Mr. William T. Cottle
President and Chief Executive Officer
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South Texas Project Electric
Generating Station
P. O. Box 289
Wadsworth, TX 77483

November 6, 1998

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION IN PROPOSED CONVERSION TO THE IMPROVED STANDARD TECHNICAL SPECIFICATIONS, SOUTH TEXAS PROJECT, UNITS 1 AND 2 (STP) (TAC NOS. M95529 AND M95530)

Dear Mr. Cottle:

The Nuclear Regulatory Commission (NRC) staff has completed a preliminary review of selected portions of STP Nuclear Operating Company's (STPNOC's) license amendment application and its supplements to convert to the format of the Improved Standard Technical Specifications (ISTS). Based on its review, the staff has determined that additional information is needed for Section 3.7 as discussed in the enclosure.

Also, per STPNOC's request by letter dated April 29, 1998, to defer any further review of the ISTS application until it can be reactivated in support of a 2001 implementation date, and per discussions with your staff on April 30, 1998, it was agreed that the NRC would continue to issue questions for those sections where NRC's preliminary review was complete or nearly complete. At that time, those Sections were 3.0, 3.5, and 3.7 (3-train questions only). By letter dated May 20, 1998, the NRC provided STPNOC with questions for Sections 3.0 and 3.5. This letter is providing questions for Section 3.7.

In accordance with STPNOC's request to defer any further review of the ISTS application, TAC Nos. M95529 and M95530 are closed with this letter. New TAC numbers will be opened when STPNOC requests that the ISTS review be reactivated.

Sincerely,
ORIGINAL SIGNED BY:
Thomas W. Alexion, Project Manager
Project Directorate IV-1
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

Enclosure: As stated

cc w/encl: See next page

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

November 6, 1998

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Enclosure: As stated

cc w/encl: See next page

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STP Nuclear Operating Company

South Texas, Units 1 & 2

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REQUEST FOR ADDITIONAL INFORMATION

TECHNICAL SPECIFICATION CONVERSION APPLICATION

SOUTH TEXAS PROJECT, UNITS 1 AND 2

3.7.5, Auxiliary Feedwater (AFW) System

3.7.5-1 JFD #3 & #10
ITS 3.7.5 Applicability
STS 3.7.5 LCO Note and Action E

ITS 3.7.5 has not adopted the Applicability requirement that the AFW is Operable in "Mode 4 when the steam generator is relied upon for heat removal". Likewise, STS 3.7.5 contains a Note to the LCO 3.7.5 Operability requirements which is not adopted by ITS 3.7.5. The Note states that "Only one AFW train, which includes a motor-driven pump, is required to be OPERABLE in Mode 4."
Comment : JFD #3 & #10 and the Bases description do not clearly explain this ITS change. The ITS BASES Applicability state AFW replaces SG inventory as the unit cools to Mode 4 conditions and that in Mode 4 the AFW may be used for heat removal via the steam generators. This is contradictory and it implies that the SGs for a short period must continue to be relied upon for entry into Mode 4 from Mode 3 through the transition pressures and temperatures until full RHR operation can be established. In addition, the Background insert for PSA success criteria discusses the importance of the SG for steam relief; otherwise cool down may not be possible. Please explain this discrepancy.
STP Response:

3.7.5-2 JFD #1
ITS 3.7.5 Action D
DOC L13
CTS 3.7.1.2 Action b and c

CTS 3.7.1.2 Action b and c both state if compensatory actions are not completed, then place the unit in Mode 3 in 6 hours and in Mode 4 within 12 hours. ITS 3.7.5, Action D states to be in Mode 3 in 6 hours but Required Action D.2 permits 18 hours in order to reach Mode 4.
Comment: Please note that in the STS, the 18 hours is in brackets. This "Mode 4" in the STS is where the LCO is no longer Applicable, which means Mode 4 without reliance upon the SGs for heat removal. Since STP apparently does not need the extra time allowed by the STS to establish RHR operation, the CTS times to exit the Applicability should be retained. This change is also coupled with the resolution of Comment 3.7.5-1.

