert B 3.3-114-01)

Insert was missing from submittal. Comment: Please submit the insert

(9)-STS markup page B 3.3-116, discussion of ITS SR 3.3.2.4 (STS SR 3.3.2.5)

The STS words "Allowable Values specified in Table 3.3.1-1" are replaced with "calibration acceptance criteria." Apart from the STS referencing the wrong table, why are the STS words not applicable to IP3? Comment: Adopt the STS wording.

NYPA RESPONSE: (3.3.2-08)

(1) Typo corrected. Bases for 3.3.2 revised to refer to ESFAS. This correction was not needed in any other section.

(2) Insert B 3.3-63-01, paragraph d provides the following discussion: Calibration acceptance criteria (i.e., setpoints) are established by plant administrative programs for the components of a channel (i.e., required sensor, alarm, interlock, display, and trip function). The calibration acceptance criteria are established to ensure, within the required level of confidence, that the Allowable Value for the entire channel will not be exceeded during the calibration interval. A description of the methodology used to calculate the channel allowable values and calibration acceptance criteria is provided in References 6 and 8.

(3) GDC 19 requires that protection systems shall be designed for high functional reliability and in-service testability 'necessary' to avoid undue risk to the health and safety of the public. IEEE-279 provides additional insight into what this means. FSAR 7.2 specifies that IP3 RPS and ESFAS meet the GDC requirement. In light of the example provided and the GDC stipulation of necessary testability, NYPA revised this statement to read "tested on line,' as necessary,' to verify."

(4) Insert B 3.3-63-01, paragraph c, includes the required discussion of uncertainties which is as follows: "The Allowable Value is more conservative than the Analytical Limit to account for instrument uncertainties that either are not present or are not measured during periodic testing. Channel uncertainties that either are not present or are not measured during periodic testing may include design basis accident temperature and radiation effects (Ref. 5) or process dependent effects." This insert should refer to Ref. 6, the IP3 setpoint methodology procedure, which includes an exhaustive treatment of the subject. Corrected the incorrect reference in the Bases insert.

(5) NYPA reviewed the Bases for the 3.3 sections and eliminated the term 'trip setpoint' where it was not appropriate for the context of the statement.

(6) STS markup page B 3.3-104 states "In the event a channel's Trip Setpoint is found non-conservative with respect to the Allowable Value, or the transmitter, instrument Loop, signal processing electronics, or bistable is found inoperable, then all affected Functions provided by that channel must be declared inoperable..." NYPA believes this discussion is correct for a one

column presentation where the trip setpoint is controlled administratively outside of Tech Specs. NYPA revised the submittal to use lower case letters for "Trip Setpoint."

(7) Typo corrected.

(8) Insert B 3.3-114-01 added. This insert states: "When testing an individual channel, the SR is not met until both train A and train B logic are tested."

(9) Insert B 3.3-63-01, paragraph d provides the following discussion: Calibration acceptance criteria (i.e., setpoints) are established by plant administrative programs for the components of a channel (i.e., required sensor, alarm, interlock, display, and trip function). The calibration acceptance criteria are established to ensure, within the required level of confidence, that the Allowable Value for the entire channel will not be exceeded during the calibration interval.

This explanation is attempting to draw the distinction that "Allowable Values" are based on the entire instrument loop while the testing performed to verify the AV and the trip setpoints are based on individual components within the loop. CTS Bases page 3.5-9 provides the same distinction with the following discussion: "Allowable values contained in these Technical Specifications are determined for the calibration of the complete instrument loop during required calibrations in a refueling cycle. .... The allowable value listed in the Technical Specifications can not normally be compared to the results of a specific test due to different calculation methods, but will require an engineering evaluation to determine if the Technical Specification allowable value was exceeded."

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.3 Post Accident Monitoring (PAM) Instrumentation**

NRC RAI No: **3.3.3--01**

RAI STATEMENT:

--JFD 3.3.3 CLB.1
--ITS Table 3.3.3-1 Required Channels
--ITS 3.3.3 Bases insert B 3.3-123-01

The referenced insert explains that the redundancy required by RG 1.97 for PAM instrumentation is controlled administratively instead of by TS. Thus the ITS required channels specified in Table 3.3.3-1 are usually at least one less than the number of channels available in the IP3 design (as listed in CTS Table 3.5-5); that is, only one channel is usually required. Consequently, the Actions table only addresses loss of function. It does not address loss of redundancy like the STS. Single failure tolerance should be required by TS. Administrative control of the inoperable redundant channels outside of TS could allow operation indefinitely with redundant channels inoperable. The 30-day limit of STS 3.3.3 Action A is a reasonable allowance for operation with one or more PAM instruments without single failure protection; it ought to be adopted. Loss of redundancy beyond 30 days only requires making a PAM report per ITS 5.6.7.

Comment: Revise the ITS consistent with STS 3.3.3 by requiring redundant channels to also be operable and including action requirements for loss of redundancy.

NYPA RESPONSE:

NYPA revised the ITS 3.3.3 to establish Technical Specification requirements for all Regulatory Guide 1.97, Type A and Category 1, identified as required in the NRC Safety Evaluation: Conformance to Regulatory Guide 1.97, Revision 3, for Indian Point 3 (TAC No. 51099), dated April 3, 1991. These requirements are listed in FSAR Table 7.5-1, Rev 0, dated 6/99. This includes requirements for redundant channels to be operable and includes NUREG-1431 action requirements for loss of redundancy.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.3 Post Accident Monitoring (PAM) Instrumentation**

NRC RAI No: **3.3.3--02**

RAI STATEMENT:

--DOC 3.3.3 A.22

The referenced DOC incorrectly addresses ITS 3.4.15. It also states that 30 days to indefinite operation is allowed by ITS 3.3.3 Actions when one or more PAM instruments are inoperable. Proposed ITS 3.3.3 does not require operability of redundant channels; thus it does not have a 30-day allowance to restore an inoperable PAM channel. It only contains the 7-day action for loss of the one required channel. For most PAM functions, failure to restore the required channel(s) to operable status results in shutting the plant down in accordance with ITS Action C. Comment: Correct the discussion of change.

NYPA RESPONSE:

See Response to RAI 3.3.3-01.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.3 Post Accident Monitoring (PAM) Instrumentation**

NRC RAI No: **3.3.3--03**

RAI STATEMENT:

--DOC 3.3.3 A.17
--DOC 3.3.3 M.7
--ITS Table 3.3.3-1 Functions 18, 19, 20, and 21, Core Exit Thermocouples

CTS Table 3.5-5 column 1 indicates 4 Core Exit TCs per Quadrant. ITS Table 3.3.3-1 Required Channels column indicates 2 Core Exit TCs per Quadrant, as discussed by DOC A.17. DOC M.7 provides discussion and justification for the change, indicating that ITS Table 3.3.3-1 requires 3 Core Exit TCs per Quadrant, to provide single failure protection.

Comment: Clarify these differences.

NYPA RESPONSE:

See Response to RAI 3.3.3-01.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.3 Post Accident Monitoring (PAM) Instrumentation**

NRC RAI No: **3.3.3--04**

RAI STATEMENT:

--3.3.3-04-DOC 3.3.3 L.2
--CTS Table 4.1-1 channel 15.e, MSL radiation monitors
--ITS Table 3.3.3-1 Function 22
--ITS SR 3.3.3.1 Channel Check

DOC L.2 partially justifies the relaxation of the channel check frequency from 12 hours to 31 days for the referenced PAM function by stating that the LCO for PAM functions requires sufficient redundancy to support a random single failure. As discussed in RAI 3.3.3-01, this is not true of ITS 3.3.3, as proposed. Comment: Either adopt the STS 3.3.3 LCO and Action requirements, or retain the CTS frequency for the channel check for each PAM function.

NYPA RESPONSE:

See Response to RAI 3.3.3-01.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.3 Post Accident Monitoring (PAM) Instrumentation**

NRC RAI No: **3.3.3--05**

RAI STATEMENT:

--3.3.3-05-DOC A.19
--CTS Table 4.1-1 Item 15.f, Gross Failed Fuel Detectors
--ITS Table 3.3.3-1 Function 23

Although CTS Table 4.1-1 specifies surveillance requirements for the referenced function, the CTS do not specify operability or action requirements. Such requirements are contained in the ITS for this function consistent with the other PAM functions.

Comments: Addition of requirements is a more restrictive change. Revise the submittal accordingly. Also, revise the ITS to require both channels. See RAI 3.3.3-01. DOC A.19.c incorrectly refers to the MSL radiation monitors. Correct this error.

NYPA RESPONSE:

See Response to RAI 3.3.3-01. NYPA revised the ITS submittal to include an M DOC for new action requirements and corrected the typo in DOC A.19.c.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.3 Post Accident Monitoring (PAM) Instrumentation**

NRC RAI No: **3.3.3--06**

RAI STATEMENT:

--DOC 3.3.3 LA.1

This comment applies to most LA-type DOCs. Refer to the boiler plate used to justify relocation of details to documents controlled by 10 CFR 50.59. It incorrectly states that this regulation assures changes to the FSAR (1) do not result in changes to the TS, (2) do not result in "significant" increases in probability or consequences of accidents previously evaluated, and (3) do not result in a "significant" reduction in a margin of safety. There seems to be confusion with the NSHC criteria.

Comment: Revise this and similar LA-type discussions, and also any other DOCs that use this language, to omit item (1) and remove the word "significant" from (2) and (3).

NYPA RESPONSE:

NYPA revised LA DOCs to delete the word "significant" from discussions of probability or consequences of accidents previously evaluated and reductions in margin of safety related to changes governed by 10 CFR 50.59.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.3 Post Accident Monitoring (PAM) Instrumentation**

NRC RAI No: **3.3.3--07**

RAI STATEMENT:

--DOC 3.3.3 LA.6, A.10, and A.22
--CTS Table 3.5-4 Functional Unit 6 - MSL Radiation Monitor & Note 3
--CTS Table 3.5-5 Parameter 23 - High-Range Containment Radiation Monitor and Note **** a)
--ITS Table 3.3.3-1 Functions 22 - MSL Rad Monitor) & 10 - Containment Area
--Radiation (High Range)

(1) DOC LA.6 incorrectly states that Note 3 of CTS Table 3.5-4 allows 6 days to begin the preplanned alternate sampling/monitoring capability following identification of the failure of the MSL radiation monitors. It only allows 3 days, same as the containment radiation monitors.

(2) The DOC also states this time limit is to be placed in the FSAR, which seems unusual.

Comment: Correct the error in DOC LA.6 and confirm the new location of the time limit. Also discuss in general your choice of the FSAR as the new location of many of the action requirements being relocated from CTS. Include an example.

NYPA RESPONSE:

(1) Revised DOC LA.6 to delete incorrect reference to a 6-day time limit for instituting alternate monitoring.

(2) Requirements are placed in the FSAR when it is determined that the requirement is best implemented by procedure. The requirement is then placed in the FSAR and a procedure generated which references the FSAR requirement. This method ensures the requirement is governed by 10 CFR 50.59 while allowing for more convenient implementation via the procedure. In general, NYPA reviewed the LA-DOCs and Relocated Items for Rev 1 of the proposed ITS and made several changes in relocation destination. In many cases, items proposed for the FSAR in Rev 0 were changed to Technical Requirements Manual (TRM) for Rev 1. For this specific case, NYPA concluded that the FSAR and implementing procedures is appropriate for the timing of alternate monitoring.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.5 Loss of Power (LOP) Diesel Generator (DG) Start Instrumentation**

NRC RAI No: **3.3.5--01**

RAI STATEMENT:

CTS Table 3.5-3 indicates 2 channels per bus of LOP instrumentation. With 2 channels per bus available, it is not clear why the STS 3.3.5 Actions A, B, and C cannot be adopted for 2 "required channels" of both Undervoltage and Degraded Voltage Functions. Throughout the STS the "required channels" is based on the number of available instrument channels for a given Function. The LCOs are then established, when possible, to ensure single failure protection. DOC A.4 discusses the CTS Operability requirement presentation method, but does not adequately explain why the STS presentation cannot be adopted in this case.

Comment: Provide additional discussion and justification based on specific plant design for the STS deviation.

NYPA RESPONSE:

CTS Table 3.5-3, Item 4.a, requires only one of the two installed channels of 480V Bus Undervoltage Relay be Operable. The IP3 ITS maintains current licensing basis and does not establish an AOT for the second channel.

NYPA believes that, rather than the "required channels" being based on the number of available instrument channels for a given Function." Technical Specification requirements are established to enforce 10 CFR 50, Appendix A GDC, and IEEE 279 requirements for redundancy. Neither the GDC nor IEEE 279 specifically address this requirement other than those GDC that require single failure tolerance with and without offsite power. NYPA believes that these requirements are satisfied by redundancy in DGs and safeguards power trains. This is explained in Bases Insert B 3.3-144-01 which states: "Two undervoltage relays are provided on each 480 V bus for detecting a bus undervoltage. Either of the two relays is sufficient to satisfy requirements for the 480 V bus undervoltage Function even though the failure of the one remaining undervoltage relay could result in the failure of one DG to start because there is redundancy in the number of EDGs available."

NYPA recognizes the safety enhancement provided by the second channel of the 480V Bus Undervoltage function on each bus and normally maintains both channels operable even though only one is required.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.5 Loss of Power (LOP) Diesel Generator (DG) Start Instrumentation**

NRC RAI No: **3.3.5--02**

RAI STATEMENT:

CTS Table 4.1-1 requires testing of the Undervoltage Relay and the Degraded Voltage Relay on a monthly Frequency. ITS SR 3.3.5.1 requires performance of a Trip Actuation Device Operational Test every 31 days for these Functions. It is assumed that this testing requirement is equal to the monthly testing required in the CTS, however no discussion or justification is included in the submittal.

Comment: Provide discussion and justification for the change.

NYPA RESPONSE:

CTS Table 4.1-1 requires a "test" of the Undervoltage Relay and the Degraded Voltage Relay on a monthly Frequency. Although the procedure used to perform this test is labeled as a functional test, the test currently performed meets the ITS definition for a TADOT. Therefore, the adoption of ITS SR 3.3.5.1, which requires a TADOT for the Undervoltage Relay and the Degraded Voltage Relay on a monthly Frequency, does not result in any change between the CTS and ITS.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.5 Loss of Power (LOP) Diesel Generator (DG) Start Instrumentation**

NRC RAI No: **3.3.5--03**

RAI STATEMENT:

CTS Table 3.5-3 requires declaring the DG inoperable within 72 hours when the minimum number of channels of LOP instrumentation is not Operable. ITS 3.3.5 provides 1 hour to either restore the channel to OPERABLE status or place the channel in trip, and requires the DG declared inoperable immediately when these Required Actions are not met within the allowed 1 hour, or when 2 channels of Degraded Voltage are determined Inoperable. This change is discussed in DOC A.6, as an Administrative Change. This change is considered more restrictive.

Comment: Provide applicable documentation for the More-Restrictive Change.

NYPA RESPONSE:

CTS Table 3.5-3, Note 1, specifies the following actions whenever requirements for Undervoltage or Degraded Voltage are not met: "If the 138KV and 13.8KV sources of offsite power are available and the conditions of column 3 or 4 cannot be met within 72 hours, then the requirements of 3.7.C.1 or 2 shall be met." CTS 3.7.C.1 and CTS 3.7.C.2 are the actions taken after the AOT for an inoperable DG has expired. Therefore, these CTS statements are equivalent to requiring a plant shutdown in 72 hours. In ITS 3.3.5 Conditions A and B, a one hour completion time is provided for Required Actions that can be taken prior to declaring the associated DG inoperable, which then requires a plant shutdown in 72 hours. This results in a less restrictive change because ITS allows a total of 73 hours to reach the same plant condition that must be reached in 72 hours under CTS.

NYPA revised the ITS conversion submittal to replace DOC A.6 with a justification for a less restrictive change (DOC L.2) and a supporting NSHE.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.6 Containment Purge System and Pressure Relief Line Isolation Instrumentation**

NRC RAI No: **3.3.6--01**

RAI STATEMENT:

ITS 3.3.6 Required Action A.1 is added in the ITS as a More Restrictive Change when one radiation monitoring channel is Inoperable. This requirement is not included in the CTS. This conservative change is considered acceptable, however, the Completion Time for this Required Action in the STS is 4 hours, and the Completion Time in the ITS is extended to 7 days. There is no discussion or basis for the 7-day Completion Time provided, or any discussion for the deviation from the STS - in particular for the pressure relief line isolation.

Comment: Provide additional discussion and justification for the STS deviation, including a technical basis for the 7-day Completion Time.

NYPA RESPONSE:

There are two rad monitors covered by ITS 3.3.6: Containment Air Particulate Monitor (R-11) or Containment Radioactive Gas Monitor (R-12). Each of these rad monitors automatically isolates two penetrations: the Containment Purge System; and, the Containment Pressure Relief Line (i.e., Containment Vent).

