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NewYorkPower Authority

Michael J. Colomb
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June 30, 2000
JAFP-00-0141

United States Nuclear Regulatory Commission
Attn: Document Control Desk
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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 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0, and 5.0

References:

1. NRC Letter to J. Knubel (NYPA), Request for Additional Information Regarding Sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.3.9, 3.4, 3.6, 3.8, 3.9, and 5.0 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

3. NYPA Letter to NRC, Response to Request for Additional Information Regarding Proposed Improved Technical Specifications, JPN-00-004 dated February 11, 2000

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). In Reference 3 the Authority committed to respond to those requests for additional information (RAIs) regarding ITS sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0, and 5.0 by June 30, 2000.

Attachment 1 to this letter contains the Authority responses to the RAIs discussed above except for certain RAIs that concern: 1) instrumentation allowable values or the instrument setpoint methodology and 2) ventilation charcoal filter testing and Generic Letter 99-02. Responses to those RAIs will be provided at a later date consistent with a telephone conference with members of the NRC staff held on June 29, 2000.

A001

Attachment 2 contains the list of commitments contained in attachments 1 and 2. Attachment 3 contains plant drawing (FM-19A, Revision 37) which is referenced in RAI 4.0-1.

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

Very truly yours,

Michael J. Colomb
Site Executive Officer

MJC:WVC:las
Attachments as stated

Cc:

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NYPA Response to NRC Request for Additional Information
Regarding Improved Technical Specifications
Sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0, and 5.0

SECTION 1.0, USE AND APPLICATION

1.0-01 CTS 1.0.U. Thermal Parameters, 1. Minimum critical power ratio (MCPR), and 2. Fraction of Limiting Power Density

There is no DOC which discusses the changes made to these definitions.

Comment: Provide a proper DOC for these changes.

JAFNPP Response:

1. The Authority will provide proper DOCs for the changes to CTS 1.0.U.1 and 1.0.U.2.

**NYPA Response to NRC Request for Additional Information
Regarding Improved Technical Specifications
Sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0, and 5.0**

1.0-02 CTS 1.0 Radiological Effluent Technical Specifications, A. Dose Equivalent I-131

There is no DOC which discusses the changes made to this definitions.

Comment: Provide a proper DOC for these changes.

JAFNPP Response:

1. Essentially the same changes to CTS RETS 1.0.A were approved as part of CTS Amendment 261.

2 The Authority will revise the ITS submittal to reflect CTS Amendment 261 (and thus make the changes requested unnecessary).

**NYPA Response to NRC Request for Additional Information
Regarding Improved Technical Specifications
Sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0, and 5.0**

1.0-03 ITS 1.1, Emergency Core Cooling System (ECCS) Response Time
JFD CLB1

The licensee proposes not to adopt the definition of ECCS Response Time. The justification provided in JFD is not adequate. Specifically, a previously approved TS change by using the BWR Owners Group Topical Report, NEDO-32291, "System Analyses for Elimination of Selected Response Time Testing Requirements," dated January 1994, is required for this deviation from the ITS. If the licensee has already submitted plant specific request for TS changes based upon this Topical Report, revise and provide detailed information in JFD supporting this change.

Comment: Revise JFD to address whether the Topical Report was adopted. If not, this definition should be retained in the ITS.

JAFNPP Response:

1. CTS Amendment 235 (TAC No. M95524) was approved on October 28, 1996 for elimination of selected Response Time Test (RTT) surveillance requirements based on Topical Report NEDO-32291. The amendment specifically addressed elimination of RTT for certain Reactor Protection System and Primary Containment Isolation instrumentation functions.

2. The FitzPatrick plant CTS does not include requirements for ECCS Response Time Testing. That is, the current licensing basis (CLB) does not include a requirement for ECCS RTT. The markup of NUREG 1.1 reflects the current licensing basis and the Authority does not consider ECCS RTT to be necessary as discussed in JFD CLB1.

3. The Authority will revise ITS 1.1, JFD CLB1 to make it clearer that the current licensing basis does not include a requirement for ECCS RTT.

**NYPA Response to NRC Request for Additional Information
Regarding Improved Technical Specifications
Sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0, and 5.0**

1.0-04 ITS 1.1, Isolation System Response Time
JFD CLB2

The licensee proposes not to adopt the definition of Isolation System Response Time. The justification provided in JFD is not adequate. Specifically, a previously approved TS change by using the BWR Owners Group Topical Report, NEDO-32291, "System Analyses for Elimination of Selected Response Time Testing Requirements," dated January 1994, is required for this deviation from the ITS. If the licensee has already submitted plant specific request for TS changes based upon this Topical Report, revise and provide detailed information in JFD supporting this change.

Comment: Revise JFD to address whether the Topical Report was adopted. If not, this definition should be retained in the ITS.

JAFNPP Response:

1. See response to RAI 1.0-03.

2. The Authority will revise ITS 1.1, JFD CLB2 to note approval of CTS Amendment 235 based on NEDO-32291.

**NYPA Response to NRC Request for Additional Information
Regarding Improved Technical Specifications
Sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0, and 5.0**

SECTION 3.0 LCO AND SR APPLICABILITY

ITS 3.0-1 changed to allow 9 hour Completion Time to be in Mode 2.

JFD-X2 states that due to JAFNPP operating limitations, imposed by a restrictive exclusion zone as a result of thermal-hydraulic stability option 1D, the requirement to be in MODE 2 within 7 hours is revised to MODE 2 within 9 hours. The CTS 3.0.C (M1) Completion Time of 9 hours is consistent with current operating practice established in CTS Table 3.1-1Note 3.B, to reduce power and place the Mode switch in the startup position within 8 hours.

Comment: Provide more detailed plant specific information to justify this change.

JAFNPP Response:

1. The Authority has reviewed operating records associated with actual orderly shutdown procedures to evaluate the time necessary to bring the plant from 100 percent RATED THERMAL POWER (RTP) to approximately 10 percent RTP. The result of this evaluation show that approximately 8 hours is required.

2. Thermal-hydraulic stability Option I-D is applicable to the FitzPatrick Plant. Option I-D established an "Exclusion Region" of the power-to-flow map contained in the Core Operating Limits Report (COLR) as a means of avoiding the operating region where the potential for "thermal-hydraulic instability" exists. Avoiding the Exclusion Region during orderly shutdown procedures that progressively reduce reactor power and reactor recirculation flow, and the necessary use of "dual concurrent verification" of each reactivity control action by operators during the shutdown results in a shutdown process that requires a full 8 hours to bring the plant from 100 percent RTP to approximately 10 percent RTP where the shift to MODE 2 is performed.

3. A similar evaluation was performed by personnel at the Duane Arnold plant (which is also an Option I-D plant) with similar results and the ITS conversion for the Duane Arnold plant was approved with the same 9 hour period (one hour to start the shutdown plus 8 hours to reduce power to approximately 10% RTP) allowed to reach MODE 2.

BEYOND SCOPE ISSUE

3.3.5.1-05 CTS Table 3.2-2 Item 18
DOC A.16
ITS Table 3.3.5.1-1 Function 3.e
JFD DB11

The trip setpoint Allowable Values in CTS Table 3.2-2 for the Suppression Chamber High Level (item 13) is modified to reflect a value corresponding to $\leq$6 inches above normal level. The CTS 3.7.A.1 specifies the normal level as being from 13.88 to 14.00 inches. In the conversion, the assumption was to use the higher value of 14.00 inches which results in a setpoint value of 14.5 inches. DOC A.16 justifies the changes in setpoint Allowable value without discussing the assumption of using the higher value for the "normal level." This item (A.16) is considered beyond the scope of this (TSB) review and will be forwarded to the appropriate technical branch (EEIB) for additional consideration.

Comment: This RAI is provided for information purpose only and therefore no response is necessary.