ENCLOSURE

STP Response:

3.7.5-3 No DOC
CTS 3.7.1.2 Action b.2 and b.3
JFD #11
ITS 3.7.5 Action B

CTS 3.7.1.2 Action b.2 permits a combination of an inoperable Train D turbine-driven AFW pump and any one motor-driven AFW pump to be restored Operable within 72 hours; or, CTS 3.7.1.2 Action b.3 permits a combination of an inoperable Train A motor-driven AFW pump and either Train B or Train C motor-driven pump to be restored Operable within 72 hours. ITS 3.7.5 Action B requires that when any two AFW trains are inoperable that any one AFW train be restored Operable within 72 hours.
Comment: There is no justification provided for this change to the CTS to allow <u>any</u> combination of two trains to be inoperable for 72 hours. STP is requested to revise Action B of ITS 3.7.5 so that this only applies to the same combinations as is stated in the CTS. The combination of an inoperable Train B and Train C will be a new Action requested of STP in Comment 3.7.5-4.

STP Response:

3.7.5-4 DOC L14
CTS 3.7.1.2 Action c
ITS 3.7.5 Action B?

CTS 3.7.1.2 Action c specifies that when a combination of Train B and Train C motor-driven AFW pump is inoperable, the unit shall be placed in a Mode of operation in which the LCO does not apply. ITS 3.7.5 Action B requires that when any two AFW trains are inoperable that any one AFW train can be restored Operable within 72 hours.
Comment: The reason the CTS has a shorter allowed outage time for this combination is that the remaining Operable Train A and D are vulnerable to a single train failure of the actuation logic which can cause the failure of these two remaining AFW pumps. DOC L14 does not discuss this vulnerability which appears to require a unique ITS Action to be written just like was done for the CTS. STP is requested to discuss this vulnerability and to revise the submittal to make the ITS like the CTS in this regard.

STP Response:

3.7.5-5 JFD #5
ITS SR 3.7.5.1

ITS SR 3.7.5.1 modifies the STS text and does not adopt the descriptive text for each AFW valve in the first part of the sentence and deletes the word "both" in describing the steam supply flow paths to the steam driven pump.

Comment: The first change is not specifically addressed in the JFD. It is inconsistent with similar terminology proposed elsewhere in the ITS and it is different from the CTS 4.7.1.2.1.a.3 and 4. STP is requested to adopt the STS text here for consistency. The second change implies there is more than one steam supply path to the turbine driven pump. The Bases state that the steam supply is only from Train D. If this is the case, the wording should be changed from " and in steam supply paths to the steam turbine driven pump," to "and in *the* steam supply *path* to the steam turbine driven pump,".

STP Response:

3.7.5-6 DOC L26
CTS 4.7.1.2.1.a.3 and 4
ITS SR 3.7.5.1

CTS 4.7.1.2.1.a.3 and 4 verify that each AFW is in its correct position every 31 days on a Staggered Test Basis. ITS SR 3.7.5.1 verifies that each AFW valve is in its correct position every 31 days.
Comment: This change is acceptable; however, the DOC L26 goes into good detail pertaining to testing on a Staggered Test Basis. However, this Surveillance does not involve "testing" but just a position verification. STP is requested to revise the justification for this change to address position verification rather than testing issues.

STP Response:

3.7.5-7 DOC A11
CTS 4.7.1.2.1.a.4 & 4.7.1.2.1.b.1

This change adds the qualifier to CTS 4.7.1.2.1.a.4 & 4.7.1.2.1.b.1 to verify each automatic valve "that is not locked, sealed, or otherwise secured in position".
Comment: This CTS change is justified as an administrative change when this is a less restrictive change. STP is requested to provide a replacement "L" DOC.

STP Response:

3.7.5-8 DOC L22
CTS 4.7.1.2.1.b
ITS SRs 3.7.5.3 and 4

Comment: This pertains to the "actual or simulated test signal" issue of Generic Comment #4.

STP Response:

3.7.7, Component Cooling Water (CCW) System

3.7.7-1 JFD #4 and #19
ITS 3.7.7, Action B
DOC L19
CTS 3.7.3, Action a

CTS 3.7.3 Actions permit only one CCW train to be inoperable. With two CCW trains inoperable, the CTS would require entry into LCO 3.0.3. ITS 3.7.7 Action B defines a new Condition permitting two CCW trains to be inoperable.
Comment: JFD #4 is referenced for this change from the STS. JFD #4 states that changes have been made to reflect the facility specific nomenclature, number, reference, system description, or analysis description. This JFD does not adequately address the addition of a new Condition for two CCW trains inoperable. Please provide a separate JFD to address this change.

STP Response:

3.7.7-2 DOC L27
CTS 4.7.3.b.1 and 2
ITS SRs 3.7.7.2 and 3.7.7.3

Comment: This is an example of Generic Comment #4.