The 7 day AOT for loss of one channel (R-11 or R-12) is acceptable because loss of one channel is loss of redundancy and not a loss of function and because of the following:

(1.a) Containment Purge System in Modes 1, 2, 3 and 4: Loss of actuation redundancy for 7 days is not a problem because the Containment Purge System is isolated when in Modes 1, 2, 3 and 4 in accordance with requirements established in LCO 3.6.3, Containment Isolation Valves.

(1.b) Containment Purge System during a fuel handling accident: Loss of actuation redundancy for 7 days is not a problem because the Containment Purge System isolation capability is not the primary method for ensuring that 10 CFR 100 limits are not exceeded during a fuel handling event (Ref. 1). As specified in LCO 3.9.3, Containment Penetrations, the Containment Purge System is aligned to discharge through the Containment Purge Filter System during CORE ALTERATIONS or movement of irradiated fuel until the reactor has been shutdown for at least 550 hours. Purge path filtration during the first 550 hours following reactor shutdown ensures that the dose limit for a fuel handling accident of 75 rem to the thyroid (25 percent of the 10 CFR Part 100 limit of 300 rem) at the Exclusion Area Boundary (EAB) (i.e., site boundary) is not exceeded (Ref. 2). After 550 hours, there is no need for filtration or isolation to meet 10 CFR 100 limits. Therefore, isolation based on R-11 and R-12 is a diverse function that is not included in the bounding calculation for a fuel handling accident.

(2.a) Pressure Relief Line in Modes 1, 2, 3 and 4: Containment Pressure Relief Line automatic isolation capability is required as part of the containment isolation function initiated by the Engineered Safety Feature Actuation System (ESFAS) Instrumentation required by LCO 3.3.2. Containment Pressure Relief Line automatic isolation when high radiation levels are detected by the Containment Air Particulate Monitor (R-11) or Containment Radioactive Gas Monitor (R-12) provides a diverse backup to the closure initiated by the ESFAS system. Therefore, isolation based on R-11 and R-12 is a diverse function that is not included in the bounding calculation of a DBA in Mode 1, 2, 3 and 4.

(2.b) Pressure Relief Line during a fuel handling accident: Containment Pressure Relief Line automatic isolation capability is not required during CORE ALTERATIONS or movement of irradiated fuel in the containment because the Line is isolated as specified in LCO 3.9.3. The Containment Pressure Relief Line is isolated because the fuel handling accident analysis (References 1 and 2) credits filtration and not automatic isolation to ensure 10 CFR 100 limits are met. The Containment Auxiliary Charcoal Filter System which filters the Containment Pressure Relief Line is not required to be tested in accordance with Specification 5.5.10, Ventilation Filter Test Program.

All of the information above is presented in great detail in the ITS 3.3.6 Bases and associated DOCs.

REFERENCES:

1. FSAR, Chapter 14

2. SER for IP3 Amendment 175

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.6 Containment Purge System and Pressure Relief Line Isolation Instrumentation**

NRC RAI No: **3.3.6--02**

RAI STATEMENT:

STS Table 3.3.6-1 includes a Manual Initiation Function for this type of Isolation Function. The Manual Initiation Function is omitted in ITS Table 3.3.6-1. This deviation from the STS is not discussed in the submittal, and it is not clear that this Function should not be included in the ITS to be consistent with the STS.

Comment: Provide clarification for the omission of the Manual Initiation Function in the ITS based on plant specific design.

NYPA RESPONSE:

The IP3 does not have manual initiation capability for this function other than the inclusion of these penetrations as part of the manual containment isolation function covered in ITS 3.3.2.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.7 Control Room Emergency Ventilation (CRVS) Actuation Instrumentation**

NRC RAI No: **3.3.7--01**

RAI STATEMENT:

CTS Table 4.4-1 requires testing of the ESF Actuation Logic on a bi-monthly interval. STS SR 3.3.7.3, ACTUATION LOGIC TEST, SR 3.3.7.4, MASTER RELAY TEST, and SR 3.3.7.5, SLAVE RELAY TEST, are omitted in ITS Table 3.3.7.1 without discussion or justification. The ITS 3.3.7.1, CHANNEL OPERATIONAL TEST that replaces the omitted STS surveillances is only required every 92 days. This extension of testing Frequency (twice per month verses every 92 days) is not discussed or justified.

Comment: Provide discussion and justification omitting the STS requirements to perform a ACTUATION LOGIC TEST, MASTER RELAY TEST, AND SLAVE RELAY TEST, and extending the CTS testing interval to 92 days.

NYPA RESPONSE:

NYPA revised the ITS conversion submittal to change ITS 3.3.7, Function 2, Automatic Actuation Logic and Actuation Relays, to require a Surveillance for an Actuation Logic Test at a Frequency of 31 days on a STAGGERED TEST BASIS. This makes the ITS consistent with CTS Table 4.1-1, Item 20.b which requires "at least every two months on a staggered test basis (i.e., one train per month)."

The CRVS instrumentation design for IP3 consists of consists of one area rad monitor (which is not required by Tech Specs) in a one out of one logic that actuates both trains; a single selector switch that starts train A and B; and, both trains actuated by SI signal from train A and both trains actuated by SI signal from train B. The IP3 design for CRVS actuation instrumentation, downstream of the circuits that provide input from an SI actuation, does not include components that can be considered a MASTER RELAY or SLAVE RELAYS.

Therefore, together with the CRVS TADOT performed for the manual initiation function which tests the CRVS end devices, the SR 3.3.2.5, SLAVE RELAY TEST, will ensure that the SI input initiates both trains of CRVS.

SR 3.3.7.4, MASTER RELAY TEST, and SR 3.3.7.5, SLAVE RELAY TEST, were omitted because there are no master or slave relays associated with the actuation instrumentation for this system.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.7 Control Room Emergency Ventilation (CRVS) Actuation Instrumentation**

NRC RAI No: **3.3.7--02**

RAI STATEMENT:

ITS 3.3.7 Bases Background and Safety Analysis discussions

The second paragraph on STS markup page B 3.3-159 omits the fact that CRVS can also automatically actuate on a radiation signal (R-1); thus the statement of this design feature in the third paragraph (Insert B 3.3-159-01) is surprising. This is clarified in insert B 3.3-159-02 in the safety analysis discussion. Why is the basis for this insert which is given in DOC 3.3.7 A.3, not referenced in the bases?

What is the firestat detector and does it automatically initiate CRVS on 100% recirculation (Insert B 3.3-159-01)? No statement explains why this function isn't required for operability.

Comment: Revise the Bases to better describe the design capability of the non-required CRVS auto-actuation functions and to more completely explain why these functions aren't necessary for CRVS operability.

NYPA RESPONSE:

(1) NYPA revised the ITS conversion submittal for LCO 3.3.7 to include a reference to the SER for Amendment No. 137 to Facility Operating License DPR-64 for IP3 as part of insert B 3.3-159-02 in the safety analysis section of the Bases. Note that Insert B 3.3-159-01 and Insert B 3.3-159-02 both discuss CRVS initiation on a signal from Rad Monitor R-1.

(2) As stated in Insert B 3.3-159-01, the firestat detector will automatically place the CRVS in 100% incident Mode. This function is not required in CTS or ITS.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.7 Control Room Emergency Ventilation (CRVS) Actuation Instrumentation**

NRC RAI No: **3.3.7--03**

RAI STATEMENT:

--STS 3.3.7 Required Action B.1.2 and associated Bases, STS markup page B 3.3-163
--ITS 3.3.7 Action B

The ITS omits the STS requirement to immediately enter specification 3.7.10 [11] for the CRVS train made inoperable by the inoperable actuation instrumentation. No specific explanation is given for this omission. In addition, the proposed Bases does not say why the 72-hour Completion Time is appropriate. ITS 3.3.7 Condition B could include loss of all automatic actuation capability. Why is 72 hours ok?

Comment: Revise the submittal to explain this omission and revise the basis to justify the Completion Time.

NYPA RESPONSE:

Note that the design described in NUREG-1431, LCO 3.3.7, has two "trains" of manual initiation with a separate pushbutton associated with each train. Each manual pushbutton initiates one of the two trains of CRVS. Therefore, when both channels or both trains of CRVS are inoperable, NUREG-1431, LCO 3.3.7, gives you the option of starting one train in the accident Mode (RA B.1.1) and declaring the mechanical portion of the other train inoperable (RA B.1.2) OR placing both trains in the accident Mode (RA B.2).

The IP3 design has a single switch that places both CRVS trains in the accident mode. This is explained in the Bases for RA A.1 and B.1 and in DOC M.1. Therefore, when one train or channel of CRVS actuation is inoperable, RA A.1 places both CRVS trains in the accident mode within 72 hours consistent with the AOT for one inoperable CRVS train in ITS 3.7.11. When two trains or channels of CRVS actuation are inoperable, RA B.1 also places both CRVS trains in the accident mode within 72 hours consistent with the AOT for two inoperable CRVS trains in ITS 3.7.11.

NYPA revised the bases for Required Action B.1 to add a discussion on why the 72 hour AOT is appropriate.

The option to place one train in accident mode (RA B.1.1) and then declare the other train inoperable (RA B.2.2) was deleted because this is not a normal configuration at IP3. If one or both trains do not actuate to the accident mode as required by RA B.1, the Actions of ITS 3.7.11 are applicable.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

Note that an error in the NUREG 1431 markup for Required Action B.1 may have caused confusion. The markup should read "Place CRVS in 10% incident mode" to match the presentation in the typed version of the ITS,

NYPA modified ITS 3.3.7, Required Action B.1, to make the NUREG 1431 markup for Required Action B.1 match the presentation in the typed version of the ITS.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.7 Control Room Emergency Ventilation (CRVS) Actuation Instrumentation**

NRC RAI No: **3.3.7--04**

RAI STATEMENT:

--DOC 3.3.7 A.3 and M.1

The submittal, in DOC A.3, claims that adding an LCO for certain CRVS actuation instrumentation functions is an administrative change apparently because the CTS definition of operability requires these to be operable under IP3's interpretation of its CTS. Thus, an inoperable instrument would, under CTS, require declaring CRVS inoperable immediately. The 7-day and 72-hour Completion Times thus appear to be relaxations of the CTS and require appropriate justification. DOC M.1 contradicts itself when it says Action B requires placing the CRVS in 10% incident mode both 'immediately' and within '72 hours.'

Comment: Correct the errors in the DOCs and provide appropriate justification for Actions A and B.

NYPA RESPONSE:

NYPA disagrees with the reviewers interpretation of IP3 requirements for CRVS. CTS 3.3.H.1 requires that CRVS is operable but does not require redundant CRVS capability. Likewise, CTS 3.3.H.2 establishes requirements when the CRVS is not Operable but does not distinguish between a loss of CRVS redundancy and a loss of CRVS function. Therefore, CTS 3.3.H.2 specifies no Required Actions for a loss of CRVS redundancy and provides an allowable out of service time (AOT) of 72 hours for a loss of CRVS function. This is explained in 3.7.11 DOC M.1 which is referenced from 3.3.7 DOC M.1. As discussed in 3.3.7 DOC M.1, the 72 hour AOT and 7 day AOT for loss of redundancy and loss of function, respectively, are more restrictive changes.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.7 Control Room Emergency Ventilation (CRVS) Actuation Instrumentation**

NRC RAI No: **3.3.7--05**

RAI STATEMENT:

--Bases for ITS 3.3.7 Action C

Reference to modes is omitted in ITS Action C because there are no TS requirements outside Modes 1 thru 4 for CRVS, yet the corresponding bases continues to provide this reference.

Comment: Revise the submittal to be consistent

NYPA RESPONSE:

NYPA revised the ITS conversion submittal to delete the reference to Mode 1, 2, 3 or 4 in the Bases for ITS 3.3.7 Required Actions C.1 and C.2.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.8 Fuel Storage Building Emergency Ventilation System (FSBEVS) Instrumentation**

NRC RAI No: **3.3.8--01**

RAI STATEMENT:

--DOCs 3.3.8 A.3 and A.4

The addition of an LCO for the FBEVS instrumentation and the deletion of the CTS requirement to halt operations which may increase the reactivity of the core are claimed to be administrative changes. They are more and less restrictive changes, respectively.

Comment: Revise the submittal with appropriate justifications.

NYPA RESPONSE:

(1) DOC A.3: CTS 3.8.A.12 and 3.8.C.6 require that the fuel storage building emergency ventilation system be Operable and CTS Table 4.4-1, Item 15.a, requires channel checks, functional tests and calibrations of the fuel storage building area radiation monitor which provides automatic actuation of the fuel storage building emergency ventilation system. CTS 4.5.a.6 provides testing requirements for the fuel storage building emergency ventilation system.

LCO 3.7.13, Fuel Storage Building Emergency Ventilation System (FSBEVS), maintains the requirement for FSBEVS Operability and LCO 3.3.8, Fuel Storage Building Emergency Ventilation System (FSBEVS) Actuation Instrumentation, maintains the requirements for actuation instrumentation Operability.

The ITS simply re-organizes the CTS requirements into ITS LCO 3.7.13 and ITS LCO 3.3.8. Reorganization of existing requirements into the ITS format is an administrative change.

(2) DOC A.4: NYPA revised the IP3 ITS conversion submittal to provide additional clarification and justification for classifying this as an administrative change.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.8 Fuel Storage Building Emergency Ventilation System (FSBEVS) Instrumentation**

NRC RAI No: **3.3.8--02**

RAI STATEMENT:

CTS 3.8.A.12 and CTS 3.8.C.6 include Applicability for the FSBEVS when the fuel cask or the cask crane are over the spent fuel pit. ITS 3.3.8 does not include this Applicability and no discussion or justification is provided for the change. Comment: Provide discussion and justification for the omitted CTS Applicability.

NYPA RESPONSE:

NYPA revised the IP3 ITS conversion submittal for Relocated Item R.12, Refueling, Fuel Handling and Storage (Manipulator Cranes), to include the following requirements in the relocation:

(1) CTS 3.8.A.12: The fuel storage building emergency ventilation system shall be operable whenever... the spent fuel cask (n)or the cask crane are moved over the spent fuel pit...

(2) CTS 3.8.C.6: The emergency ventilation system may be inoperable when neither the spent fuel cask nor the cask crane are moved over the spent fuel pit...

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.8 Fuel Storage Building Emergency Ventilation System (FSBEVS) Instrumentation**

NRC RAI No: **3.3.8--03**

RAI STATEMENT:

It is not clear what system or component level redundancy is included in the FSBEVS. Information such as the number of manual actuation trains, the number of radiation monitors, etc. are not clearly discussed in the ITS Bases. It appears that there is only one manual actuation switch and one automatic actuating radiation monitor in the FSBEVS. Therefore, it is not clear what single failure measures are included in the design. If there is only one manual actuation switch and one automatic actuating radiation monitor in the design, ITS Condition A should identify the inoperable Condition (i.e., The manual initiation Function or the automatic actuation Function Inoperable).

Comment: Provide additional discussion and justification for ITS requirements and expand the Bases to better describe the system Safety Analysis.

NYPA RESPONSE:

IP3 FSBEVS actuation instrumentation consists of one manual actuation switch and one automatic actuating radiation monitor in the FSB. There is no redundancy for single failure for this system or its actuation instrumentation. Additionally, the manual actuation is from a control panel in the fan house.

NYPA clarified this with the following changes:

LCO 3.3.8 was revised to read: "FSBEVS manual and automatic actuation instrumentation shall be OPERABLE."

Condition A was revised to read: "Manual or automatic FSBEVS actuation instrumentation inoperable."

Insert B 3.3-169-01 for the LCO section of the Bases to read as follows:

"Manual and automatic FSBEVS actuation instrumentation consists of one channel of Fuel Storage Building Area Radiation Monitor (R-5) and one channel of manual actuation Manual actuation from the fan house and automatic FSBEVS actuation instrumentation are OPERABLE when both the Fuel Storage Building Area Radiation Monitor (R-5) signal and manual initiation will cause the realignment of the FSBEVS to the accident mode of operation as described in the Bases for LCO 3.7.13, Fuel Storage Building Emergency Ventilation System (FSBEVS).

The setpoint for Fuel Storage Building Area Radiation Monitor (R-5) are established in accordance with the FSAR (Ref. 2)."

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.8 Fuel Storage Building Emergency Ventilation System (FSBEVS) Instrumentation**

NRC RAI No: **3.3.8--04**

RAI STATEMENT:

CTS Page 3.8-3 is marked-up to indicate addition of ITS 3.3.8 Required Action A.1.2. In addition, DOC L.1 indicates Required Action A.1.2. It is assumed that this is a typographical error. The added Required Action is actually numbered A.2. Correct typographical error. No response required.

NYPA RESPONSE:

Typo corrected.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.3.8 Fuel Storage Building Emergency Ventilation System (FSBEVS) Instrumentation**

NRC RAI No: **3.3.8--05**

RAI STATEMENT:

--Bases insert 3.3-168-05

The bases discuss manual initiation of this apparently one channel, one detector automatic actuation system. Manual initiation is also described in the bases as required for operability of FSBEVS.