JAFNPP Response:

1. The normal torus (suppression pool) maximum and minimum water level is expressed in feet rather than inches as stated in the discussion above.

2. Since the normal maximum suppression pool level is 14.00 feet, and the transfer of the High Pressure Coolant Injection (HPCI) System suction from the Condensate Storage Tank to the suppression pool is automatically initiated at a suppression pool level of equal to or less than six inches (0.5 feet) above normal as stated in CTS Table 3.2-2, item 18, expressing the Allowable Value as equal to or less than 14.5 (14.0 plus 0.5) feet in ITS Table 3.3.5.1-1, Function 3.e, is not a change. In addition, note that the engineering units associated suppression pool level indication provided to control room operators are "feet" rather than "inches."

**NYPA Response to NRC Request for Additional Information
Regarding Improved Technical Specifications
Sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0, and 5.0**

3.3.6.1-01 CTS 4.2.A and Table 3.2-8 Function 4
DOC L.2
ITS NA
JFD NA

The instrument ID numbers included in CTS 4.2.A and CTS Table 3.2-8 for Function 4, Containment High Range Radiation Monitor, are deleted for this conversion. In this submittal, this change is categorized as a L-2, Less Restrictive discussion of change. This change is a removal of detail, not necessary to ensure OPERABILITY, and should be categorized as a LA change.

Comment: Provide corrected categorization for this discussion of change.

JAFNPP Response:

1. The Authority will correct the categorization of the change and provide an appropriate DOC.

3.3.6.1-03 CTS Table 3.2-1 Action 3.A
DOC L.5
STS Table 3.3.6.1-1 Function 6.b and 3.3.6.1 Action I.1 and I.2
JFD CLB7

CTS Table 3.2-1 Action 3.A requires cold shutdown within 24 hours when the Reactor Vessel Water Level - Low (Level 3) Function of Shutdown Cooling Isolation is inoperable. ITS 3.3.6.1 Actions I.1 and I.2 change the requirement to proceed to cold shutdown to immediate initiation of action to restore inoperable channels "or" isolate the RHR Shutdown Cooling System. The justification for the change (L.5) states that the ITS Actions ensure that the shutdown cooling operations are not unnecessarily interrupted when needed, while ensuring action is continued to restore channels. Although this change appears to be consistent with the STS, DOC L.5 does not provide detailed information to ensure that the change is consistent with the plant safety analysis.

Comment: Provide additional discussion and justification concerning how this change is consistent with the plant safety analysis.

JAFNPP Response:

1. The Bases Applicable Safety Analysis for ITS 3.3.6.1, Function 6.b notes that isolation of the RHR Shutdown Cooling System suction is not directly assumed in safety analyses because a break of the RHR Shutdown Cooling System is bounded by breaks of the reactor water recirculation system and Main Steam Line (which are discussed in UFSAR Sections 14.6.1.3 and 14.6.1.5 respectively). In general, design basis loss-of-coolant (LOCA) accidents, such as those discussed in UFSAR 14.6.1.3 and 14.6.1.5, assume system conditions that result in maximum energy release and maximum loss of reactor water inventory. In the case of comparing a break of the RHR Shutdown Cooling System to the reactor water recirculation system break assumed in the design basis LOCA it is apparent that the larger recirculation system piping (28 or 26 inch diameter versus 20 inch diameter) and much higher recirculation system operating pressure (greater than 1000 psig versus less than 75 psig) will result in the recirculation system break bounding the RHR Shutdown Cooling System break. In a similar manner, a break of a Main Steam Line (24 inch diameter and greater than 1000 psig) will also bound the RHR Shutdown Cooling System break.

3.3.6.1-04 CTS Table 3.2-1 Action 3.B
DOC L.15
STS Table 3.3.6.1-1 Function 1.b Action E and 3.3.6.1 Action E
JFD CLB9

The CTS Table 3.2-1 Action 3.B requirement to isolate the Main Steam Lines is being relaxed in the corresponding ITS 3.3.6.1 Required Action E. ITS 3.3.6.1 Required Action E requires the plant placed in MODE 2 instead of isolating the Main Steam Lines. This Required Action appears acceptable because the initiating Function (Main Steam Line Pressure - Low) is only required in MODE 1. Therefore, placing the plant in MODE 2 under this Condition removes the plant from the MODE of Applicability. However, the corresponding STS 3.3.6.1 Completion Time for this Required Action is 8 **[6]** hours. The ITS 3.3.6.1 Required Action E proposed 6 **[8]** hour Completion Time results in a deviation from the STS which is not technically justified in CLB9.

Comment: Provide additional discussion and justification for the extended Completion Time, based on specific plant difference.

JAFNPP Response:

1. The Authority proposed changes to the Completion Time for ACTIONS that place the plant in MODE 2 from 6 hours to 8 hours. The additional 2 hours is necessary to provide plant operating personnel with the flexibility necessary to avoid the "Exclusion Region" associated with thermal-hydraulic instability. See ITS 3.0, NUREG markup JFD X2 and response to RAI 3.0-1.

3.3.6.1-08 CTS Table 4.1-1 and 4.1-2
DOC L.14
ITS NA
JFD NA

The details removed from CTS Tables 4.1-1 and 4.1-2 as discussed in DOC L-14 are incorrectly identified as Less Restrictive changes. This change is a removal of detail, not necessary to ensure OPERABILITY, and should be categorized as a LA change.

Comment: Provide corrected categorization for this discussion of change.

JAFNPP Response:

1. The Authority will correct the categorization and provide an appropriate DOC.

**NYPA Response to NRC Request for Additional Information
Regarding Improved Technical Specifications
Sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0, and 5.0**

3.3.6.1-09 CTS NA
DOC NA
ITS 3.3.6.1 Condition B
JFD CLB7

Justification For Difference CLB 7 provides discussion and justification for omitting the word "automatic" from ITS 3.3.6.1 Condition B, based on the fact that all Manual Initiation Functions are omitted. It is not clear that the STS wording is not correct. This omission results in a deviation from the STS that does not seem necessary.

Comment: Provide additional clarification for the change or include the term "automatic" in ITS Condition B.

JAFNPP Response:

1. Since none of the "manual" isolation Functions are applicable to JAFNPP and the associated ACTION G for manual isolation Functions was deleted (as discussed in NUREG markup JFD CLB7 and NUREG Bases markup JFD CLB1), the word "automatic" was deleted from Condition B to avoid any implication that a Condition addressing manual isolation Functions might exist.

**NYPA Response to NRC Request for Additional Information
Regarding Improved Technical Specifications
Sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0, and 5.0**

3.3.6.2-01 CTS NA
DOC NA
ITS ITS 3.3.6.2 Condition B
JFD PA1

STS 3.3.6.2 Condition B wording is changed in the ITS to omit "automatic" and "secondary containment". It is not clear that the STS wording change is necessary. No discussion or justification is provided for the STS deviation.

Comment: Provide additional clarification for the change or include the term "automatic" and "secondary containment" in ITS Condition B.

JAFNPP Response:

1. Since there are no "manual" secondary containment isolation initiation Functions applicable to JAFNPP (as discussed in NUREG Markup JFD PA1 and NUREG Bases Markup JFD DB1) the word "automatic" was deleted in Condition B and Required Action B.1 to avoid the implication that "manual" isolation Functions might exist.

2. The Authority will revise the NUREG markup and the associated JFDs to clearly address deletion of the term "automatic" in a manner similar to ITS 3.3.6.1, NUREG markup JFD CLB7. (See response to RAI 3.3.6.1-09.)

3. The Authority will revise the NUREG markup, associated JFDs, clean-typed ITS, etc, to restore the term "secondary containment" to the text of Condition B and Required Action B.1.