STP Response:

3.7.8, Essential Cooling Water (ECW) System

3.7.8-1 JFD #15 and #19
ITS 3.7.8, Action B
DOC L21
CTS 3.7.4, Action a

CTS 3.7.4 Actions permit only one ECW train to be inoperable. ITS 3.7.8 Action B defines a new Condition permitting two ECW trains to be inoperable.
Comment: DOC L21 is referenced to justify this change to the CTS. DOC L21 does not provide an adequate technical justification for this change. DOC L21 only states that STP has

three redundant ECW trains and that 24 hours for two ECW trains inoperable "is reasonable based on operating experience." Please revise DOC L21 to be consistent with other DOCs where new conditions for two trains inoperable have been added where additional justification was provided relating to the design basis accident analysis.

STP Response:

3.7.8-2 JFD #4
ITS SR 3.7.8.2

ITS SR 3.7.8.2 verifies if each automatic valve in the flowpath actuates to the correct position. The ITS has not adopted the phrase which exempts any valve "that is locked, sealed, or otherwise secured in position".
Comment: The JFD #4 justification is not sufficiently explicit to explain why this phrase is not applicable for STP while it is applicable for ITS SR 3.7.8.1. STP is requested to provide this additional explanation.

STP Response:

3.7.8-3 DOC L28
CTS 4.7.4.b.1, 2, and 3
ITS SRs 3.7.8.2, 3.7.8.3 and 3.7.8.4

Comment: This is an example of Generic Comment #4.

STP Response:

3.7.8-4 DOC LA22
CTS 4.7.4.b
ITS SR 3.7.8.4

CTS 4.7.4.b.3 requires that verification of screen wash booster pump operation be performed "during shutdown" which ITS 3.7.8 has not retained as a specific requirement.
Comment: It is acceptable to not state this specific requirement in the ITS SR 3.7.8.4; however, DOC LA22 states the CTS requirement is relocated to the Bases. A review of the Bases for ITS SR 3.7.8.4 does not show this requirement has been relocated. Please revise the Bases in accordance with DOC LA22 to be consistent with the Bases for other ITS SRs which were derived from CTS SRs with a similar shutdown restriction (e.g., ITS SRs 3.7.8.2 & 3.7.8.3).

STP Response:

3.7.8-5 DOC A17
CTS 4.7.4.a
ITS SR 3.7.8.1

CTS 4.7.4.a is modified to add a note to ITS 3.7.8.1 which states that "Isolation of ECW flow to individual components does not render the ECW system inoperable."
Comment: DOC A17 is similar to DOC A15 of CTS 4.7.3.a because the same note is added to ITS SR 3.7.7.1. DOC A15 was revised by a supplement whereas DOC A17 was not similarly revised. Is this intentionally different because of a technical reason or is this an editorial oversight? STP is requested to revise the DOC as required.

STP Response:

3.7.10, Essential Chilled Water (ECHW) System

3.7.10-1 JFD #5
ITS 3.7.10, Action B
DOC L29
CTS 3.7.14 Actions

CTS 3.7.14 Actions permit only one ECHW train to be inoperable. ITS 3.7.10 defines a new Condition permitting two ECHW trains to be inoperable for 24 hours.
Comment: JFD #5 is inadequate justification as the sole explanation for the new ITS 3.7.10 proposed. Please provide a separate JFD that addresses where the proposed ITS 3.7.10 differs from your CTS.

STP Response:

3.7.10-2 DOC A1-4
CTS 3.7.14, LCO Statement

CTS 3.7.14 LCO statement states that "three <u>independent</u> ECHW loops shall be Operable". ITS 3.7.10 states that three ECHW trains shall be Operable.
Comment: The descriptive word "independent" has not been retained in ITS 3.7.10 which is acceptable because the independence of the ECHW trains should be explained in the Bases. Please explain whether the heat loads for each train are equal and if there is full three-train redundancy and independence for all safety-related equipment served. STP is requested to revise the submittal and to provide a new "LA" DOC to justify and explain the relocation of Operability requirements to the ITS 3.7.10 Bases. The Bases should also be revised to include an explanation of the independence (or dependence) of the ECHW trains.