Comment: Explicitly list both the manual and radiation signal initiation functions in the LCO, or have a table like STS Table 3.3.8-1.

NYPA RESPONSE:

See Response to RAI 3.3.8-03

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.1 Containment**

NRC RAI No: **3.6.1 -- 01**

RAI STATEMENT:

--DOC A.3
--DOC LA.1
--CTS 1.10
--CTS 3.6.A.1
--ITS B3.6.1 Bases - BACKGROUND

CTS 1.1.0 defines CONTAINMENT INTEGRITY. A markup of CTS 1.10 shows that only CTS 1.10.2 is relocated to ITS B3.6.1 Bases - BACKGROUND and the relocation is justified by DOC LA.1. The rest of CTS 1.10 is covered by DOC A.3. DOC A.3 states that portions of CTS 1.10 are covered or relocated to other LCOs in ITS 3.6 and that CONTAINMENT INTEGRITY is changed to containment shall be OPERABLE. DOC A.3 also states that this definition is deleted. While the former statements are correct and acceptable, the latter statement is incorrect. The definition is not deleted but is relocated to ITS B3.6.1 Bases -BACKGROUND which makes this portion of the change a Less Restrictive (LA) change. See Comment Number 3.6.3-1.

Comment: Revise the CTS markup and the discussions and justifications associated with DOC LA.1 to include the rest of CTS 1.10. Modify DOC A.3 accordingly. See Comment Number 3.6.3-1.

NYPA RESPONSE:

NYPA revised ITS to add 3.6.1 DOC LA.2 that recognizes that CTS 1.10.1 requirements for non automatic containment isolation valves, CTS 1.10.3 requirements for containment airlocks, and CTS 1.10.4 requirements for automatic containment isolation valves are maintained in the Bases for ITS LCO 3.6.1 as well as in ITS LCO 3.6.2 and 3.6.3.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.1 Containment**

NRC RAI No: **3.6.1 -- 02**

RAI STATEMENT:

--JFD CLB.1
--JFD T.1
--CTS 4.4.A
--STS SR 3.6.1.1
--ITS SR 3.6.1.1 and Associated Bases

CTS 4.4.A requires leak rate testing in accordance with the Containment Leak Rate Testing Program which is based on the requirements of 10 CFR 50 Appendix J, Option B. STS SR 3.6.1.1 requires the visual examination and leakage rate testing be performed in accordance with 10 CFR 50 Appendix J as modified by approved exemptions. ITS SR 3.6.1.1 modifies STS SR 3.6.1.1 to conform to CTS 4.4.A as modified in the CTS markup. The STS is based on Appendix J, Option A while the CTS and ITS are based on Appendix J, Option B. Changes to the STS with regards to Option A versus Option B are covered by a letter from Mr. Christopher I. Grimes to Mr. David J. Modeen, NEI, dated 11/2/95 and TSTF-52, as modified by staff comments of 10/96 and 12/98. The changes to ITS 3.6.1., 3.6.2, 3.6.3, 3.6.9, and their associated Bases are not in conformance with the letter and TSTF-52 as modified by staff comments. See Comment Numbers 3.6.2-2, 3.6.2-3, 3.6.3-10, 3.6.9-8, 3.3.D/4.4.C.-1 and 4.4.E.3-1.

Comment: Licensee should revise its submittal to conform to the 11/2/95 letter and TSTF-52 modified by the staff. See Comment Numbers 3.6.2-2, 3.6.2-3, 3.6.3-10, 3.6.9-8, 3.3.D/4.4.C-1 and 4.4.E.3-1.

NYPA RESPONSE:

NYPA reviewed the comments for inclusion in the ITS Revision 1 submittal. These comments were of an editorial nature and did not change the technical content of the proposed ITS 3.6.1 submittal. These comments were incorporated as applicable to improve the clarity of the ITS Revision 1 submittal.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.1 Containment**

NRC RAI No: **3.6.1 -- 03**

RAI STATEMENT:

--JFD PA.1
--JFD DB.1
--STS B3.6.1 Bases - BACKGROUND
--ITS B3.6.1 Bases - BACKGROUND

The fifth paragraph of STS B3.6.1 Bases - BACKGROUND states the following: "To maintain this leak tight barrier:...d. The pressurized sealing mechanism associated with a penetration is OPERABLE, except as provided in LCO 3.6.[ ]." ITS B3.6.1 Bases - BACKGROUND substitutes the following words for item d. "d. The Isolation Valve Seal Water (IVSW) system is OPERABLE, except as provided in LCO 3.6.9." Based on the responses to Comment Numbers 3.6.3-1, 3.6.A/4.4.C-1, and 3.3.D/4.4.E.3-1. This statement may need to be modified and/or supplemented.

Comment: Revise the ITS markup accordingly. See Comment Numbers 3.6.3-1, 3.6.A/4.4.C-1 and 3.3.D/4.4.E.3-1.

NYPA RESPONSE:

NYPA revised the ITS conversion submittal to add ITS Section 3.6.10, " Weld Channel and Penetration Pressurization System," as stated in the response to RAI 3.6.0-01. Accordingly, the Background section of the Bases for 3.6.1 has been modified to add a cross-reference to LCO 3.6.10.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.2 Containment Air Locks**

NRC RAI No: **3.6.2 -- 01**

RAI STATEMENT:

--DOC A.3
--CTS 1.10
--CTS 3.6.A.1
--ITS B3.6.2 Bases - LCO

--CTS 1.10 defines CONTAINMENT INTEGRITY and personnel air lock OPERABILITY (CTS 1.10.3). DOC A.3 discusses a number of changes associates with CTS 1.10 and 3.6.A.1. The staff has reviewed these changes and finds that the change associated with changing CONTAINMENT INTEGRITY in CTS 1.10 and 3.6.A.1 to "Two containment air locks shall be OPERABLE" is an Administrative change and is acceptable. However, the balance (majority) of the changes associate with CTS 1.10.3 and DOC A.3 deal with relocating requirements to ITS B3.6.2 Bases - LCO, which are Less Restrictive (LA) changes. Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (LA) change.

NYPA RESPONSE:

CTS 1.10.3 specifies that air lock doors are properly closed "unless being used for entry, egress or maintenance, at which time at least one air lock door shall be closed."

NYPA revised the IP3 ITS conversion submittal for LCO 3.6.2, Containment Air Locks, to change the CTS markup and DOC A.3 and add DOC LA.1 to show that this portion of the requirement is relocated to an existing statement in the LCO section of the Bases for ITS 3.6.2.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.2 Containment Air Locks**

NRC RAI No: **3.6.2 -- 02**

RAI STATEMENT:

--DOC A.9
--JFD CLB.1
--JFD PA.1
--JFD DB.1
--JFD DB.2
--CTS 4.4.D
--ITS SR 3.6.2.1 and Associated Bases

Comment: See Comment Numbers 3.6.1-2 and 3.6.2-3.

NYPA RESPONSE:

See Responses to RAI 3.6.1-02 and RAI 3.6.2-03. Additionally, NYPA reviewed each of the items referenced in this RAI and provides the following responses.

--DOC A.9 is addressed in Observation #7.

--JFD CLB.1 is addressed in Observation #2.

--PA.1 for ITS LCO 3.6.2 addresses an editorial improvement to the Bases for ITS 3.6.2, Required Action C.3, Restore air lock to OPERABLE status within 24 hours. The Bases for Required Action C.3 explains this requirement as "Additionally, the affected air lock(s) must be restored to OPERABLE status within the 24 hour Completion Time" to which IP3 attached the phrase "unless Condition C is exited in accordance with LCO 3.0.2 (i.e., one door is made OPERABLE)." The phrase added by IP3 adds clarification for the operators that if Condition C is exited before one or both airlocks are Operable, then Required Action C.3 no longer applies in accordance with LCO 3.0.2. This change is an IP3 wording preference intended to prevent a potential misreading of the NUREG-1431 Bases.

--JFD DB.1 markings in the ITS 3.6.2 Bases were inadvertently omitted. DB.1 applies to the change to the third paragraph of NUREG-1431 page B 3.6-21.

--JFD DB.2 applies to insert B 3.6-21-01.

--ITS SR 3.6.2.1 and Associated Bases are addressed in the responses to RAI 3.6.1-02.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.2 Containment Air Locks**

NRC RAI No: **3.6.2 -- 03**

RAI STATEMENT:

--JFD CLB.1
--JFD PA.1
--JFD DB.1
--JFD DB.2
--ITS B3.6.2 Bases - LCO

The third paragraph of ITS B3.6.2 Bases - LCO states the following: "Pressurization of air lock seals is not required for air lock OPERABILITY. However, 10 CFR 50 Appendix J, Section III.2.b (iii) specifies...." IP-3 is approved to use 10 CFR 50 Appendix J, Option B. Appendix J Option B does not have a Section III.2.b(iii), and neither does Appendix J, Option A. However, Appendix J, Option A does have a Section III.D.2.b(iii), which does address the subject of the ITS paragraph. Since IP-3 is approved for Appendix J, Option B, it seems that an incorrect reference was used.

Comment: Revise the ITS markup to show the correct reference and provide additional discussion and justification for this change.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.2, Containment Air Locks, so that 10 CFR 50, Appendix J, Option B, requirements are referenced.

Insert B 3.6-22-02 says:

"The program established by Specification 5.15, "Containment Leakage Rate Test Program," which conforms to NEI 94-01, Section 10.2.2 (Ref. 3) for Containment Air Locks, requires that air lock doors opened during periods when containment integrity is required must be tested within 7 days after being opened. For Indian Point 3, which has air locks with testable seals, this requirement is satisfied in accordance with ANSI/ANS-56.8-1994 "Containment System Leakage Testing Requirements," (Ref. 4) by testing the seals (i.e., verifying that seals re-pressurize to the required pressure after an airlock door is closed). Pressurization of air lock seals is not required for air lock OPERABILITY except as needed to satisfy testing requirements after being opened."

Reference 3 is NEI 94-01. Reference 4 is ANSI/ANS-56.8-1994

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.2 Containment Air Locks**

NRC RAI No: **3.6.2 -- 04**

RAI STATEMENT:

--JFD T.1
--STS SR 3.6.2.2
--ITS SR 3.6.2.2 and Associated Bases

--STS SR 3.6.2.2 requires verifying only one door in the air lock will open at a time at six month intervals. The interval is modified in ITS SR 3.6.2.2 from 6 months to 24 months. This modification is in accordance with TSTF-17; however, the Bases changes are not in accordance with TSTF-17. Comment: Revise the ITS Bases to be in accordance with TSTF-17 or justify the deviations.

NYPA RESPONSE:

NYPA revised the IP3 ITS conversion submittal for LCO 3.6.2, Containment Air Locks, to add the parenthetical expression "(procedures require strict adherence to single door opening)" to insert B 3.6-27-01. These changes will make the IP3 Bases conform to TSTF-17, R2.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.0 -- 01**

RAI STATEMENT:

3.3.D/4.4.C Weld Channel and Penetration Pressurization System (WC& PPS)

--DOC R.6
--CTS 3.3.D
--CTS 4.4.C

--CTS 3.3.D and CTS 4.4.C specify the Limiting Conditions for Operation, ACTIONS and Surveillance Requirements for the Weld Channel and Penetration Pressurization System (WC & PPS). The CTS markup indicates by DOC R.6 that these requirements are to be located to the FSAR and plant procedures. The staff has reviewed the justification provided in DOC R.6, as well as the Safety Evaluation (SE) issued with Amendment No. 174, dated June 17, 1997 and supplemented on June 27, 1997. The staff concludes, based on the Amendment No.174 SE that CTS 3.3.D and CTS 4.4.C cannot be completely relocated out of the ITS since it is considered part of the Containment Leakage Test Program. The staff finds that CTS 3.3.D.1 and 4.4.C must be retained either in ITS 3.6.1 or 3.6.3, however specific details (i.e., test pressures and leakage rates) may be relocated to the appropriate ITS Bases or the Containment Leakage Rate Testing Program, depending on how similar SRs are addressed in the 11/2/95 letter and TSTF-52 as modified by staff comments (See Comment Number 3.6.1-2). CTS 3.3.D.2 and 3.3.D.3 can either be retained as written or modified to conform to proposed ITS 3.6.1 or 3.6.3 ACTIONS. Comment: Revise the CTS and ITS markups and provide the appropriate discussions and justifications for the retention of this specification. See Comment Number 3.6.1-2.

NYPA RESPONSE:

NYPA revised the ITS submittal to delete DOC R.6 and added Specification 3.6.10 to govern the requirements for Weld Channel and Penetration Pressurization System (WC&PPS). Note 6 was added to Actions to prompt entry into ITS 3.6.10 as applicable.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.0 -- 02**

RAI STATEMENT:

4.4.E.3 Service Water Isolation Valve Leakage System

--DOC R.13
--CTS 4.4.E.3
--CTS 6.14.c

--CTS 4.4.E.3 and 6.14.c specify the surveillances and criteria for the service water isolation valve leakage system. The CTS markup indicates by DOC R.13 that these requirements are to be relocated to the FSAR and plant procedures. The staff has reviewed the justification provided in DOC R.13, as well as the Safety Evaluation (SE) issued with Amendment No. 174, dated June 17, 1997, and supplemented on June 27, 1997. The staff concludes, based on the Amendment No. 174 SE that CTS 4.4.E.3 and CTS 6.14.c cannot be relocated out of the ITS since it is considered part of the Containment Leakage Test Program. The staff finds that CTS 4.4.E.3 and 6.14.c must be retained in ITS 3.6.3. and 5.5.15 respectively, however, specific details (i.e., test pressures and leakage rates) may be relocated to the appropriate ITS Bases or the Containment Leakage Rate Testing Program, depending on how similar SRs are addressed in the 11/2/95 letter and TSTF-52 as modified by staff comments (See Comment Number 3.6.1-2).

Comment: Revise the CTS and ITS markups and provide the appropriate discussions and justifications for the retention of the specification. See Comment Number 3.6.1-2.

NYPA RESPONSE:

NYPA revised ITS 5.5.15, Containment Leakage Rate Testing Program, to retain CTS 4.4.E.3 and CTS 6.14.c as part of the Containment Leakage Rate Testing Program. As a result of adding this back to ITS 5.5.15, ITS SR 3.6.3.10 was added to include the requirements of CTS 4.4.E.3. In addition, DOC R.13 was deleted.

The following clarification is added to the Bases for ITS SR 3.6.3.10 (Insert B 3.6-44-02).

"The Containment Leakage Rate Testing Program includes verification that inleakage rate from the containment isolation valves sealed with service water is maintained at a level that will prevent flooding the internal recirculation pumps for the full 12-month period of post accident recirculation. This inleakage test has acceptance specific criteria specified in the Containment Leakage Rate Testing Program and the results for this inleakage test are not counted against the acceptance criteria for the Type B and C tests that are also performed as part of the SR."

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 01**

RAI STATEMENT:

--DOC A.3
--CTS 1.10
--ITS B3.6.1 Bases - BACKGROUND
--ITS 3.6.3 and Associated Bases
--See Comment Number 3.6.1-1.

Comment: See Comment Number 3.6.1-1.

NYPA RESPONSE:

NYPA revised the ITS conversion submittal to add 3.6.1 DOC LA.2 that recognizes the requirements in CTS 1.10.1 and CTS 1.10.4 for containment isolation valves are maintained in the Bases for ITS LCO 3.6.1 as well as being maintained in ITS LCO 3.6.3.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 02**

RAI STATEMENT:

--DOC A.5
--JFD PA.1
--JFD DB.1
--CTS 3.6.A.1
--ITS 3.6.3 ACTION Notes 4 and 5

--CTS 3.6.A.1 is modified to add ITS 3.6.3 ACTION Note 4. This change is characterized as an Administrative change (DOC A.5.). DOC A.5 describes the addition of both ITS 3.6.3 ACTION Notes 4 and 5. The CTS markup does not show the addition of ACTION Note 5. See Comment Number 3.6.3-3.

Comment: Correct this discrepancy. See Comment Number 3.6.3-3.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.3, Containment Isolation Valves, so that the markup of CTS page 3.6-1 indicates that the addition of Note 5 and Note 6 is explained and justified in DOCs A.4 and A.13, respectively.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 03**

RAI STATEMENT:

--DOC A.5
--JFD PA.1
--JFD DB.1
--CTS 3.6.A.1
--ITS 3.6.3 ACTION Notes 4 and 5

--CTS 3.6.A.1 is modified to add ITS 3.6.3 ACTION Note 4. This change is characterized as an Administrative change (DOC A.5). DOC A.5 describes and justifies the addition of ITS 3.6.3 ACTION Notes 4 and 5 (See Comment Number 3.6.3-2 for concern on Note 5). The discussion and justification deals with the application and intent of these Notes with regards to the ITS. There is no discussion or justification on why this is an Administrative change to the CTS. The change must be justified on its own merits based on its applicability to the CTS, not the ITS.

Comment: Provide additional discussion and justification for this Administrative change. See Comment Number 3.6.3-2.