3.3.6.2-02 CTS RETS Table 3.10-2 Note (f)
DOC L.6
ITS NA
JFD NA

CTS RETS Table 3.10-2 Note (f) provides detail of how to perform an LSFT (where possible using test jacks) which is omitted in the ITS as stated because this information is included in the definition for LSFT. DOC L.6 documents this change as less-restrictive. This change is actually a removal of detail not required to ensure OPERABILITY. Therefore, the change should be reclassified as an LA "Generic Less Restrictive Change."

Comment: Provide corrected change classification and associated documentation.

JAFNPP Response:

1. The Authority will correct the categorization of the change and provide an appropriate DOC.

**NYPA Response to NRC Request for Additional Information
Regarding Improved Technical Specifications
Sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0, and 5.0**

3.3.8.2-01 CTS 3.9.G
DOC L.1, M.1
ITS 3.3.8.2.1
JFD CLB1

CTS 3.9.G does not provide specific Applicability requirements for the RPS Electric Power Monitoring instrumentation. The corresponding STS 3.3.8.2 requires Applicability for this instrumentation in MODES 1, 2, and 3, and in MODES 4 and 5 with any control rod withdrawn from a core cell containing one or more fuel assemblies. ITS 3.3.8.2 deletes the MODE 3 and 4 Applicability and changes the requirements of ITS SR 3.3.8.2.1 and added ITS 3.3.8.2 Condition D. JFD CLB1 justifies the omission of MODE 3 and 4 Applicability based on the ITS 3.3.1.1 Applicability of the RPS instrumentation. It is not clear why the STS Applicability requirement for this instrumentation is not maintained for the JAFNPP design. DOC L.1, M.1, and JFD CLB 1 do not provide adequate justification for omitting the MODE 3 and 4 Applicability due to design or operational differences.

Comment: Provide additional discussion and justification for the change, based on plant specific design or operational differences.

JAFNPP Response:

1. Since the Reactor Protection System (RPS) Functions in ITS 3.3.1.1 are not required in MODE 3 or 4 (except when the MODE 3 or 4 requirements are modified by ITS 3.10.3 and 3.10.4 as discussed in ITS 3.3.8.2, DOC L1 and NUREG markup JFD CLB1), it follows that the Applicability of the RPS power supply (the MG sets or alternate power sources) do not specify MODE 3 or 4. This is consistent with the current licensing basis that OPERABLE RPS electric power monitoring applies to RPS only (rather than to RPS as well as other systems and components that are also powered from the RPS Bus such as RHR Shutdown Cooling System isolation logic) as discussed in the Technical Evaluation Report that is incorporated into the NRC Safety Evaluation for License Amendment 76.

2. ITS LCO 3.10.3 and LCO 3.10.4 (which concern control rod withdrawal when in MODE 3 or 4) specifically address the operability requirements of ITS 3.3.8.2 when control rod withdrawal is possible in MODE 3 or 4. At other times when in MODE 3 or 4 control rod withdrawal is blocked due the reactor mode switch being in the shutdown position as required by ITS 3.3.2.1, Table 3.3.2.1-1, Function 3.

3. NUREG LCO 3.3.8.2 was written for plants where the protection provided by the RPS electric power monitoring was intended to include components other than RPS which are also supplied with power from the RPS Busses. That licensing basis is different than the FitzPatrick Plant licensing basis.

3.3.8.2-02 CTS 3.9.G.1, 3.9.G.2, 3.0.C
DOC L.3
ITS LCO 3.3.8.2 (ACTION C.2)
JFD CLB1

When the requirements of CTS 3.9.G.1 or CTS 3.9.G.2 are not met the plant must be placed in cold shutdown within 24 hours in accordance with CTS 3.0.C. STS 3.3.8.2 Action C also requires shutdown to MODE 4 when applicable RPS power sources are Inoperable. ITS 3.3.8.2 omits the requirement to place the plant in MODE 4 when Required Actions and Completion Times of Conditions A and B are not met. DOC L.3 justifies this change based on the automatic rod block Function during MODE 3 operation. It is not clear that a plant specific design difference justifies this STS deviation.

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

JAFNPP Response:

1. See response to RAI 3.3.8.2-01 which discusses ITS 3.3.8.2 Applicability.

2. Since the Applicability of ITS 3.3.8.2 does not include MODE 3 or 4, placing the plant in MODE 3 as required by Required Action C.1 results in the plant being outside the Applicability of the Specification and thus there is no need (or requirement) to place the plant in MODE 4.

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Sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0, and 5.0**

SECTION 3.4, REACTOR COOLANT SYSTEM

RAIs

Generic — Terminology for jet pump loop flow, jet pump flow, recirculation loop, recirculation pump loops, and recirculation drive flow have been changed, interchanged, etc. Only change the nomenclature that is plant specific. Other changes are generic and have to be changed through the established change process, e.g., the TSTF. This refers to all PA changes.

JAFNPP Response:

1. The Authority agrees that some of the changes made were not necessary to ensure understanding of the terms used while some of the changes are necessary to provide consistent terminology.

2. A summary of the changes needed in ITS 3.4.1 and 3.4.2 to achieve consistent use of terms is provided below:

   a. in ITS 3.4.1, "Insert ACTIONS A and B" - change "Jet pump loop flow..." to "Recirculation loop jet pump flow..." in Condition B to make it consistent with ITS SR 3.4.1.2.a discussed in b below,

   b. in ITS SR 3.4.1.2.a - retain "...recirculation loop jet pump flow..." as stated in the NUREG,

   c. in ITS SR 3.4.1.2 Bases (first paragraph, last sentence) - retain "...recirculation loop jet pump loop flow..." as stated in the NUREG,

   d. in ITS SR 3.4.2.1.a - retain "Recirculation pump flow..." as stated in the NUREG,

   e. in ITS SR 3.4.2.1.a - change "...jet pump loop flow..." to "...recirculation loop jet pump flow..." to make it consistent with NUREG SR 3.4.1.1 (ITS SR 3.4.1.2),

   f. in NUREG (and ITS) SR 3.4.2.1 Bases (first paragraph, 20th line) - change "...jet pump loop flow.." to "...recirculation loop jet pump flow..." to make consistent with NUREG SR 3.4.1.2 and NUREG SR 3.4.1.2 Bases,

   g. in NUREG (and ITS) SR 3.4.2.1 Bases (first paragraph, 20th line) - change "...recirculation loop flow..." to "...recirculation pump flow..." to make consistent with NUREG (and ITS) SR 3.4.2.1.a,

SECTION 3.4, REACTOR COOLANT SYSTEM (cont'd.)

JAF Response: (cont'd.)

h. in NUREG (and ITS) SR 3.4.2.1 Bases (second paragraph, first sentence) - change "...(pump flow and loop flow versus..." to "...(recirculation pump flow and recirculation loop jet pump flow versus..." to make consistent with NUREG SR 3.4.1.1 (ITS SR 3.4.1.2) and NUREG (and ITS) SR 3.4.2.1.a, and

i. in NUREG (and ITS) SR 3.4.2.1 Bases (second paragraph, third sentence) - change "...pump flow and loop flow versus..." to "...recirculation pump flow and recirculation loop jet pump flow versus..." to make consistent with NUREG SR 3.4.1.1 (ITS SR 3.4.1.2) and NUREG (and ITS) SR 3.4.2.1.a.

3.4.1 Recirculation Loops Operating

3.4.1-01 ITS 3.4.1
CTS 3.5.J.1
DOC M2
JFD CLB1
JFD X1

ITS 3.4.1 is revised to contain CTS 3.5.J.1 requirements related to core thermal hydraulic stability as ITS 3.4.1 ACTION A and ITS SR 3.4.1.1. These details deviate from the STS but are justified by JFD CLB1. Condition B has also been added and is not currently contained in the CTS or the STS. It is justified by JFD X1.

Comment: The staff considers this is a Beyond Scope issue. Both the licensing basis portion and the additions need to be reviewed in the context of their impact upon the specification as currently written.