STP Response:

3.7.10-3 DOC A27
CTS 4.7.14.a

CTS 4.7.14.a requires the "Performance of surveillances as required by Specification 4.0.5". ITS 3.7.10 does not retain this requirement.
Comment: DOC A27 states these surveillance requirements are already contained in the Inservice Test Program. It has been a standard presentation policy to individually identify verifications of "pumps required developed head", "chiller unit cooling capacity", etc. These surveillances are to be performed in accordance with test programs defined under the administrative controls established in the Section 5.0. Therefore, STP is requested to revise the submittal to add ITS SRs, as necessary, to separately identify the Specification 4.0.5 requirements. In addition, STP is requested to consider adding, for consistency, SRs (similar to the CCW and ECW Systems) which verify the correct position of valves in each flowpath servicing safety-related equipment and a verification that automatic valves actuate to the correct position on an actual or simulated test signal.

STP Response:

3.7.10-4 JFD #5
ITS 3.7.10 Bases, Background

ITS 3.7.10 Bases, Background, third paragraph states "The 150-ton chiller may be capable of handling the train heat loads under selected conditions, with engineering evaluation on a case-by-case basis." The next sentence states "Train Operability requires the 150-ton chiller be prevented from automatic start during low temperature ECW conditions as described in Reference 1."
Comment: STP is requested to explain these two sentences in more detail with emphasis on whether the ITS requires modification to acknowledge these operational situations. It is not clear if the train operation is based on normal operational heat loads, on non-ESF heat loads plus ESF heat loads or on just the ESF heat loads. Why is an on-the-spot evaluation required when the 300-ton chiller in the train is available? How long does it take to complete this evaluation? How is the Operability verification performed of the identified "low-temperature prevent on the chiller start" during the performance of ITS SR 3.7.10.1? Does this require a Note to the SR, stating this may be an exception to this SR or should there be a separate ITS SR?

STP Response:

3.7.10-5 JFD #5
ITS 3.7.10 Bases, LCO

ITS 3.7.10 Bases, LCO, first paragraph states that independent ECHW operation is limited to controls, power supplies and no other-related dependence.
Comment: There is no discussion of redundant capabilities with the three trains which is a crucial feature of three train system. A cursory review of the P&IDs does not easily disclose which are the non-safety-related and the safety-related loads served by the respective trains. It appears from the drawing that each train serves a different set of heat loads from one another. From drawing 3V119V10004 #1 for example, it is expected that the ESF Pump rooms would be serve by each train; whereas, Room 006 is "Train A", Room 005 is "Train B" and Room 004 is "Train C". ITS SR 3.7.10.1 states "If one train is inoperable, there are redundant capabilities". This redundancy is not apparent. STP is requested to tabulate the heat loads for each train and to show the respective train redundancies. Also, on ITS markup insert page B 3.7-49c, the last paragraph of the LCO Bases discussion is normally associated with the isolation of non-ESF loads such as is found with ITS SR 3.7.7.1. A review of the P&ID does indicate there are many butter-fly type valves to balance flow but none to isolate flowpaths. STP is requested to provide additional information.

STP Response:

3.7.10-6 JFD #5
ITS 3.7.10 Bases, Applicability

ITS 3.7.10 Bases, Applicability, second paragraph states "In Mode 5 or 6, the Operability requirements of the ECHW are determined by the systems it supports."
Comment: STP is requested to explain this statement because ECHW supports the Control Room Envelope HVAC which is always required in Modes 5 and 6. Explain the Applicability for this LCO.

STP Response:

3.7.10-7 JFD #5
ITS 3.7.10 Bases, Applicable Safety Analyses

ITS 3.7.10 Bases, Applicable Safety Analyses have been added.
Comment: A review of the ITS 3.7.10 Bases, Applicable Safety Analyses, shows there is little explanation which summarizes the results of the ECHW safety analyses performed. How does this LCO ECHW train Operability support the assumptions of the analyses? STP is requested to revise the Bases to augment this explanation.

STP Response:

3.7.11, Control Room Envelope (CRE) HVAC System

3.7.11-1 No DOC or JFD
ITS 3.7.11

CTS 3.7.7 is identified as the Control Room Makeup and Cleanup Filtration System. ITS 3.7.11 is identified as the Control Room Envelop (CRE) HVAC.
Comment: The name change is acceptable; however, should the new name be identified as with or without "System"? Also, at the top of the page 3.7-25 in the ITS, the title is identified as only in Modes 1-4. This is presumed to be an editorial ITS markup error. STP is requested to provide a revised CTS/ITS markup as required for these two items.