NYPA RESPONSE:

NYPA revised the ITS conversion submittal to justify the addition of Note 4 in DOC A.5 and Note 5 in DOC A.13. The justifications will be as follows:

Without this note (i.e. 4), ITS 3.6.3 could allow plant operation to continue with containment isolation valves with excessive leakage if ITS 3.6.3 Required Actions are completed even if these Actions did not ensure that the safety function of the valves is met. This is an administrative change with no impact on safety because only with the addition of this note will the ITS maintain the CTS requirement for plant shutdown when excessive valve leakage in one or more containment isolation valve results in exceeding Technical Specification limits for overall containment leakage.

Without this note (i.e. 5), ITS 3.6.3 could allow plant operation to continue if ITS 3.6.3 Required Actions are completed even if the containment isolation valve is not sealed by the IVSW or WC&PPS and has not been leak tested in accordance with ITS SR 3.6.3.9. This is an administrative change with no impact on safety because only with the addition of this note will the ITS maintain the CTS requirement for plant shutdown when excessive valve leakage in one or more containment isolation valve results in exceeding Technical Specification limits for overall containment leakage.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 04**

RAI STATEMENT:

--DOC A.6
--CTS 1.10
--CTS 3.6.A.1
--CTS 3.6.D.
--ITS 3.6.3 ACTION Note 2

--CTS 3.6.A.1 and 3.6.D is modified to add ITS 3.6.3 ACTION Note 2 which specifies separate condition entry is allowed for each penetration path. This change is characterized as an Administrative change (DOC A.6). DOC A.6 states that the change is considered Administrative since this allowance is consistent with an unstated assumption in the CTS. The wording of CTS 1.10, 3.6.A.1 and 3.6.D does not seem to allow for separate condition entry, and the staff cannot determine how this can be concluded from the CTS. Thus, the staff considers this change to be a Less Restrictive (L) change. Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change.

NYPA RESPONSE:

Although single condition entry is not precluded in CTS, NYPA revised the ITS conversion submittal to recategorize this change by deleting DOC A.6 and adding DOC L.3 . The justification provided in the DOC is that ITS LCO 3.6.3, Actions Note 2, is added to specify that separate Condition entry is allowed for each penetration flow path. This change is acceptable because ITS provides an allowable out of service time only for a loss of redundancy and not a loss of safety function. Therefore, separate Condition entry provides a short time for restoration of redundant isolation capability only when the safety function is maintained while avoiding the risk of initiating a plant shutdown.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 05**

RAI STATEMENT:

--DOC A.9
--DOC L.2
--CTS 1.10.1 and 1.10.4
--ITS 3.6.3 Required Actions A.1, B.1, C.1 and Associated Bases

--CTS 1.10.1 and 1.10.4 specifies that the compensatory action for an inoperable containment isolation valve includes isolating a penetration flow path by a closed automatic containment isolation valve, or a closed manual valve or blind flange that meets the same design criteria as the isolation valve. ITS 3.6.3 Required Action A.1, B.1 and C.1 allows use of one closed and deactivated automatic valve, closed manual valve or blind flange to isolate a flow path. ITS 3.6.3 Required Action A.1 also allows the use of a check valve with the flow through the valve secured to isolate a flow path.

The CTS markup characterizes this change as an Administrative change (DOC A.9). This is not an Administrative change but a combination of a Less Restrictive (L) change and a More Restrictive change. The Less Restrictive (L) change involves the addition of the check valve isolation for penetrations with two isolation valves and the deletion of the requirement that the manual valve and blind flange meet the same design criteria as the inoperable isolation valve. The More Restrictive change involves the addition of the criteria that the closed automatic isolation valve be deactivated whereas the CTS only requires it to be closed.

Comment: Revise the CTS markup and provide the appropriate discussions and justifications for these More Restrictive and Less Restrictive (L) changes.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.3, Containment Isolation Valves, to change the CTS markup, delete DOC A.9, and add DOCs M.5 , L.4, and L.5, which will justify the following:

DOC M.5 notes that ITS 3.6.3 specifically requires that a closed automatic containment isolation valve must be de-activated if being used as compensatory action for an inoperable containment isolation valve.

DOC L.4 justifies that a check valve with flow secured may be used as compensatory action for one inoperable containment isolation valve on a penetration with two containment isolation valves. The justification is that the intent of both the CTS and ITS is that the penetration flow path is isolated using at least one isolation barrier that cannot be adversely affected by a single

active failure. A check valve with flow secured is considered a passive device and is equivalent to a closed manual valve.

DOC L.5 justifies that a valve or blind flange used as compensatory action for an inoperable containment isolation valve is not specifically required to satisfy all the design criteria as the inoperable containment isolation valve. The justification is that the valve is closed and does not have to operate, the valve or blind flange satisfied design and code requirements at the time of installation, and that peak containment pressures are relatively low. Additionally, the closed and de-activated automatic valve, closed manual valve, blind flange, or check valve with flow through the valve secured must capable of satisfying the containment isolation function.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 06**

RAI STATEMENT:

--DOC L.1
--DOC LA.1
--CTS 1.10.1
--CTS 3.6.A.1--
--CTS Table 3.6-1
--CTS 4.4.E.1
--CTS Table 4.4-1

--The CTS markup of CTS 1.10.1 and 3.6.A.1 shows that CTS Table 3.6-1 is deleted by DOC L.1. The CTS markup of CTS 4.4.E.1 shows that CTS Table 4.4-1 is relocated to the FSAR by DOC LA.1. CTS Table 3.6-1 cannot be deleted. CTS Table 3.6-1 is a listing of non-automatic containment isolation valves. A comparison between CTS Table 3.6-1 and Table 4.4-1 shows that CTS Table 3.6-1 contains additional containment isolation valves not listed in CTS Table 4.4-1. Therefore, CTS Table 3.6-1 must be relocated to the FSAR and not deleted.

Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (LA) change.

NYPA RESPONSE:

CTS Amendment 195, dated 9/16/99, relocated CTS Table 3.6-1 and CTS Table 4.4-1 to FSAR 5.2-3. NYPA revised the IP3 ITS conversion submittal for LCO 3.6.3, Containment Isolation Valves, to incorporate CTS Amendment 195.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 07**

RAI STATEMENT:

--DOC L.1
--CTS 1.10.1

--The CTS markup of CTS 1.10.1 shows the words "non-automatic" and "which are not required... in Table 3.6-1" as being deleted by DOC L.1. DOC L.1 deletes the reference to CTS 1.10.1.

Comment: Correct this discrepancy.

NYPA RESPONSE:

CTS Amendment 195, dated 9/16/99, relocated CTS Table 3.6-1 to FSAR 5.2-3 and deleted the reference to the Table in CTS 1.10.1. NYPA revised ITS for LCO 3.6.3, Containment Isolation Valves, to incorporate CTS Amendment 195 and delete DOC L.1.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 08**

RAI STATEMENT:

--DOC L.1
--CTS 1.10.1
--CTS 3.6.A.1
--CTS Table 3.6-1
--STS 3.6.3 ACTION Note 1 and Associated Bases
--ITS 3.6.3 ACTION Note 1 and Associated Bases

--The first paragraph, first sentence of STS B3.6.3 Bases - ACTIONS states the following: "The ACTIONS are modified by a Note allowing penetration flow paths, except...." ITS B3.6.3 Bases - ACTIONS modifies this sentence by deleting "A Note...paths," and replacing it with Insert B3.6-33-01: "Note 1, which allows flow paths that are isolated in accordance with Required Actions,." The intent of the STS Note is to allow any closed containment isolation valve except certain purge valves to be opened under Administrative controls and not restrict it to just those valves closed as a result of Required Actions. The proposed change would limit the STS intent. Comment: Delete this change.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.3, Containment Isolation Valves, to clarify in the Bases that Note 1 applies to any containment isolation valve (except for the purge valves). This makes the IP3 ITS consistent with NUREG-1431.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 09**

RAI STATEMENT:

--DOC L.2
--CTS 1.10
--CTS 3.6.A.1
--CTS 3.6.A.3
--CTS 3.6.D
--CTS Table 3.6-1
--ITS 3.6.3 Required Action A.1 and C.1, SR 3.6.3.3, SR 3.6.3.4
-- and Associated Bases

--The time allowed to restore an inoperable automatic containment isolation valve to OPERABLE status or isolate the penetrations has been increased from the CTS time of 1 hour to the ITS time of 4 or 72 hours for the penetration designs specified in ITS 3.6.3 ACTIONS A and C. The CTS markup indicates this change DOC L.2 applies to CTS 1.10.4, 3.6.A.3 and 3.6.D. CTS 1.10.1 requires that all non-automatic containment isolation valves which are not required to be opened during accident conditions except as specified in CTS 1.10.1, 3.6.A.1 and Table 3.6-1, are closed and blind flanges are installed where required. If CTS 1.10.1 cannot be met, then CTS 3.6.A.1 cannot be met, thus the actions of CTS 3.6.A.3 are entered which require restoration of valve OPERABILITY within 1 hour or shutdown within the following 36 hours. The corresponding ITS SRs for CTS 1.10.1 are ITS SR 3.6.3.3 and SR 3.6.3.4. If these SRs cannot be met, then the ACTIONS of ITS 3.6.3 are entered specifically ITS 3.6.3 ACTION A or C. Thus DOC L.2 also applies to CTS 1.10.1. Comment: Revise the CTS markup and DOC L.2 to show its applicability to CTS 1.10.1.

NYPA RESPONSE:

NYPA revised the IP3 ITS conversion submittal for LCO 3.6.3, Containment Isolation Valves, so that the markup of CTS page 1.4 shows that the addition of Required Actions A.1 and C.1 applies to both CTS 1.10.1 and 1.10.4. NYPA believes that DOC L.2 is correct as written.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 10**

RAI STATEMENT:

--JFD CLB.1
--JFD PA.1
--JFD DB.1
--CTS 4.4.E.
--CTS Table 4.4-1--
--ITS SR 3.6.3.8 and Associated Bases
--
--See Comment Number 3.6.1-2.

Comment: See Comment Number 3.6.1-2.

NYPA RESPONSE:

See Response to RAI 3.6.1-02.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 11**

RAI STATEMENT:

--JFD CLB.1
--JFD PA.1
--JFD DB.1
--CTS 4.4.E.1
--STS 3.6.3 Conditions A and B, 3.6.3 ACTION D, SR 3.6.3.11 and Associated Bases
--ITS 3.6.3 Conditions A and B, SR 3.6.3.8 and Associated Bases.
--
--STS SR 3.6.3.11 verifies that the shield building bypass leakage is within limits. Failure to meet the requirement of STS SR 3.6.3.11 requires entry into STS 3.6.3 ACTION D, and not STS 3.6.3 ACTIONS A and B as stated in the Condition statements ("except for...shield building bypass leakage not within limits"). The ITS markup modifies STS SR 3.6.3.11 to verify the combined leakage rate for all containment bypass leakage paths (ITS SR 3.6.3.8). See Comment Numbers 3.6.1-2 and 3.6.3-10 for the TSTF-52 concerns with regards to ITS SR 3.6.3.8. Since the ITS markup deletes the exception phrases from ITS 3.6.3 Conditions A and B and deletes STS 3.6.3 ACTION D, it is unclear what ACTION would be taken for containment bypass leakage not within limits. It would seem that a modified STS 3.6.3 ACTION D and a modified fourth paragraph to ITS B3.6.3 Bases - LCO should have been included to provide appropriate ACTIONS for bypass leakage not within limits and appropriate OPERABILITY leakage description.
--Comment: Provide a discussion and justification to address these changes to the STS/ITS. See Comment Numbers 3.6.1-2 and 3.6.3-10.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.3, Containment Isolation Valves, to retain NUREG-1431, Condition D and associated Required Action D.1. Additionally, Required Actions A.1, B.1 and their bases were revised to retain the statement "except for containment bypass leakage not within limits" to ensure that Condition D is entered if ITS SR 3.6.3.9 is determined not met.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 12**

RAI STATEMENT:

--JFD PA.1
--JFD DB.1
--CTS Table 4.1-3, Item 5
--ITS SR 3.6.3.6 and Associated Bases

--CTS Table 4.1-3, Item 5 requires the automatic actuation of the Containment Isolation System on a 24 month frequency. The corresponding ITS SR is ITS SR 3.6.3.6. While the CTS phrase "automatic actuation" can be interpreted to mean "an actual or simulated actuation signal", the CTS seems explicit in that all automatic containment isolation valves must be tested. The ITS exempts valves which are locked, sealed or otherwise secured in position. Thus the ITS is less restrictive that the CTS.

Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change.

NYPA RESPONSE:

CTS Table 4.1-3, Item 5, requires checking the automatic actuation of the Containment Isolation System on a 24 month frequency. ITS SR 3.6.3.6 maintains the identical requirement as "Verify each automatic containment isolation valve that is not locked, sealed or otherwise secured in position, actuates to the isolation position on an actual or simulated actuation signal."

NYPA revised the ITS conversion submittal to add DOC L.6 to CTS Table 4.1-3, Item 5, is modified to exempt valves that are locked, sealed or otherwise secured in position from the automatic actuation test.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 13**

RAI STATEMENT:

--JFD PA.1
--JFD DB.1
--CTS 3.6.D and 4.13.A.2
--ITS B3.6.3 Bases - BACKGROUND, APPLICABLE SAFETY ANALYSES, SR 3.6.3.1, SR 3.6.3.2 and SR 3.6.3.7

--CTS 3,6,D and 4.13.A.2 specifically list by valve number the containment purge supply and exhaust valves, and the containment pressure relief isolation valves. The ITS SRs associated with these valves do not specifically list the valves. The specific listing by valve number has been relocated to various sections of the Bases for ITS 3.6.3. The CTS markup does not show the valve numbers as being relocated. Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (LA) change.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.3, Containment Isolation Valves, to relocate valve numbers for the containment purge supply and exhaust valves from SR 3.6.3.2 to the associated Bases, and the containment pressure relief isolation valves from SR 3.6.3.7 to the associated Bases. DOC LA.3 is added to justify this relocation.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 14**

RAI STATEMENT:

--JFD PA.1
--JFD DB.1
--ITS B3.6.3 Bases - APPLICABLE SAFETY ANALYSES
--SR 3.6.3.1

--ITS B3.6.3 Bases - APPLICABLE SAFETY ANALYSES and SR 3.6.3.1 are modified by INSERTS B3.6-31-02 and B3.6-39-02 respectively which define the term sealed closed valves and sealed closed barriers. While the staff does not seem to have a problem with the definition of sealed closed valves, sealed closed barriers is not a normally defined term from the staff's point of view, is confusing and does not meet the intent of valve and penetration isolation. In particular, the statement that "closed automatic valves which remain closed after a loss of coolant accident" is unacceptable. The ITS requires that closed automatic valves used for penetration isolation be deactivated. In addition, normally closed automatic containment isolation valves are also deactivated. The sealed barrier definition would allow closed activated automatic valves. In addition, the statement "Sealed closed barriers may be used in place of any automatic isolation valve" does not connotate leak tightness. There may be penetrations normally isolated by sealed closed barriers that are required to be leak tight. This is not discussed. See Comment Number 3.6.3-15. Comment: Delete this change. See Comment Number 3.6.3-15.

NYPA RESPONSE:

Since the term 'sealed closed' is not described or defined in NUREG-1431, the proposed plant specfic wording preference being added to the IP3 ITS Bases is intended to provide a clarification. This information is based on the following statement from Section 6.2.4.II.3.f of the Standard Review Plan:

"Sealed closed barriers may be used in place of automatic isolation valves. Sealed closed barriers include blind flanges and sealed closed isolation valves which may be closed manual valves, closed remote-manual valves, and closed automatic valves which remain closed after a loss-of-coolant accident. Sealed closed isolation valves should be under administrative control to assure that they cannot be inadvertently opened. Administrative control includes mechanical devices to seal or lock the valve closed, or to prevent power from being supplied to the valve operator."

To improve clarity and ensure this requirement is fully understood and consistently applied, NYPA added the following guidance to the ITS Bases as Insert B 3.6-31-02:

The term sealed closed, as applied to containment isolation valves, is not intended to describe leak tightness. Sealed closed isolation valves must be under administrative controls that assure the valve cannot be inadvertently opened. Administrative controls includes mechanical devices to seal or lock the valve closed, or to prevent power from being supplied to the valve operator (Ref. 3). Sealed closed barriers include blind flanges and sealed closed isolation valves including closed manual valves, closed remote-manual valves, and closed automatic valves which remain closed after a loss-of-coolant accident. Sealed closed barriers may be used in place of any automatic isolation valve.

Note that NYPA changed the SRP statement "Sealed closed isolation valves 'should' be under administrative control" to "Sealed closed isolation valves 'must' be under administrative controls." This more restrictive change to the SRP description and the stipulation in LCO 3.6.3 Required Actions that "closed and de-activated automatic valves" be used in lieu of an inoperable containment isolation valve provides assurance that "closed automatic containment isolation valves are also deactivated."

The statement valves "which remain closed after a loss-of-coolant accident" is correct because a valve does not have to be de-activated unless the valve is being used as a barrier in accordance with Condition A, B or C because it is only these actions which require de-activation.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 15**

RAI STATEMENT:

--JFD PA.1
--JFD DB.1
--STS B3.6.3 Bases - SR 3.6.3.1
--ITS B3.6.3 Bases - SR 3.6.3.1

--ITS B3.6.3 Bases - SR 3.6.3.1 is modified by Insert B3.6-39-02 which defines sealed closed valves and sealed closed barriers. ITS B3.6.3 Bases - SR 3.6.3.1 deals specifically with the containment purge supply and exhaust valves and the requirement to verify that these valves are sealed closed. This definition is a general definition for sealed closed valves and sealed closed barriers which in the context of this Bases write-up could result in allowing other means for sealing closed these purge valves (i.e., sealed closed barriers). The staff finds this Insert changes the technical meaning and intent of this SR, and finds it unacceptable. The staff finds that the STS wording which this Insert replaces, is explicit and conveys the exact intent of this SR and should be retained.

Comment: Delete this change.

NYPA RESPONSE:

NYPA revised the IP3 ITS conversion submittal for LCO 3.6.3, Containment Isolation Valves, to remove insert B 3.6-39-02 and retain the wording in NUREG-1431 for the SR 3.6.3.1 Bases because this description is specific to the Containment Purge Valves. NYPA maintained the more general description of what constitutes a "sealed closed" valve used in Insert B 3.6-31-02 because NYPA believes that this description is necessary for clarity. The general description of what constitutes a "sealed closed" valve used in Insert B 3.6-31-02 is from Section 6.2.4.II.3.f of the Standard Review Plan.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 16**

RAI STATEMENT:

--JFD PA.1
--JFD DB.1
--CTS 3.6.D and 4.13.A.2--
--STS B3.6.3 Bases - LCO
--ITS SR 3.6.3.2, SR 3.6.3.7 and Associated Bases

--CTS 3.6.D, CTS 4.13.A.2 and ITS SR 3.6.3.7 all specify that the containment pressure relief isolation valves are blocked to restrict valve opening. Since these valves are verified closed per ITS SR 3.6.3.2 rather than sealed closed, it is assumed that they are capable of automatic closure during accident conditions if open. The second paragraph, third sentence in STS B3.6.3 Bases - LCO is deleted. This sentence refers to blocked purge valves and would seem to apply to the containment pressure relief isolation valves.

Comment: Provide a discussion and justification for this STS deletion.

NYPA RESPONSE:

NUREG-1431, LCO 3.6.3, discusses two containment venting systems: the Shutdown Purge System ([42] inch purge valves) and the Minipurge System ([8] inch purge valves). The equivalent systems at IP3 are the containment Purge System (supply and exhaust isolation valves) and the containment pressure relief system, respectively.

The bracketed portions of the NUREG-1431, LCO 3.6.3, (i.e., Actions Note 1, first and second bracketed paragraphs on page B 3.6-31, and the bracketed portions of second paragraph of the LCO Bases) are options that are selected depending on whether or not a particular plant allows the Shutdown Purge System ([42] inch purge valves) to be opened in Modes 1, 2, 3 and 4.

NYPA did not include the bracketed third sentence in the second paragraph of the NUREG-1431 LCO Bases because it appears to be intended only for those plants that allow the Shutdown Purge System ([42] inch purge valves) to be opened in Modes 1, 2, 3 and 4.

NYPA believes that the ITS Specification and Bases clearly require that Purge System (supply and exhaust isolation valves) must be closed at all times in Modes 1, 2, 3 and 4 and that pressure relief isolation valves PCV-1190, PCV-1191, and PCV-1192 must have both auto closure capability and must be blocked to open less than 60 degrees in Modes 1, 2, 3 and 4. This is ensured by the ITS because each of the following ITS 3.6.3 SRs must be met at all times in the Applicable Modes:

SR 3.6.3.1, each 36 inch purge supply and exhaust isolation valve is sealed closed;

SR 3.6.3.2, each 10 inch pressure relief isolation valve is closed;

SR 3.6.3.6, each automatic containment isolation valve actuates to the isolation position on an actuation signal; and

SR 3.6.3.7, each 10 inch containment pressure relief line isolation valve is blocked to restrict opening to = 60 degrees.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 17**

RAI STATEMENT:

--JFD PA.1
--JFD DB.1
--STS B3.6.3 Bases - LCO
--ITS B3.6.3 Bases - LCO and References

--The third paragraph of STS B3.6.3 Bases - LCO deals with those containment isolation valves that are required to be closed during an accident and are in the closed position during normal operation. The last sentence in this paragraph states that these passive isolation valves/devices are listed in a plant specific document(s). This sentence has been deleted from ITS B3.6.3 Bases - LCO. Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design, on current licensing basis as specified in the CTS or for editorial reasons, the deletion does not seem to fall into any of these categories. This statement directs the operator/inspector to those documents which list these passive devices similar to the document that lists the automatic valves. The staff requires that this statement be retained. Comment: Revise the ITS markup to retain this statement modified to include specific plant documents containing the listing of the passive isolation valves/devices or if the listing of the documents is extensive, a general description of the type of documents.

NYPA RESPONSE:

NYPA revised the ITS conversion submittal to identify the FSAR as the reference document for the subject valve information. The proposed BAses now reads:

"The valves covered by this LCO are listed in the FSAR (Ref. 2). The passive isolation devices are shown on drawings in the FSAR. The normally closed isolation valves are considered OPERABLE when manual valves are closed, automatic valves are de-activiated and secured in their closed position, blind flanges are in place, and closed systems are intact (Ref. 3)."

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 18**

RAI STATEMENT:

--JFD PA.1
--JFD DB.1
--ITS B3.6.3 Bases - LCO

--ITS B3.6.3 Bases - LCO is modified by Insert B3.6-32-01 which discusses manually operated containment isolation valves on essential lines. JFD PA.1 and JFD DB.1 do not provide sufficient information for the staff to evaluate the addition of this Insert. It is unclear from the Insert whether some or all of the manually operated containment isolation valves on essential lines are covered by ITS SR 3.6.3.3 and/or SR 3.6.3.4; the Insert implies that some of these valves are normally open. In addition, since the Insert defines the OPERABILITY of these manual valves as being able to "be closed in accordance design assumptions," or as being able to be opened following an event. It would seem reasonable that these manually operated containment isolation valves on essential lines should be stroked on a periodic basis and that this should be an ITS SR.

Comment: Provide additional discussion and justification on the manually operated containment isolation valves on essential lines to show that they are being adequately covered by ITS SRs with regards to their OPERABILITY.

NYPA RESPONSE:

NYPA revised the IP3 ITS conversion submittal for LCO 3.6.3, Containment Isolation Valves, to add SR 3.6.3.8.

SR 3.6.3.8 will state:
"Perform one complete cycle of each manually operated containment isolation valve on essential lines." The required Frequency will be 24 months.

The valves covered by this SR will be manually operated containment isolation valves on essential lines defined in FSAR Section 5.2. As stated in the Bases of the IP3 ITS submittal (see Insert B 3.6-43-02), manually operated containment isolation valves on essential lines that are those valves required to be open, at least for a time, during post accident conditions. These valves are OPERABLE if they can be closed in accordance with design assumptions. Essential lines are those lines required to mitigate an accident, or which, if unavailable, could increase the magnitude of the event. Also, those lines which, if available, would be used in the short term (24 to 36 hours) to restore the plant to normal operation following an event which has resulted in containment isolation (Ref. 4). Reference 4 is FSAR Section 5.2.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 19**

RAI STATEMENT:

--JFD PA.1
--JFD DB.1
--STS 3.6.3 ACTION C
--ITS 3.6.3 ACTION C and Associated Bases

--STS 3.6.3 ACTION C specifies the required ACTIONS to be taken for an inoperable containment isolation valve in a penetration flow path with only one containment isolation valve and a closed system. STS 3.6.3 ACTION C has been modified by TSTF 30 Rev.2 to extend the Completion Time from 4 hours to 72 hours. This modification in the ITS is in accordance with TSTF 30 which is acceptable. However, the Bases changes are not in accordance with TSTF-30 Rev.2.

Comment: Licensee to update submittal to be in accordance with TSTF-30 Rev.2 or provide additional justification for the deviations.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.3, Containment Isolation Valves, to incorporate TSTF 30 Rev.3, which is identified as JFD T.3. IP3 ITS 3.6.3 Bases for Required Action C.1 keep the change ",other than the closed system," which is identified as minor editorial improvement JFD PA.1.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.3 Containment Isolation Valves**

NRC RAI No: **3.6.3 -- 20**

RAI STATEMENT:

--JFD PA.1
--JFD DB.1
--JFD T.1
--STS SR 3.6.3.3
--STS SR 3.6.3.4
--ITS SR 3.6.3.2
--ITS SR 3.6.3.3 and Associated Bases

--STS SR 3.6.3.3 and SR 3.6.3.4 verify the position of containment isolation manual valves and blind flanges outside and inside containment respectively. The SRs are modified to include a clarification that valves which are locked, sealed or otherwise secured in their required safety position are not required to be verified in their closed position. This modification in the ITS is in accordance with TSTF-45 Rev.1 which is acceptable. However, the Bases changes are not in accordance with TSTF-45 Rev.1.

Comment: Licensee to update submittal to be in accordance with TSTF-45 Rev.1 or provide additional justification for the deviations.

NYPA RESPONSE:

NYPA reviewed the NUREG-1431 Bases markup for ITS SR 3.6.3.3 and SR 3.6.3.4 against TSTF-45, Rev.1, and concluded that TSTF-45, Rev.1, was incorporated verbatim except that NYPA replaced the word "since" with the word "because." This minor editorial improvement was made because the word "since" is used primarily to denote the passage of time.

NYPA revised the IP3 ITS conversion submittal for LCO 3.6.3, Containment Isolation Valves, to mark this difference with PA-1 to denote the minor editorial improvement.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.4 Containment Pressure**

NRC RAI No: **3.6.4 -- 01**

RAI STATEMENT:

--DOC A.3
--CTS 3.6.B.
--ITS 3.6.4 ACTION A

--CTS 3.6.B requires that if the containment internal pressure exceeds specified limits, then the condition must be corrected or the reactor shutdown. Since no Completion Time is specified to restore containment internal pressure to within limits, then in accordance with CTS 3.0 this is assumed to be zero (0), and action is initiated without delay. DOC A.3 modifies CTS 3.6.B by specifying a Completion Time of 1 hour to restore containment pressure to within limits. The CTS can be interpreted in two ways: 1. Containment pressure must be restored to within limits instantaneously (Completion Time of zero), thus a reactor shutdown would be started immediately; or, 2. Action to restore containment pressure is initiated at time of zero, but the completion of the action (restoration to within limits) to proceed for a reasonable amount of time (i.e., a few hours) before shutdown is started. In either case, the proposed change would not be an Administrative change. For the first interpretation, the change would be considered a Less Restrictive (L) change (zero to 1 hour) while the latter interpretation would result in a More Restrictive change (no time to a specified time).

Comment: Revise the CTS and provide additional discussions and justifications based on the appropriate interpretation to show that the change is either Less Restrictive (L) or More Restrictive.

NYPA RESPONSE:

NYPA revised the ITS for LCO 3.6.4, Containment Pressure, to change DOC A.3 to DOC L.1 to justify the addition of a 1 hour delay before initiating a plant shutdown when containment pressure requirements are not met. Note that IP3 administrative procedures establish requirements similar to ITS LCO 3.0.3 when the CTS require immediate shutdown.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.4 Containment Pressure**

NRC RAI No: **3.6.4 -- 02**

RAI STATEMENT:

--DOC M.1
--CTS 3.6.B
--ITS 3.6.4 ACTION B

--CTS 3.6.B requires that if the containment internal pressure exceeds specified limits, then the condition must be corrected or the reactor shutdown. The CTS markup shows two changes associated with DOC M.1: 1. The adding of the APPLICABILITY of MODES 1, 2, 3 and 4; and 2. The adding of the shutdown requirements and Completion Times associated with ITS 3.6.4 ACTION B. DOC M.1 discusses and justifies the addition of the APPLICABILITY but does not discuss the addition of ITS 3.6.4 ACTION B.

Comment: Provide a discussion and justification for the More Restrictive change of adding ITS 3.6.4 ACTION B and its associated Completion Times.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.4, Containment Pressure, to add the following discussion to DOC M.1:
"In conjunction with this change, LCO 3.6.4, Required Actions B.1 and B.2 (i.e., be in Mode 3 within 6 hours and Mode 5 within 36 hours), are added to require that the plant be promptly placed outside this expanded Applicability whenever requirements for containment pressure are not met."

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.5 Containment Air Temperature**

NRC RAI No: **3.6.5 -- 01**

RAI STATEMENT:

--DOC LA.2
--CTS 3.6.C.1

--CTS 3.6.C.1 states that "The reactor shall not be taken above the cold shutdown condition unless the containment ambient temperature is greater than 50 °F." The CTS markup shows this requirement as being relocated by DOC LA.2. DOC LA.2 states that this requirement is being relocated to the FSAR and plant procedures but does not provide a justification as to why it can be relocated to these documents. The response to this comment will depend on the resolution of Comment Number 3.6.5-2. Comment: Provide additional discussion and justification for this Less Restrictive (LA) change.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.5, Containment Air Temperature, to include the containment temperature lower limit of 50 degrees F. Condition B was added with a Completion Time of "immediately" to reflect the lower temperature limit. This change includes the requirements in Required Action C.1 and C.2 to be in Mode 3 in 6 hours and Mode 5 in 36 hours if the lower temperature limit is not met.

The ITS Bases include the following information from the CTS Bases:
"The requirement of a 50°F minimum containment ambient temperature is to assure that the minimum service metal temperature of the containment liner is well above the NDT +30°F criterion for the liner material." The Bases will reference this requirement to FSAR 5.1.1.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.5 Containment Air Temperature**

NRC RAI No: **3.6.5 -- 02**

RAI STATEMENT:

--DOC LA.2
--CTS 3.6.C.1
--CTS 3.6.C.3

--CTS 3.6.C.1 states that "The reactor shall not be taken above the cold shutdown condition unless the containment ambient temperature is greater than 50 °F." The CTS markup shows this requirement as being relocated by DOC LA.2. This change is incorrect. As currently written in the CTS markup, if the reactor is operating (above cold shutdown conditions) and the containment ambient temperature drops to less than 50 °F, no remedial actions are provided. The CTS does not have the equivalent of an ITS LCO 3.0.3; however, the wording and structure of CTS 3.6.C.1 and CTS 3.6.C.3 would imply that under the above scenario a shutdown to cold shutdown conditions would be required. Because of the implied shutdown requirement associated with the lower temperature limit, the staff believes that there was some safety related reason for imposing a lower containment temperature limit and the associated actions and surveillances of CTS 3.6.C.1 and 3.6.C.3. Thus CTS 3.6.C.1 needs to be retained in ITS 3.6.5, and that deleting or relocating this requirement may be a beyond scope item for this conversion. See Comment Number 3.6.5-1.

Comment: Revise the CTS and ITS markups to show the retention of CTS 3.6.C.1 and provide the appropriate discussions and justifications for the retention of this requirement. See Comment Number 3.6.5-1.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.5, Containment Air Temperature, to include the containment temperature lower limit of 50 degrees F. This change includes the requirements in Required Action C.1 and C.2 to be in Mode 3 in 6 hours and Mode 5 in 36 hours if the lower temperature limit is not met.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.6 Containment Spray System and Containment Fan Cooler System**

NRC RAI No: **3.6.6 -- 01**

RAI STATEMENT:

--DOC A.2
--CTS 3.3.B
--CTS 4.5.A.2
--CTS 4.5.B.1

--DOC A.2 justifies the deletion of the CTS Objective and Applicability statements. The CTS markup for CTS 3.3.B, 4.5.A.2, and 4.5.B.1 do not show Objective and Applicability statements nor do they indicate DOC A.2. Comment: Correct this discrepancy.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.6, Containment Spray System and Containment Fan Cooler System, Part 2, CTS Markup, to include page CTS 3.3-1, which will show the Applicability and Objectives Sections deleted by DOC A.2.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.6 Containment Spray System and Containment Fan Cooler System**

NRC RAI No: **3.6.6 -- 02**

RAI STATEMENT:

--DOC A.7
--CTS 4.5.B.1.b
--ITS SR 3.6.6.4

--CTS 4.5.B.1.b specifies the containment spray pump acceptance criteria that each pump starts, reaches the required developed head and operates for at least 15 minutes. ITS SR 3.6.6.4 maintains these requirements except that the criterion to operate the pump for at least 15 minutes is deleted. The CTS markup shows this deletion as an Administrative change (DOC A.7). Since this is a deletion of a requirement (relocation to a non-10 CFR 50.59 controlled document), this change is considered to be a Less Restrictive (L) change. Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.6, Containment Spray System and Containment Fan Cooler System, to relocate the requirement to run each containment spray pump for at least 15 minutes during the SR 3.6.6.4 pump test to the Inservice Test (IST) Program. The relocation is justified in a new DOC LA.2.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.6 Containment Spray System and Containment Fan Cooler System**

NRC RAI No: **3.6.6 -- 03**

RAI STATEMENT:

--DOC A.8
--CTS 4.5.A.2.a and 4.5.A.2.c
--ITS SR 3.6.6.5

--CTS 4.5.A.2.a specifies that the verification of Containment Spray System valve actuation shall be performed with the isolation valves in the supply lines at the containment and the spray additive tank isolation valves blocked closed. CTS 4.5.A.2.c specifies that the Containment Spray System tests will be considered satisfactory if visual observations indicate all components have operated satisfactorily. The CTS markup shows both of these requirements as being deleted, and indicates the change as Administrative (DOC A.8). DOC A.8 provides a discussion for the deletion of CTS 4.5.A.2.c, but does not discuss the deletion of the requirement associated with CTS 4.5.A.2.a. Since this is a deletion of a requirement (relocation to a non 10 CFR 50.59 controlled document), these changes are considered to be Less Restrictive (L) changes.

Comment: Revise the CTS markup and provide a discussion and justification for these Less Restrictive (L) changes.

NYPA RESPONSE:

CTS 4.5.A.2.a specifies that the verification of Containment Spray System valve actuation shall be performed with the isolation valves in the supply lines at the containment and the spray additive tank isolation valves blocked closed. This allowance ensures that spray is not introduced into containment and that NaOH from the spray additive tank is not introduced into the Containment Spray System. Note that these valves are manually operated valves and are not included as part of the actuation test. NYPA revised ITS for LCO 3.6.6, Containment Spray System and Containment Fan Cooler System, to add DOC LA.3 which relocates the allowance in CTS 4.5.A.2.a to the Bases for SR 3.6.6.5 and SR 3.6.6.6.

CTS 4.5.A.2.c establishes the acceptance criteria for this test as, "the tests will be considered satisfactory if visual observations indicate all components have operated satisfactorily." NYPA revised the ITS for LCO 3.6.6, Containment Spray System and Containment Fan Cooler System, to add DOC L.6 which deletes this requirement.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.6 Containment Spray System and Containment Fan Cooler System**

NRC RAI No: **3.6.6 -- 04**

RAI STATEMENT:

--DOC A.9
--CTS 4.5.A.2.a
--ITS SR 3.6.6.5, SR 3.6.6.6 and Associated Bases

--CTS 4.5.A.2.a requires a functional test of the Containment Spray System and specifies that "Operation of the system is initiated by tripping the normal actuation instrumentation." The ITS breaks this CTS surveillance up into two surveillances - ITS SR 3.6.6.5 and SR 3.6.6.6, however the tests may be initiated by either an actual or simulated actuation signal. The CTS markup show this change "normal actuation" to "actual or simulated actuation" as an Administrative change (DOC A.9). This is incorrect. "Tripping the normal actuation" connotes only a simulated actuation. By adding the words "actual actuation" the change becomes a Less Restrictive (L) change. Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.6, Containment Spray System and Containment Fan Cooler System, to delete DOC A.9 and add DOC L.7 which justifies allowing initiation of the Containment Spray System tests using "an actual or simulated actuation signal" versus the CTS requirement for "tripping the normal actuation."

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.6 Containment Spray System and Containment Fan Cooler System**

NRC RAI No: **3.6.6 -- 05**

RAI STATEMENT:

--DOC A.11
--CTS 3.3.B.2
--ITS 3.6.6 ACTIONS, and Associated Bases

--CTS 3.3.B.2 specifies that "any one" of the five fan cooler units or containment spray pumps to be inoperable at any one time and CTS 3.3.B.2.a, CTS 3.3.B.2.b, and CTS 3.3.B.2.c do not permit any allowable out of service time (AOT) if redundant trains of containment spray or fan cooler units are inoperable. ITS LCO 3.6.6 ACTIONS allow an allowable out of service time (AOT) even if redundant trains of containment spray or fan cooler units are inoperable as long as the combination of inoperable fan cooler units (i.e., containment fan cooler trains) and/or inoperable containment spray trains do not result in less than the minimum functional capability assumed in the accident analysis. The CTS is marked up to show this change which is designated as an Administrative change (DOC A.11). This is incorrect. The change is a Less Restrictive (L) change, since one is going from a shutdown requirement (CTS) to an AOT of 7 days/10 days from discovery.

Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change.

NYPA RESPONSE:

CTS 3.3.B.2 specifies that "any one" of two fan cooler unit combinations or containment spray pumps may be inoperable at "any one time." This restriction is reinforced by CTS 3.3.B.2.a which states that a fan cooler unit may be inoperable only if "both containment spray pumps are operable" and CTS 3.3.B.2.b which states that a containment spray pump may be inoperable only if "the five fan cooler units are operable" and CTS 3.3.B.2.c which states that a valve required for accident conditions may be inoperable onlt if "all valves in the system that provide the duplicate function are operable."

ITS LCO 3.6.6 and associated Required Actions allow simultaneous inoperability of one containment spray pump (Condition A) and two fan cooler unit trains (Condition D) for up to 72 hours because the safety function is maintained even in this condition.

DOC L.5 provides justification for the differences between CTS 3.3.B.2.a and ITS LCO 3.6.6 and Conditions A and D.

NYPA revised ITS for LCO 3.6.6, Containment Spray System and Containment Fan Cooler System, to add DOC L.8 to provide justification for the differences between CTS 3.3.B.2.a, CTS 3.3.B.2.b, CTS 3.3.B.2.c and ITS LCO 3.6.6. DOC A.11 was deleted.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.6 Containment Spray System and Containment Fan Cooler System**

NRC RAI No: **3.6.6 -- 06**

RAI STATEMENT:

--DOC M.2
--CTS 3.3.B.3.b
--ITS 3.6.6 ACTIONS and Associated Bases

--CTS 3.3.B.3 established the ACTIONS required if either containment spray and/or containment fan cooler trains are not restored to meet CTS requirements within specified completion times of CTS 3.3.B.2. CTS 3.3.B.3.a specifies that, if the reactor is critical when requirements are not met, then the reactor must be in hot shutdown (MODE 3) within 4 hours and cold shutdown (MODE 5) within the following 24 hours. However, if the reactor is subcritical when requirements are not met, CTS 3.3.B.3.b requires only that reactor coolant system temperature and pressure not be increased more than 25 F and 100 psi, respectively, over existing values with the requirement to proceed to cold shutdown (MODE 5) deferred by 48 hours. The CTS markup shows CTS 3.3.B.3.b as being deleted. The deletion is justified in DOC M.2. DOC M.2 states that under the same conditions stated above, ITS 3.6.6, Required Actions B.1 and B.2 and/or Required Actions E.1 and E.2, require that the reactor be in MODE 3 in 6 hours and MODE 5 in 84 hours (Required Actions B.2, and E.2), regardless of the status of the unit when the Condition is identified. The allowance of 48 hours provided in CTS 3.3.B.3.b is deleted. This justification is not entirely correct. The statement implies that if either a containment spray train and/or one or two containment fan cooler trains is determined to be inoperable while in MODE 3, then an immediate shutdown is commenced such that MODE 5 is reached within 84 hours. (See Comment Number 3.6.6-11 for additional concerns with regards to the 84 hour Completion Time for Required ACTION E.2). The CTS for this type of condition would allow 24 hours to restore the systems to OPERABLE status before entering CTS 3.3.B.3 where an additional 48 hours would be allowed before shutting down to MODE 5. In the ITS for this condition ITS ACTIONS A, C, and/or D would be entered first. If the systems could not be restored to OPERABLE status within the specified Completion Times of these ACTIONS, then ITS 3.6.6 ACTION B and/or E would be entered. Under this scenario, the changes associated with CTS 3.3.B.3.b would be an Administrative change for the Containment Spray System (CTS: 24 + 48= 72 hours to ITS of 72 hours) and a Less Restrictive (L) change for one containment fan cooler train inoperable (CTS 24 + 48 = 72 hours to ITS of 7 days). See Comment Number 3.6.6-7. Comment: Revise the CTS markup and provide a discussion and justification for these Administrative and Less Restrictive (L) changes. See Comment Numbers 3.6.6-7 and 3.6.6-11.

NYPA RESPONSE: (3.6.6-06)

CTS 3.3.B.3.a applies only after the allowable out of service time expires and begins with the phrase "If the reactor is critical" and specifies the completion times for achieving both hot shutdown and cold shutdown if the condition is identified when the reactor is critical.

CTS 3.3.B.3.b applies only after the allowable out of service time expires and begins with the phrase "If the reactor is subcritical" and specifies in the completion times for achieving cold shutdown if the condition is identified when the reactor is subcritical. The difference between CTS 3.3.B.3.a and CTS 3.3.B.3.b is that the allowable out of service time (AOT) is extended by 48 hours if the condition is identified when the reactor is not critical. Note that there is no change to the shutdown completion time (i.e., the requirement to proceed to cold shutdown "using normal operating procedures") when the AOT has expired.

NYPA deleted CTS 3.3.B.3.b (as stated in DOC M.2) and only the requirements in CTS 3.3.B.3.a are used when justifying the differences between CTS and ITS requirements.

The 48 hour extension to the AOT in CTS 3.3.B.3.b is not related to the extended shutdown completion time in NUREG-1431, LCO 3.6.6A, Condition B, (i.e., 84 hours is justified in NUREG-1431 because of reduced driving force for a release when in Mode 3) because the AOT extension in CTS is tied to a conditional "critical/subcritical" initial condition. Many CTS shutdown requirements use the identical "critical/subcritical" initial condition where the corresponding ITS Required Actions do not have extended shutdown completion times (e.g., CTS 3.7.C, AC onsite and offsite sources, batteries and battery chargers, inverters, etc, CTS 3.3.E.3, Component Cooling Water, CTS Table 3.5-5, PAM Instrumentation, CTS 3.3.A.5, Safety Injection, CTS 3.2.C, CVCS, etc.). NYPA believes that the CTS/ITS change description and justification in DOC M.2 and L.3 are correct.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.6 Containment Spray System and Containment Fan Cooler System**

NRC RAI No: **3.6.6 -- 07**

RAI STATEMENT:

--DOC M.2
--DOC L.3
--CTS 3.3.B.3
--ITS 3.6.6 ACTIONS

--CTS 3.3.B.3 establishes the ACTIONS required if either containment spray and/or containment fan cooler trains are not restored to meet CTS requirements within specified completion times of CTS 3.3.B.2. CTS 3.3.B.3.a specifies that, if the reactor is critical when requirements are not met, then the reactor must be in hot shutdown (MODE 3) within 4 hours and cold shutdown (MODE 5) within the following 24 hours. However, if the reactor is subcritical when requirements are not met, CTS 3.3.B.3.b requires only that reactor coolant system temperature and pressure not be increased more than 25 F and 100 psi, respectively, over existing values with the requirement to proceed to cold shutdown (MODE 5) deferred by 48 hours. There seems to be a small error in the CTS which is not addressed by any of the DOCs. The ITS corrects the problem. The interpretation of the CTS that causes the problem deals with the application of CTS 3.3.B.3.a and 3.3.B.3.b. Once the hot shutdown condition (MODE 3) is achieved in CTS 3.3.B.3.a, the reactor is subcritical, thus one could enter CTS 3.3.B.3.b which would delay the requirement to be in cold shutdown within 24 hours, by at least the 48 hours restoration time of CTS 3.3.B.3.b. See Comment Number 3.6.6-11. Comment: Revise the CTS markup and provide an appropriate discussion and justification for this change. See Comment Number 3.6.6-11.

NYPA RESPONSE:

See Response to RAI 3.6.6-06. Note that DOC M.2 states: "This change is needed to eliminate the ambiguity created by CTS 3.3.B.3.b when performing a reactor shutdown and cooldown required by CTS 3.3.B.3.a." NYPA corrected the error in the CTS by deleting CTS 3.3.B.3.b and basing the conversion to ITS based solely on differences with CTS 3.3.B.3.a.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.6 Containment Spray System and Containment Fan Cooler System**

NRC RAI No: **3.6.6 -- 08**

RAI STATEMENT:

--DOC M.4
--JFD CLB 1
--STS SR 3.6.6A.2 and Associated Bases
--ITS SR 3.6.6.2 and Associated Bases

--Since there is no equivalent CTS requirement, ITS SR 3.6.6.2 is added to require operation of each fan cooler train for 15 minutes every 92 days. The equivalent STS SR (SR 3.6.6A.2) has a frequency of 31 days. No justification is provided in DOC M.4 or JFD CLB.1 (See Comment Number 3.6.6-9 for an additional concern on JFD CLB.1) for the change in frequency, based on system design, operational constraints or current licensing basis. Comment: Provide a discussion and justification for the change in SR frequency based on system design, operational constraints or current licensing basis. See Comment Number 3.6.6-9.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.6, Containment Spray System and Containment Fan Cooler System, to add JFD X.1 to justify changing the Frequency of 31 days in STS SR 3.6.6A.2 to 92 days in IP3 ITS SR 3.6.6.2. The justification in JFD X.1 is that IP3 has no current requirement to periodically operate each of the Fan Cooler Units and is voluntarily adopting this Technical Specification at a Frequency consistent with current practice for rotating the operating fans. NYPA believes that this is acceptable because of the demonstrated reliability of this equipment and that all of the fans are routinely operated during normal plant operation. NYPA wishes to keep the Frequency of this SR consistent with ITS SR 3.6.6.3 (See response to RAI 3.6.6-10).

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.6 Containment Spray System and Containment Fan Cooler System**

NRC RAI No: **3.6.6 -- 09**

RAI STATEMENT:

--DOC M.4
--DOC M.5
--JFD CLB.1
--STS SR 3.6.6A.2, SR 3.6.6A.3 and Associated Bases
--ITS SR 3.6.6.2, SR 3.6.6.3 and Associated Bases

--The CTS and ITS markup show the addition of ITS SR 3.6.6.2 and SR 3.6.6.3. DOCs M.4 and M.5 which add these ITS SRs to the CTS states that there is no equivalent CTS requirement. Yet the ITS markup indicates the changes to these SRs are justified by JFD CLB.1 (Retention of Existing Requirement). There is no JFD CLB.1 in ITS 3.6.6 Part 6 "Justification for Differences Between NUREG 1431 and IP3 ITS." Comment: Correct this discrepancy.

NYPA RESPONSE:

See Responses to RAI 3.6.6-08 and RAI 3.6.6-10. JFD designation for STS SR 3.6.6A.2 and ITS SR 3.6.6A.3 will be changed from CLB.1 to X.1 and X.2, respectively.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.6 Containment Spray System and Containment Fan Cooler System**

NRC RAI No: **3.6.6 -- 10**

RAI STATEMENT:

--DOC M.5
--JFD CLB.1
--STS SR 3.6.6A.3 and Associated Bases
--ITS SR 3.6.6.3 and Associated Bases

--Since there is no equivalent CTS requirement, ITS SR 3.6.6.3 is added to require verification that cooling water flow to each fan cooler unit is 1400 gpm. The equivalent STS SR (SR 3.6.6A.3) has a frequency of 31 days. DOC M.5 states that the frequency is 24 months. The ITS markup shows a frequency of 92 days. No justification is provided in DOC M.5 or JFD CLB.1 (See Comment Number 3.6.6-9 for an additional concern on JFD CLB.1) for the change in frequency based on system design, operational constraints or current licensing basis. Comment: Correct this discrepancy on frequency and provide a discussion and justification for the change in SR frequency based on system design, operational constrains or current licensing basis. See Comment Number 3.6.6-9.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.6, Containment Spray System and Containment Fan Cooler System, to add JFD X.2 to justify changing the Frequency of 31 days in STS SR 3.6.6A.3 to 92 days in ITS SR 3.6.6.3.

The justification in JFD X.2 will be that initiation of flow through the fan cooler units causes a major perturbation of the entire service water system which affects flow settings and temperatures for a wide variety of plant equipment. IP3 has no current requirement to periodically operate each of the Fan Cooler Units and is voluntarily adopting this Technical Specification at a Frequency consistent with current practice for switching the essential and non-essential service water flow headers. This 92 day Frequency is also consistent with IST program requirements for testing the flow control valves for the FCUs. NYPA believes that this Frequency is acceptable because of the demonstrated reliability of this equipment.

DOC M.5 was revised to correctly state the 92 day surveillance frequency.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.6 Containment Spray System and Containment Fan Cooler System**

NRC RAI No: **3.6.6 -- 11**

RAI STATEMENT:

--DOC L.3
--JFD PA.1
--JFD DB.1
--CTS 3.3.B.3.a
--STS 3.6.6A Required Action E.2 and Associated Bases
--ITS 3.6.6 Required Action E.2 and Associated Bases

--CTS 3.3.B.3 establishes the ACTIONS required if either containment spray and/or containment fan cooler trains are not restored to meet CTS requirements within specified completion times. CTS 3.3.B.3.a specifies that, if the reactor is critical when requirements are not met, then the reactor must be in hot shutdown (MODE 3) within 4 hours and cold shutdown (MODE 5) with the following 24 hours. Under the same conditions, ITS 3.6.6, Required Actions B.1 and B.2 and/or Required Actions E.1 and E.2, require that the reactor be in MODE 3 in 6 hours and in MODE 5 in 84 hours (Required Actions B.2, and E.2). While the changes in CTS completion times of 4 hours to the ITS Completion Time of 6 hours to be in MODE 3 and 24 hours to the ITS 3.6.6 Required Action B.2 Completion Time of 84 hours to be in MODE 5 are acceptable and in conformance with the STS required Completion Times, the change of the CTS completion time of 24 hours to the ITS 3.6.6 Required Action E.2 Completion Time of 84 hours is not in conformance with the STS Required Action E.2 Completion Time of 36 hours. No justification is provided for this deviation from the STS, and the change could be considered as a generic change which would be beyond the scope of review for this conversion. See Comment Number 3.6.6-7. Comment: Revise the CTS/ITS markups to delete this potential generic change or provide a discussion and justification based on system design, operational constraints, or current licensing basis to justify the deviation from the STS. See Comment Number 3.6.6-7.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.6, Containment Spray System and Containment Fan Cooler System, so that the Completion Time of Required Action E.2 is 36 hours and is consistent with NUREG-1431.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.6 Containment Spray System and Containment Fan Cooler System**

NRC RAI No: **3.6.6 -- 12**

RAI STATEMENT:

--DOC LA.1
--CTS 4.5.B.1.a
--ITS SR 3.6.6.4 and Associated Bases

--CTS 4.5.B.1.a requires that the containment spray pumps be started every quarter. The corresponding ITS SR (SR 3.6.6.4) maintains this same requirement except that the SR Frequency is "In accordance with the Inservice Testing Program". The CTS markup shows the change in frequency as a Less Restrictive (LA) change. This change is not a Less Restrictive (LA) change, based on the discussion in DOC LA.1. If the CTS frequency is the same as the ASME Code Section XI and the current Inservice Testing Program frequencies then the change is an Administrative change (Terminology change). However, if the CTS frequency is different than the ASME Section XI and the current Inservice Testing Program frequencies then the change could be More Restrictive or Less Restrictive (L) depending on whether the CTS frequency less than or greater than the ASME/Inservice testing frequencies, respectively.

Comment: Revise the CTS markup and provide the appropriate discussion and justification for this change.

NYPA RESPONSE:

Containment Spray pump testing requirements equivalent to the requirements in CTS 4.5.B.1.a are already in the IST Program at a quarterly frequency. NYPA will revise the ITS conversion submittal to delete DOC LA.1 and show the change as DOC A.12.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.6 Containment Spray System and Containment Fan Cooler System**

NRC RAI No: **3.6.6 -- 13**

RAI STATEMENT:

--JFD PA.1
--JFD DB.1
--CTS 4.5.A.2.a
--ITS SR 3.6.6.5 and Associated Bases

--ITS SR 3.6.6.5 exempts those automatic containment spray valves that are locked, sealed or otherwise secured in position from the requirements of the surveillance. CTS 4.5.A.2.a does not exempt these locked, sealed or otherwise secured valves. The CTS markup does not show or provide a justification for this Less Restrictive (L) change.

Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change.

NYPA RESPONSE:

CTS 4.5.A.2.a requires a functional test of the spray additive system. ITS SR 3.6.6.5 adds the exemption for each valve "that is not locked, sealed, or otherwise secured in position".

NYPA revised the ITS submittal to add DOC L.9. The justification for this change is that valves that are "locked, sealed, or otherwise secured in position" do not change position as a result of an actuation signal.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.6 Containment Spray System and Containment Fan Cooler System**

NRC RAI No: **3.6.6 -- 14**

RAI STATEMENT:

--JFD PA.1
--JFD DB.1
--ITS B3.6.6 Bases - F.1

--ITS B3.6.6 Bases - F.1 is modified by the following statement (Insert B3.6-71-1): "This Condition ensures that at least one containment spray train and one fan cooler train will be available during an accident." This is an incorrect statement. This Condition deals with the inoperability of two Containment Spray Systems or any combination of three or more trains (Containment Spray and Fan Cooler). If one enters this Condition there may not be at least one containment spray and one fan cooler train available. In addition, no justification is provided to substantiate this change.

Comment: Delete this sentence.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.6, Containment Spray System and Containment Fan Cooler System, to delete the first sentence of insert B 3.6-71-01 for Condition F.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.6 Containment Spray System and Containment Fan Cooler System**

NRC RAI No: **3.6.6 -- 15**

RAI STATEMENT:

--JFD PA.1
--JFD DB.1
--STS B3.6.6 Bases - SR 3.6.6.A-1
--ITS B3.6.6 Bases - SR 3.6.6.1

--ITS B3.6.6 Bases - SR 3.6.6.1 is modified by the following statement (Insert B3.6-71-02):"Valves in containment with remote position indication may be checked using remote position indication." The corresponding STS Bases write-up states that "only check valves are inside containment" and thus they are exempt from the system walkdown verification. The ITS write-up deletes the reference to the check valves and adds the above statement. No justification is provided for this addition. The change is incomplete. The ITS SR Bases states that the valves outside containment and those valves inside containment with remote indication are verified in the correct position. However, there is no mention of those valves inside containment which are not locked, sealed or otherwise secured in position or do not have remote indication. The SR requires those valves also to be verified in the correct position.

Comment: Revise the ITS markup to discuss the verification of the position of these other valves.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.6, Containment Spray System and Containment Fan Cooler System, to maintain the statement from NUREG-1431 that "(check valves are located in containment)."

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.7 Spray Additive System**

NRC RAI No: **3.6.7 -- 01**

RAI STATEMENT:

--DOC A.2
--CTS 3.3.B
--CTS 4.5.A.2
--CTS 4.5.B.2

--DOC A.2 justifies the deletion of the CTS Objective and Applicability statements. The CTS markup for CTS 3.3.B, 4.5.B.A.2 and 4.5.B.2 do not show Objective and Applicability statements nor do they indicate a DOC A.2. Comment: Correct this discrepancy.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.7, Spray Additive System, Part 2, CTS Markup, to include page CTS 3.3-1, which will show the Applicability and Objectives Sections deleted by DOC A.2.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.7 Spray Additive System**

NRC RAI No: **3.6.7 -- 02**

RAI STATEMENT:

--DOC A.4
--CTS 4.5.A.2.a
--ITS SR 3.6.7.4 and Associated Bases

--CTS 4.5.A.2.a requires a functional test of the Containment Spray Additive System and specifies that "Operation of the system is initiated by tripping the normal actuation instrumentation." The corresponding ITS SR is SR 3.6.7.4, however this test may be initiated by either an actual or simulated actuation signal. The CTS markup shows this change "normal actuation" to "actual or simulated actuation" as an Administrative change (DOC A.4). This is incorrect. "Tripping the normal actuation" commutates only a simulated actuation. By adding the words "actual actuation" the change becomes a Less Restrictive (L) change. Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.7, Spray Additive System, to change DOC A.4 to DOC L.5 to justify as less restrictive the change in test initiation methodology from the CTS "tripping the normal actuation instrumentation" to the ITS requirement allowing use of "an actual or simulated actuation signal."

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.7 Spray Additive System**

NRC RAI No: **3.6.7 -- 03**

RAI STATEMENT:

--DOC A.5
--CTS 4.5.A.2.a and 4.5.A.2.c
--ITS SR 3.6.7.4

--CTS 4.5.A.2.a specifies that the verification of Containment Spray Additive System valve actuation shall be performed with the isolation valves in the supply lines at the containment and the spray additive tank isolation valves blocked closed. CTS 4.5.A.2.c specifies that the containment spray additive system tests will be considered satisfactory if visual observations indicate all components have operated satisfactorily. The CTS markup shows both of these requirements as being deleted, and indicates the change as Administrative (DOC A.5). DOC A.5 provides a discussion for the deletion of CTS 4.5.A.2.c, but does not discuss the deletion of the requirement associated with CTS 4.5.A.2.a. Since this is a deletion of a requirement (relocation to a non 10 CFR 50.59 controlled document) these changes are considered to be Less Restrictive (L) changes. Comment: Revise the CTS markup and provide a discussion and justification for these Less Restrictive (L) changes.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.7, Spray Additive System, to relocate the statement in CTS 4.5.A.2.a to the Bases for SR 3.6.7.4 using DOC LA.1.

NYPA revised the ITS conversion submittal for LCO 3.6.7, to delete DOC A.5 and add DOC L.6 deleting the CTS 4.5.A.2.c requirement for acceptable test performance by visual observation.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.7 Spray Additive System**

NRC RAI No: **3.6.7 -- 04**

RAI STATEMENT:

--DOC A.6
--CTS 4.5.B.2.a
--ITS SR 3.6.7.4 and Associated Bases

--CTS 4.5.B.2.a specifies that each spray additive valve shall be cycled by operator action with the pumps shutdown at least once per 24 months. The corresponding ITS SR is SR 3.6.7.4. The CTS markup indicates that the requirement "By operator action with the pumps shut down" has been deleted from the CTS/ITS. This deletion is characterized as an Administrative change (DOC A.6). DOC A.6 does not discuss this deletion and this is an incorrect characterization of the change. The change is a Less Restrictive (L) change - deletion of a requirement/details. Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change.

NYPA RESPONSE:

NYPA revised the ITS conversion submittal for LCO 3.6.7, to add DOC L.5, deleting the CTS 4.5.B.2.a requirement that valves be tested "by operator action with pumps shut down".

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.7 Spray Additive System**

NRC RAI No: **3.6.7 -- 05**

RAI STATEMENT:

--DOC A.6
--CTS 4.5.A.2.a
--CTS 4.5.B.2.a
--ITS SR 3.6.7.4 and Associated Bases

--ITS SR 3.6.7.4 exempts those automatic spray additive valves that are locked, sealed or otherwise secured in position from the requirements of the surveillance. CTS 4.5.A.2.a and 4.5.B.2.a do not exempt these locked, sealed or otherwise secured valves. The CTS does not show this change, however DOC A.6 does describe it as an Administrative change. This is incorrect. This change is a Less Restrictive (L) change.

Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change.

NYPA RESPONSE:

CTS 4.5.A.2.a requires that " System tests shall be performed at least once per 24 months." CTS 4.5.B.2.a requires that "Each spray additive valve shall be cycled by operator action with the pumps shut down at least once per 24 months." For valves that change position as a result of an actuation signal, ITS SR 3.6.7.4 maintains this requirement. For valves that do not change position as a result of an actuation signal, ITS LCO 3.6.7 does not have a requirement to cycle these valves every 24 months.

NYPA revised ITS for LCO 3.6.7, Spray Additive System, to delete DOC A.6 and add DOC L.4 which deletes the requirement in CTS 4.5.A.2.a and CTS 4.5.B.2.a to cycle valves that do not change position as a result of an actuation signal. This includes valves that are "locked, sealed, or otherwise secured in position."

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.7 Spray Additive System**

NRC RAI No: **3.6.7 -- 06**

RAI STATEMENT:

--DOC M.3
--CTS 3.3.B.3.b
--ITS 3.6.7 ACTIONS and Associated Bases

--CTS 3.3.B.3 establishes the ACTIONS required if the Spray Additive System is not restored to meet CTS requirements within specified completion times. CTS 3.3.B.3.a specifies that, if the reactor is critical when requirements are not met, then the reactor must be in hot shutdown (MODE 3) within 4 hours and cold shutdown (MODE 5) within the following 24 hours. However, if the reactor is subcritical when requirements are not met. CTS 3.3.B.3.b requires only that reactor coolant system temperature and pressure not be increased more than 25 F and 100 psi, respectively, over existing values with the requirement to proceed to cold shutdown (MODE 5) deferred by 48 hours. The CTS markup show CTS 3.3.B.3.b as being deleted. The deletion is justified in DOC M.3. DOC M.3 states that under the same condition stated above, ITS 3.6.7 Required Actions B.1 and B.2 require that the reactor be in MODE 3 in 6 hours and in MODE 5 in 84 hours (Required Actions B.2.) regardless of the status of the unit when the Condition is identified. The allowance of 48 hours provided in CTS 3.3.B.3.b is deleted. This justification is not entirely correct. The statement implies that if the Spray Additive System is determined to be inoperable while in MODE 3, then an immediate shutdown is commenced such that MODE 5 is reached within 84 hours. The CTS for this type of condition would allow 24 hours to restore the systems to OPERABLE status before entering CTS 3.3.B.3 where and additional 48 hours would be allowed before shutting down to MODE 5. In the ITS for this condition, ITS ACTION A would be entered first. If the system could not be restored to OPERABLE status within the specified Completion Time of this ACTION, then ITS 3.6.7 ACTION B would be entered. Under this scenario the changes associated with CTS 3.3.B.3.b would be an Administrative change for the Spray Additive System (CTS: 24 + 48 = 72 hours to ITS of 72 hours). See Comment Number 3.6.7-7. Comment: Revise the CTS markup and provide a discussion and justification for this Administrative change. See Comment Number 3.6.7-7.

NYPA RESPONSE:

See Response to RAI 3.6.6-06 and RAI 3.6.6-07.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.7 Spray Additive System**

NRC RAI No: **3.6.7 -- 07**

RAI STATEMENT:

--DOC M.3
--DOC L.1
--DOC L.2
--CTS 3.3.B.3
--ITS 3.6.6 ACTIONS

--CTS 3.3.B.3 establishes the ACTIONS required if the Spray Additive System is not restored to meet CTS requirements within specified completion times. CTS 3.3.B.3.a specifies that, if the reactor is critical when requirements are not met, then the reactor must be in hot shutdown (MODE 3) within 4 hours and cold shutdown (MODE 5) within the following 24 hours. However, if the reactor is subcritical when requirements are not met, CTS 3.3.B.3.b requires only that reactor coolant system temperature and pressure not be increased more than 25 F and 100 psi, respectively, over existing values with the requirement to proceed to cold shutdown (MODE 5) deferred by 48 hours. There seems to be a small error in the CTS which is not addressed by any of the DOCs. The ITS corrects the problem. The interpretation of the CTS that causes the problem deals with the application of CTS 3.3.B.3.a and 3.3.B.3.b. Once the hot shutdown condition (MODE 3) is achieved in CTS 3.3.B.3.a, the reactor is subcritical. Thus one could enter CTS 3.3.B.3.b which would delay the requirement to be in cold shutdown within 24 hours, by at least the 48 hours restoration time of CTS 3.3.B.3.b. See Comment Number 3.6.7-8. Comment: Revise the CTS markup and provide an appropriate discussion and justification for this change. See Comment Number 3.6.7-8.

NYPA RESPONSE:

See Response to RAI 3.6.6-06 and RAI 3.6.6-07.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.7 Spray Additive System**

NRC RAI No: **3.6.7 -- 08**

RAI STATEMENT:

--DOC L.1
--CTS 3.3.B.1.a
--CTS 3.3.B.2.c
--CTS 3.3.B.3
--ITS 3.6.7 ACTION A.

--CTS 3.3.B.1.a establishes requirements for the Spray Additive System. DOC L.1 states that "If the requirements of CTS 3.3.B.1.a are not met, then CTS 3.3.B.3 requires initiation of a plant shutdown because no other allowable out of service (AOT) is specified. Under the same conditions, ITS LCO 3.6.7, Required Action A.1 provides an AOT of 72 hours before a reactor shutdown is required." This statement is not entirely correct. Based on the CTS and ITS valve SRs and the ITS 3.6.7 Bases discussion, CTS 3.3.B.2.c does provide an AOT of 24 hours for the Spray Additive System valves that are inoperable. The CTS markup does not show CTS 3.3.B.2.c as being associated with ITS 3.6.7 when it should be. CTS 3.3.B.2.c should be marked up to reflect DOC L.1. In addition, Comment Number 3.6.7.-7 does have an impact on the discussion and justifications provided in DOC L.1. Comment: Revise the CTS markup and provide additional discussion and justification for this Less Restrictive (L) change.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.7, Spray Additive System, to include a discussion of CTS 3.3.B.2.c, which provide an AOT of 24 hours for the Spray Additive System valves that are inoperable, to the AOT extension justified in DOC L.1.

See Response to RAI 3.6.6-06 and RAI 3.6.6-07 also.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.7 Spray Additive System**

NRC RAI No: **3.6.7 -- 09**

RAI STATEMENT:

--JFD PA.1
--JFD DB.1
--STS B3.6.7 Bases - BACKGROUND
--ITS B3.6.7 Bases - BACKGROUND

--The second paragraph, fifth and sixth sentences in STS B3.6.7 Bases - BACKGROUND states the following: "The NaOH added to the spray also ensures a pH value of between 8.5 and 11.0 of the solution recirculated from the containment sump. This ph band minimizes..." The ITS modifies this sentence by replacing "a pH value of between 8.5 and 11.0" with "an alkaline pH." This change conflicts with the succeeding sentence in that "an alkaline pH" does not connotate a "pH band" but a single value. Comment: Correct this discrepancy.

NYPA RESPONSE:

NYPA revised the IP3 ITS conversion submittal for LCO 3.6.7, Spray Additive System, to read as follows:
"The NaOH added to the spray also ensures an alkaline pH of the solution recirculated from the containment sump. An alkaline pH minimizes the evolution of iodine as well as the occurrence of chloride and caustic stress corrosion on mechanical systems and components."

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.7 Spray Additive System**

NRC RAI No: **3.6.7 -- 10**

RAI STATEMENT:

--JFD PA.1
--JFD DB.1
--STS B3.6.7 Bases - SR 3.6.7.5
--ITS B3.6.7 Bases - SR 3.6.7.5

--ITS B.3.6.7 Bases - SR 3.6.7.5 adds Insert B3.6-114-01 which states "This test is satisfied by the Inservice Test Program verification of the spray additive check valve. Water may be used in lieu of NaOH for performance of this SR which is not intended to require the transfer of NaOH." It is unclear how the Inservice Test Program verification of the spray additive check valve will satisfy this flow rate surveillance requirement.

Comment: Provide a discussion and justification for this change.

NYPA RESPONSE:

NYPA is voluntarily adopting ITS SR 3.6.7.5 with the intent that this SR will test spray additive system operation without pumping any NaOH solution from the spray additive tank and without draining the spray additive tank. Note that IP3 ITS SR 3.6.7.5 does not include the bracketed expression [rate] because the proposed test will verify the spray additive flow path but will not verify NaOH injection rate.

NYPA revised the IP3 ITS conversion submittal for LCO 3.6.7, Spray Additive System, so that insert B 3.6-114-01 reads as follows:
"This test is satisfied by a verification of spray additive system flow without pumping any NaOH solution from the spray additive tank and without draining the spray additive tank. Water may be used in lieu of NaOH for the performance of this SR which is not intended to require the transfer of NaOH."

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.8 Hydrogen Recombiners**

NRC RAI No: **3.6.8 -- 01**

RAI STATEMENT:

--DOC LA.1
--JFD DB.1
--CTS 4.5.7.a.2) b)
--ITS B3.6.8 Bases - SR 3.6.8.2

--CTS 4.5.7.a.2).b) verifies through a visual examination that there is no evidence of abnormal conditions within the recombiner enclosure. The CTS markup shows that the detailed acceptance criteria associated with this surveillance has been relocated by DOC LA.1. DOC LA.1 states that this information has been relocated to ITS B3.6.8 Bases - SR 3.6.8.1. This is incorrect. This information has been relocated to ITS B3.6.8 Bases - SR 3.6.8.2. In addition, DOC LA.1 references the wrong CTS surveillance (CTS 4.5.7.2.b should be CTS 4.5.7.a.2).b)) and no justification is provided for the relocation of this material. Comment: Revise DOC LA.1 to correct the discrepancy in the CTS reference and provide a discussion and justification for relocating the details of CTS 4.5.7.a.2).b).

NYPA RESPONSE:

NYPA revised the IP3 ITS conversion submittal for LCO 3.6.8, Hydrogen Recombiners, DOC LA.1, to show the following: acceptance criteria from CTS 4.5.7.a.1 goes to the Bases for ITS SR 3.6.8.1; acceptance criteria from CTS 4.5.7.a.2.b goes to the Bases for ITS SR 3.6.8.2; and, acceptance criteria from CTS 4.5.7.a.2.c goes to the Bases for ITS SR 3.6.8.3. Additionally, the final paragraph of DOC LA.1 is revised to indicate that the justification applies to SR 3.6.8.1, SR 3.6.8.2 and SR 3.6.8.3.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.8 Hydrogen Recombiners**

NRC RAI No: **3.6.8 -- 02**

RAI STATEMENT:

--DOC LA.1
--CTS 4.5.7.a.2).c).
--ITS B3.6.8 Bases - SR 3.6.8.3

--CTS 4.5.7.a.2).c) verifies the integrity of all heater electrical circuits by performing a resistance to ground test. The CTS markup show that the detailed acceptance criteria associated with this surveillance has been relocated by DOC LA.1. DOC LA.1 states that this information has been relocated to ITS B3.6.8 Bases - SR 3.6.8.3. This is not entirely correct. The criteria that CTS 4.5.7.a.2).c) (ITS SR 3.6.8.3) be performed following the performance of CTS 4.5.7.a.1) (ITS SR 3.6.8.1) has not been relocated to the ITS B3.6.8 Bases. Comment: Revise the ITS markup to include this criteria in ITS B3.6.8 Bases or provide additional discussion and justification for its deletion.

NYPA RESPONSE:

NYPA revised ITS conversion submittal for LCO 3.6.8, Hydrogen Recombiners, to add DOC L.2 which will delete the requirement in CTS 4.5.7.a.2.c that the hydrogen recombiner resistance to ground test must be performed after the functional test. The justification for deletion will be that the sequence for the performance of a functional test and resistance to ground test has no effect on the results of either test or the subsequent performance of the hydrogen recombiners.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.8 Hydrogen Recombiners**

NRC RAI No: **3.6.8 -- 03**

RAI STATEMENT:

--CTS 3.3.I.1
--ITS LCO 3.6.8 and Associated Bases

--CTS 3.3.I.1 states that "Two independent Hydrogen Recombiner Systems shall be OPERABLE." ITS LCO 3.6.8 restates this requirement, but does not include the word "independent." This information has been relocated to ITS B3.6.8 Bases - BACKGROUND. This Less Restrictive (LA) change is not indicated or justified in the CTS markup. Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (LA) change.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.8, Hydrogen Recombiners, to add DOC LA.3 which justifies relocation of the word "independent" from the CTS 3.3.I.1 LCO for hydrogen Recombiners to the Bases for the ITS 3.6.8 LCO for hydrogen recombiners. The justification for the relocation is that this qualifier is not needed because there are only two hydrogen recombiners and they are already described as redundant and independent in the FSAR and the ITS Bases.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.9 Isolation Valve Seal Water (IVSW) System**

NRC RAI No: **3.6.9 -- 01**

RAI STATEMENT:

--DOC A.2
--CTS 3.3.C

--DOC A.2 justifies the deletion of the CTS Objective and Applicability statements. The CTS markup for CTS 3.3.C does not show Objective and Applicability statements nor does it indicate a DOC A.2. Comment: Correct this discrepancy.

NYPA RESPONSE:

NYPA revised the IP3 ITS conversion submittal for LCO 3.6.9, Isolation Valve Seal Water System, Part 2, CTS Markup, to include page CTS 3.3-1, which will show the Applicability and Objectives Sections deleted by DOC A.2.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.9 Isolation Valve Seal Water (IVSW) System**

NRC RAI No: **3.6.9 -- 02**

RAI STATEMENT:

--DOC A.4
--CTS 3.3.C.3.a
--ITS 3.6.9 Required Action C.1 and Associated Bases

--CTS 3.3.C.3.a specifies that with the reactor critical, if the IVSW is not restored to OPERABLE status within the time limits specified in CTS 3.3.C.2, the reactor shall be brought to shutdown condition utilizing normal operating procedures. The CTS markup changes "utilizing normal operating procedures" to a Completion Time in ITS 3.6.9 Required Action C.1 of 6 hours and designates the change as Administrative (DOC A.4). DOC A.4 states that the reactor shall be brought to hot shutdown (MODE 3) within 48 hours. Based on the discussion in DOC A.4 the change would be a More Restrictive change (48 hours to 6 hours) rather than Administrative. However, DOC A.4 is incorrect with regards to the 48 hour hot shutdown requirement. See Comment Numbers 3.6.9-3 and 3.6.9-4 for additional concerns in this area. The staff concludes that the change is not an Administrative change, but is a More Restrictive change. Since the CTS does not specify a time limit to reach hot shutdown (MODE 3), except for the phrase "utilizing normal operating procedures," the time used will depend on plant conditions. The ITS imposes a specific time limit which makes it More Restrictive than the CTS. Comment: Revise the CTS markup and provide a discussion and justification for this More Restrictive change. See Comment Numbers 3.6.9-3 and 3.6.9-4.

NYPA RESPONSE:

NYPA revised ITS for LCO 3.6.9, Isolation Valve Seal Water System, Part 2, CTS Markup, to revise the markup for CTS 3.3.C.3.a, 3.3.C.3.b, and 3.3.C.3.c as follows:

1. The CTS markup of the change from CTS shutdown completion time 3.3.C.3.c to ITS Required Action C.2 is identified as change M.1 which addresses both the change from completion time based on "normal operating procedures" to an explicit completion time and deletion of the CTS allowance for a 48 hour delay prior to proceeding to cold shutdown.

2. CTS 3.3.C.3.b limits on temperature and pressure changes is deleted with justification provided in existing DOC M.1.

3. The statements in CTS 3.3.C.3.a and 3.3.C.3.c, "The shutdown shall start no later than at the end of the specified time period." is deleted by DOC A.4.

4. The CTS markup of the change from CTS shutdown completion time 3.3.C.3.a to ITS Required Action C.1 is identified as change M.4 which addresses both the change from completion time based on "normal operating procedures" to an explicit completion time.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.9 Isolation Valve Seal Water (IVSW) System**

NRC RAI No: **3.6.9 -- 03**

RAI STATEMENT:

--DOC A.4
--DOC M.1
--CTS 3.3.C.3.a
--CTS 3.3.C.3.c
--ITS 3.6.9 ACTION C and Associated Bases

--CTS 3.3.c.3.a specifies that with the reactor critical, if the IVSW is not restored to OPERABLE status within the time limits specified in CTS 3.3.C.2, the reactor shall be brought to shutdown condition utilizing normal operating procedures. The CTS markup changes "utilizing normal operating procedures" to a Completion Time in ITS 3.6.9 Required Action C.1 of 6 hours and designates the change as Administrative (DOC A.4). DOC A.4 states that the reactor shall be brought to hot shutdown (MODE 3) within 48 hours. DOC M.1 describes the 48 hour time limit as the time allowed to restore the system to OPERABLE status while in MODE 3. Comment: Correct this discrepancy between DOC A.4 and DOC M.1.

NYPA RESPONSE:

See Response to RAI 3.6.9-02.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.9 Isolation Valve Seal Water (IVSW) System**

NRC RAI No: **3.6.9 -- 04**

RAI STATEMENT:

--DOC M.1
--DOC M.2 (ITS 3.6.6)
--DOC M.3 (ITS 3.6.7)
--CTS 3.3.C.3.c
--ITS 3.6.9 ACTIONS

--Even though DOC M.1 does not address the concern specified in Comment Numbers 3.6.6-6 and 3.6.7-6 with regards to DOC M.2 (ITS 3.6.6) and DOC M.3 (ITS 3.6.7), the concern also applies here. Comment: See Comment Numbers 3.6.6-6 and 3.6.7-6.

NYPA RESPONSE:

NYPA believes that RAIs 3.6.6-06 and 3.6.7-06 are not related to this RAI because CTS 3.3.B.3.a and b provide two independent options, one if the reactor is critical and one if the reactor is subcritical at the time the condition is found. See Responses to RAI 3.6.6-06 and RAI 3.6.6-07.

However, this issue is different from the issue in RAI 3.6.6-06 and RAI 3.6.6-07 because CTS 3.3.C.3.c specifies that the 48 hour extension to reach cold shutdown applies "In either case" (i.e., if the reactor is critical or sub critical) which is different from the wording in CTS 3.3.B.3. NYPA did not make this distinction which is why the changes described in the response to RAI 3.6.9-02 are needed. See Response to RAI 3.6.9-02.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.9 Isolation Valve Seal Water (IVSW) System**

NRC RAI No: **3.6.9 -- 05**

RAI STATEMENT:

--DOC M.1
--CTS 3.3.C.3.b
--ITS 3.6.9 Required Action C.2

--CTS 3.3.c.3 specifies that if the IVSW is not restored to OPERABLE status within the time period specified in CTS 3.3.C.2, then CTS 3.3.C.3.b specifies that if the reactor is subcritical, the reactor coolant system temperature and pressure shall not be increased more than 25 F and 100 psi, respectively over existing values. The CTS markup shows this requirement as being replaced by ITS 3.6.9 Required Action C.2. The addition of ITS 3.6.9 Required Action C.2 is justified by DOC M.1. DOC M.1 does not provide sufficient justification for deleting CTS 3.3.C.3.b and replacing it with ITS 3.6.9 Require Action C.2 which would be a Less Restrictive (L) change. Comment: Provide additional discussion and justification for this Less Restrictive (L) change.

NYPA RESPONSE:

See Response to RAIs 3.6.9-02 and 3.6.9-04. Deletion of CTS 3.3.C.3.b is justified in DOC M.1. The bases for deletion is that the allowance provided in CTS 3.3.C.3.b to spend 48 hours in Mode 3 or 4 was deleted by DOC M.1 (See Response to RAI 3.6.9-02, paragraph 1). Therefore, the requirement for steady-state temperature and pressure is both unnecessary and cannot be complied with because the plant is performing a cooldown to satisfy ITS 3.6.9, Required Action C.2.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.9 Isolation Valve Seal Water (IVSW) System**

NRC RAI No: **3.6.9 -- 06**

RAI STATEMENT:

--DOC M.2
--DOC M.3
--CTS 3.3.C.1.b
--CTS 4.4.E
--ITS SR 3.6.9.1, SR 3.6.9.2, SR 3.6.9.3, and Associated Bases

--CTS 3.3.C.1.b requires that the IVSW tank be maintained at a minimum pressure and water volume. The corresponding ITS requirements are ITS SR 3.6.9.1 and SR 3.6.9.3. CTS 3.3.C and 4.4.E do not include a specific requirement for verification of the IVSW nitrogen supply. ITS SR 3.6.9.2 provides this verification. The CTS markup and DOCs M.2 and M.3 show the frequency for these surveillances as "every 7 days." However, ITS SR 3.6.9.1, SR 3.6.9.2, SR 3.6.9.3 and their Associated Bases shows the surveillance frequency as 24 hours.

Comment: Correct this discrepancy.

NYPA RESPONSE:

NYPA revised ITS to correct DOC M.2 and M.3 to show that the Frequencies for ITS SR 3.6.9.1, SR 3.6.9.2, and SR 3.6.9.3 are 24 hours.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.9 Isolation Valve Seal Water (IVSW) System**

NRC RAI No: **3.6.9 -- 07**

RAI STATEMENT:

--CTS 3.3.C.2.b
--ITS B3.6.9 Bases - A.1

--CTS 3.3.C2.b states that any IVSW valve may be inoperable for up to 7 days provided that "all valves in the system that provide a duplicate function are operable." The CTS markup shows this requirement as being part of Condition A and Required Action A.1 when in fact this requirement "all valves ... are operable" has been relocated to ITS B3.6.9 Bases.

Comment : Revise the CTS markup and provide a discussion and justification for this Less Restrictive (LA) change.

NYPA RESPONSE:

CTS 3.3.C.2.b which specifies that an automatic valve in the IVSW system may be inoperable for 7 days provided "all valves in the system that provide a duplicate function are operable." ITS 3.6.9, Condition A, addresses "One IVSW automatic actuation valve inoperable" with no allowance for separate condition entry which means that Condition A does not apply unless all valves in the system that provide a duplicate function are operable. The Bases for ITS 3.6.9, Condition A, clarifies this point with the statement "With one IVSW automatic actuation valve inoperable, the IVSW function is still available because the redundant automatic actuation valve is OPERABLE. Therefore, the 7 days is allowed to restore the IVSW automatic actuation valve to OPERABLE status."

NYPA revised the ITS conversion submittal to add DOC LA.1 to relocate to the Bases the CTS 3.3.C.2.b requirement that the AOT applies only if " all valves in the system that provide a duplicate function are operable" to the Bases for Condition A.

NYPA REPLY TO NRC RAI
REGARDING REVISION OF PROPOSED ITS

ITS LCO: **3.6.9 Isolation Valve Seal Water (IVSW) System**

NRC RAI No: **3.6.9 -- 08**

RAI STATEMENT:

--CTS 4.4.E.2
--ITS B3.6.9 Bases
--See Comment Number 3.6.1-2.

Comment: See Comment Number 3.6.1-2.

NYPA RESPONSE:

See Response to RAI 3.6.1-02.

Note that ITS LCO 3.6.9, Isolation Valve Seal Water (IVSW) System, is unique to IP3 and is not covered in NUREG-1431. Therefore, the failure to fully incorporate unapproved TSTF-52, Rev 1, and the 8 handwritten comments from the NRC do not affect this LCO.

ATTACHMENT III TO IPN-00-071

REVISION 1 PAGES FOR

PROPOSED IMPROVED TECHNICAL SPECIFICATIONS

(Revision 1 pages are provided for ITS sections as outlined in Attachment I)

NEW YORK POWER AUTHORITY
INDIAN POINT 3 NUCLEAR POWER PLANT
DOCKET NO. 50-286
DPR-64