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James Knubel
Senior Vice President and
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July 31, 2000
JPN-00-025

United States Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, D.C. 20555

Subject: **James A. FitzPatrick Nuclear Power Plant**
Docket No. 50-333
License No. DPR-59

Response to Requests for Additional Information Regarding Improved Technical Specification Sections 2.0, 3.1, 3.2, 3.3, 3.5, 3.7 and 3.10

References:
1. NRC Letter to J. Knubel (NYPA), Request for Additional Information Regarding Sections 2.0, 3.1, 3.2, 3.3, 3.5, 3.7 and 3.10 of the Improved Technical Specifications (TAC No. MA5049)
2. NYPA Letter to NRC, Proposed Technical Specification Change - Conversion to Improved Technical Specifications, JPN-99-008 dated March 31, 1999

Dear Sir:

The NRC requested in Reference 1 additional information regarding certain sections of the James A. FitzPatrick NPP Improved Technical Specification (ITS) submittal (Reference 2). Attachment 1 to this letter contains the Authority responses to the RAIs discussed above except for certain RAIs that concern instrumentation aspects of our ITS submittal. Responses to those RAIs will be provided at a later date to be determined by the Authority. Attachment 2 contains the list of commitments contained in Attachment 1.

If you have any questions regarding this matter, please contact Mr. George Tasick at 315-349-6572.

Very truly yours,

J. Knubel
Senior Vice President
and Chief Nuclear Officer

JK:KWK:las
Attachments as stated
cc: next page

A001

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Attachment 2

ITS Request for Additional Information (RAI)

List of Commitments

Commitment No.	Description	Due Date
JPN-00-025-01	Revise ITS submittal as stated in responses to ITS 2.0, 3.1, 3.2, 3.3, 3.5, 3.7 and 3.10	TBD

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

SECTION 2.0 SAFETY LIMITS (SL)

RAI 2.0-1

ITS SL 2.1.1.2, MCPR SL Note and associated Bases
CTS SL 1.1.A Note
JFD CLB1

The ITS retains the CTS Safety Limit note that the MCPR SL is applicable for cycle 14 only. This note is not in the STS.

Comment: The MCPR SL note is not necessary. The treatment of the cycle specific MCPR SL is being addressed in the STS by proposed change TSTF-357.

Licensee Response:

TSTF-357 has not been approved by the NRC and is also unrelated to this Note. However, consistent with the Staff's comment, the Authority intends to remove the MCPR SL Note. This change request is being made in a separate request to Amend the CTS. A future ITS Conversion update will reflect this proposed Amendment.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

SECTION 3.1 - REACTIVITY CONTROL SYSTEMS

RAI 3.1-1

ITS 3.1.2 Reactivity Anomalies
ITS LCO, SR 3.1.2.1, and Bases
CTS 3/4.3.D
DOCs LA1 and M3
JFD PA1

The STS term "monitored rod density" is replaced with the ITS term "measured rod density."

Comment: CTS 4.3.D refers to "reactivity monitoring" during power operation, similar to the STS use of the term "monitoring." The Bases states that the "3D Monicore System calculates the rod density for the reactor conditions." Isn't this more "monitoring" than "measuring?" Why has the term been changed? The change in terminology has not been explicitly addressed.

Licensee Response:

The Authority will develop an "A" DOC to explicitly address the replacement of the term "monitored rod density" with the term "measured rod density." The "A" DOC will contain similar words as follows:

CTS 4.3.D is revised to replace the term "reactivity monitoring" with the term "reactivity measuring." The predicted core reactivity is calculated by the 3D Monicore System. This system does not determine core reactivity and display this parameter as a continuous readout, which is analogous to a "monitored" value but rather "measures" core reactivity by considering actual control rod densities and performing appropriate calculations.

In addition, the use of the word "measured" in ITS SR 3.1.2.1 is allowed as a plant-specific term since brackets are provided in this SR. The use of the word "measured" in the Bases is consistent with the plant specific terminology used in ITS SR 3.1.2.1.

This change does not affect the method utilized to verify this SR. Accordingly, the change is considered administrative.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.1-2

ITS 3.1.2 Bases

JFD PA2

Throughout the Bases the STS term "Anticipated Operational Occurrence" has been replaced in the ITS with "Anticipated Operational Transient."

Comment: Has "Anticipated Operational Transient" been defined/utilized in the UFSAR, rather than "Anticipated Operational Occurrence?"

Licensee Response:

Chapter 14 of the JAF FSAR generally uses the word "transients" rather than "occurrences" in describing the identification and evaluation of abnormal events. For example, "transients" is used Section 14.4.1 and in the title of Table 14.4-1 of the JAF FSAR. Accordingly, the Authority prefers the use of "transients" in lieu of "occurrences" so as to maintain consistency with the FSAR.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.1-3

ITS 3.1.3 Required Action A.3
SR 3.1.3.2 and SR 3.1.3.3
JFD PA1

SR 3.1.3.2 and SR 3.1.3.3 are defined by "fully withdrawn control rods" and "partially withdrawn control rods" in ITS 3.1.3 Required Action A.3, for clarity.

Comment: This will be the only place where the distinction between partially and fully withdrawn control rods is made in the ITS. The type of control rods that apply is self-evident. It is not certain that the addition adds clarity.

Licensee Response:

Required Action A.3 of Specification 3.1.3 will be revised to remove the proposed changes (restoring ISTS wording) associated with fully and partially withdrawn control rods.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.1-4

Bases ITS 3.1.3 Actions, pg B 3.1-16

JFD PA4

'For clarity,' "MODE 4" is replaced with "cold shutdown condition," and "MODE 3" is replaced with "hot subcritical."

Comment: Replacing the precisely defined terms with the imprecise phrases does not add clarity.

Licensee Response:

Bases Actions A.1, A.2 and A.3 of Specification 3.1.3 will be revised to remove the proposed changes associated with "cold shutdown condition" and "hot subcritical"; restoring ISTS wording to "MODE 4" and "MODE 3," respectively.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.1-5

ITS 3.1.5 Required Action C.1

JFD PA2

ITS 3.1.5 Required Action C.1 is reworded for clarity.

Comment: Uncertain of enhancement; it is more concise but not as precise. Submit TSTF change proposal.

Licensee Response:

Required Action C.1 of Specification 3.1.5 will be revised to remove the proposed changes associated with "inoperable accumulators," restoring the ISTS wording.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.1-6

Bases ITS 3.1.6 Actions A.1 and A.2, pg B 3.1-36

JFD PA3

The sentence in the first paragraph clarifying the type of control rod movement that is acceptable when the control rod pattern is not in compliance with the BPWS has been deleted. The reason given for the deletion is that " ... the Actions do not require that all control rod movement be stopped ...".

Comment: In fact the Action do not require that all control rod movement be stopped. The Action A.1 states, "Move associated control rod(s) to correct position." The Bases statement that is deleted supports the Required Action and should be retained.

Licensee Response:

The proposed change to the Bases for Required Actions A.1 and A.2 was made to be consistent with the Actions in the Technical Specifications. Specifically, the sentence was deleted because the Actions do not require that all control rod movement be stopped when the control rod pattern is not in compliance with the prescribed sequence. Therefore, the Authority agrees with the Staff's determination as stated in their comments associated with this RAI that "In fact the Action do not require that all control rod movement be stopped." Consistent with the Staff's determination, the Bases sentence is viewed as a recommendation and not a requirement. Accordingly, with this mutual understanding regarding the relationship of the Bases sentence and the Technical Specification Action, the Authority will revise the Bases to retain the sentence that was previously deleted.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.1-7

Bases ITS 3.1.6 Actions A.1 and A.2, pg B 3.1-36

JFD PA4

The sentence in the second paragraph discussing control rod operability has been deleted. The reason given for the deletion is that it is not in the correct location.

Comment: Consider moving the sentence to the LCO Bases section where it would be more appropriate.

Licensee Response:

Bases for Required Actions A.1 and A.2 of Specification 3.1.6 will be revised to retain the sentence that was being deleted. This sentence is viewed in context with the previous sentence in the Bases. Specifically, the Bases states that a control rod not in compliance with the prescribed sequence is not considered inoperable except as required by Required Action A.2. The location of the retained sentence is appropriate when viewed in relationship to this previous sentence. Accordingly, the Authority will adopt the standard wording of the ISTS with regards to this matter.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.1-8

ITS SR 3.1.7.8 Frequency
CTS 4.4.A.5
M5, CLB2

The SR frequency change involves going from "24 months" in the CTS to "24 months on a staggered test basis" in the ITS. The change is classified as more restrictive since it "adds a more prescriptive requirement."

Comment: The change is mis-categorized since it in reality decreases the frequency each subsystem is now tested has gone from 24 to 48 months. This change needs to be justified, based on system reliability. Provide justification for change.

Licensee Response:

The Authority will revise the submittal to eliminate the CTS 4.4.A.5 reference to DOC-M5 and replace it with a new L-DOC. This L-DOC will provide the justification for extending test interval for the SLC System valve(s) that are not verified unblocked by other surveillances every 24 months (e.g., SR 3.1.7.9). This justification will provide sufficient basis for determination that the reliability of the system will not be adversely impacted.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.1-9

ITS 3.1.8 Required Action A.1

JFD X.2

The ITS adopts an action, for one or more SDV vent or drain lines with one valve inoperable, to isolate the associated line within 7 days. The STS requires restoring the valve to operable status within 7 days.

Comment: WNP2 had this approved in their conversion with the understanding that they would submit a TSTF change proposal to modify the STS. What is the status of that TSTF change?

Licensee Response:

There is no record of this change being proposed to the BWROG. The Authority will initiate a generic change to modify NUREG-1433 and 1434 consistent with the proposed ITS.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.1-10

Bases ITS 3.1.8 Applicability, pg B 3.1-48

JFD PA1

A sentence has been removed from the Applicability section of the Bases related to control rod withdrawal in Modes 3 and 4.