STP Response:

3.7.11-2 JFD #17
ITS 3.7.11 Action B
DOC M21 and DOC A1-5
CTS 3.7.7 Action b for Modes 1-4

CTS 3.7.7 Action b for Modes 1-4 permits two trains to be inoperable for 72 hours. ITS 3.7.11 Action B limits two trains inoperable for only 24 hours.
Comment: STP is requested to clarify explicitly how CTS 3.7.7 Action b for Modes 1-4 is currently interpreted and procedurally implemented at STP. It is noted that DOC L23 has been deleted from the CTS markup which now indicates this is just an editorial rewording. At question, specifically, is whether two inoperable trains must both be made Operable in 72 hours or is only one inoperable train to be made Operable in 72 hours.

STP Response:

3.7.11-3 JFD #17 and DOC L37
ITS 3.7.11 Actions F, G & H

CTS 3.7.7 does not provide any Action for when the control room envelop pressure is not capable of being maintained at $\geq$ 0.125 inches water gauge; so, LCO 3.0.3 is invoked. ITS 3.7.11 has been modified to add new Actions F, G, and H to provide compensatory actions when the control room envelop pressure is not capable of being maintained.
Comment: This is a change that is beyond the scope of the conversion review because it is a change to both the CTS and the STS and is not related to the STP three-train issues. It appears that the need for these new ITS actions arises when either there is a significant breach in the pressurized envelop or two trains of CRE HVAC are inoperable, because it takes two trains to achieve the minimum pressure requirement. Therefore, it appears that some consolidation of the proposed Action conditions could be undertaken to achieve equal purpose. STP is requested to determine whether the new Actions are really necessary. It appears that: (1) Action F could be combined with Action B because the result is the same of not meeting the minimum pressure requirement; (2) Action C and Action G are the same and can be made as one and appropriately relocated in the sequence; and (3) Action H is the same as Action E so these two Actions could be combined. It also appears that a modifies version of STS 3.7.10

Action E should be adopted for the consistency with the other three trains LCOs which have the explicit Actions to cover the Loss of Function state of each System.

STP Response:

3.7.11-4 DOC M24,
CTS 3.7.7, Applicability

CTS 3.7.7 Applicability is during "All Modes". ITS 3.7.11 Applicability is during Modes 1-6; During movement of irradiated fuel assemblies; and, During CORE ALTERATIONS.
Comment: It is accepted that "During movement of irradiated fuel assemblies" could be interpreted as more restrictive because it is not related to the unit's mode status; however, Core Alterations can only be done during Mode 6 and this is already part of the current licensing basis. Therefore, Core Alteration should justified under DOC A.1 with the rest of the ITS Applicability. STP is requested to provide a revised justification for DOC M24 which only discusses the changes to the CTS. There are references to other CTS changes in DOC M24 which should be discussed separately in new DOCs. (See Comment 3.7.11-5 below.)

STP Response:

3.7.11-5 DOC LA13
CTS 4.7.7.b
JFD #3
ITS SR 3.7.11.1

CTS 4.7.7.b requires the initiation and periodic operation of the CRE HVAC system for 10 continuous hours with the "makeup filter unit" heater operating. ITS SR 3.7.11.1 does not retained these details of how to verify this function of the CRE HVAC system. These details are relocated to plant procedures.
Comment: It is acceptable to remove these procedural details from the CTS; however, these details shall also be included into the Bases for ITS SR 3.7.11.1. Also, the system is required to Operate using the "makeup filter unit" heaters. This is not clearly identified in the ITS SR 3.7.11.1. STP is requested to identify the heaters or place the heater identities in the Bases. Otherwise, there are other unit heating coils and reheat coils on STP drawing 5V119V25005 #1 which, may be inadvertently used, instead of the makeup filter units.

STP Response:

3.7.11-6 DOC L25
CTS 4.7.7.b and CTS 4.7.7.e.3
JFD #20
ITS SR 3.7.11.1 and SR 3.7.11.4

Comment: This is an example of Generic Comment #2.

STP Response:

3.7.11-7 DOC LA14 and L40
CTS 4.7.7.e.2

Comment: This is an example of Generic Comment #4.

STP Response:

3.7.11-8 JFD #1, #4 and #20
ITS SR 3.7.7.4
CTS 4.7.7.e.3

CTS 4.7.7.e.3 verifies that the CRE HVAC system maintains a positive pressure of 1/8" water gauge. ITS SR 3.7.11.4 requires the same but the STS text has been changed.
Comment: STP states it take two CRE HVAC trains to meet this test; so, change "one" to "two"; "train" to "trains" and substitute "recirculation" for "pressurization" mode. Also, the revised CTS markup indicates that STP is now retaining the Staggered Test Basis; so, please revise the ITS markup for consistency. This last item is also related to Generic Comment #2.