JAFNPP Response:

1. The Authority will delete the proposed Condition B and make other changes to make the ITS 3.4.1 ACTIONS and SRs essentially the same as in the NUREG except for differences associated with Thermal-Hydraulic Stability Option I-D. (This will result in the FitzPatrick ITS being essentially the same as the Cooper Nuclear Station ITS which is also a Thermal-Hydraulic Stability Option I-D plant.)

3.4.1-02 CTS 3.5.J
DOC M3
JFD CLB1
JFD X2

Similarly, a surveillance requirement has been added that is not in the CTS or the STS and is therefore a Beyond Scope issue

JAFNPP Response:

1. The Authority does not consider the addition of ITS SR 3.4.1.1 to be a "Beyond Scope Issue."

2. Consistent with the general philosophy applied throughout the Improved STS NUREGs that a Surveillance Requirement is needed to verify compliance with each LCO (and each LCO attribute), ITS SR 3.4.1.1 was added to verify compliance with the ITS 3.4.1 LCO requirement for "...the reactor operating at core flow and THERMAL POWER conditions outside the Exclusion Region of the power-to-flow map..." (The new SR is essentially identical to Cooper and Duane Arnold ITS SR 3.4.1.2. Both of these plants are also plants to which the Thermal-Hydraulic Stability Option I-D is applicable.)

3.4.1-03 JFD PA1

Editorial changes have been made that are generic and must therefore be made through the established change process.

Comment: These changes must be made through the TSTF. If this is a plant specific change, please justify on a plant specific basis.

JAFNPP Response:

1. See response to ITS 3.4-Generic RAI.

3.4.2 Jet Pumps

3.4.2-01 LCO 3.4.2
JFD PA2

Editorial changes have been made that are generic and must therefore be made through the established change process.

Comment: These changes must be made through the TSTF. If this is a plant specific change, please justify on a plant specific basis.

JAFNPP Response:

1. See response to ITS 3.4-Generic RAI.

3.4.3 Safety Relief Valves

3.4.3-01 DOC LA3
JFD X1

CTS 4.6.E.1 does not specify the IST program. The STS has a frequency of IST or [24?] months. JFD X1 proposed to delete the [24?] months. There appears to be no reason why the ITS should differ from the STS.

Comment: Retain the STS.

JAFNPP Response:

1. The change which deletes the portion Frequency that specifies performance of the SR at "24 month" intervals is consistent with the SR Frequency notation for testing of other pumps and valves within the scope of the ITS Program. In each case where the NUREG SR Frequency specifies "In accordance with the Inservice Test Program or [X] months." the Frequency has been revised by deletion of the portion of the Frequency that states "or 24 months," "or 92 days" etc.

2. The other ITS SRs where the NUREG Frequency was revised by deletion of a portion of the SR Frequency notation as discussed in 1 above are as follows:

   ITS SR 3.1.7.7 (Standby Liquid Control pump testing)
   ITS SR 3.1.8.2 (Scram Discharge Volume vent and drain valve stroke time testing)
   ITS SR 3.5.1.7 (RHR-LPCI Mode and Core Spray pump testing)
   ITS SR 3.5.1.8 (HPCI pump testing)
   ITS SR 3.6.1.3.5 (PCIV stroke time testing)
   ITS SR 3.6.1.3.6 (MSIV stroke time testing)
   ITS SR 3.6.1.3.8 (EFCV functional testing)
   ITS SR 3.6.1.6.2 (Reactor Building to Suppression Chamber VB functional testing)
   ITS SR 3.6.1.9.2 (RHR-Containment Spray Mode pump testing)
   ITS SR 3.6.2.3.2 (RHR-Suppression Pool Cooling Mode pump testing)
   ITS SR 3.6.4.2 (SCIV stroke time testing)

3.4.4 RCS Operational Leakage

3.4.4-01 JFD PA1

Same as above.

Comment: Retain STS or provide justification.

JAFNPP Response:

1. The Authority will provide additional justification to show that the changes are necessary.

3.4.XXX RCS Pressure Isolation Valve (PIV) Leakage

3.4.XXX-01 CLB1

This specification has been deleted from the Technical Specifications (TS). It is this reviewer's opinion that a specification of this importance should be retained in the TS. To try to adopt the standard and not include this specification is not in keeping with our current practice. This is a Beyond Scope Issue and will be evaluated by the tech staff. No response is required from the licensee

JAFNPP Response:

1. Although this specific specification has been deleted, the intent of the specification for Pressure Isolation Valves has not been deleted. The valves in question are tested via ITS Surveillance Requirement 3.6.1.3.11. The valves are tested in accordance with the Appendix J program with alternative test acceptance criteria. These valves are considered under the CLB to be containment isolation valves with specific leakage limits. "Pressure isolation Valve" is not a term used in the FitzPatrick licensing basis, FSAR, or CTS. An additional ITS specification that addresses PIVs is not required. The Authority believes that this is not a beyond scope item.

3.4.6 RCS Specific Activity

3.4.6-01 JFD PA2

Many editorial changes have been made that do not appear to be reflected in the CTS.

Comment: As indicated above, the generic changes must be made through the TSTF. Any plant specific changes should be identified in the CTS justified as such.

JAFNPP Response:

1. The Authority agrees that the changes are editorial. The Authority proposes to initiate the TSTF process for these generic editorial changes within 6 months following the implementation of ITS at JAF.

3.4.7 Residual Heat Removal (RHR) Shutdown Cooling System - Hot Shutdown

3.4.7-01 DOC M1
JFD CLB1
JFD PA1, 2, 3

The CTS indicates that there is not an RHR Shutdown Cooling System-Hot Shutdown specification, however, changes have been made to the specification based on current licensing basis.

Comment: This is obviously confusing. No CTS specification references are provided. Licensee to provide detailed justification. These changes appear to be Beyond Scope issues.

JAFNPP Response:

1. The Authority provides the following additional clarifying information: The CTS does not have explicit specification requirements for RHR shutdown cooling. Since the CTS does not have specific TS requirements, any addition of TS requirements in the ITS conversion is more restrictive. The Authority did not incorporate all of the requirements of NUREG 3.4.8 because the Current Licensing Basis (CLB) does not require a similar specification. The CTS do not contain restrictions with regard to how many or how long SDC subsystems can be inoperable or out of service. The FitzPatrick ITS conversion proposes to add requirements that will effectively require RHR shutdown cooling and/or Ricirc pump operation when required by the ITS coolant temperature monitoring specification (ITS SR 3.4.9.1). This is consistent with the CTS section 3.6.A.3 and 4. These CTS specification require coolant temperature monitoring when heating up or cooling down. When temperature monitoring is required coolant circulation must be provided to give accurate temperature indication. Therefore, a Recirc pump or RHR shutdown cooling subsystem must be in service to provide the necessary coolant circulation. The proposed addition of the ITS SR 3.4.7.1 will help ensure the availability of the RHR shutdown cooling subsystems when shutdown.

2. The Authority believes this item is not a beyond scope issue. The CTS do not contain a similar specification. The FitzPatrick ITS conversion proposes to add restrictions, not revise existing requirements.

3.4.8 Residual Heat Removal (RHR) Shutdown Cooling System - Cold Shutdown

3.4.8-01 DOC M1
JFD CLB1
JFD PA1

The same comment as RAI 3.4.7-01 above applies.

Comment: Provide detailed justification.

JAFNPP Response:

1. The Authority provides the following clarifying information: The CTS does not have explicit specification requirements for RHR shutdown cooling. Since the CTS does not have specific TS requirements, any addition of TS requirements in the ITS conversion is more restrictive. The Authority did not incorporate all of the requirements of NUREG 3.4.9 because the Current Licensing Basis (CLB) does not require a similar specification. The CTS do not contain restrictions with regard to how many or how long SDC subsystems can be inoperable or out of service. The FitzPatrick ITS conversion proposes to add requirements that will effectively require RHR shutdown cooling and/or Ricirc pump operation when required by the ITS coolant temperature monitoring specification (ITS SR 3.4.9.1). This is consistent with the CTS section 3.6.A.3 and 4. These CTS specification require coolant temperature monitoring when heating up or cooling down. When temperature monitoring is required coolant circulation must be provided to give accurate temperature indication. Therefore, a Recirc pump or RHR shutdown cooling subsystem must be in service to provide the necessary coolant circulation. The proposed addition of the ITS SR 3.4.7.1 will help ensure the availability of the RHR shutdown cooling subsystems when shutdown.

2. The Authority believes this item is not a beyond scope issue. The CTS do not contain a similar specification. The FitzPatrick ITS conversion proposes to add restrictions, not revise existing requirements.

3.4.9 Pressure and Temperature (P/T) Limits

3.4.9-01 JFD CLB1

The limits are not specified, i.e., Figures, etc.

Comment: Provide detail of implementation and indicate where the P/T limits are specified.

JAFNPP Response:

1. The limits are contained within the Specification itself (ITS 3.4.9), and further amplified in the Bases.

2. In NUREG-1433, Revision 1, P/T limits are not themselves contained in the Specification or Bases but rather are incorporated by reference. The NUREG refers to a PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR). Pressure and temperature limits are typically referred to as "specified in the PTLR". Thus, the NUREG does not contain the limits, but refers to an external report.

3. As noted in JFD CLB1 (and analogous Bases CLB1) a PTLR does not exist for FitzPatrick. Accordingly, NUREG 3.4.9 was modified to remove reference to a non-existent external report and the limits themselves were included in the Specification and Bases. Apart from the deleted reference in the LCO statement, every "specified in the PTLR" reference in ISTS was replaced with the actual value; or, in the case of pressure/temperature limit curves, with reference to Figure 3.4.9-1; or, where the PTLR reference was generic in nature, with appropriate explanation. Thus, the information contained in an external report and incorporated by reference in the NUREG is incorporated directly into the appropriate location (surveillance, figure, bases section, etc.) in ITS 3.4.9.

4. Treatment of this Specification in the FitzPatrick ITS is the same as in the Duane Arnold ITS and Cooper ITS.

3.4.9-02 JFD PA2

The change from "and" to "or" to be consistent with the writer's guide is a generic change that changes the meaning of the Condition.

Comment: This change must be changed through the TSTF.

JAFNPP Response:

1. The Authority has reviewed the change discussed above to determine the appropriate action to be taken and has concluded that while part of the changes addressed in JFD PA2 are necessary, the changes also contain errors that require correction as discussed below:

   a. in Condition A, the change of "and" to "or" (which is marked with JFD PA2) is necessary since Required Actions A.1 and A.2 are necessary if the LCO is not met at any time during plant operation in any portion of MODE 1, 2, or 3. Use of "and" as stated in the NUREG can be read to mean that Condition A is entered only when the LCO is not met in MODES 1, 2, and 3 inclusive,

   b. in ITS 3.4.9, ACTIONS A.1 and A.2 BASES, a conforming change is necessary to reflect the change to Condition A discussed in a above, and

   c. in Condition C, the change of "and" to "or" (which is marked with JFD PA2) is not considered necessary and the change will be withdrawn.

2. Note that the changes to Conditions A and C discussed above will result in the text of Conditions A and B being identical to the approved ITS for the Duane Arnold plant.

3.4.9-03 JFD PA3

These changes are also generic and must follow established practice for these changes.

Comment: These changes must be changed by the TSTF process.

JAFNPP Response:

1. The PA3 change in the ITS SR 3.4.9.1 is a editorial change made for clarity. The wording change contained in ITS SR 3.4.9.1 is consistent with wording used in ITS SR 3.4.9.1 (ISTS 3.4.10.1) Bases. No TSTF process is required.

3.4.9-04 CTS 3.6.A.5
DOC A4

CTS 3.6.A.5 indicates that with any of the limits 3.6.1 through 3.6.A.4 exceeded.... 3.6.A.4 specifies "during all Modes of operation. Would this not imply that 3.6.A.5 then should be the same. CTS 3.6.A does not specify Applicability. DOC A2 concluded that because there was not a stated Applicability in CTS 3.6.A, it implies that CTS 3.6.A is applicable at all times. DOC A2 logic conflicts with DOC A4. DOC A4 concludes that because CTS 3.6.C does not include an Applicability statement then the Applicability can be determined from the actions required when the LCO cannot be met. DOC A4 states "Since this Specification requires that, if the Required Actions and Completion Times are not met, the reactor be placed in Cold Shutdown (MODE 4), it can be implied that the Specification is Applicable in MODES 1, 2 and 3." A similar difference in logic exists between DOC L3 of ITS 3.4.6 and DOC A2 of ITS 3.4.9.

Comment: Provide discussion regarding the above apparent conflict in the discussions.

JAFNPP Response:

1. The FitzPatrick ITS conversion has noted in a number of DOCs that Applicability of a particular CTS LCO is implied based on CTS Required Action that stipulates an "end state" that is presumed to place the plant in a Mode or specified condition that is outside the (unstated) Applicability for the particular LCO. This "logic" for determining the Applicability of CTS 3.6.A.5 was (in error) used in ITS 3.4.9, DOC A4 and is (as stated above by the NRC reviewer) in conflict with ITS 3.4.9, DOC A2.

2. The Authority will revise ITS 3.4.9, DOC A2 and DOC A4 as well as ITS 3.4.6, DOC L3 as necessary to eliminate the conflicts.

3.4.9-05 CTS 4.6.A.1
SR 3.4.9.7
SR 3.4.9.8
DOC A1

CTS 4.6.A.1.a and b require recording the reactor vessel temperature when flange temperature is ≤ 120 ⊕F and ≤ 100 ⊕F respectively and the studs are tensioned. The corresponding ITS SR 3.4.9.7 and SR 3.4.9.8 do not specify that these surveillances are only performed when the studs are tensioned.

Comment: While this change is consistent with the STS, provide documentation for deleting the exception for performing the surveillances only when the studs are tensioned.

JAFNPP Response:

1. Upon review, the Authority finds the notes qualifying these specifications to be ambiguous. The note qualifying SR 3.4.9.7 states:

   "Not required to be performed until 30 minutes after RCS temperature ≤ 100 degrees F in MODE 4."

   This could be taken to mean:

   (a) that the specified grace period applies only in MODE 4, or:

   (b) that the surveillances are only required in to be performed MODE 4, with a grace period as specified.

   A similar ambiguity exists for the note qualifying SR 3.4.9.8.

2. The discussion in the Bases identifies that the SRs are only required in MODE 4, with a grace period for performing the first surveillance.

3. ITS Table 1.1-1 defines MODES. The primary differentiation between MODES 4 and 5 is that in MODE 4, all reactor vessel head closure bolts are fully tensioned, while in MODE 5, one or more reactor vessel head closure bolts are less than fully tensioned. Thus, with any stud less than fully tensioned, MODE 5 is entered and surveillances SR 3.4.9.7 and 3.4.9.8 are no longer required. This is analogous to, but slightly less restrictive than CTS 4.6.A.1 requirements. The CTS requires SRs 3.4.9.7 and 3.4.9.8 to be performed until all studs are de-tensioned. The ITS permits suspension of SRs 3.4.9.7 and 3.4.9.8 as soon as de-tensioning begins.

3.4.9-05 (cont'd.)

NYPA Response: (cont'd.)

4. Upon further evaluation, NYPA considers retention of the CLB requirements in the CTS prudent. While entry into MODE 5 from MODE 4 is a transient situation, the objective being complete stud de-tensioning, situations could arise where a relatively protracted period (i.e., a number of hours) would transpire before all studs were fully de-tensioned. Continuation of the surveillances specified in SR 3.4.9.7 and SR 3.4.9.8 during such an interval is consistent with the objectives of the surveillances and provides added protection during this period. This is consistent with ITS LCO 3.4.9 Bases, which identifies one element of the LCO as:

   "e. The reactor vessel flange and the head flange temperatures are greater than 90 degrees F when tensioning the reactor vessel head bolting studs *and when any stud is tensioned.*" [Emphasis added]

5. NYPA will revise the notes qualifying SR 3.4.9.7 and SR 3.4.9.8 to remove the previously noted ambiguity and to retain the CLB requirements that the surveillances be continued until all studs are de-tensioned. Applicable DOCs, Bases, and JFDs will be revised according.

3.4.9-06 CTS 3.6.A.2, .3, .4
Figure 3.6-1
Bases

CTS 3.6.A.2, 3.6.A.3 and 3.6.A.4 specify being to the right of CTS Figure 3.6-1 curves A, B, and C respectively, which makes clear the safe area for operation. By implication the same applies (being to the right) of the curves on ITS Figure 3.4.9-1. ITS 3.4.9 including ITS Figure 3.4.9-1, which is exactly the same as CTS figure 3.6-1 Part 3, and ITS 3.4.9 Bases do not specify anywhere that the safe area relative to curve A, B, or C is to the right. ITS 3.4.9 simply requires maintaining pressure and temperature within limits.

Comment: State where in the LCO the limits are found. Additionally, provide clarification in ITS 3.4.9 Bases where the safe area relative to ITS Figure 3.4.9-1 curves A, B, and C is located.

JAFNPP Response:

1. As noted in response RAI 3.4.9-01,NUREG-1433, Revision 1, does not state where pressure and temperature limits are found beyond making reference to an external report. In contrast, FitzPatrick limits are incorporated directly into ITS 3.4.9, with specific limits identified or referenced as applicable. Each specific limit is identified in its respective surveillance. (See response RAI 3.4.9-01.)

2. A note will be added to ITS Figure 3.4.9-1 specifying that safe operation is on or to the right of curve A, B, or C, as appropriate.

3.4.9-07 CTS 4.6.A.6.a, .b, .c
DOC A6

CTS 4.6.A.6.a, 4.6.A.6.b, and 4.6.A.6.c specify that the differential temperatures be recorded. The corresponding ITS SR 3.4.9.3 and SR 3.4.9.5 do not include the explicit requirement to record the differential temperature.

Comment: The CTS Markup indicates that these deletions are justified by DOC A6. DOC A6 does not identify CTS 4.6.A.6.a, 4.6.A.6.b, and 4.6.A.6.c in the list of specifications affected by the change. Include these in DOC A6.

JAFNPP Response:

1. The Authority will revise ITS 3.4.9, DOC A6 as suggested above.

3.4.9-08 SR3.4.9.4
DOC L2
JFD X1
NOTE 2

ITS SR 3.4.9.4 did not have a corresponding CTS and it was added as a deviation from the STS. ITS SR 3.4.9.4 allows verifying the active recirculation drive flow exceeds 40% of rated drive flow or the active loop has been operating below 40% for a period no longer than 30 minutes as an alternative to performing ITS SR 3.4.9.3 (STS 3.4.10.3).

Comment: Justification for the change was provided in JFD X.1 and DOC L2. However, this is a deviation from both the CTS and the STS. Licensee is to provide detail information for the staff to review as a Beyond Scope issue.

JAFNPP Response:

1. The detailed information is contained in ITS 3.4.9 Bases References 11 and 12. The Authority will provide copies of the references to the reviewer under a cover letter separate from the response to this RAI.

3.4.9-09 JFD TA1

STS SR 3.4.9.3 is modified in the ITS to incorporate Revision 0 of TSTF-035. TSTF 035 does not delete the bracketed phrase [with reactor steam dome pressure greater than or equal to 25 psig].

Comment: Does this phrase apply to JAFNPP? Also a justification for incorporating the TSTF needs to be provided. It is not sufficient to say you are incorporating the TSTF.

JAFNPP Response:

1. Deletion of the bracketed phrase is marked with JFD DB1 (rather than JFD TA1 for TSTF-35, Revision 0, as indicated by the reviewer).

2. The Authority notes that the markup of NUREG SR 3.4.10.3 could have been clearer. JFD DB1 provides justification for the deletion of the phrase and is shown on the markup directly below the deletion (crossout) of the phrase of concern.

3.4.10 Reactor Steam Dome Pressure

3.4.10-01 DB1

This specification has been deleted from the Technical Specifications (TS). It is staff's opinion that a specification of this importance should be retained in the TS. To try to adopt the standard and not include this specification is not in keeping with our current practice.

Comment: The licensee should retain the CRTS requirements or provide detailed justification for this deviation for the staff to review as a Beyond Scope issue.

JAFNPP Response:

1. The requirements identified in NUREG 3.4.11 were not eliminated from the FitzPatrick ITS. For FitzPatrick, essentially identical requirements are contained in ITS 3.3.1.1, Table 3.3.1.1-1, Function 3, Reactor Pressure - High, and associated SRs and ACTIONS. Since the requirements specified by NUREG 3.4.11 are already included in ITS 3.3.1.1, the essentially redundant NUREG requirements were deleted.

2. As noted in DB1, FitzPatrick site specific overpressure analysis is based upon an Analytical Limit of 1094 psig. This is the same Analytical Limit used for the Reactor Pressure - High scram. If NUREG 3.4.11 were included in the FitzPatrick ITS, the AV for NUREG would be 1080 psig, the same as the AV for the Reactor Pressure - High scram.

3. NUREG 3.4.11 establishes a specification for Reactor Steam Dome Pressure. The associated LCO requires that reactor steam dome pressure shall be less than or equal to a plant specific ALLOWABLE VALUE. For FitzPatrick, the plant specific ALLOWABLE VALUE would be 1080 psig, as discussed in JFD DB1. NUREG LCO 3.4.11 is applicable in MODES 1 and 2. The lone surveillance associated with this LCO requires verification that the LCO is met on a 12 hour Frequency. If reactor steam dome pressure is not within limits, a 15 minute Completion Time (Action A) is provided to restore pressure to within the limits, else the plant must be in MODE 3 in 12 hours (Action B).

3.4.10 Reactor Steam Dome Pressure

3.4.10-01 DB1 (cont'd.)

NYPA Response: (cont'd.)

4. ITS 3.3.1.1 establishes specifications for Reactor Protection System (RPS) instrumentation. The associated LCO requires that RPS instrumentation for each Function in Table 3.3.1.1-1 shall be operable. Table 3.3.1.1-1, Function 3, identifies requirements and associated SRs for the Function Reactor Pressure - High. The applicable MODES requiring Function 3 operability are MODES 1 and 2. The ALLOWABLE VALUE associated with Function 3 is a reactor pressure less than or equal to 1080 psig. Thus for FitzPatrick, the parameter and ALLOWABLE VALUE associated with Table 3.3.1.1-1, Function 3 are the same as those which would be associated with NUREG 3.4.11. The MODES under which the LCOs and associated requirements are applicable are also the same.

5. Table 3.3.1.1-1, Function 3 provides a SCRAM on Reactor Pressure - High. If reactor (i.e., reactor steam dome) pressure were to exceed 1080 psig in MODES 1 or 2, a scram would occur, immediately placing the plant in MODE 3. This makes Required Action A of NUREG 3.4.11 meaningless for FitzPatrick, since automatic RPS action will correct the high pressure condition immediately.

6. SR 3.3.1.1.1 requires performance of a CHANNEL CHECK at a 12 hour Frequency. This surveillance is required for Function 3 in MODES 1 and 2. A CHANNEL CHECK includes verifying the parameter monitored by the channel against other instruments monitoring the same parameter and for consistency with plant conditions. Thus, reactor (reactor steam dome) pressure is surveilled at a 12 hour Frequency by SR 3.3.1.1.1, at the same Frequency and in the same MODES as would be required by NUREG SR 3.4.11.1.

7. If the once per 12 hour CHANNEL CHECK required by by SR 3.3.1.1.1 were to discover reactor pressure > 1080 psig, an RPS function ALLOWABLE VALUE would be exceeded without the associated protective action occurring, a condition requiring entry into ITS 3.3.1.1 ACTION C, "One or more Functions with RPS trip capability not maintained." This requires that the Function be restored within 1 hour, else entry into Action G ("Be in MODE 3 in 12 hours") is required. In such a case — reactor steam dome pressure > 1080 psig concurrent with a loss of function for the Reactor Pressure - High scram — the actions required by ITS 3.3.1.1 are theoretically less

3.4.10 Reactor Steam Dome Pressure

3.4.10-01 DB1 (cont'd.)

NYPA Response: (cont'd.)

restrictive than would be required by NUREG 3.4.11. The NUREG would require pressure to be restored to ≤ 1080 psig in 15 minutes, else be in MODE 3 in 12 hours, a total elapsed time of 12 hours and 15 minutes. ITS 3.3.1.1 requires restoring trip function capability in 1 hour, else be in MODE 3 in 12 hours, a total elapsed time of 13 hours. The difference is minor. In practice, action would be taken to lower pressure to ≤ 1080 psig immediately, if for no other reason than restoration of the trip function with pressure > 1080 psig would result in an immediate scram.

8. In summary, the Authority concurs with the staff's assessment as to the importance of this specification, but believes the provisions of ITS 3.3.1.1 provide the same requirements with the same or higher visibility, since the conditions requiring action within NUREG 3.4.11 cannot occur without a concurrent RPS failure. NUREG 3.4.11 was eliminated to minimize unnecessary redundancy within the FitzPatrick ITS.

**NYPA Response to NRC Request for Additional Information
Regarding Improved Technical Specifications
Sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0, and 5.0**

SECTION 3.9 REFUELING OPERATIONS

3.9.1 Refueling Equipment Interlocks

3.9.1-01 JFD TP1
DOC L2

This TSTF is pending and may not be completed in time for this conversion.

Comment: Licensee should provide detailed justification.

JAFNPP Response:

1. The Authority will provide the requested justification to allow review and approval of the ITS without prior approval of TSTF-232.

3.9.1-02 JFD DB1, 2

DB1 and DB2 have been interchanged in the JFDs and the ITS markup.

Comment: Change to agree with which ever is desired.

JAFNPP Response:

1. JFDs DB1 and DB2 have not been interchanged as discussed above; however, the topic of NUREG markup JFD DB1 and DB2 are "reversed" with respect to NUREG Bases markup JFD DB1 and BD2. That is, NUREG markup JFD DB1 addresses bracket removal and plant specific terminology while NUREG Bases markup JFD DB2 addresses the same topic. In a similar manner, NUREG markup JFD DB2 addresses the service platform and hoist while NUREG Bases markup JFD DB1 addresses the service platform and hoist. (This obviously creates the potential for confusion, but no actual error exists.)

3.9.6 [Reactor Pressure Vessel (RPV)] Water Level - [Irradiated Fuel]

3.9.6-01 JFD X1

This specification has been deleted from the ITS. It is the staff's opinion that this specification is important enough to be included. This specification is of such significance that the deletion should be reviewed by the tech staff.

Comment: Licensee should provide justification for this deletion as a Beyond Scope issue.

JAF Response:

1. NUREG Specification 3.9.6 has not been deleted. The title has been changed so that ITS 3.9.6 is applicable during movement of both irradiated fuel and new fuel as discussed in JFD X1.

2. The same change was made to the Duane Arnold ITS and this change should not be considered to be a beyond scope change.

3.9.8 Residual Heat Removal (RHR) - High Water Level

3.9.8-01 JFD CLB 1

The Condition related to no RHR subsystem in operation has been deleted as well as the requirement to verify that the system is operating. The CTS markup shows this as a new specification, yet the ITS has deleted information based on current licensing basis. This obviously is confusing. These deletions are of sufficient magnitude of such safety significance that they should be reviewed by tech staff.

Comment: The licensee should provide justification in more detail for the staff to review these changes as Beyond Scope issues.

JAFNPP Response:

1. The Authority provides the following additional clarifying information: The CTS does not have explicit specification requirements for RHR shutdown cooling. Since the CTS does not have specific TS requirements, any addition of TS requirements in the ITS conversion is more restrictive. The Authority did not incorporate all of the requirements of NUREG 3.9.8 because the Current Licensing Basis (CLB) does not require a similar specification. The CTS do not contain restrictions with regard to how many or how long SDC subsystems can be inoperable or out of service. The FitzPatrick ITS conversion proposes to add requirements that will effectively require RHR shutdown cooling and/or Ricirc pump operation when required by the ITS coolant temperature monitoring specification (ITS SR 3.4.9.1). This is consistent with the CTS section 3.6.A.3 and 4. These CTS specification require coolant temperature monitoring when heating up or cooling down. When temperature monitoring is required coolant circulation must be provided to give accurate temperature indication. Therefore, a Recirc pump or RHR shutdown cooling subsystem must be in service to provide the necessary coolant circulation. The proposed addition of the ITS SR 3.4.7.1 will help ensure the availability of the RHR shutdown cooling subsystems when shutdown.

2. The Authority believes this item is not a beyond scope issue. The CTS do not contain a similar specification. The FitzPatrick ITS conversion proposes to add restrictions, not revise existing requirements.

3.9.9 Residual Heat Removal (RHR) - Low Water Level

3.9.9-01

The is same issue RAI 3.9.8-01 above.

Comment: Licensee should provide detailed information for the staff to evaluate as a Beyond Scope issue.

JAFNPP Response:

1. The Authority provides the following additional clarifying information: The CTS does not have explicit specification requirements for RHR shutdown cooling. Since the CTS does not have specific TS requirements, any addition of TS requirements in the ITS conversion is more restrictive. The Authority did not incorporate all of the requirements of NUREG 3.9.9 because the Current Licensing Basis (CLB) does not require a similar specification. The CTS do not contain restrictions with regard to how many or how long SDC subsystems can be inoperable or out of service. The FitzPatrick ITS conversion proposes to add requirements that will effectively require RHR shutdown cooling and/or Ricirc pump operation when required by the ITS coolant temperature monitoring specification (ITS SR 3.4.9.1). This is consistent with the CTS section 3.6.A.3 and 4. These CTS specification require coolant temperature monitoring when heating up or cooling down. When temperature monitoring is required coolant circulation must be provided to give accurate temperature indication. Therefore, a Recirc pump or RHR shutdown cooling subsystem must be in service to provide the necessary coolant circulation. The proposed addition of the ITS SR 3.4.7.1 will help ensure the availability of the RHR shutdown cooling subsystems when shutdown.

2. The Authority believes this item is not a beyond scope issue. The CTS do not contain a similar specification. The FitzPatrick ITS conversion proposes to add restrictions, not revise existing requirements.

**NYPA Response to NRC Request for Additional Information
Regarding Improved Technical Specifications
Sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0, and 5.0**

SECTION 4.0 DESIGN FEATURES

4.0-1

ITS 4.3.2 Drainage is a new Technical Specification identifying the elevation, for the minimum water level, to prevent inadvertent draining from the spent fuel storage pool.

DOC-M3 states that CTS5.0 is being supplemented. ITS 4.3.2, Drainage- The proposed minimum design elevation to prevent inadvertent draining is 367 feet 3 inches.

Comment: Provide plant specific data to demonstrate how the minimum design elevation is derived.

JAFNPP Response:

1. The elevation is taken from the invert of the suction line for RHR Fuel Pool Cooling Assist, shown on plant drawing FM-19A, Rev. 37 (copy attached) as El. 367'-3". The invert of this line is considered the lowest credible level to which an inadvertent spent fuel storage pool drain down could occur.

2. The Discussion of Changes section for this specification (DOC-M3) inaccurately refers to this level as the minimum to which the spent fuel storage pool could be drained with the gates removed. It is rather the minimum level to which the spent fuel storage pool could be drained inadvertently with the gates **installed**, which is the normal condition of the pool. DOC-M3 will be revised to reflect this.

3. It is noted that during refueling with the gates removed, in the event of an inadvertent drain down of the reactor well cavity, it would be possible to drain the fuel pool to as low as the fuel pool inner gate sill, elevation 344 feet 6 inches. This elevation is still above the top of active fuel in the spent fuel storage pool.

4. Figure RAI 4.0-1.1 is provided to clarify the various spent fuel storage pool levels/elevations addressed in the CTS, the UFSAR, and the proposed ITS. It should be noted that elevation 367 feet 3 inches is conservative with respect to both the CTS required level, and to the UFSAR.

SECTION 4.0 DESIGN FEATURES

Figure RAI 4.0-1.1
Summary of Fuel Pool Elevations/Levels

Level	Elevation	Remarks
(12)	369' 6"	Refuel Floor
(11)	368' 6"	Fuel Pool normal level
(10)	368' 1"	Approximate level of fuel pool skimmer invert
(9)	367' 10-3/4"	- Approximately 2" below fuel pool skimmer invert - 21' 6-3/4" above level (5) - 22' 2" above level (4), RPV flange • Proposed **ITS 3.5.2 (ECCS-Shutdown)** Level • Proposed **ITS 3.7.7 (Spent Fuel Pool Level)** Level • Proposed **ITS 3.9.6 (RPV Water Level)** Level • Proposed **ITS 3.9.7 (RHR - High Water Level)** Level • Proposed **ITS 3.9.8 (RHR - Low Water Level)** Level
(8)	367' 3"	- Proposed **ITS 4.3.2 (Fuel Pool Drainage)** - (Lowest level to which Fuel Pool could be inadvertently drained based upon invert of RHR Fuel Pool Cooling Assist suction line.)
(7)	363' 9-1/4"	Level (1) plus 33' as noted in CTS 3.10.C (Spent Fuel Pool Water Level)
(6)	354' 3-1/4"	Level (2) plus 10' of shielding noted in UFSAR 9.3.4.1
(5)	346' 4"	Top of stored fuel assembly bail
(4)	345' 8-3/4"	RPV flange
(3)	344' 6"	Fuel Pool inner gate sill (elevation of between gates drain)
(2)	344' 3-1/4"	Top of active fuel with fuel rack adjustable feet at maximum height (3/4" above nominal height)
(1)	330' 9-1/4"	Fuel Pool floor

**NYPA Response to NRC Request for Additional Information
Regarding Improved Technical Specifications
Sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0, and 5.0**

SECTION 5.0, ADMINISTRATIVE CONTROLS

5.2 Organization

5.2-01 CTS 6.2.2.6
DOC LA.2
STS 5.2.2.e
JFD TP1

STS Section 5.2.2.e and CTS Section 6.2.2.6 have been deleted and the ITS introduces a revised version of text. JFD TP1 and DOC LA.2 state that this change is based on TSTF-86. TSTF-86 has been withdrawn during the TSTF review process and has been superseded by TSTF-258 R.4. This TSTF (TSTF-258 R.4) has been approved by the NRC on June 1999.

Comment: Revise the submittal to either include CTS wording or re-evaluate and revise ITS as it pertains to TSTF-258 R.4.

JAFNPP Response:

1. The Authority will revise the submittal to reflect withdrawal of TSTF-86 and adopt the changes contained in TSTF-258, Revision 4.

5.5 Programs and Manuals

5.5-01CTS 6.20.D
DOC A.5
ITS 5.5.6
JFD CLB1

CTS section 6.20.D markup has deleted the reference that states "The provisions of specification 4.0.B do not apply...." Changes to the STS with regards to SR 3.0.2 are covered in a letter from Mr. C. Grimes to Mr. David Modeen dated 11/2/95 and TSTF-52 as modified by staff comments on 10/96 qnd 12/98. See NRC RAI 3.6.1.1-4 for additional information.

Comment: Revise ITS 5.5.6 as needed to be consistent with Staff letter and TSTF-52 (as modified by staff comments).

JAFNPP Response:

1. The Authority will revise the ITS submittal to provide reference to the prohibition of the modification of the testing Frequencies required by 10 CFR 50, Appendix J (as shown in TSTF-52, Revision 3).

**NYPA Response to NRC Request for Additional Information
Regarding Improved Technical Specifications
Sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0, and 5.0**

5.5-07 CTS RETS 2.5
STS 5.5.10
ITS 5.5.9
JFD None

CTS RETS 2.5 contains the statement "the amount that would result in concentrations less than...." There is indication in the CTS markup that this statement will be relocated or deleted. The STS 5.5.10 markup deletes this statement and replaces it with the statement ".. Or equal to 10 curies..." CLB5 states that this change reflects JAFNNP's current requirements. For this DOC to be true, both previously mentioned statements would have to be included in the ITS.

Comment: Revise the submittal to either include both previously mentioned wording in the ITS or provide less restrictive documentation to justify this change.

JAFNNP Response:

1. The Authority will revise the submittal to address deletion of phrase.

NYPA Response to NRC Request for Additional Information
Regarding Improved Technical Specifications
Sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0, and 5.0

5.6 Reporting Requirements

5.6-01 CTS 6.9.A.4.d
STS/ITS 5.6.5.d

Last several words in paragraph CTS section 6.9.A.4.d have been deleted (omitted) with no discussion of change.

Comment: Noting that this change (deletion) is consistent with NUREG-1433, either provide DOC to justify change or retain original CTS wording.

JAFNNP Response:

1. The Authority will provide appropriate discussion and justification of the change.

5.7 High Radiation Area

5.7-01 CTS 6.11
STS 5.7
TSTF-258R.4 sections 5.7.1.4.i, 5.7.1.4.ii, 5.7.2.a, 5.7.2.e,5.7.2.f
ITS 5.7.1.d.4, 5.7.1.e, 5.7.2.a, 5.7.2.e, 5.7.2.f
JFD X1

In the proposed section 5.7 change, JFD X1 references a letter from the NRC to the Owners Groups dated 7/28/95. This letter eventually evolved into what is now the NRC approved TSTF-258, R.4. The latest revision (R.4) of this generic issue was approved by the NRC on 4/99 and the TSTF (Owners Groups) were notified of deposition (approved) via letter dated 6/29/99. In this proposed section 5.7 submittal, the sections as referenced above are not consistent with the NRC approved TSTF-258 R.4.

Comment: If adopting TSTF-258 R.4, revise sections (as mentioned above) for consistency or provide justification for changes. If not adopting TSTF-258 R.4, provide additional JFD(s) (explicit and technical) to explain the differences and in addition, to justify why you are not adopting the NUREG-1433 R.1 or the TSTF-258 R.4 (which in a few months will be in the standard NUREG-1433 R.2)

JAFNNP Response:

1. The Authority will revise the submittal to reflect withdrawal of TSTF-86 and adopt the changes in TSTF-258, Revision 4.

Attachment 3
JAFP-00-0141

ITS Request for Additional Information (RAI)

List of Commitments

Commitment No.	Description	Due Date
JAFP-00-0141-01	Revise ITS submittal as stated in responses to ITS 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.4, 3.9, 4.0 and 5.0	9/30/00

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DWG NO FM-19A, REV 37 SHEET 1 OF 1

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