Comment: Why has the sentence been removed?

Licensee Response:

The sentence removed from the Bases states that adequate controls are provided to ensure only a single control rod can be withdrawn. These controls refer to the previous sentence which states that in Modes 3 and 4 control rods are not able to be withdrawn since the reactor mode switch is in shutdown and a control rod block is applied. The deleted sentence (regarding single control rod withdrawal) contradicts the previous sentence in that a single rod cannot be withdrawn in Modes 3 and 4. Therefore, the sentence is deleted from the Bases.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

SECTION 3.2 - POWER DISTRIBUTION LIMITS

RAI 3.2-1

ITS 3.2.4.2 LCO and ITS SR 3.2.4.2
JFD PA1, DOC A3

The ITS replaces the STS setpoint requirements with allowable value requirements.

Comment: It is the setpoints that are adjusted, not the allowable values; the allowable values remain constant. Discuss change.

Licensee Response:

The CTS 4.1.B requirement for "scram ... settings adjusted" refers to the "Trip Setting" and "scram setting" references in CTS Table 3.1-1 for RPS. Per DOC A19 for ITS 3.3.1.1 (RPS) these CTS references to trip settings are synonymous to the ITS "Allowable Values." The CTS 4.1.B requirement further states that the setting adjusted is as specified in the COLR. The JAFNPP COLR requires the RPS required trip setting (i.e., Allowable Value) to be modified. It should be noted that with a reduction in the required Allowable Value, the actual in-plant trip setting would be required to be correspondingly reduced to maintain the appropriate margin. This actual trip setting is not explicitly presented in ITS.

Additionally, in revisiting this change, the Authority intends to revise the LCO statement for ITS 3.2.4 to reflect the CTS level of detail. Specifically, the adjustments required when MFLPD is greater than the fraction of RTP will reference adjustments "as specified in the COLR." DOC A3 will be modified appropriately for this change.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

SECTION 3.3 - Instrumentation

3.3.1.1 - Reactor Protection System (RPS) Instrumentation

RAI ITS 3.3.1.1-1

ITS Table 3.3.1.1
DOC A19

CTS 2.1 lists 8 RPS Trip Functions as "limiting safety system trip settings." The proposed RPS ITS Table 3.3.1.1-1 renames these "allowable values". The staff interprets that the "Allowable Values" listed in ITS Table 3.3.1.1-1 as the "limiting safety system settings" required by 10 CFR 50.36 and they are values derived from an approved setpoint methodology which includes instrument channel uncertainties associated with the measured parameter and the installed instrumentation.

Comment: DOC A19 indicates that the CTS values are treated consistent with the ITS values when determining Function or channel operability, therefore, it is appears that the change represents an Administrative Change. However, a more complete explanation of the defined terminology is required for Table 3.3.1.1-1 Functions 3, 6, 7.a and 7.b allowable values taken from CTS Table 3.1-1 to clarify that the CTS "trip level settings" and the ITS "Allowable Values" are both the TS limit values placed on the "as-found" trip actuation setpoint that includes all applicable instrument channel and measurement uncertainties.

Licensee Response:

{Response deferred – schedule for reply to be discussed separately.}

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.1.1- 2
DOC L.4

CTS Table 3.1-1 requirements for APRM Neutron Flux -Startup during Refuel (Note 7), APRM Inoperative during Refuel (Note 7), and CTS 2.1.A.1.b requirements for APRM Neutron Flux Scram Trip Setting during refuel are deleted in the ITS. DOC L.4 justifies this deletion based on the staff findings contained in the safety evaluation report for Amendments 41 and 7 to the Limerick Plant Unit 1 and Unit 2 respectively. These amendments eliminated APRM RPS trip operability requirements in Mode 5 for all cases other than during SDM demonstrations. The SDM requirement is moved to ITS 3.10.8.

Comment: Proposed license amendments unrelated to topical reports require plant-specific safety analyses and staff evaluation without relying on references to other plant approved amendments or other staff issued safety evaluations as supporting justification. Remove the citation to the Limerick amendments and provide plant specific data to support proposed CTS changes.

Licensee Response:

DOC L4 will be revised to clarify the plant-specific analyses that have been performed in support of this change. Any reference to other plant approved amendments will be as reference only.

DOC L4 intended to provide the regulatory basis for the Staff's conclusion that the APRMs are not necessary for safe operation while operating in MODE 5 with the mode switch in Refuel. Specifically, this regulatory basis was described in the Staff's SERs for License Amendments 41 and 7 with regards to Limerick Units 1 and 2, respectively. The Authority performed a review of this matter in support of DOC L4 and concluded that the nine reasons for acceptance of the change on the Limerick docket (provided in the Staff's SER), are equally applicable to JAF.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.1.1-3
DOC - none

The CTS 2.1.b trip setting for the APRM Flux Scram is ≤15% of rated neutron flux. The proposed ITS Table 3.3.1.1-1 Allowable Value for the APRM - High (Startup) is "≤15% RTP".

Comment: Provide documentation which justifies that the CTS trip setting units, "rated neutron flux" units are equivalent to the ITS Allowable Value "RTP" units.

Licensee Response:

The terms are equivalent. The term RTP is defined in ITS 1.1 as:

RATED THERMAL POWER (RTP)	RTP shall be a total reactor core heat transfer rate to the reactor coolant of 2536 Mwt.

Thus, "% RTP" is a percentage of rated thermal power, a measure of heat transferred from the fuel to the reactor coolant.

APRM's do not measure power directly. APRM's are neutron monitors, measuring neutron flux. At power above the source range in an operating power reactor, both thermal power and neutron flux are directly proportional to the rate of fissioning within the fuel. They are thus directly proportional to one another and the measurement of one may be equated to the other.

There is no direct method of measuring reactor thermal power. Rather, power is determined through a calorimetric calculation from a variety of input parameters. The calorimetric results are periodically compared with APRM readings (a measure of neutron flux), and instrument gain adjustments are performed to assure the APRM reading provides an accurate, but conservative, reflection of reactor thermal power as a percentage of rated power.

CTS uses the technically more precise term "rated neutron flux" while ITS uses the derivative term "RTP". As explained, both are directly proportional to the rate of fissioning within the fuel and are thus proportional to one another (i.e., 100% rated neutron flux is that flux produced by a fission rate which produces 100% rated thermal power). Thus, "% of rated neutron flux" and "% RTP" describe the same condition and, for the purposes of ITS, are equivalent.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.1.1-4

DOC - none

The CTS 2.1.b trip setting Applicability for the APRM Flux Scram includes the Hot Standby Mode. However Hot Standby Applicability is not included in CTS Table 3.1-1, or in the ITS.

Comment: Provide discussion of the CTS discrepancy and omission of the Hot Standby Applicability in the ITS.

Licensee Response:

CTS definition I.4 titled "Startup/Hot Standby" is a single Mode, which is treated as the "Startup" Mode in ITS (refer to Section 1.0 conversion). Similarly, reference ITS Table 1.1-1, "Modes," presents Mode 2 as associated with the Startup/Hot Standby Mode switch position. There is no separate "Hot Standby" Applicability in CTS or ITS.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

Beyond Scope Issue (BSI) - change to CTS allowable value

RAI 3.3.1.1-5 (BSI)

DOC L.9

CTS 2.1.5, "Main Steam Line Isolation Valve Closure Scram Trip Setting" is ≤10% valve closure from full open. The proposed ITS Table 3.3.1.1-1 Function 5, "Main Steam Line Isolation Valve - Closure" Allowable Value is ≤14% closed.

Comment: DOC L9 provides discussion and justification for the change based on the current setpoint methodology, established consistent with ISA-67.04-1994. The trip setting value change is outside the RTSB scope of review. Additionally, L9 is shown on CTS markup page 14 of 15 to be the DOC for the addition of SR 3.3.1.1.6 to ITS function 2.a. DOC L9 does not include such a discussion of change. Clarify the CTS markup. Licensee to provide applicable change request and schedule to the PM.

Licensee Response:

The trip setting value is acknowledged as a Beyond Scope Issue (BSI) and will be addressed separately.

DOC L9 for the addition of ITS SR 3.3.1.1.6 is mis-labeled. DOC L9 will be revised to reflect DOC M14 instead.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.1.1-6

DOC - none

CTS 4.1.A, footnote "*" omits the sensor from Response Time Testing of the RPS actuation logic circuits for Function 1, Reactor High Pressure and Function 3, Reactor Water Level - Low (L3). ITS SR 3.3.1.1.16, Note 2 also omits these sensors from Response Time Testing, maintaining the current licensing basis.

Comment: Staff approval of topical report NEDO-32291 included specific language for replacing testing with design sensor response time. Revise ITS SR 3.3.1.1.16, Note 2 to read as follows: "For Functions 3 and 4, the sensor response time may be assumed to be the design sensor response time."

Licensee Response:

Further changes to response time SRs will be evaluated against the pending generic change, TSTF-332 (which is currently under negotiation with the NRC).

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.1.1-7

CLB-11

CTS Table 3.1-1, Note 3.B Action requires reducing power to the IRM range and placing the Mode Switch in the Startup Position within 8 hours. ITS 3.3.1.1, Action F, adopts the CTS time allowance to be in Startup which is 2 hours longer than the 6-hour time in the STS. As proposed the ITS actions do not require reducing the power to the IRM range.

Comment: This proposed change represents a less restrictive requirement which is not justified in CLB 11. Provide technical discussion and justification for deleting the CTS requirement to reduce power to the IRM range.

Licensee Response:

Eliminating the specific reference to "reducing power to the IRM range" is part of the editorial, administrative change discussed in DOC A.4 for the CTS changes. For the unit to be placed in MODE 2 (as required by ITS Action F), power is inherently required to be reduced to the IRM range (MODE 2 requires the mode switch to be in Startup, which enforces the APRM-Startup trip Function with an allowable value of $\leq$ 15% RTP). MODE 2 also requires the Operability of the IRMs, which inherently requires operable IRM readings. Since the specific reference to "reducing power to the IRM range" is an administrative step inherent in the ITS stated requirement to be in MODE 2, this change is administrative.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.1.1-8
CLB-2
STS SR 3.3.1.1.3 requires a Surveillance Test to verify the instrument channel conforms to a calibrated flow signal, every 7 days. CLB-2 states that the CTS Channel functional test includes this verification on a 92 day interval, therefore credit for the test is included in ITS SR 3.3.1.1.8, Channel functional test. It is not clear that this type of testing is required to be included as part of the ITS definition of Channel functional test, nor why the 92 day Frequency does not affect safe operation of the plant.

Comment: Provide additional discussion and justification for the STS deviation, including a clear description of the CTS test method. Provide a safety basis discussion for the 92 day surveillance test interval.

Licensee Response:

CLB-2 will be clarified to provide a clearer description of the current licensing basis for testing this function as follows:

CTS 4.1-2 "Flow Biased Signal" requires an "internal power and flow test with standard pressure source" calibration on a "refueling interval," which has been translated into ITS SR 3.3.1.1.13. This calibration of the flow signal is at a frequency that is consistent with the current licensing basis. The Functional Test of the APRMs (ITS SR 3.3.1.1.8) is consistent with CTS Table 4.1-1, which ensures the APRM circuitry responds appropriately to this calibrated flow signal. As such, the proposed ITS adequately translates the current licensing basis for testing the APRM Flow Biased Function without adopting the ISTS SR 3.3.1.1.3.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.1.1-9

DOC L13

CTS Table 4.1-2 requires a once per 24 hour Heat Balance (Calibration) of the APRM High Flux Output Signal. The corresponding ITS (SR 3.3.1.1.2) proposes to extend the surveillance frequency to 7 days consistent with STS. However, DOC L13 for the justification of a 7 day surveillance frequency does not state that it is JAFNPP operating experience which shows that historically only minor changes in LPRM sensitivity have occurred between APRM heat balance calibrations.

Comment: Show that data from operating experience at JAFNPP supports the chosen 7 day surveillance frequency.

Licensee Response:

Surveillance Test data from the current cycle was reviewed to determine if JAFNPP operating experience supports the 7 day surveillance frequency. Daily surveillance data over four different periods (1/14/99 - 1/28/99, 8/8/99 - 8/22/99, 4/16/00 - 4/26/00, and 6/8/00 - 6/24/00) with reactor power stable at approximately 100% was reviewed. Only minor changes, typically on the order of 0.2 to 0.4 % RTP due to changes in LPRM sensitivity over any 7 day period sampled was required. The largest accumulative adjustment made over any 7 day period sampled for an individual APRM was 1.3%. This is within the allowed absolute difference of $\leq$ 2% RTP for an individual APRM channel. This data supports the change to a 7 day surveillance frequency.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.1.1-10

DOC A12

CTS Table 4.1-1 Note 4 specifies that Turbine First Stage Pressure instrumentation is exempted from the "instrumentation channel test" definition. DOC A12 justifies the change based on CTS and ITS definitions. The CTS markup shows that this function is translated into ITS Table 3.3.1.1-1 Function 8 (Turbine Stop Valve Closure) and Function 9 (Turbine Control Valve Fast Closure). Both of these functions include channel functional testing as part of the required surveillance tests.

Comment: CTS do not include an "instrument channel test" definition. Provide additional discussion explaining the change justified by DOC A12.

Licensee Response:

While CTS does not include a definition for "instrument channel test" it does include a definition for "Instrument Channel *Functional* Test." Since the CTS Note 4 reference is made within the "Functional Test" column, and since the Note itself includes a statement of what an "instrument channel functional test" is to include, the Authority has concluded that the reference to "instrument channel test definition" is referring to the definition of "Instrument Channel Functional Test." Given this conclusion, the DOC A12 discussion implicitly addresses the entire CTS Note 2. The CTS Note states that the defined instrument channel [functional] test does not apply, and provides a statement of the testing that does apply. DOC A12 relates that the stated testing "allowance" does satisfy the "Instrument Channel Functional Test." The DOC goes on to note that no exception is or was necessary since the stated "allowance" is consistent with the definition both in the CTS and the ITS. No change to DOC A12 appears necessary.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.1.1-11

DOC M12

DOC M12 provides discussion that CTS Stop Valve and MSIV Closure limit switch testing is once per 24 months and that the ITS specifies the same interval. It appears M12 discusses Administrative changes.

Comment: Revise DOC M12 to include discussion of the more restrictive requirements that result from adding ITS SR 3.3.1.1.15.

Licensee Response:

(Comment reference is believed to be intended to be SR 3.3.1.1."13" – Note that the addition of SR 3.3.1.1.15 is related to DOC M13.)

The More Restrictive aspect is related to revising the CTS "actuation of the ... switch" to the ITS "Channel Calibration," which will involve verifying the actual switch setting. This difference is included in DOC M12.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.1.1-12

JFD DB3 (insert page B 3.3-8, insert page B 3.3-9)

Insert Function 2.b-1 (DB3) Bases provided on these pages for the APRM Neutron Flux - High (flow biased) addresses the safety analysis basis for the RPS Function. Insert page B 3.3-8 states that this Function is not (emphasis added) specifically credited in the safety analysis, whereas insert B 3.3-9 states that the Allowable Value of this Function is credited in the safety analysis and specifically confirmed for each operating cycle.

Comment: Clarify the need for both statements in proposed ITS Bases.

Licensee Response:

The two insert paragraphs refer to different analyses. The Bases will be revised to clarify that no credit is taken for RPS Function 2.b in the safety analysis except in the case of the thermal-hydraulic instability analysis.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.1.1-13

DB7 (STS page B 3.3-12)

Bases insert DB7 states that the Reactor Pressure-High trip is credited for generator load reject and main turbine trip events when initiated from low power levels (Reactor Pressure High is required to be operable in Modes 1 and 2). DB7 further states that at low power levels, e.g., less than 29% RTP, the Turbine Stop Valve Closure Function and the Turbine Control Valve Fast Closure Functions are not required to be operable.

Comment: The Bases added in DB7 infer that the modes of applicability for the Reactor Pressure High function (Modes 1 and 2) are not in agreement with TSV Closure and TCV Fast Closure specified applicability (≥ 29% RTP). Explain the Bases clarification provided by insert DB7.

Licensee Response:

At low powers (e.g., <29% RTP) the scram from the TSV and TCV is not required; however, the turbine generator can remain online (and trip with resultant pressure transient) below this power level. The TSV and TCV Fast Closure (turbine trip or main generator trip) provides a direct reactor scram when ≥ 29% RTP. When < 29% RTP, a turbine or main generator trip will not result in a direct scram, but should the pressure transient reach the setpoint for the Reactor High Pressure trip, a scram would occur (i.e., is credited to occur from the Reactor High Pressure trip). Since turbine operation below 29% RTP includes MODE 1 and MODE 2, the necessary applicability of the Reactor High Pressure trip is consistent with specifying MODE 1 and 2.

3.3.1.2 - SRM Instrumentation

RAI 3.3.1.2-1

3.3.1.2-1

No associated JFD or DOC

ITS propose to adopt SR 3.3.1.2.4.a, but not SR 3.3.1.2.4.b. This change to the ISTS is not evaluated.

Comment: Provide missing DOC and JFD.

Licensee Response:

DOC M7 will be provided to acknowledge adding the signal to noise ratio limitation for the 3 cps minimum count rate. However, JFD CLB1 is already provided to discuss not including SR 3.3.1.2.4.b. SR 3.3.1.2.4.b reflects additional flexibility that is not evaluated or justified by JAF.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.1.2-2

DOC L.1

ITS include required actions and associated completion times for one or more inoperable SRMs in Mode 2 with the IRMs on Range 2 or below.

Comment: Revise DOC L1 to include a safety basis discussion for adopting proposed ITS Required Actions A.1 and B.1 for specified plant conditions.

Licensee Response:

While DOC L1 does provide a limited discussion of the safety basis for the change, the Authority will revise DOC L1 to include additional discussion. This discussion will follow the rationale provided in the Bases for Required Action A.1 and B.1 as well as the previously provided safety basis.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

SECTION 3.3.2.1 - Control Rod Block Instrumentation

RAI 3.3.2.1-1
DOC L.7

Beyond Scope Issue (BSI) - change to CTS applicability
SR 3.3.2.1.4 is added to CTS Table 4.2.3 to verify that the RBM is not bypassed at Thermal Power >30% RTP and when a peripheral control rod is not selected every 92 days. Changing the CTS applicability by requiring the upscale RBM to be operable only above 30% RTP if a peripheral control rod is not selected is also a change to NUREG-1433, Table 3.3.2.1-1.

Comment: The Licensee and the Fitzpatrick Project Manager will address the proposed CTS change in a separate SE for this BSI.

Licensee Response:
{No action identified or requested at this time}

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.2.1-2

DOC M.1

SR 3.3.2.1.1

SR 3.3.2.1.1 is added to CTS Table 4.2.3 to verify that the RBM-inop Function is verified operable on a 92 day frequency.

Comment: Revise DOC M1 to justify the addition of the proposed SR, including the proposed SR frequency.

Licensee Response:

When a Function (i.e., RBM-Inop Function) is added, the addition of that Function's Surveillances, Actions, and Bases as well as the operability requirements are implicitly added and assumed part of the justification. The Authority will provide this understanding explicitly in a revised M1-DOC.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.2.1-3
CTS 4.3.B.3.a.4
DOC L.4, M.5

CTS 4.3.B.3.a.4 requires demonstration of the rod block function of the rod worth minimizer during startup, prior to the start of control rod withdrawal. The corresponding ITS SR 3.3.2.1.2 requires a channel functional test of the RWM every 92 days in Mode 2 and a Note to SR 3.3.2.1.2 delays the performance of the surveillance until 1 hour after any control rod is withdrawn at greater than or equal to 10% RTP. In addition, ITS SR 3.3.2.1.3 is added (see M5) to perform a channel functional test in Mode 1, but not until 1 hour after thermal power is greater than or equal to 10% RTP. These changes, consistent with the STS, are justified in DOC L.3 and JFD DB2, based on reliability analysis results documented in NEDC-30851-P-A.

Comment: The extended SR Frequency based on topical report NEDC-30851-P-A requires prior review and approval by the staff for use in ITS. Provide a license amendment citation for the referenced analysis.

Licensee Response:

The requested review is made within the ITS Conversion submittal, DOC L3. No separate license amendment request has been made.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.2.1-4

CTS 3.3.B.3.d

DOC LA.4

The LA.4 DOC justifies relocating CTS reporting requirements to the ITS Bases for any plant startup made without the RWM operable. It is not appropriate to include requirements, including specifying required reports, in the Bases that change TS requirements.

Comment: Either propose to retain the reporting requirements in LCO 3.3.2.1 or propose an L-DOC to justify deleting the CTS requirement.

Licensee Response:

The Authority will revise the LA4-DOC to remove reference to relocating the Report to the Bases. In its place, a new L8-DOC will be provided that justifies elimination of the special reporting requirement.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.2.1-5

CTS 4.2.C (Table 4.2-3)

DOC L2

DOC L2 states that performing an instrument check is impractical and that setpoint renulling occurs automatically for the RBM functions without stating regulatory reasons for deleting these CTS testing requirements.

Comment: Provide additional explanation giving a safety basis for not requiring an Instrument Channel Check of the RBM Upscale and Downscale Functions once per day.

Licensee Response:

As stated in DOC L2, at the time a control rod is selected for movement the RBM automatically readjusts its input and output readings (different LPRM inputs [associated with the rod selected] and re-normalization), i.e., "renulling." At this time, the operator is in direct observation and monitoring of the control rod movement and RBM response; in essence, performing a continuous instrument check during the time the RBM is performing its safety function (i.e., during control rod withdrawal). A routine daily check of the RBMs during static conditions, prior to the renulling that occurs when a control rod is selected for movement, adds no assurance of safety.

This additional discussion will be added to DOC L2.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.2.1-6

CTS 4.3.B.5

DOC L6

CTS specify requirements to perform an RBM functional test prior to withdrawal of designated rod(s) when a limiting control rod pattern exists. L6 justifies deleting testing requirements because performing a functional test due to one channel being inoperable does not increase the reliability of the other channel.

Comment: Explain the nexus between DOC L6 and CTS testing requirements proposed to be deleted.

Licensee Response:

DOC L6 will be revised to address the elimination of a functional test when a limiting rod pattern exists, and not relate it to any inoperability in a RBM.

Section 3.3.2.2 - Feedwater and Main Turbine High Water Level Trip Instrumentation

RAI 3.3.2.2-1

CTS Table 3.2-6
DOC A6

CTS Table 3.2-6 lists the "Trip Level Setting" for Reactor Vessel Water Level - High as ≤ 222.5 inches. The corresponding ITS SR 3.3.2.2.3 lists the "Allowable Value" for this setting at ≤ 222.5 inches. It is not clear that the CTS "Trip Level Setting" is equal to the ITS "Allowable Value." It is assumed that the CTS value is the actual device actuation setpoint and the ITS Allowable Value is the limit on the actuation setpoint which includes all instrument channel uncertainty, as defined in ITS 1.0.

Comment: Provide additional discussion and justification for the change including verification that the ITS value does not result in a change to the actual CTS limit.

Licensee Response:

{Response deferred – schedule for reply to be discussed separately.}

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.2.2-2

CTS Table 42-6, Note 2

DOC A4

Note 2 discusses the CTS requirement to inject a simulated signal into the measurement channel as close to the sensor as practicable to satisfy the requirements of the instrument channel functional test. DOC A4 addresses deleting this portion of the Table notation. Note 2 also includes a statement that the instrumentation is exempt from the instrument channel functional test definition. This statement is also deleted but DOC A4 does not evaluate the change.

Comment: Provide additional discussion for proposed changes.

Licensee Response:

The DOC A4 discussion implicitly addresses the entire CTS Note 2. The CTS Note states that the defined instrument channel functional test does not apply, and provides a statement of the testing that does apply. DOC A4 relates the stated testing "allowance" does satisfy the "Instrument Channel Functional Test." The DOC goes on to note that no exception is or was necessary since the stated "allowance" is consistent with the definition both in the CTS and the ITS. No change to DOC A4 appears necessary.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

Section 3.3.3.1 - Post Accident Monitoring Instrumentation

RAI 3.3.3.1-1

CTS Table 3.2-6, Note K
DOC LA3

CTS Table 3.2-6, Note K specifies that the primary containment atmosphere shall be continuously monitored for hydrogen and oxygen (H2/O2) when in the Run and Startup/Hot Standby modes; except, when the Post-Accident Sampling System (PASS) is to be operated, the containment atmosphere monitoring system (CAMS) may be isolated for a period not to exceed 3 hours in a 24-hour period. CTS require 1 of 2 containment atmosphere H2/O2 monitoring channels to be operable. The proposed ITS relocate the specific operational allowance to periodically isolate the monitoring system during PASS operation to the Bases. The proposed Bases states that the hydrogen/oxygen monitor is still considered operable during the realignment.

Comment: The staff notes that the Bases cannot be used to change TS LCO operability requirements. Thus, if CAMS is isolated to operate PASS and the CAMS cannot perform its intended function and the staff has not credited PASS to replace CAMS then the CAMS H2/O2 channel(s) are inoperable and the TS Actions should be entered. The CTS requirements added to the ITS Bases as part of LA3 should be restructured to be included in the LCO or otherwise dispositioned with an L-DOC.

Licensee Response:

In conjunction with the Authority's response to RAI 3.3.3.1-4 (revising the PAM Specification to require only one division in accordance with CTS), DOC LA3 will be deleted. Furthermore, a new M-DOC will be provided that will delete the flexibility provided by CTS Footnote K. The Technical Specifications and associated Actions will provide sufficient controls for any situation where operation of PASS renders any H2/O2 monitor inoperable.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.3.1-2

CTS Table 3.2-6, Note K

DOC L5

CTS Table 3.2-6, Note K specifies that the primary containment atmosphere shall be continuously monitored for hydrogen and oxygen (H2/O2) when in the Run and Startup/Hot Standby modes; except when the Post-Accident Sampling System (PASS) is to be operated, the containment atmosphere monitoring system (CAMS) may be isolated for a period not to exceed 3 hours in a 24-hour period. CTS require 1 of 2 containment atmosphere H2/O2 monitoring channels to be operable. The proposed ITS delete the maximum acceptable time period for operating with the CAMS isolated.

Comment: The staff notes that CTS Table 3.2-6, Note K states that when the PASS is in operation the CAMS may be isolated. Thus, Note K indicates that the design of PASS will render both CAMS inoperable when PASS is placed into operation. If so, the L5 justification for deleting time limits for operating PASS based on a second channel of CAMS that is required to be operable should be reevaluated. Clarify DOC L5.

Licensee Response:

In conjunction with The Authority's response to RAI 3.3.3.1-4 (revising the PAM Specification to require only one division in accordance with CTS), DOC L5 will be deleted. Furthermore, a new M-DOC will be provided that will delete the flexibility provided by CTS Footnote K. The Technical Specifications and associated Actions will provide sufficient controls for any situation where operation of PASS renders any H2/O2 monitor inoperable.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.3.1-3

ITS Actions Notes

X1

The proposed Actions Note 2 requests separate condition entry for PCIV position indication.

Comment: Show that the TS and Bases changes are consistent with the approved TSTF.

Licensee Response:

The ITS will be revised to incorporate TSTF-295 with regard to the format for establishing the allowance for separate condition entry.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.3.1-4

ITS Table 3.2-6, Note A, Note F

DOC M1

The DOCs used to justify translation of CTS Note A into ITS Actions do not consider the difference between the CTS and ITS required channels operable. For the CTS, only 1 of 2 available channels are required by TS. Thus, for one inoperable channel no CTS actions are required. For the second inoperable CTS channel, Note A allows 30 days to repair or otherwise place the plant in cold shutdown. ITS provides separate required actions for one channel inoperable, and for two channels inoperable for each TS function.

Comment: Revise DOCs, as appropriate, to address differences between the CTS and ITS required channels. The staff maintains that ITS Condition A and C are new requirements for channels not previously included in TS. The staff also maintains that Condition C is a more restrictive change, requiring a 7 day repair time in place of a 30 day repair time.

Licensee Response:

The Authority will revise the conversion of the PAM Specification to more closely reflect CTS requirements (only require one of two PAM channels and provide a 30 day AOT for a required channel inoperable). DOC L4 justifying a relaxation in actions for both containment radiation monitors inoperable will be retained.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.3.1-5

CTS Table 3.2-6, Note F

DOC LA2

DOC LA2 discusses relocation of details related to plant operation to the TRM. The changes relocate remedial actions to perform alternate sampling and analysis for inoperable PAM instrument channels during the CTS 30 day allowed outage time.

Comment: Revise DOC LA2 to provide a safety basis justification for the proposed changes.

Licensee Response:

DOC LA2 will be revised by replacing 3rd and 4th sentences with:

... The remedial action of CTS Table 3.2-6, Note F, requires monitoring during normal plant operation, while the safety function for the PAM instrument is to provide information in a post-accident condition. Additional monitoring during normal operations does not provide an increased level of safety for the post-accident function. The increased monitoring during normal operations is appropriate, and may provide additional assurance of meeting SR 3.6.3.1.1 (primary containment oxygen concentration), but since this monitoring is not a compensatory measure for the PAM safety function, its relocation will not have any negative safety impact.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.3.1-6

CTS Table 3.2-6, Note K

DOC LA3, DOC L5

CTS Table 4.2-8 requires instrument checks on a daily frequency. ITS SR 3.3.3.1.1 extends the Frequency of these surveillances to 31 days based on NEDO-30851-P-A. The 31 day frequency is consistent with the STS.

Comment: Provide a license amendment citation for the referenced analysis.

Licensee Response:

<<Above discussion and comment are not consistent with referenced Specification and DOCs. The following addresses the discussion and comment – not the references.>>

The Frequency extension of CTS 4.2-8 from daily to every 31 days is not based on NEDO-30851. DOC L6 was provided to justify this Frequency extension. Neither this DOC, its associated NSHC, or the Bases (NUREG or IST) reference the NEDO. As such, the Authority requests the Staff reconsider this request.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.3.1-7

CTS Table 3.2-6, Note K

DOC LA3, DOC L5

ITS Table 3.3.3.1-1, Function 7 is added to address PCIV Position. According to ISTS Table 3.3.3.1-1, Function 8, PCIV Position, footnotes (a) and (b) modify the Function operability requirements. The addition of footnotes (a) and (b) are not discussed in the submittal.

Comment: Provide the applicable change documentation.

Licensee Response:

<<Above discussion and comment are not consistent with referenced Specification and DOCs. The following addresses the discussion and comment – not the references.>>

DOC M4 will be clarified to include a reference to the ITS footnotes (a) and (b).

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.3.1-8

CTS Table 3.2-6, Note K

DOC LA3, DOC L5

Beyond Scope Issue (BSI)- changes to TS limits

In the retyped (smooth copy) ITS Table 3.3.3.1-1, Function 10, Suppression Pool Water Temperature operability is modified by footnote (c), which states: "A channel requires 15 of 16 RTDs to be OPERABLE." This results in a CTS change and a deviation from the STS.

Comment: Inadequate or no discussion or justification is included for the CTS change or the STS deviation. Provide applicable change request documentation. (Licensee to discuss schedule w/ PM for this BSI)

Licensee Response:

<<Above discussion and comment are not consistent with referenced Specification and DOCs. The following addresses the discussion and comment – not the references.>>

The ITS Markup is not consistent with the clean typed version of the ITS. Specifically, footnote (c) to the Table does not exist in the ITS M/U but does exist in the ITS clean typed version. Accordingly, there is no JFD for the footnote. However, the ITS Bases "Insert LCO-10" on page B3.3-69a, provides the justification for the CTS and ITS change.

The Authority will provide an L DOC and a JFD, which will be consistent with the information provided in the Bases insert. This will provide the basis for concluding that with 15 of 16 RTDs operable in each instrument channel, each tee-quencher will have at least two operable RTDs monitoring its local temperature at all times. The Authority will also revise the ITS Markup to be consistent with the retyped ITS.

Finally, the Authority will make changes appropriate for adopting approved TSTF-295 (addressing separate Condition entry).

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.3.1-9

CTS Table 3.2-6

DOC L7

Beyond Scope Issue (BSI)- change to TS actions

Staff to perform a review of the safety basis to determine the acceptability of proposed DOC L7 which changes CTS (ITS Functions 15-18) remedial actions if channels are not restored to operable status.

Comment: The staff considers this as a BSI (Licensee to discuss schedule with PM and provide applicable change request.)

Licensee Response:

<<NOTE – Reference to Functions 15 – 18 are CTS #s; not ITS #s (as stated)>>

The Authority will discuss the schedule with the Project Manager regarding this BSI after further review of any outstanding technical issues with the Staff regarding this proposed change.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.3.1-10

CTS Table 3.2-6

DOC M4

Beyond Scope Issue (BSI) - change to TS actions

Staff to perform a review of the safety basis to determine the acceptability of proposed remedial actions for ITS Table 3.3.3.1-1, Function 2.c, Reactor Vessel Water Level, Refueling Zone.

Comment: Licensee to provide applicable change request and discuss schedule with PM for this BSI.

Licensee Response:

The proposed addition of Function 2.c will be removed. This Function (Refueling Zone Water Level) is neither a Type A nor a Category 1 instrument (refer to Bases "Insert LCO-2"). As such, it is not intended or required to be included in the ITS (and also was not included in CTS). Associated references to this Function in DOC M4 will be removed.

SECTION 3.3.3.2 - Remote Shutdown System

RAI 3.3.3.2-1

CTS 3.2.J.3.a
DOC A3

An explicit CTS requirement is deleted. The option to place the component actuated by the control circuit in the safe shutdown configuration (CTS 3.2.J.3.a) is deleted, retaining the CTS 3.2.J.3 requirement to restore the control circuit to operable status.

Comment: The DOC does not include sufficient supporting documentation to conclude this proposed change is an administrative change to CTS.

Licensee Response:

The submittal will be revised to incorporate the allowance of CTS 3.2.J.3.a explicitly in the Actions for ITS 3.3.3.2. As such, DOC A3 will be deleted.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.3.2-2

CTS 3.2.J.2.b

DOC LA1

The staff notes that the Bases cannot be used to change TS LCO operability requirements. Thus, the Bases cannot contain the proposed allowance to approve use of alternate channels or circuits for required channels or circuits.

Comment: Revise the submittal (LA1 and L1)to provide justification for deleting all CTS 3.2.J.2.b requirements.

Licensee Response:

DOC LA1 will be deleted and DOC L1 will be revised to address all the CTS 3.2.J.2.b requirements. The allowance to have and utilize alternate controls is consistent with the essence of the NUREG-1433 presentation of the Remote Shutdown System requirements (refer to the next-to-last paragraph of the LCO Bases). When a required instrument or control is inoperable, the 30-day Completion Time provides time to establish operability of any one of the acceptable alternates. Elimination of CTS 3.2.J.2.b eliminates an apparent time limit to restore the primary alternate, even though an acceptable alternate is operable. The change results in elimination of a plant shutdown if the primary instrument or control is not restored within 90 days. Since an acceptable alternate is available and operable within 30 days (as assured by Required Action A.1), the JAFNPP corrective action program provides adequate controls to assure prompt restoration of the primary instrument or control without imposing a 90 day plant shutdown limit.

RAI 3.3.3.2-3

CTS Table 3.2-10

DOC LA2

Beyond Scope Issue (BSI)

Proposed relocation of RSS components to TRM changes the ISTS format which includes the list of RSS components in the Bases.

Comment: Revise the submittal to adopt ISTS as approved by the TSTF and the staff or provide applicable change request for this BSI. (Licensee to discuss schedule with PM on this BSI)

Licensee Response:

The Authority will revise the submittal to relocate the Table of RSS components to the ITS Bases (instead of the TRM) in accordance with TSTF-266.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

SECTION 3.3.4.1, ATWS-RPT Instrumentation

RAI 3.3.4.1-1

CTS Table 3.2-7
A3/ CLB1

Beyond Scope Issue (BSI) - change to LCO applicability

Channel configuration is changed to 4 channels in one trip system from 2 channels per trip system representing a change to the CTS and the STS format. The ITS Bases describe ATWS-RPT to be a one-out-of-two taken twice trip logic with two channels of level and pressure powered by division I and the redundant channels powered by division II, yet the Bases state ATWS-RPT consist of one trip system.

Comment: Provide additional discussion to support the proposed changes to CTS and STS, or provide applicable change request for this BSI. (Licensee to inform the PM early if this item is considered a BSI).

Licensee Response:

The Authority will revise the ITS and Bases to retain the CTS presentation of channels and trip systems.

Specifically, the ITS Specification and its associated Bases will be revised to be consistent with the channel configuration as presented to the Staff by the Authority's Application for Amendment dated July 9, 1991 and as approved by the Staff in License Amendment Number 172, dated October 29, 1991. The referenced License Amendment revised CTS Table 3.2.7, titled "Instrumentation That Initiates Recirculation Pump Trip," and Table 4.2-7, titled "Minimum Test and Calibration Frequency for Recirculation Pump Trip," to reflect a modification to the Reactor Water Recirculation Pump Trip system logic. The logic was changed as part of the modifications required by 10 CFR 50.62, titled "Requirements for Reduction of Risk from Anticipated Transients Without Scram (ATWS) Events for Light-Water-Cooled Nuclear Power Plants."

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.4.1-2

CTS Table 3.2-7, Footnote *

DOC A4

DOC A4 states that CTS Footnote *, specifying that an inoperable channel or trip system need not be placed in the tripped condition where this would cause the Trip Function to occur, is clarified by ITS 3.3.4.1 Required Action A.1 which specifies a channel is to be restored to operable status. DOC A4 states that the proposed ITS change is consistent with current requirements since the alternative actions in the CTS is to place the reactor in the startup/hot standby mode within 6 hours if the Required Actions are not performed.

Comment: Explain the equivalence between CTS and ITS requirements.

Licensee Response:

DOC A4 will be clarified as follows:

A4 CTS Table 3.2-7 Note 1 requires an inoperable channel or trip system to be placed in trip, but is modified by Footnote (*) which specifies that an inoperable channel or trip system need not be placed in the tripped condition where this would cause the Trip Function to occur. Utilizing the Footnote (*) allowance, the resultant requirement is to restore the channel to operable status within the same time allowed to trip the channel. For clarity this CTS presented option (trip or restore) is presented as two ITS actions: Required Actions A.1 and A.2. This change is considered administrative since there are no changes in any technical requirements. This change is consistent with NUREG-1433, Revision 1.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.4.1-3

CTS Table 3.2-7

DOC A5

ITS requirements which limit remedial actions to restoring the inoperable ATWS-RPT channel to operable status if the channel is inoperable due to an inoperable pump trip breaker have been added to CTS requirements.

Comment: Clarify DOC A5 to show how the additional action given by ITS Required Action A.2 Note is consistent with CTS.

Licensee Response:

Since the prohibition of placing a channel in a tripped condition if the inoperability of an instrument channel is due to an inoperable breaker is not explicitly stated in the CTS, DOC A.5 will be revised to an M DOC.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.4.1-4

CTS Table 3.2-7

A7

CTS Table 3.2-7 lists ATWS-RPT Function "trip level settings." The corresponding ITS SR 3.3.4.1.4 lists these "trip level settings" as "Allowable Values". It is not clear that the CTS "trip level settings" are not the physical trip actuation setpoints set into the ATWS-RPT actuation devices. Furthermore, it is assumed that the "Allowable Values" listed in ITS SR 3.3.4.1.4 are the values derived from the setpoint methodology analyses that include instrument channel uncertainties associated with the measured parameter and the installed instrumentation.

Comment: DOC A.7 indicates that the CTS values are treated consistent with the ITS values when determining Function or Channel OPERABILITY, therefore, it is assumed that the change is an acceptable Administrative Change. However, a more complete explanation of the defined terminology is required to ensure the CTS "trip level settings" and the ITS "Allowable Values" are both the administrative (TS limit) values placed on the trip actuation setpoint, that includes all applicable instrument channel and measurement uncertainties.

Licensee Response:

{Response deferred – schedule for reply to be discussed separately.}

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.4.1-5

CTS Table 3.2-7

DOC L1, L2

CTS Table 3.2-7 provides allowable out-of-service times for single and multiple channel ATWS-RTP inoperability conditions. The CTS AOTs associated with the ATWS-RPT instrumentation are changed consistent with the STS.

Comment: DOC L.1 provides justification for the changes based on the result of analysis GENE-770-06-1-A and states that the Fitzpatrick design is similar to the BWR-4 design used in the analysis. Provide a license amendment citation for the referenced analysis.

Licensee Response:

The requested review is made within the ITS Conversion submittal. No separate license amendment request has been made. The following is also provided in support of the requested Staff review:

GENE-770-06-1-A is an NRC approved Licensing Topical Report , which was the basis for certain changes in CTS Amendment 227 (refer to NRC Safety Evaluation Report, letter form E. Carpenter, Jr., NRC. to W. Cahill, Jr., NYPA, "Correction to Amendments No. 227 and 228 for James A. Fitzpatrick Nuclear Power Plant (TAC NO. M90657 AND M93010)", dated December 11, 1995).

The Authority will revise the submittal to provide confirmation of the plant-specific applicability of GENE-770-06-1-A for these changes.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.3.4.1-6

CTS Table 3.2-7

DOC None

The ATWS Reactor Pressure - High RPT setpoint is modified by Note 3 to CTS Table 3.2-7 according to the number of SRVs that are out of service. The corresponding ITS SR 3.3.4.1.4 changes the setting also but bases the changed setting on the number of SRVs that are OPERABLE.

Comment: This change is not discussed or justified. Provide change documentation for the CTS change.

Licensee Response:

The reference to DOC A1 is intended to address this technically equivalent, administratively reworded, revised presentation. For clarity, a separate A9-DOC will be prepared as follows:

A9 Since the JAF design includes 11 SRVs the CTS wording of "zero or one SRVs are out of service" is equivalent to the proposed ITS wording of "≥ 10 SRVs are OPERABLE" and the CTS wording of "two or more SRVs are out of service" is equivalent to the proposed ITS wording of "< 10 SRVs OPERABLE."

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

SECTION 3.5 - ECCS

Section 3.5.1 ECCS - Operating

RAI 3.5.1-1 ITS SR 3.5.1.5 and SR 3.5.1.12
JFD CLB5

SR 3.5.1.5 and proposed SR 3.5.1.12 address the LPCI inverters. However, there is no Conditions or Required Actions for inoperable inverters in these LCOs.

Comment: What are the appropriate Condition and Required Actions for an inoperable LPCI converter? These reasons need to be included in the ITS. JFDs may need to be revised as appropriate.

Licensee Response:

The LPCI MOV inverter (power supply) is by design a support component of the LPCI system. Any inoperable inverter will impact the operability of a LPCI subsystem, which does have Conditions and Required Actions specified in Specification 3.5.1. This relationship is also explicitly stated in the Bases for SR 3.5.1.5. Since, by virtue of the definition of operability, both the CTS required actions for an inoperable inverter and the NUREG-1433 actions for the same inoperable inverter result in declaring the affected LPCI subsystem inoperable (and no change in this regard is proposed by the Authority), there is no revision necessary and no additional JFD required.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

SECTION 3.5.2 ECCS - Shutdown

No comments.

SECTION 3.5.3 RCIC System

RAI 3.5.3-1 CTS 4.5.E.1.d, Flow Rate Test
DOC M3
ITS SR 3.5.3.5, SR 3.5.3.6
JFD DB3

The licensee proposed to divide the current requirement of CTS 4.5.E.1.d, "that RCIC delivers at least 400 gpm against a system head corresponding to a reactor vessel pressure of 1195 psig to 150 psig," into two separate Surveillance Requirements: SR 3.5.3.5 and SR 3.5.3.6. The JFD states that the brackets have been removed and the proper plant specific values have been provided. However, these values are altered from those in CTS. The JFD further states that these are "nominal values at rated conditions...very close to the lower range where RCIC is required to be operable...at the same time allows some flexibility to establish the condition."

Comment: The justification provided in DOC M3 and JFD DB3 do not support how these pressure ranges were derived and why these values are considered acceptable. Provide additional technical justifications for the derivation and acceptability of these values. Otherwise, this item will be treated as a beyond scope issue.

Licensee Response:

3.5.3 DOC M3 will be revised to more explicitly address how the stated pressure ranges were derived and why these values are acceptable. It was also noted that ITS SRs 3.5.3.5 & 6 proposed wording included a reference to "... of 1195 psig" and "... of 150 psig" that will be deleted in the revised submittal.

(Note: This RAI issue and resolution is also applicable to 3.5.1, HPCI testing; DOC M2 and SRs 3.5.1.8 & 9. These changes will also be made during the incorporation of RAI 3.5.3-1 reply.)

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

SECTION 3.5 - ECCS

Section 3.5.1 ECCS - Operating
Beyond Scope Issues (BSI) - JFD DB3, DB4

ITS 3.5.1, ECCS - Operating, INSERT ACTION A, INSERT ACTION B, ACTIONS C, E, and G, INSERT ACTION H, ACTIONS I and J

Comment: These modifications and additions to the STS are beyond the scope of the ITS conversion. They are neither conforming to the CTS nor adopting STS. Provide applicable change request documentation and inform the PM the schedule for this BSI issue.

Licensee Response:

The changes to the ISTS identified with JFD DB3 are generally consistent with an NRC approved change to NUREG-1433 (TSTF-318). As such, those changes are no longer "BSIs." The Authority will revisit the changes associated with JFD DB3 to ensure appropriate justification and consistency with TSTF-318.

The proposed changes associated with JFD DB4 were generally consistent with proposed changes to NUREG-1433 (TSTFs-223 and 224) that have been withdrawn. As such, The Authority will withdraw the changes associated with JFD DB4.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

Section 3.5.3 - RCIC System
Beyond Scope Issue (BSI) - CTS 4.5. E.1.e, Testable Check Valves
DOC M6
ITS SR 3.5.3.3 (Insert SR3-A)
JFD CLB1

The FREQUENCY added to ITS SR 3.5.3.3, "Once each startup prior to exceeding 25% RTP, " is beyond the scope of the ITS conversion review.

Comment: It is not contained in the CTS nor a part of the STS. Provide applicable change request documentation and its schedule for this BSI to the PM.

Licensee Response:
The Authority will revise the submittal to eliminate the proposed ITS SR 3.5.3.3. CTS 4.5.E.1.e will be justified for relocation to the TRM, without a change to the CTS Frequency. DOC M6 will be revised to delete reference to this surveillance, and a new LA-DOC will be provided.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

SECTION 3.7 - PLANT SYSTEMS
RAI 3.7.1-1

DOC L2
CTS 3.0.C
CTS 3.5.B.4
ITS 3.7.1 Actions D & E
STS 3.7.1 Actions D & E
TS Bases markup JFD DB2

In the event both RHRSW subsystems are inoperable for reasons other than one inoperable RHRSW pump in each subsystem (that is three or four RHRSW pumps could be inoperable), CTS 3.0.C requires a shutdown, because CTS 3.5 provides no action requirements to address this loss-of-function condition. In contrast, the STS in Action D permits 8 hours to restore one subsystem to operable status (i.e., to the level of degradation addressed by STS/ITS Actions A and C) before requiring a shutdown by Action E. ITS adopts this 8-hour allowance, but DOC L2 fails to explicitly address why this is acceptable in spite of the apparent difference between the FitzPatrick RHRSW design and the design assumed in the STS (Hatch). Specifically, as indicated in the markup of the STS Bases Background, the FitzPatrick design requires two, not one, RHRSW pumps to provide the required cooling capability (either two in one subsystem or one in each subsystem) to maintain safe shutdown conditions. Apparently, in the STS, one of the four RHRSW pumps is sufficient to maintain safe shutdown.

Comment: Revise DOC L2 to address why Action D is acceptable given the apparent design difference.

Licensee Response:

The stated premise of the NRC comment is that the ISTS is based on a design where only one RHRSW pump is necessary to maintain the required cooling capability. Per the NUREG-1433 Bases (which are based on the Hatch design) for the LCO, Required Action B.1, and Required Action D.1 there is a clear inference that two RHRSW pumps (in one subsystem, or one in each subsystem) are required for this minimum cooling requirement. The single NUREG-1433 Bases reference to one-pump capability is in the Background in the context of "to maintain safe shutdown conditions." This single reference to an analysis separate from the required post-LOCA function (which has not been identified for JAFNPP) is not believed to constitute the basis for the Action requirements.

Furthermore, the justification provided by DOC L2 equates the safety significance of both RHRSW subsystems being inoperable with the significance of inoperability of the systems supported by RHRSW. Based on the lack of identified design difference from the ISTS, it is requested that the NRC reconsider the acceptability of the justification provided by DOC L2.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.7.2-1
ITS SR 3.7.2.2

ITS adopts a new requirement to verify UHS temperature is ≤85°F in SR 3.7.2.2. However, FSAR sections 9.7.1.2 and 9.7.2.3 both appear to indicate the limit should be ≤82°F.

Comment: Revise the submittal to resolve this difference between the ITS and the FSAR.

Licensee Response:
The most recent FSAR update revised these sections. The FSAR currently reflects the 85°F temperature.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.7.2-2

Bases Insert BKGRD 3 (STS markup page B 3.7-8)

Recommend defining the term "frazil ice" in the Bases. In addition, the referenced insert includes two statements that may need clarification.

(a) "The capacity of these deicing heaters keeps the bars at approximately 34°F during periods when subcooling occurs and the plant is operating under normal conditions with the circulating water system in service."

Comment: Explain what is meant by subcooling in this context. Explain how the circulating water system operation impacts the ESW operation with respect to the deicing heaters.

(b) "The heating system has been designed to be very reliable and to ensure continuous plant operation and to mitigate the consequences of a design basis event."

Comment: Explain how this statement aids in understanding the basis for ITS 3.7.2

Licensee Response:

1. "Frazil ice" is a technical meteorological/hydrological term describing a type of suspended ice that forms in northern waters under certain conditions, and that can deposit on submerged structures such as intake bars. While including a definition in the Bases might be desirable, the nature of the phenomenon is sufficiently complex as to defy simple definition. For example, a typical glossary definition of frazil ice is:

   Frazil Ice : Fine spicules, plates, or discoids of ice suspended in water. In rivers and lakes, frazil is formed in supercooled, turbulent water.

   This, in turn, requires further exposition (e.g., the colloidal nature of typical frazil ice, a discussion of "frazil slush", etc.). For this reason, the Authority does not consider it desirable to include a definition of frazil ice in the Bases.

2. The term "subcooling" alludes to the fact that frazil ice forms in supercooled water (i.e., water subcooled below the normal freezing point without the formation of bulk ice). The Bases will be reworded for clarity.

3. FSAR Section 12.3.7 explains the relationship between frazil ice and Circulating Water System operation. This section states, in part:

   > "During plant shutdown conditions when the Circulating Water Pumps are not normally operating, the flow velocity of water into the intakes is so low that significant frazil ice is not drawn into the intake. When the Circulating Water Pumps are operating, the flow of water into the intake may draw in frazil ice which can form under certain meteorological and hydrological conditions."

   Since frazil ice will not be drawn into the intake without the Circulating Water Pumps in operation, buildup of frazil ice on the intake bars in not a concern when the Circulating Water System in not in service. Ice buildup on the intake bars, possibly restricting the ESW intake pathway, is not a concern under these conditions.

4. The sentence cited:

   > "The heating system has been designed to be very reliable and to ensure continuous plant operation and to mitigate the consequences of a design basis event."

   ... adds nothing to the understanding of ITS 3.7.2 and will be deleted.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.7.2-3

ITS SR 3.7.2.1 and associated Bases

ITS adds a surveillance requirement to verify ES pump screen well level ≥236.5 feet [above] mean sea level. According to STS markup Bases Insert BKGRD 3, minimum lake level would be about 243 ft elevation (above sea level).

Comment: Revise the bases (a) to explain the basis for SR limit and (b) to consistently refer to elevation, i.e., above mean sea level.

Licensee Response:

ITS SR 3.7.2.1 is based upon the design basis low water level for the UHS. FSAR Section 2.4.3.6 identifies the design basis low water level for Lake Ontario (the UHS) as "el. 236.5". The Bases reference to elevation 233 being "10 feet below minimum level" is in reference to the normal minimum level experienced at JAFNPP; not the minimum required level of 236.5 feet.

Lake Ontario is a regulated body of water, as described in FSAR Section 2.4.3.5. Actual minimum levels observed are greater than the design basis minimum. FSAR Section 2.4.3.6 further identifies the minimum levels actually observed on Lake Ontario, as compared with that postulated as a basis for the design minimum. FSAR Section 2.4.3.6 notes that the "lowest monthly mean water surface level recorded subsequent to the commencement of regulation of Lake Ontario by the St. Lawrence Power Project", a period of approximately 40 years, is el. 243.0.

As appropriate, the Authority will revise the Bases Background to clarify the reference regarding elevations.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.7.2-4

ITS 3.7.2 Actions

ITS Actions A and B are independent of each other. To preclude unlimited operation with the LCO not met by alternately entering and exiting two independent Actions associated with the same LCO, such as in proposed ITS 3.7.2, the STS would include an additional Completion Time for the Required Action to restore the inoperable feature to operable status.

Comment: Add a Completion Time of "14 days from discovery of failure to meet the LCO" to ITS Required Actions A.1 and B.1. Also explain these Completion Times in the Bases for these Actions.

Licensee Response:

Condition A of LCO 3.7.2 is associated with one inoperable SW subsystem while Condition B of LCO 3.7.2 is associated with one division of support for the UHS. This same layout is provided in NUREG-1433 (ISTS) Conditions A and C without necessitating a separate Condition to recognize a maximum "from failure to meet the LCO" restriction. This is acceptable given that complete safety function is maintained while concurrently in ITS 3.7.2 Conditions A and B (assuming no additional single failure). Since the generic ISTS does not impose this additional restriction, The Authority is not proposing to create this Condition.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

There were no comments on the non-adoption of STS 3.7.4

There were no comments on ITS 3.7.3 (STS 3.7.4)

There were no comments on ITS 3.7.4 (STS 3.7.5)

There were no comments on ITS 3.7.5 (STS 3.7.6)

There were no comments on ITS 3.7.6 (STS 3.7.7)

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.7.7-1 *(Part 1)*
DOC M1
DOC LA1
ITS SR 3.7.7.1
DOC L1, L2
CTS 3/4.10.C

ITS requires a minimum of 21 ft 7 inches of water (above the top of the fuel) in the SFP and requires verifying this every 7 days, but only when irradiated fuel is being moved in the spent fuel storage pool. The CTS requires 33 ft of water in the SFP (about 17 feet above the top of the fuel) and requires verifying this level daily.

(1) DOC LA1 states that the 21 ft 7 inches required by the ITS assures that the a refueling accident meets UFSAR 14.6.1.4. This section of the FSAR provides no information on the assumed SFP level during a refueling accident. The only reference to SFP level given in the FSAR as being assumed for a refueling accident is the "normal level of 25 feet" found in section 9.3.5.

Comment: Revise the submittal with adequate justification for the 21 ft 7 inches level limit.

Licensee Response:

1. The language in the FSAR is imprecise in its discussion of SFP level. The "25 feet nominal depth of water above the stored fuel" in FSAR Section 9.3.5 (cited in the RAI) is an example. The actual depth of water with the SFP at normal level is 22 ft. 2 in. above the bails (the reference point used in ITS for fuel stored in SFP racks), or 24 ft. 2-3/4 in. above active fuel. A level of 25 feet (above the bails) would result in overflowing the SFP onto the refuel floor.

2. FSAR Section 14.6.1.1 characterizes postulated accidents involving dropped fuel assemblies as follows:

	Accident Category	Design Basis Accident
	...	...
c.	Accidents that result in radioactive material release directly to the secondary containment with the primary containment initially intact.	Stuck open relief valve Steam line break in the secondary containment Fuel drop accident in the spent fuel pool
d.	Accidents that result in radioactive material releases directly to the secondary containment with the primary containment not intact.	Refueling accident (fuel assembly drops on core during refueling)

FSAR Section 14.6.1.1 further states:

> "An investigation of accident possibilities reveals that accidents in Category "c" are less severe than those in Categories "d" and "e". Category "c" includes two varieties of accidents: failures of the Reactor Coolant Pressure Boundary inside the secondary containment and failures involving fuel that is located outside the primary containment but inside the secondary containment. Similarly, the most severe accident of the second variety is the dropping of a fuel assembly into the fuel pool, but this results in a smaller radioactivity release to the environs than that resulting from dropping a fuel assembly on the fuel in the reactor vessel during refueling. Because the consequences of accidents in Category "c" are less severe than those resulting from similar accidents in other categories, the accidents in Category "c" are not described."

The FSAR thus characterizes a "fuel drop accident in the spent fuel pool" as a less severe accident than that described in FSAR Section 14.1.6.4 and one not requiring further discussion, as per the accident selection criteria described in FSAR Section 14.4.3. Although not explicitly discussed in the FSAR, this characterization must take into account both fuel pool geometry and plausible accident scenarios. The selection of a minimum level of 21' 7" does nothing to change either fuel pool geometry or accident scenarios. It merely adds a Technical Specification restriction on minimum fuel pool level for moving fuel, a Technical Specification restriction which currently does not exist.

3. Although not explicitly discussed in the FSAR, a fuel drop accident in the spent fuel pool is less severe than a refueling accident for a number of reasons, including the following:

   a. Two possible scenarios exist for a fuel drop in the SFP, a drop over fuel racks, or a drop in an unracked portion of the pool.

      1) For a drop in an unracked portion of the pool, no fuel rods could be broken other than those in the dropped assembly. This results in fewer failed fuel rods than for the refueling accident. Since the drop would be to the bottom of the fuel pool, a depth of water of >35 feet is involved. This scenario is clearly bounded by the refueling accident.

      2) In the case of a drop in the racked portion of the pool, the geometry involved limits the height of a postulated drop to 2 feet or less, as compared to a drop of 30 feet postulated for the refueling accident. Since the amount of energy available to cause fuel damage is directly proportional to the height of the postulated drop, a fuel drop accident in the spent fuel pool involves only about 7% of the kinetic energy available to cause fuel damage as that analyzed for the refueling accident, resulting in far less fuel damage. Further, rack geometry prevents the dropped assembly from simultaneously impacting four other assemblies, a condition of the refueling accident. This also makes a drop in the fuel pool much less severe.

4. Therefore, the fact that a fuel drop accident in the spent fuel pool is inherently much less severe than a refueling accident (as stated in FSAR Section 14.4.3), and that the specified 21' 7" does not establish new criteria for the accident, the Authority considers the criteria of FSAR Section 14.6.1.4 bounding.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.7.7-1 (*Part 2*)
DOC M1
DOC LA1
ITS SR 3.7.7.1
DOC L1, L2
CTS 3/4.10.C

(2) DOC L2 explains that the weekly frequency for checking pool level is acceptable because the level is maintained constant and because an alarm would alert operators before level dropped to the limit - implying that level is normally maintained above the 21 ft 7 inches level limit. However, DOC L1 indicates that unless fuel is being moved in the pool, the level may be maintained lower, but at or above the current limit (about 17 ft), a limit which is being moved to the FSAR.

Comment: Will the daily verification be retained in the FSAR for the lower limit? And is there a level alarm to alert operators should level approach the lower limit? Revise the submittal to discuss usual plant practice for maintaining and monitoring pool level.

Licensee Response:

1. The daily verification will not be retained in the FSAR. The CTS limit does not equate to a level at which the SFP would normally be maintained, and alarms would alert operators to an unexpected decrease in level well above this CTS value.

2. As noted in DOC LA1, the current CTS limit of 33 ft (equivalent to about 17 ft above the top irradiated fuel assemblies seated in the spent fuel pool storage racks) is not provided to satisfy the requirements of any design basis event, but rather is a value that ensures that both adequate cooling and shielding requirements of the fuel in the pool are met. The 33 foot value also does not equate to any level at which the SFP would normally be maintained, and in fact is more than three feet below the level identified in ITS 4.3.2 as the lowest to which an inadvertent SFP draining might plausibly occur. The SFP is maintained at a normal operating level of El. 368' 6" (+3,-2 in.), equivalent to 22' 2" (+3, -2 in.) above fuel stored in the pool. A SFP low-level alarm is received at elev. 368' 2", requiring entry into an Abnormal Operating Procedure, which requires restoration of SFP level to the normal control band. Further lowering of level would result in additional alarms from the SFP Cooling System, whose suction invert is at level 368' 1". With the refueling gates in place, lowering SFP level below that specified in ITS 4.3.2 would require the installation and use of temporary pumps. Thus, the SFP would not be maintained at a level approaching the CTS limit, except during maintenance activities with attendant special administrative controls.

3. DOC L2 will be revised to provide this additional information.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI CTS 3/4.11.C-1
DOC LA1L
CTS 3/4.11.C

(1) The CTS requirements for the battery room ventilation system are being moved entirely to the TRM. This appears to be an R-type change rather than an LA-type change.

Comment: Revise the submittal with the correct classification for this specification relocation.

(2) DOC LA1 incorrectly references CTS 3/4.9.D (diesel generator operability in Modes 4 and 5) but should reference CTS 3/4.9.E (battery operability)

Comment: Correct the reference.

(3) The Cooper Nuclear Station ITS Safety Evaluation addressed relocation of the battery room ventilation as follows: (See RAI CTS 3/4.12.D and 3/4.12.D - R.1 Battery Room Ventilation for the Cooper Station ITS issue.)

The requirements in CTS 3/4.12.D concerning operability and testing of the battery room exhaust fans are proposed to be relocated to the TRM. This system is not assumed to function during an accident nor does it act to mitigate the consequences of an accident. The control building essential ventilation system provides ventilation flow to essential areas of the control building during emergency conditions. The battery room ventilation system was designed only to ensure the removal of hydrogen generated by the station batteries, a function no longer necessary due to the use of lead-calcium cells which do not generate significant amounts of hydrogen. The operability and testing requirements contained in CTS 3/4.12.D are not required to be included in the ITS to provide adequate protection of the public health and safety. Thus, CTS 3/4.12.D does not meet any of the criteria in 10 CFR 50.36 and may be relocated out of the CTS. Any changes to these requirements regarding the battery room exhaust fans after they are relocated to the TRM will require a safety evaluation pursuant to 10 CFR 50.59. Therefore, under 10 CFR 50.59, sufficient regulatory controls exist to ensure continued protection of the public health and safety, and the relocation of the CTS requirements for the battery room exhaust fans to the TRM is acceptable."

DOC LA1 seems to imply that the ventilation system is required to maintain proper temperature in the battery room. It seems to say that if the ventilation system is inoperable, the associated battery would be declared inoperable, even if the temperature in the room is acceptable.

Comment: Review the basis for this relocation in light of the relocation justification for the Cooper battery room ventilation system, and verify whether an operable ventilation system is required for battery operability. Revise the submittal based on this review as appropriate.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

Licensee Response:

(1) Without the battery room ventilation system, the post-accident electrolyte temperature could (in a worst-case scenario) become too cold with a resultant reduction in battery capacity. Since the battery room ventilation is credited for a necessary post-accident support function (supporting battery and battery charger operability), it meets the "split criteria." As such, it would not be relocated by an "R" type change.

(2) The incorrect reference is to be revised to "3/4.11.C" and not the NRC suggested "3/4.9.E." The reference is to the relocated Specification that is not needed to be included in the ITS since it is appropriately controlled by the definition of Operability and the relocated details. This reference is therefore more appropriately made to the relocated CTS 3/4.11.C.

(3) It appears that Cooper credits the control building ventilation system to support its battery and/or charger and not a separate battery room ventilation system. Since the JAFNPP design and safety analyses do not credit a system other than the battery room ventilation system, the Cooper example is not applicable to the JAFNPP ITS conversion. Furthermore, as a support system required for post-accident battery and charger operability, inoperability of the battery room ventilation system could result in the inability to maintain the necessary minimum DC electrical equipment operable as required to mitigate an accident – even if normal operation room temperature was within limits. Therefore, without the necessary capability to support a worse-case event when battery room ventilation is inoperable, the battery must be considered inoperable.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

SECTION 3.10 - SPECIAL OPERATIONS

RAI 3.10-1

ITS 3.10.1
DOC LA1 and DOC L2
TYPOs

Comment: The seventh sentence in DOC LA1 that reads, "A minimum temperature limit of approximately 200°F...", should read, "... approximately 212°F...". The third sentence in DOC L that reads, "... reactor coolant temperature is ≥212°F ...", should read "... reactor coolant temperature is >212°F ...".

Licensee Response:

Based on Revision "C" to the Fitzpatrick ITS submittal, these typos no longer exist.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.10-2

Bases ITS 3.10.1 Background

JFD X2

The fourth paragraph on hydrostatic testing has been deleted because it is covered adequately in B 3.4.[11] (P/T Limits), and it is an unnecessary level of detail for the Bases.

Comment: The detail of the deleted paragraph is not in B 3.4.[11] on P/T Limits. Explain why the detail is excessive and submit a TSTF change to correct the STS Bases.

Licensee Response:

JFD X2 will be revised as follows:

Bases discussion is made more generic to accommodate future changes to required test conditions. The rationale for the temperature shifts required for performing hydrostatic testing is outlined in the 3rd paragraph of the 3.10.1 Bases Background Section. The paragraph deleted was providing specific hydrostatic test conditions which are required by Specification 3.4.9. As such, this detail is unnecessary here.

Since the change to the Bases reflects a plant-specific request, and does not reflect correction of an error, it would not meet the threshold for generic (TSTF) change.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.10-3

Bases ITS 3.10.1 LCO

JFD X3

The last sentence of the first paragraph of the LCO section of the Bases is deleted in the ITS because it incorrectly states that the ASME inservice test requires the S/RVs to be gagged.

Comment: Submit a TSTF to correct the STS.

Licensee Response:

The Authority will initiate an appropriate change to the ISTS.

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.10-4

ITS 3.10.3 Single Control Rod Withdrawal-Hot Shutdown (JFD X1), and
ITS 3.10.4 Single Control Rod Withdrawal-Cold Shutdown (JFD X1)
Bases 3.10.3 (JFD X2)
Bases 3.10.4 (JFD X2)

The ITS specifications for single control rod withdrawal in modes 3 and 4 have added the requirement to meet LCO 3.3.8.2 on RPS Electrical Power Monitoring in Mode 5 when in these Special Operations specifications.

Comment: The absence of the requirement to meet LCO 3.3.8.2 when entering ITS 3.10.3 and ITS 3.10.4, appears to be an oversight in the STS. Submit a TSTF to correct the STS.

Licensee Response:

This issue was addressed by the BWROG, which resulted in TSTF-320 (currently under NRC review). However, the details of the BWROG approved TSTF-320 did not include the change shown in the Fitzpatrick submittal. As such, this change to ITS 3.10.3 and 3.10.4 will be removed, restoring the wording to match ISTS.

NOTE: Similarly, the change to remove MODE 3 and 4 from the Applicability of ITS 3.3.8.2, RPS Electric Power Monitoring, will be retracted (MODE 3 will be added similar to the presentation of MODE 4 in the Applicability of ITS 3.3.8.2).

NYPA Responses to NRC Request for Additional Information Regarding Improved Technical Specifications Sections 2.0, 3.1, 3.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.5, 3.7 and 3.10

RAI 3.10-5

ITS 3.10.5 Required Action A.1

JFD X1

The ITS deletes the word "mechanism" from STS 3.10.5 Required Action A.1 since the removal of the control rod is also permitted.

Comment: Submit a TSTF to correct the STS.

Licensee Response:

TSTF-296 addresses issues that include clarification of the applicability of LCO 3.10.5 to removal of the control rod and well as removal of the CRD mechanism. A revision to TSTF-296 will be submitted.