STP Response:

3.7.12, Fuel Handling Building (FHB) HVAC System - Modes 1, 2, 3, and 4

3.7.12-1 No DOC or JFD
ITS 3.7.12

CTS 3/4.7.8 is identified as the Fuel Handling Building (FHB) Exhaust Air System. ITS 3.7.12 is identified as the Fuel Handling Building (FHB) HVAC.
Comment: The name change is acceptable; however, should the new name be identified as with or without "System"?

STP Response:

3.7.12-2 DOC LA17
CTS 3.7.8 Items a thru d

CTS 3.7.8 Items a thru d define the components of the FHB HVAC trains that must be Operable in Modes 1 thru 4. ITS 3.7.12 relocates the definition of Operability for the respective trains to the ITS 3.7.12, Bases, Background discussion.

Comment: It is acceptable to relocated the Operability requirement for the respective FHB HVAC trains to the Bases; however, the new Bases discussion, as presented, does not clarify the system requirements, as yet. STP is requested to answer the following questions: (1) Confirm that there are no components or system operations in the supply side of the FHB HVAC that have an effect on the exhaust side. For example, if one or more of the supply fans are not operating what happens to FHB HVAC system performance? Also, if the supply relief damper redirects air to the building emergency operations, what happens to the FHB HVAC system performance? (2) Insert "Background 1", identifies the CTS "associated dampers" in the filtration train, which is helpful; however, the emergency inlet damper versus the filter inlet damper are not separately distinguishable on P&ID 3V129V00013 #1 or perhaps they are one in the same, #DA-033 and DA-034? Also, there are two dampers in the by-pass line. Is this for double isolation or is the second for "bypass" flow control? STP is requested to identify these dampers in the Bases by their line numbers and to consider preparing a simplified sketch for inclusion into the Bases. (3) The Bases discuss the ability to arrange any combination of exhaust booster fan and main exhaust fan. It is presumed that FHB HVAC trains are dependent upon the Operability of the mechanical dampers identified on the P&ID as DA #'s -151, -151, -153 and -163, -164, -165. STP is requested to explain how these dampers functionally operate and how they are verified Operable and at what frequency?

STP Response:

3.7.12-3 STS 3.7.13 Bases, Background
ITS 3.7.12 Bases, Background

STS 3.7.13 Bases, Background, first paragraph, the second sentence was not adopted in ITS 3.7.12 Bases which states "The FBACS (sic), in conjunction with other normally operating systems, also provides environmental control of temperature and humidity in the fuel pool area."

Comment: STP is requested to explain why the STS text was not adopted when temperature control in safety related areas appears to be function of the FHB HVAC as discussed in Note #11 to P&ID 3V129V00013 #1. Please identify the safety-related areas serviced by the FHB HVAC and revise the Bases discussion as necessary.

STP Response:

3.7.12-4 DOC L20
CTS 4.7.8.a and CTS 4.7.8.d.3
JFD #5
ITS SRs 3.7.12.1 and 3.7.1.2.4

Comment: This is an example of Generic Comment #2.

STP Response:

3.7.12-5 DOC A1-7
CTS 4.7.8.a
JFD #4
ITS SR 3.7.12.1

CTS 4.7.8.a requires that the FHB HVAC system operate for 10 hours. ITS SR 3.7.12.1 states "to operate the required FHB HVAC filtration and ventilation train combination"; whereas, the STS SR 3.7.13.1 requires that each train be operated for 10 hours.
Comment: DOC A1-7 and JFD #4 are inadequate technical justifications for these changes. There are apparently no heaters in the ventilation trains. This verification is presumed to occur twice, once for each filtration train which has heaters, but this is not clearly stated. Using the term "required" is more limited; rather than, the term "each" which means all trains are to be tested. STP is requested to revise ITS SR 3.7.12.1 to be "Operate each FHB HVAC filtration train for 10 continuous hours ....", while it is presumed that the ventilation train will remain in its normal operating mode.

STP Response:

3.7.12-6 DOC LA18
CTS 4.7.8.a and CTS 4.7.8.d.2
ITS SRs 3.7.12.1 and 3.7.12.3

CTS 4.7.8.a and CTS 4.7.8.d.2 have requirements detailing how to perform these verifications. ITS SRs 3.7.12.1 and 3.7.12.3 have not retained these requirements.
Comment: DOC LA18 states these requirements are to be relocated to the Bases and licensee procedures. This is acceptable; however, these CTS requirements have just been deleted rather than moved to the BASES for SRs 3.7.12.1 and 3.7.12.3. STP is requested to revise the submittal to move these CTS requirements to the Bases as stated in DOC LA18.

STP Response:

3.7.12-7 DOC L41
CTS 4.7.8.d.2
ITS SR 3.7.12.3

Comment: This is an example of Generic Comment #4.

STP Response:

3.7.12-8 JFD #4
ITS 3.7.12 Action A

ITS 3.7.12 has Required Action A.1 which states to "Restore FHB HVAC train(s) to Operable status".
Comment: The Action A Condition only permits one of two trains to be inoperable; hence only one train can be restored Operable. The change to add plural to train is not accepted. STP should adopt the STS text, as written.

STP Response:

3.7.12-9 JFD #4
STS SR 3.7.13.4
ITS SR 3.7.12.4
CTS 4.7.8.d.3

CTS 4.7.8.d.3 requires verification that the FHB HVAC system maintains the FHB at a negative pressure of ≥ ⅛-inch water gauge. ITS SR 3.7.12.4 states "Verify the required FHB HVAC filtration and ventilation train combination can maintain a pressure ≤ -0.125 inches water gauge...". STS SR 3.7.13.4 requires that one train be verified to maintain a pressure ≤ -0.125 inches water gauge on a staggered test basis.
Comment: JFD #4 does not adequately explain this change. Please explain how the CTS language to verify that "the system" maintains the FHB at a negative pressure relates to the ITS language to verify "the required FHB HVAC filtration and ventilation train combination" maintains the negative pressure and to the STS language to verify "one FBACS train" can maintain a negative pressure "on a staggered test basis". The concern is whether each train is being tested.

STP Response:

3.7.13, Fuel Handling Building (FHB) HVAC System - During Movement of Irradicted Fuel Assemblies

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3.7.13-1 No DOC or JFD
ITS 3.7.13

CTS 3/4.9.12 is identified as the Fuel Handling Building (FHB) Exhaust Air System. ITS 3.7.13 is identified as the Fuel Handling Building (FHB) HVAC.
Comment: The name change is acceptable; however, should the new name be identified as with or without "System"?

STP Response:

3.7.13-2 DOC LA17
CTS 3.9.12 Items a thru d
ITS 3.7.13

CTS 3.9.12 Items a thru d define the components of the FHB HVAC trains that must be Operable "During the movement of irradiated fuel assemblies". ITS 3.7.13 relocates the definition of Operability for the respective trains to the ITS 3.7.13, Bases, Background discussion.
Comment: STP is referred to the comment for this LCO, as being identical to that expressed in Comment 3.7.12-2. STP is requested to modify the response to this LCO comment to cover any difference in Operation of the FHB HVAC that would be different for the separate LCO Applicability requirements "During the movement of irradiated fuel assemblies".

STP Response:

3.7.13-3 STS 3.7.13 Bases, Background
ITS 3.7.13 Bases, Background

STS 3.7.13 Bases, Background, first paragraph, the second sentence was not adopted in ITS 3.7.13 which states "The FBACS (sic), in conjunction with other normally operating systems, also provides environmental control of temperature and humidity in the fuel pool area."
Comment: STP is requested to explain why the STS text was not adopted when temperature control in safety related areas appears to be a function of the FHB HVAC as discussed in Note #11 to P&ID 3V129V00013 #1. Please identify the safety-related areas serviced by the FHB HVAC and revise the Bases as necessary.

STP Response:

3.7.13-4 ITS 3.7.12 Bases, Background
ITS 3.7.13 Bases, Background

ITS 3.7.13 Bases, Background, is stated as being the same as the ITS 3.7.12 Bases, Background in accordance with the ITS Markup. In fact, they are different when the CTS "clean" copies are compared.
Comment: The ITS 3.7.12 Bases markup is hard to read due to the extensive modification. STP is requested to determine if the noted ITS text difference in the second paragraph is technically correct and is in need of a justification or is an editorial error?

STP Response:

3.7.13-5 DOC L20
CTS 4.9.12.a and CTS 4.9.12.d.3

JFD #5
ITS SRs 3.7.13.1 and 3.7.13.4

Comment: This is an example of Generic Comment #2.

STP Response:

3.7.13-6 DOC A1-8
CTS 4.9.12.a
JFD #4
ITS SR 3.7.13.1

CTS 4.9.12.a requires that the FHB HVAC system operate for 10 hours. ITS SR 3.7.13.1 states "to operate the required FHB HVAC filtration and ventilation train combination"; whereas, the STS SR 3.7.13.1 requires that each train be operated for 10 hours. **Comment:** DOC A1-8 and JFD #4 are inadequate technical justifications for these changes. There are apparently no heaters in the ventilation trains. This verification is presumed to occur twice, once for each filtration train which has heaters, but this is not explained. Using the term "required" is more limited; rather than, the term "each" which means all trains are to be tested. STP is requested to revise ITS SR 3.7.13.1 to be "Operate each FHB HVAC filtration train for 10 continuous hours ....", while it is presumed that the ventilation train will remain in its normal operating mode.

STP Response:

3.7.13-7 DOC LA18
CTS 4.9.12.a and CTS 4.9.12.d.2
ITS SRs 3.7.13.1 and 3.7.13.3

CTS 4.9.12.a and CTS 4.9.12.d.2 have requirements detailing how to perform these verifications. ITS SRs 3.7.13.1 and 3.7.13.3 have not retained these requirements. **Comment:** DOC LA18 states these requirements are to be relocated to the Bases and licensee procedures. This is acceptable; however, these CTS requirements have just been deleted rather than moved to the BASES for SRs 3.7.13.1 and 3.7.13.3. STP is requested to revise the submittal to move these CTS requirements to the Bases as stated in DOC LA18.

STP Response:

3.7.13-8 DOC LA17
CTS 3.9.12
ITS 3.7.13

CTS 3.9.12 has a footnote #1 which contains Operability requirements for the FHB HVAC train capable of being powered from an Operable onsite emergency power source. ITS 3.7.13 has not retained these requirements.
Comment: DOC LA17 states these requirements are to be relocated to the Bases and licensee procedures. This is acceptable; however, this CTS requirement has just been deleted rather than moved to the BASES of 3.7.13. STP is requested to revise the submittal to move this CTS requirement to the Bases as stated in DOC LA17.

STP Response:

3.7.13-9 DOC L41
CTS 4.9.12.d.2
ITS SR 3.7.13.3

Comment: This is an example of Generic Comment #4.

STP Response:

3.7.13-10 DOC L31 and L33
CTS 3.9.12 Applicability and Action b
ITS 3.7.13 Applicability and Action C

CTS 3.9.12 Applicability is "Whenever irradiated fuel is in the spent fuel pool". ITS 3.7.13 Applicability is "During the movement of irradiated fuel assemblies in the fuel handling building".
Comment: The change in Applicability is acceptable; however, the DOC L31 justification is weakened by the DOC L33 argument. STP is requested to clarify if this LCO is applicable during the movement of new fuel in the fuel handling building. What are the specific prescriptive controls at STP which will ensure a potential new fuel bundle drop onto an irradiated fuel assembly cannot occur?

STP Response:

3.7.13-11 JFD #4
ITS 3.7.13 Action A and B

ITS 3.7.13 have Required Action A.1 and B.1 which respectively "Restore train(s) to Operable status" and "Place Operable train(s) in operation".
Comment: The Action A Condition only permits one of two trains to be inoperable; hence only one train can be restored to Operable status. Required Action B.1 pertains to the one remaining Operable train; hence only one train can be placed in operation. The change to add plural to train is not appropriate. STP should adopt the STS text, as written. Also, the Action B Condition statement of "During movement of irradiated fuel assemblies in the fuel

handling building" can be deleted because it is redundant, just like the same text which is deleted from ITS 3.7.13 Action C.

STP Response:

3.7.13-12 JFD #4
STS SR 3.7.13.4
ITS SR 3.7.13.4
CTS 4.9.12.d.3

CTS 4.9.12.d.3 requires verification that the FHB HVAC system maintains the spent fuel sotrage pool area at a negative pressure of ≥ ⅛-inch water gauge. ITS SR 3.7.13.4 states "Verify the required FHB HVAC filtration and ventilation train combination can maintain a pressure ≤ -0.125 inches water gauge...". STS SR 3.7.13.4 requires that one train be verified to maintain a pressure ≤ -0.125 inches water gauge on a staggered test basis. **Comment:** JFD #4 does not adequately explain this change. Please explain how the CTS language to verify that "the system" maintains the spent fuel storage pool area at a negative pressure relates to the ITS language to verify "the required FHB HVAC filtration and ventilation train combination" maintains the negative pressure and to the STS language to verify "one FBACS train" can maintain a negative pressure "on a staggered test basis". The concern is whether each train is being tested.

STP Response:
