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

May 20, 1998

LICENSEE: Duke Energy Corporation

FACILITY: Oconee Nuclear Station, Units 1, 2, and 3

SUBJECT: SUMMARY OF THE MAY 11-12, 1998, MEETING ON OCONEE NUCLEAR STATION ELECTRICAL TECHNICAL SPECIFICATIONS, ELECTRICAL REPORT, AND IMPROVED TECHNICAL SPECIFICATIONS

On May 11 and 12, 1998, NRC Projects, Electrical Engineering, and Technical Specifications Branch personnel met at the NRC headquarters in Rockville, Maryland, with representatives of the Duke Energy Corporation (DEC) staff to discuss various electrical system issues related to the Oconee Nuclear Station. Enclosure 1 is a list of the individuals who attended the meeting and Enclosure 2 is the handout material that was supplied by DEC.

The topics discussed included the status of the Keowee delayed loading, voltage and frequency modifications, discussion of the amendments to the Oconee Electrical Technical Specifications (TS) that are under staff review and of various aspects of the Improved TS project that is also under staff review. All of the handout material supplied by the licensee for the various discussions is draft material that is subject to revision prior to its submittal.

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Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-269, 50-270, and 50-287

Enclosures:
1. Attendance List
2. DEC Handout

cc w/encls: See next page

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ATTENDANCE RECORD

MAY 11-12, 1998

NAME	AFFILIATION
D. LaBarge*	NRR/PD II-2
J. Lazevnick*	NRR/DE/EELB
Aldeau Beuge	Duke/NGO
James E. Stoner, Jr.	Duke/NGD-GO
Clay A. Little	Duke/NGD/Oconee
H. Todd Grant	Duke/NGD/Oconee
D. A. Donaldson	Duke/NGO
Michael Bailey	Duke/NGO/Oconee
Boyd Shingleton*	Duke/Oconee/Excel
Noel Clarkson*	Duke/NGD/Oconee
Tom Dunning*	NRR/TSB
Frank Ashe*	NRR/DE/EELB
Duc Nguyen*	NRR/DE/EELB

*Also present for meeting on May 12, 1998.

Enclosure 1

ONS Emergency Power System Modifications

May 1998

1. Delayed Loading of Keowee for LOCA/LOOP
2. Out-of-Tolerance Voltage and Frequency Protection

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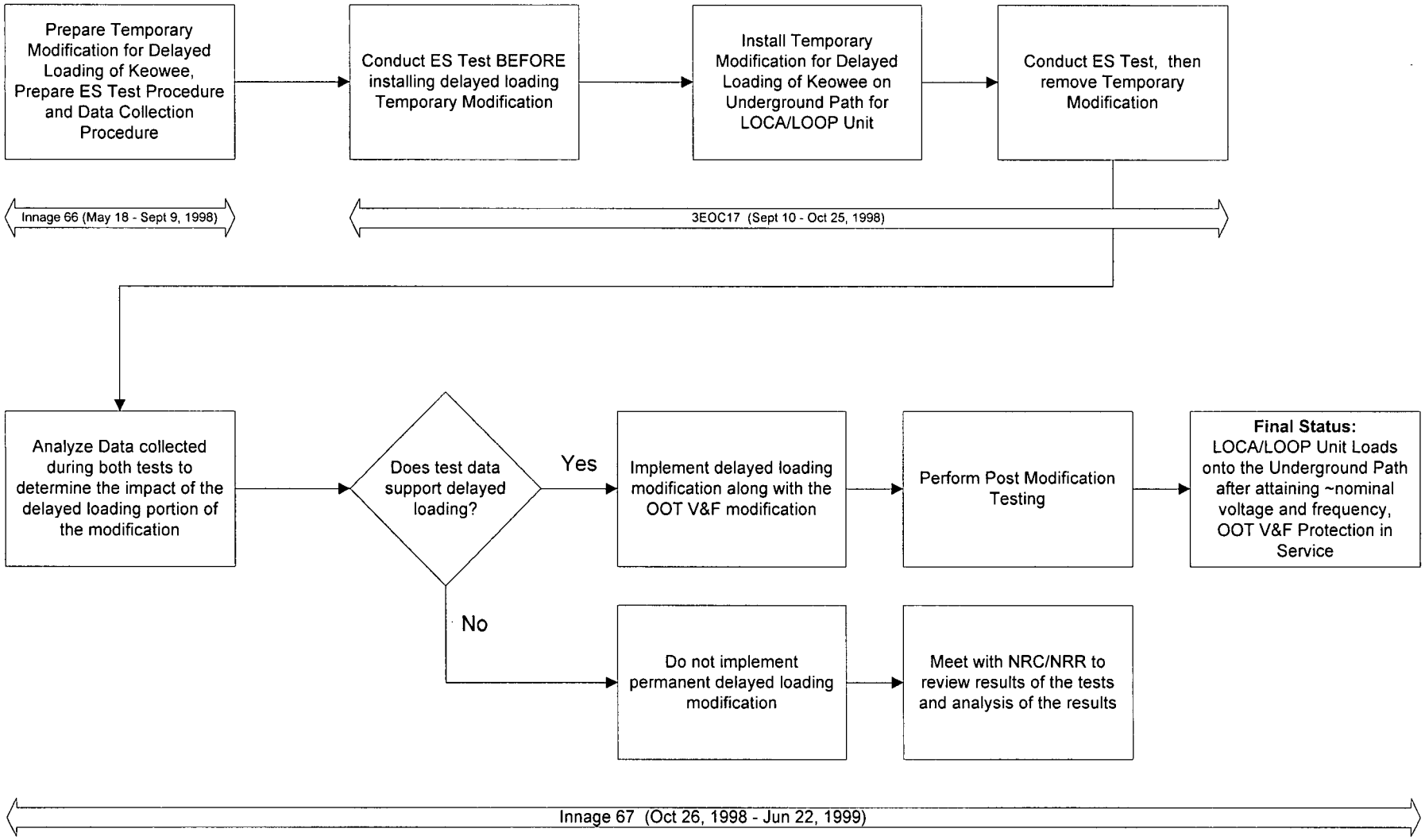
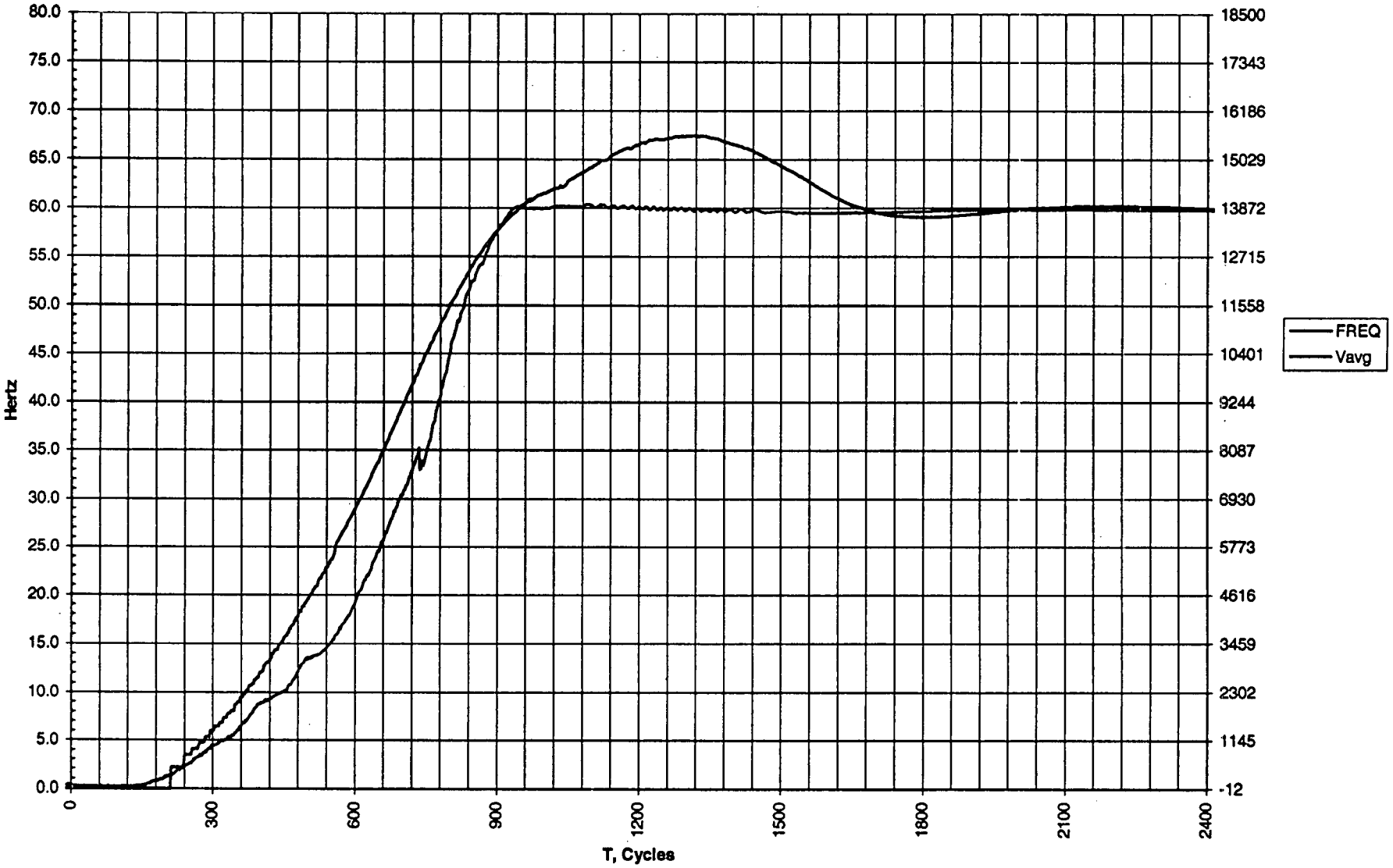


Enclosure 2

DRAFT

Figure 4.3.1-5: Test3, Keowee Frequency and Current



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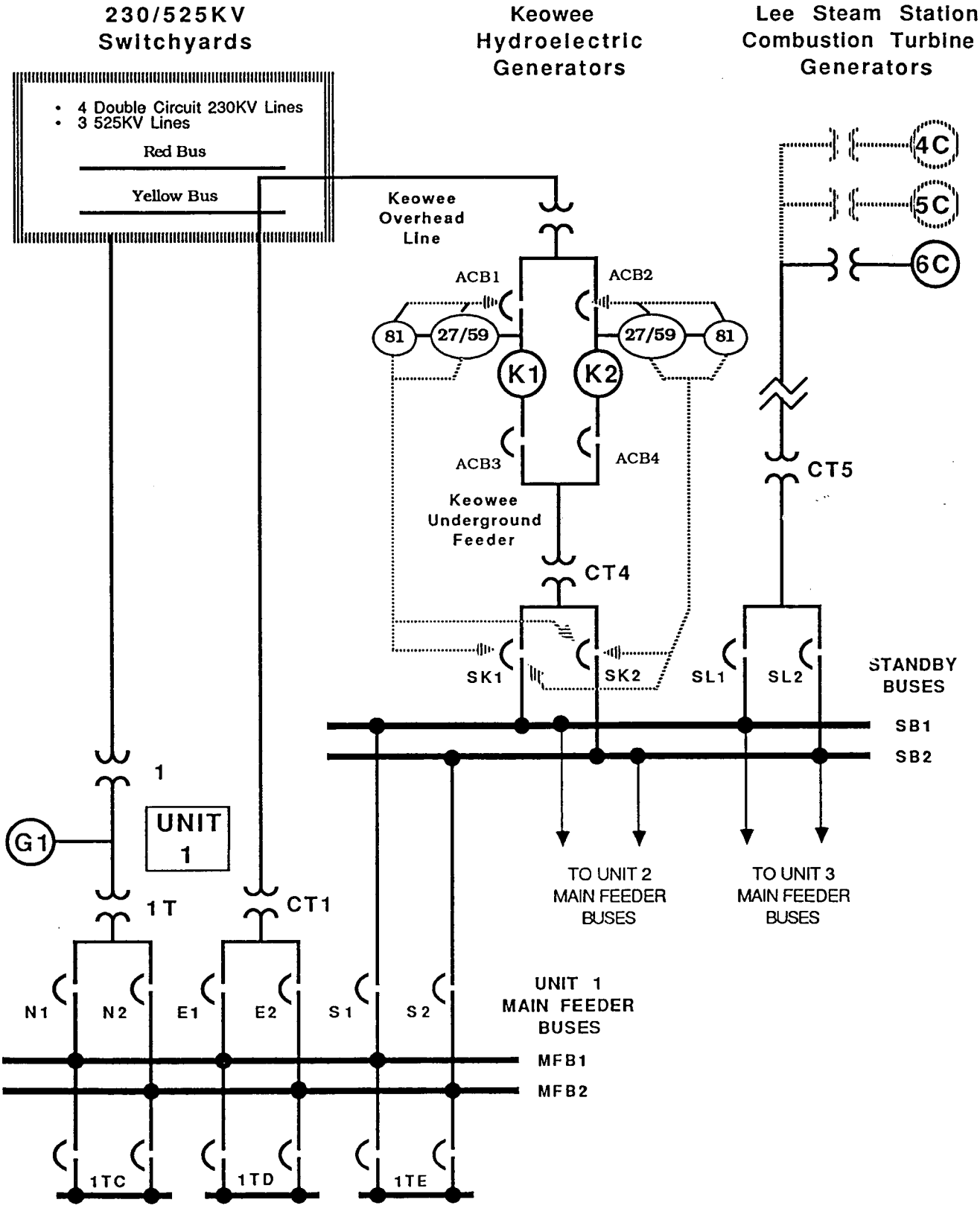
OCONEE NUCLEAR STATION
Emergency Power System



Based on Reviewing ONS Supplement 1, be advised of the status of the following TSTFs.

1. TSTFs 211, 212, 213, 217 are under staff review and not yet approved. This applies to section 3.3.3, 3.3.4, 3.3.5, 3.3.6, 3.3.7, 3.3.11; and the respective Bases and JFDs. ID No. 56.

2. TSTF 216 does not apply to section 3.4. This is ID No. 46.

3. TSTF 257 is under staff review and not yet approved. This applies to section 3.4, ID No. 47.

4. TSTFs 255, 259, 260, 261, 262, 263, and 264 have not been submitted for staff review. These TSTFs affect the following specifications.

255 - Bases for 3.7.13
259 - SR 3.3.1.3
260 - Spec 3.6.5
261 - Specs 3.4.5, 3.4.6,
262 - Spec 3.4.8
263 - Spec 3.4.5, 3.4.6, 3.4.7, 3.4.8
264 - SR3.3.10.3, Bases of 3.3.9 & 3.3.10

5. ITS section 3.4.7 ID No. 60. Actions A, B, SR 3.4.7.1, TSTF number has been left out.

Improved STS Change Packages by Status

NRC Action Pending

TSTF-2, Rev. 1	Relocate the 10 year sediment cleaning of the fuel oil storage tank to licensee control
TSTF-21, Rev. 1	Make RHR - Low Water Level Surveillances consistent between PWR NUREGs
TSTF-51, Rev. 0	Revise containment requirements during handling irradiated fuel and core alterations
TSTF-58, Rev. 0	Incorporate CE NPSD-995 recommendations into the ECCS specification
TSTF-59, Rev. 0	Incorporate CE NPSD-994 recommendations into the SITs specification
TSTF-68, Rev. 1	Containment Personnel Airlock Doors Open During Fuel Movement
TSTF-92, Rev. 1	Revise the Containment Purge and Exhaust SR to exempt valves that are locked, sealed or secured
TSTF-96, Rev. 1	Delete the initial performance of the boron concentration measurement with no source range detectors
TSTF-111, Rev. 1	Revise Bases for SRs 3.3.1.16 and 3.3.2.10 to eliminate pressure sensor response time testing
TSTF-113, Rev. 4	Eliminate Shutdown to MODE 4 for inoperable PORVs
TSTF-116, Rev. 2	RCS Inventory Balance SR: Steady State Clarification
TSTF-151, Rev. 1	PORV Operability Clarification
TSTF-160, Rev. 1	LCO 3.2.5, "Power Peaking Factors" Applicability Change to MODE 1 with THERMAL POWER > 20% RTP
TSTF-161, Rev. 1	SI Reference Applicability
TSTF-168, Rev. 0	RTB Maintenance
TSTF-190, Rev. 1	Remove reference to inadvertently bypassing a redundant channel
TSTF-197, Rev. 0	Require containment closure when shutdown cooling requirements are not met.
TSTF-204, Rev. 0	Revise DC Sources - Shutdown and Inverters - Shutdown to Address Specific Subsystem Requirements
TSTF-206, Rev. 0	Applicabilities of Suppression Pool Average Temperature Limits
TSTF-211, Rev. 0	Clarify that remove all power to the CRD system means remove power to CRD trip breakers
TSTF-213, Rev. 0	Eliminate extraneous verbiage from the definition of CONTROL RODS
TSTF-215, Rev. 0	Modify LCO 3.3.6 and LCO 3.3.7 Applicability
TSTF-217, Rev. 0	Provide applicable Required Action when more than one instrumentation channel is inoperable
TSTF-218, Rev. 0	Change 3.3.1 Applicability for Nuclear Overpower High Setpoint and RCS High Pressure functions
TSTF-219, Rev. 0	LCO 3.4.12, Action I, is modified to eliminate unnecessary Required Action and Completion Time
TSTF-223, Rev. 0	Increase Completion Time for HPCI and One ADS Valve Inoperable
TSTF-226, Rev. 0	Fuel loading with control rods withdrawn or removed from defueled core cells
TSTF-227, Rev. 0	Revision to EOC-RPT pump actions
TSTF-228, Rev. 0	Revise RHR applicability
TSTF-229, Rev. 0	Revise SR 3.2.2.2 for consistency with SR 3.1.4.4
TSTF-231, Rev. 0	Reword Bases for Turbine Stop Valve (TSV) Closure function of RPS Instrumentation LCO
TSTF-232, Rev. 0	Refuel Equipment Interlocks Applicability Change
TSTF-233, Rev. 0	Relocate LTOP Arming Temperature to PTLR
TSTF-234, Rev. 0	Add Action for More Than One DRPI Inoperable
TSTF-235, Rev. 0	MSSV Changes
TSTF-237, Rev. 0	Relaxation of Reactor Coolant Pump Flywheel Examinations
TSTF-238, Rev. 0	Correct control bank insertion limits action for applicable mode
TSTF-239, Rev. 0	Correct shutdown bank insertion limits applicability
TSTF-240, Rev. 0	Eliminate unnecessary Actions to restore compliance with the LCO
TSTF-241, Rev. 0	Allow time for stabilization after reducing power due to QPTR out of limit
TSTF-242, Rev. 0	Increase the time to perform a COT on Power Range and Intermediate Range Instruments
TSTF-243, Rev. 0	Correct Applicability for LTOP specifications

TSTF-244, Rev. 0 Correct invalid SR for Containment Isolation Valve Position
TSTF-245, Rev. 0 AFW train operable when in service
TSTF-246, Rev. 0 RTS Instrumentation, 3.3.1 Condition F Completion Time
TSTF-247, Rev. 0 Provide separate condition entry for each PORV and block valve
TSTF-248, Rev. 0 Revise Shutdown Margin definition for stuck rod exception
TSTF-249, Rev. 0 Physics Tests Exceptions reactivity effects correction.
TSTF-250, Rev. 0 Delete specific FSAR section references
TSTF-251, Rev. 0 Delete TS 5.6.9, Tendon Surveillance Report
TSTF-252, Rev. 0 Provide generic SG tube surveillance reporting requirements
TSTF-253, Rev. 0 Omit Note which indicates that performance of one SR satisfies another
TSTF-254, Rev. 0 Delete accumulated water checks for DG fuel oil.
TSTF-256, Rev. 0 Modify MODE 2 STE Applicability
TSTF-258, Rev. 0 Changes to Section 5.0, Administrative Controls

Total Number of Travelers: 55

NRC Approves

TSTF-5, Rev. 1 Delete safety limit violation notification requirements
TSTF-5, Rev. 0 Delete safety limit violation notification requirements
TSTF-6, Rev. 1 Add Exception for LCO 3.0.7 to LCO 3.0.1
TSTF-8, Rev. 2 Revise the SR 3.0.1 Bases to allow credit for unplanned events to meet any Surveillance
TSTF-9, Rev. 1 Relocate value for shutdown margin to COLR
TSTF-12, Rev. 1 Delete LCO 3.1.9 and 3.1.11 (Physics Tests Exceptions)
TSTF-13, Rev. 1 Move SR for 300 ppm MTC measurement to Frequency Note of SR 3.1.4.3
TSTF-14, Rev. 4 Add an LCO item and SR to Mode 2 Physics Tests Exceptions to verify that Thermal Power <= 5% RTP.
TSTF-14, Rev. 3 Add an LCO item and SR to Mode 2 Physics Tests Exceptions to verify that Thermal Power <= 5% RTP.
TSTF-14, Rev. 0 Add an LCO item and SR to Mode 2 Physics Tests Exceptions to verify that Thermal Power <= 5% RTP.
TSTF-15, Rev. 1 Correct error in Bases for LCO 3.1.5
TSTF-17, Rev. 1 Extension of testing frequency of containment airlock interlock mechanism from 184 days to 24 months
TSTF-19, Rev. 1 Relocate the details of RTD and thermocouple calibration from the Channel Calibration definition
TSTF-20, Rev. 0 Delete extraneous Action from Refueling Cavity Water Level
TSTF-21, Rev. 0 Make RHR - Low Water Level Surveillances consistent between PWR NUREGs
TSTF-23, Rev. 3 Bracket NUREG-1431 LCO 3.9.2, Unborated Water Source Isolation Valves
TSTF-24, Rev. 1 Delete the details on updating the target flux difference.
TSTF-26, Rev. 0 Revise the Action for Minimum Temperature for Criticality to match the Applicability
TSTF-27, Rev. 3 Revise SR frequency for Minimum Temperature for Criticality
TSTF-28, Rev. 0 Delete unnecessary Action to measure gross specific activity
TSTF-30, Rev. 2 Extend the Completion Time for inoperable isolation valve to a closed system to 72 hours
TSTF-30, Rev. 0 Extend the Completion Time for inoperable isolation valve to a closed system to 72 hours
TSTF-32, Rev. 0 Slow/Stuck Control Rod Separation Criteria
TSTF-33, Rev. 0 Specification 3.1.3, Required Action A.2 Completion Time Note
TSTF-34, Rev. 0 Delete Requirements to Disarm the associated CRD when two or more withdrawn control rods are stuck
TSTF-35, Rev. 0 Recirculation pump start RPV temperature limits verification note
TSTF-38, Rev. 0 Revise visual surveillance of batteries to specify inspection is for performance degradation
TSTF-40, Rev. 0 Exempt RCP seal water injection or leakoff from the definition of Unidentified Leakage

TSTF-42, Rev. 0	Revise the wording of SR 3.0.2 to be consistent with the other NUREGs
TSTF-43, Rev. 0	Add additional examples to the SR 3.0.1 Bases to provide additional clarification
TSTF-45, Rev. 1	Exempt verification of CIVs that are not locked, sealed or otherwise secured
TSTF-46, Rev. 1	Clarify the CIV surveillance to apply only to automatic isolation valves
TSTF-47, Rev. 0	Eliminate "manipulation" from the definition of Core Alteration
TSTF-53, Rev. 1	Clarify Manual PORVs are capable of mitigating an overpressure event
TSTF-54, Rev. 1	Operational Leakage TS Bases changed to be consistent with the Identified Leakage definition
TSTF-55, Rev. 0	Revise "minimum" to "maximum" in LTOP Bases
TSTF-56, Rev. 0	Delete reference to PORV setpoint operating correctly
TSTF-57, Rev. 0	Delete reference to minimum number of pressurizer safeties needed to be operable in lower modes
TSTF-60, Rev. 0	Make LCO 3.0.4 applicable to all actions of TS 3.4.15
TSTF-61, Rev. 0	Added statement clarifying the intent of the RCS water inventory balance surveillance
TSTF-62, Rev. 0	Delete RCP requirement from SR 3.4.1.3 Note
TSTF-63, Rev. 0	Clarification of Action B when RCS loops are filled in Mode 5
TSTF-65, Rev. 1	Use of generic titles for utility positions
TSTF-66, Rev. 0	Revise RCS specific activity LCO
TSTF-67, Rev. 0	Correction of Shutdown Margin Definition
TSTF-69, Rev. 0	Remove SR 3.3.1.6 from Function 14 and 15 in Table 3.3.1-1 (Digital)
TSTF-70, Rev. 0	Fuel Storage Pool Verification
TSTF-70, Rev. 1	Fuel Storage Pool Verification
TSTF-71, Rev. 1	Add example of SFDP to the 3.0.6 Bases
TSTF-72, Rev. 0	Split Function 12 in Table 3.3.1-1 into Two Functions
TSTF-73, Rev. 0	Indicate that RC Flow - Low, Step Allowable value is <= [7.231] psid
TSTF-74, Rev. 0	ESFAS Automatic Bypass Removal SR
TSTF-75, Rev. 0	Delete SR 3.1.5.4 from LCO 3.3.3, Action B2
TSTF-76, Rev. 0	Remove references to the onsite review function
TSTF-77, Rev. 0	Add an Action for an Adverse Condition for LHR and DNBR
TSTF-78, Rev. 0	Surveillance Requirement for ASME Section XI Pumps
TSTF-79, Rev. 1	Change Specification 3.3.4 SR to agree with CEN-327
TSTF-80, Rev. 1	Added Shutdown Track Action for Loss of Load and APD Trips
TSTF-81, Rev. 0	Add Note to SR 3.3.1.8 and SR 3.3.1.9 excluding neutron detectors
TSTF-82, Rev. 1	Move Allowable Value from LCO 3.3.2 to SR 3.3.2.4
TSTF-83, Rev. 0	Specification 3.3.3 Condition A Note was made into a second Condition
TSTF-84, Rev. 0	LCO 3.0.4 exception added to Condition for two CVCS Isolation channels inoperable
TSTF-85, Rev. 1	Add MODES column to Table 3.3.1-1
TSTF-87, Rev. 2	Revise "RTBs open" & "CRDM de-energized" Actions to "incapable of rod withdrawal"
TSTF-89, Rev. 0	Change to Frequency of SR 3.1.8.1
TSTF-90, Rev. 1	Add a Note to LCO 3.5.3 that allows RHR to be Operable as ECCS when aligned for decay heat removal
TSTF-93, Rev. 3	Change the frequency of pressurizer heater testing from 92 days to [18] months
TSTF-94, Rev. 1	Remove number of required pressurizer heater groups from Pressurizer LCO
TSTF-95, Rev. 0	Revise completion time for reducing Power Range High trip setpoint from 8 to 72 hours
TSTF-96, Rev. 0	Delete the initial performance of the boron concentration measurement with no source range detectors
TSTF-97, Rev. 0	Revise Note to SR 3.2.1.2, Fq measurement
TSTF-98, Rev. 1	Relocate the Fq(z) penalty factor to the COLR

Improved STS Change Packages by Status

TSTF-98, Rev. 2	Relocate the Fq(z) penalty factor to the COLR
TSTF-99, Rev. 0	Extend the Completion Time for Fq(w) not within limits from 2 hours to 4 hours
TSTF-100, Rev. 0	Revise ADV Action B to state "Restore All But One ADV to Operable Status"
TSTF-101, Rev. 0	Change AFW pump testing frequency to be "In accordance with the Inservice Testing Program"
TSTF-104, Rev. 0	Relocates discussion of exceptions from LCO 3.0.4 to the Bases
TSTF-106, Rev. 1	Change to Diesel Fuel Oil Testing Program
TSTF-108, Rev. 1	Eliminate the 12 hour COT on power range and intermediate range channels for Physics Test Exceptions
TSTF-109, Rev. 0	Clarify the QPTR surveillances
TSTF-110, Rev. 2	Delete SR frequencies based on inoperable alarms
TSTF-112, Rev. 1	Revise Condition D in Tech Spec 3.2.3.A
TSTF-114, Rev. 0	Revise Bases for 3.4.7 to address DHR via natural circulation
TSTF-117, Rev. 0	Revise Accumulator Pressure Reference from Pressurizer to RCS
TSTF-118, Rev. 0	Administrative Controls Program Exceptions
TSTF-122, Rev. 0	Revise LCO 3.0.2 Bases to Remove Possible Confusion
TSTF-123, Rev. 1	Revise "Control Rod" assemblies in Design Features to Match Definitions
TSTF-124, Rev. 0	Delete Specific Reference to Bypasses in CFT and Calibration Definitions
TSTF-125, Rev. 1	Delete EFPD Definition
TSTF-126, Rev. 0	Delete extraneous information from Safety Limits
TSTF-127, Rev. 1	Decrease Frequency to 92 days for CMI and CEA Deviation Circuit Functional Test
TSTF-128, Rev. 1	Revise TSP Description
TSTF-129, Rev. 0	RCS Maximum Flowrate
TSTF-130, Rev. 1	Add Note to Exclude Neutron Detectors from Channel Calibration
TSTF-132, Rev. 0	Remove Note (b) from Table 3.3.1-1
TSTF-133, Rev. 1	Add a Criteria Discussion to TSP LCO
TSTF-134, Rev. 1	Add Note Crediting CEA Drop Time SR for CEA Trip from 50% Withdrawn SR
TSTF-136, Rev. 0	Combine LCO 3.1.1 and 3.1.2
TSTF-137, Rev. 0	Relocation of the 3.4.16 Action Note A Bases
TSTF-139, Rev. 1	Incorrect Criteria Defined in B 3.7.16
TSTF-140, Rev. 0	Correct Condensate Storage Tank LCO and Criteria
TSTF-141, Rev. 0	Delete the Mode 2 Applicability for Reactivity Balance
TSTF-142, Rev. 0	Increase the Completion Time When the Core Reactivity Balance is Not Within Limit
TSTF-143, Rev. 0	Consolidate Specification 3.1.5 Actions to Restore Misaligned CEAs
TSTF-144, Rev. 0	Addition of Linear Heat Rate to Safety Limits Section
TSTF-146, Rev. 0	Revise LCO 3.9.4 to Require One SDC Loop Operable and in Operation
TSTF-148, Rev. 0	Allows the Use of Generic Shape Annealing Matrix Elements
TSTF-149, Rev. 0	Revise LHR SR to be Consistent with the LCO
TSTF-150, Rev. 0	Replace DNBR Power Decrease Number with Reference to the COLR
TSTF-152, Rev. 0	Revise Reporting Requirements to be Consistent with 10 CFR 20
TSTF-153, Rev. 0	Clarify Exception Notes to be Consistent with the Requirement Being Excepted
TSTF-154, Rev. 2	Revise Criteria Discussions of Special Test Exceptions
TSTF-156, Rev. 1	LCO 3.1.9.c removal of extraneous detail
TSTF-158, Rev. 1	3.1.5 Safety Rod Insertion Limits, Required Action A.1 Deletion
TSTF-162, Rev. 0	Maximum pressurizer water level limit bases
TSTF-163, Rev. 2	Minimum vs. Steady State Voltage and Frequency

TSTF-164, Rev. 0 AFD Notes Rearranged
TSTF-165, Rev. 0 Revise the LCO 3.0.5 Bases to Refer to Testing and Not SRs
TSTF-166, Rev. 0 Correct Inconsistency Between LCO 3.0.6 and the SFDP Regarding Performance of an Evaluation
TSTF-169, Rev. 0 Delete Condition 3.3.1.N
TSTF-170, Rev. 0 Open only affected RTCBs when a single channel is inoperable
TSTF-172, Rev. 0 Revise SR 3.1.4.1 to correct MTC reference
TSTF-173, Rev. 0 Delete incorrect Bases statement regarding I-131 equilibrium
TSTF-174, Rev. 0 Add missing Bases for 3.7.6, Actions A.1 and A.2
TSTF-175, Rev. 0 Delete incorrect Bases discussion from 3.7.8, Action B
TSTF-176, Rev. 2 Revise SR 3.1.4.1 to delete SR Note
TSTF-177, Rev. 0 Revise LCO 3.4.5 Bases to clarify RCP requirements
TSTF-178, Rev. 0 Remove "trip or bypass removal" from RPS and ESFAS Action Note
TSTF-179, Rev. 0 Replace the phrase "maximum allowed THERMAL POWER level" with "RTP"
TSTF-180, Rev. 0 Add "bypass removal" features to the RPS Instrumentation - Shutdown LCO
TSTF-181, Rev. 0 Move Notes from Conditions to Required Actions
TSTF-182, Rev. 0 Add Manual Trip to Condition for two channels of RPS Logic and Trip Initiation inoperable
TSTF-184, Rev. 0 Change Required Action Reference from 3.6.3 to 3.9.3
TSTF-185, Rev. 0 Change AND to OR in CPIS Condition B
TSTF-186, Rev. 0 Correct SRs which verify setpoints
TSTF-187, Rev. 0 Add Condition for Two Inoperable Actuation Channels
TSTF-188, Rev. 0 Remove incorrect reference from the PAM table
TSTF-189, Rev. 0 Remove uncertainty discussion from the Bases
TSTF-191, Rev. 0 Eliminate reference to Manual Trip in Bases
TSTF-192, Rev. 0 Correct a reference to RTCB channels
TSTF-193, Rev. 0 Revise CE Analog CEA Position Indication Verification
TSTF-194, Rev. 0 Add shutdown CEAs to the SDM Special Test Exception
TSTF-195, Rev. 0 Revise 3.4.6 Action A.1 to be consistent with the Specification
TSTF-207, Rev. 0 Completion Time for Restoration of MSIV Leakage Rate
TSTF-208, Rev. 0 Extension of time to reach Mode 2 in LCO 3.0.3
TSTF-210, Rev. 0 Correct 3.7.16.1 Bases to match the SR
TSTF-214, Rev. 0 Delete LCO 3.9.1, part b
TSTF-216, Rev. 0 Move Applicability Note to LCO to avoid confusion in the application of SR 3.0.4 for MODE changes
TSTF-220, Rev. 0 Revise Actions for inoperable, misaligned APSR
TSTF-221, Rev. 0 Delete Incorrect 3.10.8 Condition C
TSTF-222, Rev. 0 Control Rod Scram Time Testing
TSTF-225, Rev. 0 Fuel movement with inoperable refueling equipment interlocks
TSTF-230, Rev. 0 Add new Condition B to LCO 3.6.2.3, "RHR Suppression Pool Cooling"

Total Number of Travelers: 153

Reviewer Recommends Changes

TSTF-37, Rev. 1 Diesel Generator Surveillance Changes Based on Generic Letter 94-01 and the Maintenance Rule

Total Number of Travelers: 1

NRC Rejects: TSTF Accepts

TSTF-1, Rev. 1	Make LCO 3.0.5 applicable to variables in addition to systems and equipment
TSTF-3, Rev. 1	Relocate references to thyroid dose conversion factors to the Bases
TSTF-4, Rev. 1	Move the PORV lift settings and the enable temperature to the PTLR
TSTF-10, Rev. 1	Revise the Control Rod LCOs Applicability from Mode 2 to Mode 2 with Keff >= 1.0
TSTF-11, Rev. 1	Delete "All" from LCO 3.1.5, "Rod Group Alignment Limits"
TSTF-22, Rev. 0	Bracket the flow rate requirement in the RHR SR as some plants do not assume a specific flow rate.
TSTF-25, Rev. 0	Revise the Actions terminology regarding QPTR to match the Actions being taken
TSTF-29, Rev. 0	Remove Mode 4 when S/Gs are relied upon from the Modes of Applicability
TSTF-31, Rev. 0	Revise the 1.3 examples to match the BWR standard
TSTF-44, Rev. 0	Add a note to the Containment Isolation Valve LCO which exempts MSSVs, MSIVs, MFIV, MFRVs, and ADVs
TSTF-86, Rev. 0	Delete overtime requirements in Section 5.0
TSTF-91, Rev. 1	Relocate the trip setpoints and allowable values for loss of voltage and undervoltage to the Bases
TSTF-102, Rev. 0	Extend the periodic verification of inoperable MSIV and MFIV closure to 31 days
TSTF-103, Rev. 1	Add bracketed information to LCO 3.0.4 inappropriately deleted by Rev. 0 Change BWR-26
TSTF-119, Rev. 0	Delete Fire Protection Program Implementation from Administrative Controls
TSTF-167, Rev. 0	High Radiation Area - Unauthorized Changed to Inadvertent
TSTF-257, Rev. 0	Revise leakage detection instrument Conditions to eliminate requirement to enter LCO 3.0.3

Total Number of Travelers: 17

NRC Requests Changes: TSTF Considering

TSTF-209, Rev. 0	Delete inappropriate Condition entry statement

Total Number of Travelers: 1

NRC Requests Changes: TSTF Will Revise

TSTF-52, Rev. 0	Implement 10 CFR 50, Appendix J, Option B
TSTF-107, Rev. 0	Separate control rods that are untrippable versus inoperable
TSTF-135, Rev. 0	3.3 - RPS and ESFAS Instrumentation
TSTF-198, Rev. 0	Specification 3.8.6 - Unlimited use of battery charging current in lieu of specific gravity
TSTF-199, Rev. 0	3.8.4 - Delete maintenance Surveillances
TSTF-200, Rev. 0	Unlimited use of battery modified performance discharge test
TSTF-201, Rev. 0	Omit battery "conditional evalutations" from SR 3.8.6.2
TSTF-202, Rev. 0	Revise battery Surveillance weekly Frequencies
TSTF-203, Rev. 0	Add Bases for 3.8.6 Actions Note

Total Number of Travelers: 9

NRC Rejects: TSTF Considering

TSTF-16, Rev. 1	Add Action to LCO 3.8.9 to require entry into LCO 3.0.3 when there is a loss of function
TSTF-36, Rev. 3	Addition of LCO 3.0.3 N/A to shutdown electrical power specifications
TSTF-41, Rev. 0	Correct BWOG LCO 3.0.7 to refer to Special Exception LCOs
TSTF-48, Rev. 0	Eliminate repeated information from LCO 3.0.7 Bases
TSTF-105, Rev. 1	Remove the details of performing an RCS flow measurement
TSTF-120, Rev. 0	Simplify Fuel Oil Sampling

TSTF-131, Rev. 0 Remove Note (C) from CEOG Digital Table 3.3.1-1
TSTF-135, Rev. 1 3.3 - RPS and ESFAS Instrumentation
TSTF-138, Rev. 0 Addition of Action for Inoperable Steam Generator
TSTF-147, Rev. 0 Clarify that RPS and ESFAS Matrix Logic Testing Does Not Affect Operability
TSTF-196, Rev. 0 Revise isolation devices to include ASME/ANSI equivalent methods
TSTF-224, Rev. 0 Increase Completion Time for One ADS and One Low Pressure ECCS Inoperable
TSTF-236, Rev. 0 Seal Injection Flow 72 Hour Completion Time
Total Number of Travelers: 13

NRC Rejects: TSTF to Pursue

TSTF-18, Rev. 0 Require only one secondary containment access door per access opening to be closed
Total Number of Travelers: 1

Superceded by Revision

TSTF-1, Rev. 0 Make LCO 3.0.5 applicable to variables in addition to systems and equipment
TSTF-2, Rev. 0 Relocate the 10 year sediment cleaning of the fuel oil storage tank to licensee control
TSTF-3, Rev. 0 Relocate references to thyroid dose conversion factors to the Bases
TSTF-4, Rev. 0 Move the PORV lift settings and the enable temperature to the PTLR
TSTF-6, Rev. 0 Add Exception for LCO 3.0.7 to LCO 3.0.1
TSTF-7, Rev. 0 Delete the 1 hour time limit to begin reducing power from LCO 3.0.3
TSTF-8, Rev. 0 Revise the SR 3.0.1 Bases to allow credit for unplanned events to meet any Surveillance
TSTF-8, Rev. 1 Revise the SR 3.0.1 Bases to allow credit for unplanned events to meet any Surveillance
TSTF-9, Rev. 0 Relocate value for shutdown margin to COLR
TSTF-10, Rev. 0 Revise the Control Rod LCOs Applicability from Mode 2 to Mode 2 with Keff >= 1.0
TSTF-11, Rev. 0 Delete "All" from LCO 3.1.5, "Rod Group Alignment Limits"
TSTF-12, Rev. 0 Delete LCO 3.1.9 and 3.1.11 (Physics Tests Exceptions)
TSTF-13, Rev. 0 Move SR for 300 ppm MTC measurement to Frequency Note of SR 3.1.4.3
TSTF-14, Rev. 1 Add an LCO item and SR to Mode 2 Physics Tests Exceptions to verify that Thermal Power <= 5% RTP.
TSTF-14, Rev. 2 Add an LCO item and SR to Mode 2 Physics Tests Exceptions to verify that Thermal Power <= 5% RTP.
TSTF-15, Rev. 0 Correct error in Bases for LCO 3.1.5
TSTF-16, Rev. 0 Add Action to LCO 3.8.9 to require entry into LCO 3.0.3 when there is a loss of function
TSTF-17, Rev. 0 Extension of testing frequency of containment airlock interlock mechanism from 184 days to 24 months
TSTF-19, Rev. 0 Relocate the details of RTD and thermocouple calibration from the Channel Calibration definition
TSTF-23, Rev. 2 Bracket NUREG-1431 LCO 3.9.2, Unborated Water Source Isolation Valves
TSTF-23, Rev. 0 Bracket NUREG-1431 LCO 3.9.2, Unborated Water Source Isolation Valves
TSTF-24, Rev. 0 Delete the details on updating the target flux difference.
TSTF-27, Rev. 2 Revise SR frequency for Minimum Temperature for Criticality
TSTF-27, Rev. 1 Revise SR frequency for Minimum Temperature for Criticality
TSTF-27, Rev. 0 Revise SR frequency for Minimum Temperature for Criticality
TSTF-30, Rev. 1 Extend the Completion Time for inoperable isolation valve to a closed system to 72 hours
TSTF-36, Rev. 2 Addition of LCO 3.0.3 N/A to shutdown electrical power specifications
TSTF-36, Rev. 0 Addition of LCO 3.0.3 N/A to shutdown electrical power specifications
TSTF-36, Rev. 1 Addition of LCO 3.0.3 N/A to shutdown electrical power specifications
TSTF-37, Rev. 0 Diesel Generator Surveillance Changes Based on Generic Letter 94-01 and the Maintenance Rule

Improved STS Change Packages by Status

TSTF-39, Rev. 0	Allow CFTs to be performed by sequential, overlapping or total channel steps
TSTF-45, Rev. 0	Exempt verification of CIVs that are not locked, sealed or otherwise secured
TSTF-46, Rev. 0	Clarify the CIV surveillance to apply only to automatic isolation valves
TSTF-53, Rev. 0	Clarify Manual PORVs are capable of mitigating an overpressure event
TSTF-54, Rev. 0	Operational Leakage TS Bases changed to be consistent with the Identified Leakage definition
TSTF-65, Rev. 0	Use of generic titles for utility positions
TSTF-68, Rev. 0	Containment Personnel Airlock Doors Open During Fuel Movement
TSTF-71, Rev. 0	Add example of SFDP to the 3.0.6 Bases
TSTF-79, Rev. 0	Change Specification 3.3.4 SR to agree with CEN-327
TSTF-80, Rev. 0	Added Shutdown Track Action for Loss of Load and APD Trips
TSTF-82, Rev. 0	Move Allowable Value from LCO 3.3.2 to SR 3.3.2.4
TSTF-85, Rev. 0	Add MODES column to Table 3.3.1-1
TSTF-87, Rev. 0	Revise "RTBs open" & "CRDM de-energized" Actions to "incapable of rod withdrawal"
TSTF-87, Rev. 0	Revise "RTBs open" & "CRDM de-energized" Actions to "incapable of rod withdrawal"
TSTF-90, Rev. 0	Add a Note to LCO 3.5.3 that allows RHR to be Operable as ECCS when aligned for decay heat removal
TSTF-91, Rev. 0	Relocate the trip setpoints and allowable values for loss of voltage and undervoltage to the Bases
TSTF-92, Rev. 0	Revise the Containment Purge and Exhaust SR to exempt valves that are locked, sealed or secured
TSTF-93, Rev. 1	Change the frequency of pressurizer heater testing from 92 days to [18] months
TSTF-93, Rev. 0	Change the frequency of pressurizer heater testing from 92 days to [18] months
TSTF-93, Rev. 2	Change the frequency of pressurizer heater testing from 92 days to [18] months
TSTF-94, Rev. 0	Remove number of required pressurizer heater groups from Pressurizer LCO
TSTF-98, Rev. 0	Relocate the Fq(z) penalty factor to the COLR
TSTF-103, Rev. 0	Add bracketed information to LCO 3.0.4 inappropriately deleted by Rev. 0 Change BWR-26
TSTF-105, Rev. 0	Remove the details of performing an RCS flow measurement
TSTF-106, Rev. 0	Change to Diesel Fuel Oil Testing Program
TSTF-108, Rev. 0	Eliminate the 12 hour COT on power range and intermediate range channels for Physics Test Exceptions
TSTF-110, Rev. 0	Delete SR frequencies based on inoperable alarms
TSTF-110, Rev. 1	Delete SR frequencies based on inoperable alarms
TSTF-111, Rev. 0	Revise Bases for SRs 3.3.1.16 and 3.3.2.10 to eliminate pressure sensor response time testing
TSTF-112, Rev. 0	Revise Condition D in Tech Spec 3.2.3.A
TSTF-113, Rev. 0	Eliminate Shutdown to MODE 4 for inoperable PORVs
TSTF-113, Rev. 1	Eliminate Shutdown to MODE 4 for inoperable PORVs
TSTF-116, Rev. 0	RCS Inventory Balance SR: Steady State Clarification
TSTF-116, Rev. 1	RCS Inventory Balance SR: Steady State Clarification
TSTF-123, Rev. 0	Revise "Control Rod" assemblies in Design Features to Match Definitions
TSTF-125, Rev. 0	Delete EFPD Definition
TSTF-127, Rev. 0	Decrease Frequency to 92 days for CMI and CEA Deviation Circuit Functional Test
TSTF-128, Rev. 0	Revise TSP Description
TSTF-130, Rev. 0	Add Note to Exclude Neutron Detectors from Channel Calibration
TSTF-133, Rev. 0	Add a Criteria Discussion to TSP LCO
TSTF-134, Rev. 0	Add Note Crediting CEA Drop Time SR for CEA Trip from 50% Withdrawn SR
TSTF-139, Rev. 0	Incorrect Criteria Defined in B 3.7.16
TSTF-145, Rev. 0	Add Action to Verify Flow Path is Isolated When 2 CIVs Inoperable
TSTF-151, Rev. 0	PORV Operability Clarification

TSTF-154, Rev. 1	Revise Criteria Discussions of Special Test Exceptions
TSTF-154, Rev. 0	Revise Criteria Discussions of Special Test Exceptions
TSTF-161, Rev. 0	SI Reference Applicability
TSTF-163, Rev. 0	Minimum vs. Steady State Voltage and Frequency
TSTF-163, Rev. 1	Minimum vs. Steady State Voltage and Frequency
TSTF-176, Rev. 0	Revise SR 3.1.4.1 to delete SR Note
TSTF-190, Rev. 0	Remove reference to inadvertently bypassing a redundant channel

Total Number of Travelers: 81

TSTF Withdraws

TSTF-7, Rev. 1	Delete the 1 hour time limit to begin reducing power from LCO 3.0.3
TSTF-49, Rev. 0	Revise the 1.4 examples to match the CEOG standard
TSTF-50, Rev. 0	Revise the 1.3 examples to match the CEOG standard
TSTF-64, Rev. 0	Clarification of applicability of Channel Calibration and Channel Functional Test
TSTF-88, Rev. 0	Number of Required Reactor Vessel Head Closure Bolts
TSTF-115, Rev. 0	Battery Float Current and Battery Inspection Program
TSTF-121, Rev. 0	Remove Regulatory Duplication from Shift Manning Requirements
TSTF-145, Rev. 1	Add Action to Verify Flow Path is Isolated When 2 CIVs Inoperable
TSTF-155, Rev. 0	3.5.1 Core Flood Tanks- Deletion of Condition D and Modification of Condition C
TSTF-156, Rev. 0	LCO 3.1.9.c removal of extraneous detail
TSTF-157, Rev. 0	Omit duplicate EFW alignment SR
TSTF-158, Rev. 0	3.1.5 Safety Rod Insertion Limits, Required Action A.1 Deletion
TSTF-159, Rev. 0	LCO 3.1.6 Applicability Modification
TSTF-160, Rev. 0	LCO 3.2.5, "Power Peaking Factors" Applicability Change to MODE 1 with THERMAL POWER > 20% RTP
TSTF-171, Rev. 0	Revise Excore Channel Calibration Performance
TSTF-183, Rev. 0	Eliminate incorrect reference to Functions from RPS Logic and Trip Initiation LCO
TSTF-212, Rev. 0	Incorporate approved topical BAW-10167, Supplement 3 in SR 3.3.3.1 and SR 3.3.4.1

Total Number of Travelers: 17

NRC #	NRC Question	ITS	ONS Response
3.08.01#01	The requirement for LCO 3.8.1 is defined by a list of "power sources". Item a of the ITS state "Two offsite sources on separate towers connected to the 230kV switchyard" as compared the statement in the NUREG of "Two qualified circuits between the offsite transmission network and the onsite Class IE AC Electrical Power Distribution System." The scope of the offsite sources in item a is incomplete since it does not extend to the Class 1E buses. If the path to the Class 1E buses via both the Main or Start-up transformers do not constitute "qualified circuits", this language should be included or the following addition made to item a: "and through the E breakers to the Class 1E buses" that would clarify both the path and its connection destination.	3.8.1	The scope of the ITS electrical specifications is consistent with the current licensing basis as defined in the CTS. Although the ONS UFSAR describes two independent power paths to each ONS unit from the 230 kV switching station, neither of these power paths are uniquely addressed in the ONS CTS. Additionally, there is no provision (other than 3.0) for less than two offsite sources to be OPERABLE. One of these power paths using the startup transformer from the 230 kV switching station is shared with the overhead emergency power path and associated KHU. The other power path uses the unit main transformer, the unit generator bus and auxiliary transformer with the generator disconnected. This power path is not immediately available but is designed to be made available in time following a LOCA to assure specified acceptable fuel design limits and design conditions of the reactor coolant boundary are not exceeded.It is not possible to adopt the NUREG requirement applicable to the offsite power sources without modification. The offsite circuit using the startup transformer is encompassed within the requirements for the overhead emergency power source (Conditions A, B, F and potentially C, G, H as well.) The adoption of a Condition for the second (delayed) power path would also be a less restrictive change and would be similar to NUREG Condition A.

NRC #	NRC Question	ITS	ONS Response
3.08.01#02	Items b, c, and d address KHU paths (to the Class 1E buses), but are not explicit about including the operability of the KHU itself. While the Bases notes that a KHU is required to be operable with the associated path, this is not sufficient since the AC Sources is the subject of the LCO and should not be addressed as proposed by just identifying different transmission paths for those sources The scope of the (on-site) emergency power sources, item b, c, and d should be expanded respectively to: "One Keowee Hydro Unit (KHU) and its underground...", "One KHU and its overhead ...", and "One KHU and its underground..." with the current clarification of "from one KHU" or "from a second KHU" as applicable.	3.8.1	The ITS 3.8.1 section was developed using the ITS writers guide as well as other ITS guidance while maintaining consistency with the CTS 3.7 submittal. Revised as recommend with minor modifications.

NRC #	NRC Question	ITS	ONS Response
3.08.01#03	Items b and d are stated as essentially the same requirement but for different KHUs. However, the operability requirements should be different with regards to pre-existing condition, namely the alignment of breakers for the 1X and 2X Load Centers, and the auto-starting of the associated KHUs. For example, if KHU #2 is aligned to the underground power path with ACB-3 closed, xfmr CX would be supplying power to Load Center 1X via ACB-7. However, KHU #1 would then be aligned to the overhead power path and transformer 2X would feed Load Center 2X via ACB-6. Thus for item d, the operability of the underground path is different than it is for item b with regard to the KHU's Load Center power source and the position of its ACB to the underground path.Further clarification of items b, c, and d would be provided by expanding them to state: "One Keowee Hydro Unit (KHU) aligned to the underground emergency power path through the S breakers.", "One KHU aligned to the overhead emergency power path though the E breakers.", and "One KHU in a standby mode to the underground emergency power path through the S breakers" with the Bases providing the clarification of what is different about a KHU being operable and aligned to the underground emergency power path vs being operable and in a standby mode to the underground emergency power path. Furthermore, Note 1 could state: "The standby mode to the underground emergency power path is not required to be OPERABLE when the overhead electrical disconnects associated with the other KHU, that is aligned to the underground emergency power path, are open." and an additional references to LCOs 3.8.1.b and d for exception and the other KHU are not required since there would now be no confusion between items b and d. (If "standby mode" is not the normal term used to describe that condition, a more appropriate term should be used.)	3.8.1	This recommendation is slightly different than the one provided in the previous comment for Items b and c. The recommended wording here could imply that one is only requiring the KHU to be OPERABLE. Will revise as recommended above with minor modifications. For the KHU in standby: "One KHU in a standby mode and its associated underground emergency power path."

NRC #	NRC Question	ITS	ONS Response
3.08.01#04	Item f (sic) does not fit well as being specified as an electrical power source that shall be operable. It should be limited to use as a required action, i.e, "Energizing either or both 4.16kV Standby buses via a qualified circuit by one Lee combustion turbine generator." and that should apply for the Conditions noted in the Note. The Bases can clarify what a qualified circuit is, namely: "the 100 kV transmission line, separated from the system grid and offsite loads." Action D.2 does this to an extent, but does not clarify that the source is via a qualified circuit. Action G.1 states the difference between D.2 (energize a bus) and energizing two standby buses. However, "two" should be replaced with "both" since there are only two standby buses and the use of two is only appropriate when there are more than two to choose from for completing an action. For D.2, "energize either standby bus" is preferable to "energize a standby bus." These comments apply to required actions H.1, I.1, J.1 and K.1 and to any completion time that refers to either or both standby buses being energized by an LCT. The completion time for D.2, "of deenergized standby buses" should state "of a deenergized required standby bus."	3.8.1	Deleted LCO Item e and accompanying LCO note that state LCT not required to be OPERABLE when not energizing standby buses per required actions. The SRs and the Bases for the Required Actions (added new info at start of ACTIONS Bases after deleted info from LCO bases related to OPERABLE LCT) prescribe the requirements for an OPERABLE LCT. Action D.2 requires energizing a standby bus by an OPERABLE LCT. The Bases for the LCO prescribe the requirements for an OPERABLE LCT. The term "qualified" has no additional meaning here beyond that provided by the OPERABILITY requirements. Will revise as recommeded.

NRC #	NRC Question	ITS	ONS Response
3.08.01#05	Condition A, inoperable startup transformer, is one that renders both offsite sources inoperable, hence, should be stated as such and not as "One or more required offsite sources...inoperable due..." Action A.2 is one that removes (restores operability for) the stated condition. Hence, the Required Actions no longer apply, and Action A.3 is not appropriate where it is located. The sharing of startup transformers is a matter that might be addressed in the Note under the LCO. For example: "The startup transformers may be shared with another unit within the specified time limits stated in Required Actions." Thus, Condition B would become: "Startup transformer shared with another Operating unit" and the existing OR condition should be removed. The Completion Times should be increased by 36 hours. The existing Required Actions could be preceded by one that states: "Restore startup transformer to non-shared status" with "36 hours" being the completion time. This action could be accomplished by restoring an inoperable startup transformer to operable status or by initiating a shutdown on one of the units that are sharing the startup transformer. The Bases would clarify that an Operating unit is one that is NOT in Modes 5 or 6 or that is NOT being shutdown such that it will be in Mode 3 in 12 hours and Mode 5 in 37 hours. This presumes that a startup transformer has sufficient capacity to supply ES loads for an Operating unit and decay heat removal loads for a shutdown unit, and is a conditions that should not be restricted by a Required Action for the operating unit. If suggested action is added, the existing actions B.1 and B.2 could be eliminated by adding required B.1 (the new one) to those listed in condition E.	3.8.1	Revised to say: "Both required offsite sources..." The completion of Action A.2 does not restore operability. As such it does not allow the unit to exit the stated Condition. Sharing a startup transformer does not restore OPERABILITY to the offsite sources and overhead emergency power path. The Bases clarifies that the shared start up transformers capacity and voltage adequacy could be challenged under certain DBA conditions. Oconee believes it would be more appropriate to leave as a Condition. Removal of the OR Condition would result in unnecessary entry into LCO 3.0.3 if the Required Action and Associated Completion Time are not met for Condition A. In addition, Oconee is currently allowed 36 hours to designate and 36 hours to shutdown the unit without the startup transformer. The recommended change would result in 36 hours of Completion Time.

NRC #	NRC Question	ITS	ONS Response
3.08.01#06	There are a number of problems with the configuration of Conditions C, J, and K. It is recommended that they be combined into a single Condition, or as a minimum two. Current problems with existing conditions are the following: a. Condition C is for anything other than Condition A (and temporarily B), but J and K are for two specific conditions which leaves the last part of condition M to define actions for the case that condition C exists, but not for the reasons noted in J and K. Further, the condition that the underground path is operable, as a part of condition C, Is not one that is stated for J or K, nor M.	3.8.1	Combined C, J and K into one condition. Note: Not necessary to include the condition that the underground power path is operable since it must be operable in order to enter Condition J or K since it had to be operable to enter Condition C and RA J.2 & K.2 verify the operabillity status of the underground power path. Same for M.
	b. The Note preceding condition C.2 should not apply, immediate completion, to supersede the completion times stated for J.3, 4, & 5 and K.3, 4., & 5.		Combined C, J and K into one condition. Note no longer needed.
	c. The requirements to perform SR 3.8.1.5 should be stated once not in C.1 and J.4 or K.4.		Combined C, J and K into one condition. Needs to be stated once to invoke the once per 12 hour frequency. Then when both standby buses are energized, needs to change to once per 7 days. Added 3rd frequency and deleted restatement.
	d. The Note preceding condition J is not appropriate. If there is an administrative limit about entering into a condition, it needs to be specified as part of the LCO as to what is NOT allowed, e.g., The (state the condition, e.g., the KHU aligned to the overhead emergency power path, if this is what it is) shall not be removed from service (state the purpose) for more than x hours but less then y hours at a frequency of greater than once in any three year period.		As part of restructuring, revised note (see RA C.2, Note 2) .
	e. The Note 1 preceding required action J.1 does not make sense in that the path for generation to the system grid is inoperable as stated in condition J. Note 2 is not required in light of Condition G and the intent of the note would not seem to be intended to be restricted to the case that 72 hour limit stated in condition J is exceeded.Hence, any obstacles to combining items J and K would appear to be eliminated.		Condition J is for the overhead power path inoperable due to an inoperable KHU. The overhead power path is still OPERABLE and could be utilized for generation to the grid by the KHU connected to the underground emergency power path. The note prohibiting KHU generation to the system grid when the overhead power path is inoperable due to an inoperable KHU moved to RA C note. Note is necessary to preclude such generation in this condition and is consistent with the CLB.

NRC #	NRC Question	ITS	ONS Response
3.08.01#07	Condition D would appear to be intended to apply for LCO item b not being met, but not for LCO item d. If it is intended for EITHER, the condition should be stated as such, and this of course begs the question of needing a condition to address the situation when it is BOTH.However, it is not clear that required action D.2 is appropriate if LCO item d is not met. If it is, please clarify why it is. If the Notes under the LCO address a condition when LCO item d does not apply, it might be a help to repeat that note under either the condition or required action column, before the numbered item thereunder. Again, perhaps this is a case where the NUREG tries to clarify such by adding the word "required" to describe the item under a condition, being that their may be situations that it is not required to be operable. In any case the wording of condition D should be consistent with any change in the wording of LCO items b and d.	3.8.1	In accordance with LCO 3.0.2,. Condition D applies whenever the associated Condition exists (i.e., both items b and d). The Required Actions are the same for either one or both. Required Action D.2 requires energizing one standby bus by an OPERABLE LCT. The Bases states that "For outages of the underground power path in excess of 24 hours, an LCT must energize a standby bus prior to the outage exceeding 24 hours. This ensures the availability of a power source on the standby buses when the underground power path is out of service in excess of 24 hours. The wording of Condition D will be modified to reflect changes in LCO Items b and d.

NRC #	NRC Question	ITS	ONS Response
3.08.01#08	It is not a normal situation to specify conditions in term of something being inoperable AND something else being operable as done in conditions C and D. The operable condition should be removed or justified.	3.8.1	This is necessary to preclude unnecessary entry into multiple conditions. The Condition for both emergency power paths being inoperable is addressed by Condition H alone. Completion of the Required Actions for inoperabilities of single power paths is not necessary and in some cases cannot be performed (perform SR 3.8.1.5 and SR 3.8.1.6.). Revised Condition C and D to delete "operable condition" and added note to Required Action C.1 and D.1 that states it is not required when KHU and its associated emergency power path are inoperable.

NRC #	NRC Question	ITS	ONS Response
3.08.01#09	The condition associated with the referenced required actions and associated completion time for condition E is one that affects all Oconee units simultaneously, hence there is no basis for describing any of the units as the first unit. If the bases for staggering the shutdown of the units is to reduce the potential for grid disturbance, then a risk criterion like "the Oconee unit with the highest value of decay heat" should be the one to be shutdown first, and these words substituted for "the first Oconee unit." The completion time for condition E.2 should be similarly staggered as for required action E.1, with completion times of 37 and 49 hours, each corresponding to LCO 3.0.3 or a 12 hour delay thereof.	3.8.1	The wording for the first Completion time for Required Action E.1 will be revised to state "12 hours for one Oconee unit." The bases is that it is allowed by CTS, not based on risk. The Completion Time (84 hours) for Required Action E.2 is based on the CTS.

NRC #	NRC Question	ITS	ONS Response
3.08.01#10	In that condition F is one that "both emergency power paths are inoperable," it should be stated as such for the reason noted. Please provide the justification for not requiring the other standby bus to be energized by a LCT. Declaring the main feeder bus inoperable invokes required action A.1 of LCO 3.8.8 with a 24 hour completion time to restore the bus (either the E or S breaker) to operable status. If the situation arose where just one of the E or S breakers were restored to operable status, required action D.2 should be completed at the end of the same 24 hour completion time for LCO 3.8.8 A.1. Another reason that condition D should not be qualified by the AND operable condition rather than implying that another 24 hour clock applies for required action D.2.	3.8.1	Wording of Condition F will be revised as suggested. The Required Action is consistent with the CTS. However, refer to paragraph below. As revised will require standby bus to be energized in 24 hours. Revised Condition D to remove the 2nd condition. Therefore, Condition D will be entered concurrent with Condition F and the "second" 24 hour clock will not apply.

NRC #	NRC Question	ITS	ONS Response
3.08.01#11	In that condition G is stated as a planned reason for inoperability of both emergency power paths, the "Immediately" completion times should state "Prior to entry into the Condition." The completion time for required action G.1 with respect to 1 hour should be "discovery of either standby bus deenergized."	3.8.1	This is inconsistent with ITS 1.3, Completion Times which references Completion Time from the discovery of the Condition. Since a Condition can't be discovered until it exists, the Completion Time cannot precede the occurrence of the Condition. The immediate Completion Time for Required Action G.1 is effectively the fastest Completion Time that can exist in ITS. The Bases clarifies that a planned reason is defined as one where the standby buses are energized by an LCT prior to entry into Condition. Revised to further clarify that planned reason is when listed components are verified OPERABLE prior to entry into condition. 2nd Completion Time deleted. Added separate ACTION (J) that addresses the condition where a standby bus is discovered deenergized after being energized as a result of a Required Action.

NRC #	NRC Question	ITS	ONS Response
3.08.01#12	The intent of G.3 is to alter completion times in other LCOs, therefore this should be added to the associated required actions in the completion time column as: "OR 4 hours when Condition G of LCO 3.8.1 applies." and a Note could be added therein to state what that condition is when it is and LCO other than 3.8.1. For example, the noted addition to the completion time should be made for required action I.4. Consequently, this removes a need for required action G.3. Since the Bases only address the inoperability of KHUs as the planned action, the condition should state: "Both KHUs administratively removed from service as OPERABLE AC electrical power sources" which would of course be for a planned reason, an example for which could be addressed in the Bases. Hence, required action G.4 should be more specific: "Restore one KHU and its associated power path to OPERABLE status."	3.8.1	The 4 hour Completion Time is provided to shorten the Completion Time to restore associated electrical power equipment to OPERABLE status when in Conditions G, H, I, J, or K. The suggestion to delete the 4 hour Completion Time to restore to OPERABLE status from the 3.8.1 Required Actions and add them to the Completion Time for each referenced Specification creates another problem when the associated LCO is not met at the time when the 3.8.1 Condition is entered. Since the Completion time for the associated Required Action begins with entry into the associated Condition, it may have already been exceeded. Agree that this could be improved. Prefer to retain as a separate requirement in 3.8.1 for visibility of the shortened CT. Created a separate action to address this condition with RA to restore in 4 hours. This replaces RA G.3, H.3, I.3, J.3 and K.3. Revised as recommended.

NRC #	NRC Question	ITS	ONS Response
3.08.01#13	Condition H should be "for other than Conditions F and G" since condition F is not defined as for "unplanned reason" and includes both any planned or unplanned reason for being inoperable. The comments in 12 above apply to required action I.3, J.3 and K.3.	3.8.1	Conditon G is for planned reason other than Condition F, Condition H is for unplanned reason other than Condition F. Condition F can be for planned unplanned reason. Therefore, the combination of Condition G and Condition H address both planned and unplanned reasons other than Condition F. The exclusion of Condition F from Condition H is necessary since Required Action H.2 includes requirements to verify the distribution System operable. Verification the distribution system is inoperable is not possible when in Condition F. See response to Item 12.

NRC #	NRC Question	ITS	ONS Response
3.08.01#14	Condition I should state "One or both" since there are only two. Required action I.4 should be explicit and state: "Restore both required..." is fix just as well when only one was inoperable.	3.8.1	Revised wording as suggested.

NRC #	NRC Question	ITS	ONS Response
3.08.01#15	Required action J.5 should be more explicit and state: "Restore the KHU aligned to the overhead power path to OPERABLE status."	3.8.1	Revised to state: "Restore KHU and its associated overhead power path to OPERABLE status."

NRC #	NRC Question	ITS	ONS Response
3.08.01#16	What is the rationale for not including E breaker trip circuits as an additional OR situation under condition L. Are there not cases where loss of power to a closed E breaker would cause automatic transfer to the associated standby buses? If any N breaker trip circuit is inoperable, doesn't this constitute a condition that renders both KHU power sources inoperable when that N breaker is closed, which it normally is? If not, why not?	3.8.1	Since there is no automatic closure circuits for the N and SL breaker, the N and SL breakers are only required to trip to satisfy the safety function. Operability of the E breakers trip and close circuitry is encompassed within the OPERABILITY of the E breakers and the overhead emergency power path. Yes. This is stated in the Bases for the LCO for each emergency power path. The N breaker is capable of opening using either of its associated trip circuits.

NRC #	NRC Question	ITS	ONS Response
3.08.01#17	Given the statement in the ITS Bases regarding item 10 on page B 3.8-3, it is not clear why there should not be a specific reference to the Yellow bus with regards to the overhead path, i.e., not having a path that might bypass PCB 9, 18, 27, and 30. Please clarify why such is not necessary.	3.8.1	The Bases to the LCO for the overhead emergency power path does include PCP-9, 18, 27 and 30 as required for OPERABILITY of the overhead power path. (Refer to items 9 and 11.)

NRC #	NRC Question	ITS	ONS Response
3.08.01#18	The deviations from the NUREG are a broad brush approach where item 6 of the JFD does not address such things at automatic load sequencer. However, the zone overlap protection circuitry (item 13 on ITS Bases page B 3.8-3) and the ABC-3 to ABC-4 interlock (item 13 on ITS Bases page B 3.8-4) would appear to fit into the category of such things. Are there not similar circuits to "automatic load sequencer" that are a parallel for the control and automatic operation of the Oconee AC Power Sources? If so, what is the JFD for not including them in the ITS?	3.8.1	The zone overlap protection circuitry and ACB-3 to 4 interlock are not automatic load sequencers. JFD 6 is written to justify a plant unique ITS since the ONS plant design differs significantly from the reference plant used as the basis for 3.8.1. For example, ONS does not use diesels as the emergency power source, Additionally, the ONS onsite distribution system does not utilize a divisionalized system. The ONS emergency power sources (KHUs) are substantially larger than a typical diesel precluding the need for an automatic load sequencer. The ONS CLB* does not include circuits similar to an "automatic load sequencer" that are parallel for the control and automatic operation of the onsite emergency power sources. Additionally, it is preferable to maintain consistency with the CTS 3.7 submittal.

NRC #	NRC Question	ITS	ONS Response
3.08.01#19	1) The stipulation in Note item 1 should suffice by removing "by OPERABLE LCT." The fact that the standby buses are energized, regardless of whether it via a LCT that would satisfy operability requirements, or via the 100kV lines w/o a LCT operating. 2) The SR itself should stipulate energizing the standby buses, since such is implied by the note and to be consistent with SR 3.8.1.5 requirements. 3) It would seem to be clearer if there were one SR for auto starting the KHU that is aligned to the underground path, and one for the KHU that is on standby to the underground path, the latter for which item 2 of the note would simply be "Not required when the other KHU's overhead electrical disconnects are open". 4) Also, when one or the other of these surveillance is invoked by an action requirement, it would clear what the test encompass. Also, SRs 3.8.1.3 and 3.8.1.5 would not be redundant for one of the KHUs. 5) When the alignment of the KHUs is changed, SRs 3.8.1.3 and 3.8.1.4 may not be current (i.e., performed in the last 31 days). For this case, another Frequency is suggested for each. For the KHU realigned to the underground path, add "OR within 4 hours after a re-alignment from the overhead to the underground path if not performed in the previous 31 days" and similar statement for SR 3.8.1.4, but with the reverse on the re-alignment statement.	SR 3.8.1.3	1) No, this is a less restrictive change. Provision only allowed when standby buses are energized by a LCT. 2) Revised SR to stipulate energizing the Standby Buses consistent with SR 3.8.1.5. 3) Seems clear either way. ONS prefers no change. 4) The only SRs called out from RA's are SR 3.8.1.5 or 3.8.1.6. Any need to discuss? Revised SR frequencies to "as specfied for the applicable required action." 5) Looks like you would always be in a Condition of 3.8.1 so don't need statement.

NRC #	NRC Question	ITS	ONS Response
3.08.01#20	The note has the same effect as stating the surveillance as "Verify the KHU on standby to the overhead path automatically starts and synchronizes... assuming that "automatically" applies to "synchronizes" as well as "starts" and that "on standby" is more appropriate than "aligned" as would apply to the other KHU since its PCB to the underground path is closed.	SR 3.8.1.4	No, SR verifies availability of both KHUs, however only has to be met for one. Performed for both so can take credit for other KHU. No, per Bases synchronize can be done automatically or manually.

NRC #	NRC Question	ITS	ONS Response
3.08.01#21	While one might only be concerned about the capability to trip a closed SL breaker, and thus excuse it from testing when it is open, this would result in the SR becoming applicable after the SL breaker is closed and for which it is assumed that there is a purpose for in doing so, namely to energize the standby buses. So it doesn't make sense that having done that, one is now faced with the need to test the test the breaker, opening at a time that you just closed it to energize the bus. So if it is tested at a time that is in not required to be operable and it fails, this doesn't create a problem, just because there is no action requirement that would apply. However, one at least knows in advance of an action that might require it to be closed, that is trip circuit operability has been demonstrated within the required interval before it is placed in service. At this time, if the bus is the only source for supplying power to an ES bus, that it would make sense to waive the requirement to do the testing that would interrupt that power source. However, if the standby buses are energized, with all S breakers open, then the surveillance requirements should be performed or if the standby buses are inter-tied via the ES supply breakers (and perhaps this should stipulate that is via two or more ES buses, if that is a relevant consideration). The latter suggestion could apply with regards to the N breakers. SR 3.1.8.22 includes a note about redundant trip coil testing on a staggered test basis. Shouldn't such apply here?	SR 3.8.1.7	Note only says it doesn't have to be met - doesn't say it doesn't have to be performed. Still have to perform the SR at the frequency stated. So, if you perform it and don't meet it you don't have any OPERABILITY concern since it is only required to be met when the breaker is closed. SR 3.8.1.7 verifies the OPERABILITY of the trip functions - only trip coils require verification, while SR 3.8.1.22 verifies proper operation of the 230 kV switchyard circuit breakers and results in an actual switchyard isolation. No. Note provided in SR 3.8.1.22 to avoid having to isolate the switchyard twice and energize the yellow bus twice. Don't have that problem here since SR applies to trip coils.

NRC #	NRC Question	ITS	ONS Response
3.08.01#22	Are E breakers tested in a test position, vs being fully racked in? If so, it would appear to be an appropriate clarification. Shouldn't the exception (Note) be that the S breakers are supplying power to the ES buses, i.e. if standby buses are energized but S breakers are open, they could be tested in a test position. Wouldn't staggered testing of trip circuits also apply with regard to that part of the test cycle for these tests?	SR 3.8.1.8	Yes They could but they are not. No.

NRC #	NRC Question	ITS	ONS Response
3.08.01#23	Are the KHU DC buses cross-tied when a battery is out-of-service for a service test?	SR 3.8.1.	Yes.
	Is one of the KHUs declared inoperable during such tests? If so, which one?	12	Yes. The one with the battery OOS.
	How long is the service test?		Do a one hour discharge test but SR typically takes 12 to 24 hours including recharge and maintenance.

NRC #	NRC Question	ITS	ONS Response
3.08.01#24	The note should be removed.	SR 3.8.1.15	The note is necessary. The SR is required to be performed every 12 months, however, it doesn't have to be met when the LCT is not required to be OPERABLE. The only time a LCT is required to be OPERABLE is when it is energizing a standby bus.

NRC #	NRC Question	ITS	ONS Response
3.08.01#25	The note should be removed.	SR 3.8.1.16	The note is necessary. The SR is required to be performed every 12 months, however, it doesn't have to be met when the LCT is not required to be OPERABLE. The only time a LCT is required to be OPERABLE is when it is energizing a standby bus.

NRC #	NRC Question	ITS	ONS Response
3.08.01#26	This seems to be the only test that should be needed for a KHU's standby mode to the underground path. Can this test be performed before the electrical disconnects would be re-closed?	SR 3.8.1.17	This test is performed by simulating an electrical fault in the zone overlap region and verifying the associated underground ACBs operate correctly. Yes, but don't have to.

NRC #	NRC Question	ITS	ONS Response
3.08.01#27	The note should be removed.	SR 3.8.1.18	The note is necessary. The SR is required to be performed every 12 months, however, it doesn't have to be met when the LCT is not required to be OPERABLE. The only time a LCT is required to be OPERABLE is when it is energizing a standby bus.

NRC #	NRC Question	ITS	ONS Response
3.08.01#28	The note should be removed.	SR 3.8.1.19	The note is necessary. The SR is required to be performed every 18 months, however, it only has to be met during periods of commercial power generation using the KHU, otherwise the capablity of the KHU to reject its load prior to supplying emergency power is not needed.
	Do PCB-1 and -2 have dual trip coils?		There is not PCB 1 and 2. Must mean ACB 1 and 2 - they don't have dual trip coils
	For periods of commercial generation using KHUs, what determines which one fulfills the requirement for an operable KHU to the underground path?		Preselected by the KHU operator.

NRC #	NRC Question	ITS	ONS Response
3.08.01#29	The statement of the SR is incomplete since it does not state what it is in response to. The note should be removed.	SR 3.8.1.20	As stated, the SR is performed in response to an actual or simulated actuation signal. The note is necessary. The SR is required to be performed every 18 months, however, it only has to be met during periods of commercial power generation using the KHU, otherwise the capablity of the KHU to reject its load prior to supplying emergency power is not needed.

NRC #	NRC Question	ITS	ONS Response
3.08.01#30	Shouldn't this SR have the same note as SR 3.8.1.22? The note should be removed, but could be replaced with one noting the exception for the condition that the standby buses are energized.	SR 3.8.1.21	No. This SR verifies that the trip circuit of each breaker independently opens each breaker. SR...22 verifies proper operation of the breakers and actually causes an actual switchyard isolation and alignment of the KHUs to the overhead and underground paths. Note provided in SR 3.8.1.22 to avoid having to isolate the switchyard twice and energize the yellow bus twice. Don't have that problem here since SR applies to trip circuits.

NRC #	NRC Question	ITS	ONS Response
3.08.02#1	The language of LCO 3.8.2 should be consistent with that used for the resolution of comments on LCO 3.8.1. However, the use of a LCT via an isolated transmission circuit as an emergency power source should be stated in the LCO as an alternative to a KHU and its associated power path. Likewise, the use of a LCT or the Main Power and Unit Auxiliary xfmrs as alternate normal power sources should be stated in the LCO as an alternative to the Startup Transformer path. Restrictions should be placed on the LCT such that it can not serve as both the required offsite and emergency onsite power sources.	3.8.2	The LCO Bases provides this information. The LCT cannot be used as an offsite source, only Central can. The LCT and Central cannot be used at the same time as an offsite source and an emergency source because the emergency source is isolated from the grid/Central. This is described in the Bases. (See last sentence of next to last paragraph of LCO Bases.)

NRC #	NRC Question	ITS	ONS Response
3.08.02#2	Since power via CT5 could be used as either an offsite or emergency power source (but not both), does this impose any requirements for SL breaker operability that go beyond those where power via CT5 would be required as a part of actions specified in LCO 3.8.1?	3.8.2	No.

NRC #	NRC Question	ITS	ONS Response
3.08.02#3	For SR 3.8.2.1, the list of exceptions should be deleted since they are not necessary in that the SR states that it is applicable "for AC sources required to be operable."	3.8.2	List of exceptions is needed. These SRs could still apply.

NRC #	NRC Question	ITS	ONS Response
3.08.03#01	The TS requirements should be stated as they apply to each unit, not in terms of the number of units that are operating (defined by the Applicability as being in Modes 1 thru 4). For example, LCO item a states 3 of 4 DC sources which is ambiguous with respect which 4 of the 6 sources for the three units are required by the reference to 4. Based upon an earlier review of the Oconee electrical system, the following suggestion was developed for DC sources, which is believed to identify those sources which qualify for meeting the intended requirements: The following Vital I&C DC Sources and Distribution systems shall be OPERABLE: a. 125VDC Vital I&C sources (battery, charger, and distribution center): For Unit 1: Any three of sources 1CA, 1CB, 2CA, and 2CB. For Unit 2: Any three of sources 2CA, 2CB, 3CA, and 3CB; AND Any two of sources 1CB, 2CA, and 2CB. For Unit 3: Any three of sources 3CA, 3CB, 1CA, and 1CB; AND Any two of sources 1CB, 2CA, and 2CB. For Units 2, under some circumstances (e.g., for Unit 2 with either 2CA or 2CB inoperable) only 4 DC sources would be required to be operable, but 5 DC sources would be required for Unit 3, while only 3 sources would be required for Unit 1. If the specified combinations satisfy the design basis, they would make a more practical alternative. The suggested clarification would seem to go a long way at clarifying the requirements and eliminate the need for Notes 1 and 2 which are not very clear nor intuitive.	3.8.3	This type of detail is not appropriate for the Specification. Revised Bases to include. Since the DC power sources are shared between units and the requirements are dependent upon the number of units in MODES 1, 2, 3 or 4 it is necessary to Spec this way. Revised LCO part b to say: "...power sources when applicable to two or three Oconee Units" and part c to say "...power sources when applicable to one Oconee Unit"

NRC #	NRC Question	ITS	ONS Response
3.08.03#02	Per comment 6 on LCO 3.8.8, the following is suggested to address the distribution system:b. 125VDC I&C panelboards with each aligned to its associated power sources required to be operable: For Unit 1: 1DIA, 1DIB, 1DIC, and 1DID. For Unit 2: 2DIA, 2DIB, 2DIC, 2DID, 1DIC, and 1DID. For Unit 3: 3DIA, 3DIB, 3DIC, 3DID, 1DIC, and 1DID.The structure of the above statements follows that of item a above, but could be stated more generically as note in comments or LCO 3.8.8. The important aspect is that one LCO can address both items, a for batteries etc, and b for panelboards. With the statement "panelboards with each aligned to its associated power sources required to be operable", removes the need for a separate LCO statement as stated in item d, i.e., panelboards do not need to be aligned to power sources that are NOT required to be operable to satisfy suggested item a above. Likewise this simplifies the statement of Condition C, which is suggested to state: "One of the unit's four 125VDC panelboards inoperable or not aligned to a required 125VDC source." and also captures the case that it is an inoperable panelboard. With the suggested changes to Condition C, the Required Action could state: "Restore 125VDC panelboard to OPERABLE status with it aligned to the required 125VDC sources."	3.8.3	Combining these Specification is not consistent with the NUREG philosophy.

NRC #	NRC Question	ITS	ONS Response
3.08.03#03	With an 18-mo fuel cycle and 12-mo surveillance interval for battery service tests, batteries are disconnected from the distribution system during power operation. During these tests for the batteries of an operating unit, it is assumed that the two distribution centers for the unit would be cross-tied to maintain power to the distribution system. Under this situation, a note under the LCO statements above could clarify the treatment of this condition and what is allowed. The following is suggested: ----------NOTES---------- When both 125VDC sources for a unit are not required to be OPERABLE to satisfy the minimum requirements for OPERABLE sources for any unit and one of the associated batteries is inoperable and isolated from its bus, the two distribution centers may be cross- tied to satisfy the OPERABILITY require-ments for either source, but not both, for any unit, provided one bus is not aligned to either of its associated panelboards in another unit, and the either the same or the other bus (but not both) is not aligned to either of the associated panelboards in its unit. When distribution centers 1DCA and 1DCB are cross-tied, panelboards 1DIC and 1DID shall not be disconnected from 1DCB to satisfy these requirements. ---------- If this is not an appropriate requirement, what is and why? Because panel boards 1DIC and 1DIB have greater importance for all units, they are excluded from being chosen to be disconnected from 1DCB to satisfy the requirement that all panelboards for one unit are not aligned to their associated distribution centers when the latter are cross-tied.	3.8.3	Yes, batteries are disconnected from the distribution system during power operation. The DC distribution systems for all three ONS units are continuously cross-tied by auctioneering diodes. "When both 125VDC sources for a unit are not required to be OPERABLE to satisfy the minimum requirements for OPERABLE sources for any unit" -THESE IS NEVER THE CASE AT ONS. ONS believes the requirements, which are incorporated into the ITS, are appropriate.

NRC #	NRC Question	ITS	ONS Response
3.08.03#04	1) With an LCO that does not require all DC sources to be operable, it is not clear that given that one is inoperable that Condition A should allow a second to be removed from service for an equalization charge following a performance or service test.	3.8.3	1) This is currently allowed by CTS 3.7.2.g.3 and by proposed CTS 3.7.8 ACTION A. With one of the required sources inoperable, the remaining sources are fully capable of providing adequate voltage to all 12 plant panelboards. In addition, with one of the required DC sources inoperable, the remaining sources will assure alignment of power to at least 3 panelboards for the affected unit. Three panelboards are necessary to shut down the operating unit and maintain it in a safe shutdown condition, assuming no single failure.
	2) Further, as written, a battery could be remove from service for up to 23 hours to perform such tests (under Condition B, placed back in service for and hour and then removed from service for up to 72 hours under Condition A. If allowed at all, it would seem that 72 hours should be the AOT limit for test and any required equalization charge.		2) This is allowed by CTS. Oconee prefers to retain its current licensing basis.
	3) How do current TS requirements (not those under 3.7 review) address this matter?		3) The same way - see CTS 3.7.2.e.3 & g.3.
	4) The NUREG requirements have such tests at refueling outage intervals such that they can be performed during a shutdown. Since this would not be a practical consideration for Oconee due to the length of the fuel cycle and the shorter surveillance interval, it would seem to be consistent with the intent of the NUREG to require the surveillance to be performed at a time that the battery is not one of those which is required to be operable to meet the minimum operability requirements.		4) Oconee prefers to retain its current licensing basis which would allow this. Typically, a battery is removed from service when it is not required to be operable.

NRC #	NRC Question	ITS	ONS Response
3.08.03#05	1) It would appear that a better statement for Condition D would be: "Either panelboard 1DIC or 1DID, but not both, inoperable or not aligned to a power source required to be operable." While this Condition is equally applicable to Unit 1, it would be preferable to remove the existing Note for this condition and add a Note for Condition C that states: "For Unit 1, this condition applies only for panelboards, 1DIA and 1DIB." and thus if for Unit 1 both Conditions C and D applied, this would invoke LCO 3.0.3. However, to not invoke LCO 3.0.3 for Units 2 and 3, would require a separate Condition with the statement of it as repeating Conditions C and D separated by AND, with the same required actions and completion times, but with the completion time for required actions C.1 and D.1 modified by adding "AND 48 hours from discovery of failure to meet the LCO" all of which is explained in Example 1.3-3, under ITS Section 1.3 on Completion Times.	3.8.3	This Spec is for DC Sources. The panelboards are addressed by Specification 3.8.8. For the condition of one panelboard inoperable, Condition E applies. However, one battery can supply both distribution centers and their associated panelboard loads. Therefore, the panelboard is not inoperable, only the DC source. This Spec is for DC Sources not panelboards. Consistent with the NUREG for 3.8, the ONS ITS will also keep the requirements for sources and distribution systems in separate Specifications.

NRC #	NRC Question	ITS	ONS Response
3.08.03#06	1) While suggested changes would alter LCO items c and d, it is not clear what Note 1 requires. It is assumed that the referenced to additional sources would be for sources not associated with the unit for which the LCO applies, 2) and that the referenced to "not required to be connected to the Unit's distribution system" is in reference to other unit's loads on the other unit sources. 3) Please clarify if there is some intended requirement of Note 1 that is not captured by the suggested changes above. 4) Likewise, it is not clear what Note 2 requires, and whether the intent is anything not covered by the suggested changes above. It is not clear why the LCO requirements for a unit need to be conditioned at all with respect to the operating mode of another unit. Please clarify if such is applicable.	3.8.3	1) No, if all three units are operating, the LCO applies to all three. Additional sources are those beyond what is required for Item a. 2) Yes 3) No except as stated in response to Item 5. 4) If a unit is not in MODES 1, 2, 3, or 4, this LCO is not applicable. As such, 4 of the 6 sources could be from 2 of the units since neither of the shutdown units are required to use their respective units batteries. The requirement that each shutdown unit have at least one of its own power sources is necessary to assure assumptions in the DC capacity and voltage drop analyses for the operating unit are valid. (LCO 3.8.4 doesn't specify that the shutdown unit is required to be using its own power source.)

NRC #	NRC Question	ITS	ONS Response
3.08.03#07	If the LCO is limited to "Vital Unit I&C DC Sources and Distribution - Operating" as suggested above, the requirements for the "230kV Switchyard Vital I&C DC Sources and Distribution - Operating" could be as follows: The following 230kV Switchyard Vital I&C DC Sources and Distribution systems shall be OPERABLE: a. Vital I&C DC sources (battery, charger, and distribution center) SY-DC1 and SY_DC2. b. Vital I&C DC panelboards with each aligned to its associated power source: DYA, DYB, and DYC aligned to SY-DC1; and DYE, DYF, and DYG aligned to SY-DC2. The conditions for this LCO should be similarly reworded as those recommended for Unit Vital I&C DC sources and distribution above.	3.8.3	The proposed presentation is not consistent with the NUREG which provides a separate specification for the sources and the distribution systems. Oconee prefers to retain separate Specifications consistent with that proposed in the ITS and the CTS 3.7 rewrite.

NRC #	NRC Question	ITS	ONS Response
3.08.03#08 a	As currently worded, Condition G covers two basic cases: (1) the extended outage (>AOT) for a loss of redundancy, and (2) a loss of function. The NUREG generally provides these as separate conditions, it the latter is addressed at all. The industries intent with including the latter was apparently to avoid LERs for that case (per their reading of 10 CFR 50.73, and I'm not aware that the staff has ever challenged that interpretation). In any case, if both cases (conditions) are to be retained, they should be stated separately. Furthermore, because of the unique characteristics of the Oconee electrical design, particularly, a single condition that may cause multiple unit shutdowns, this constitutes another set of conditions that may require or allow different actions or completion time. LCO 3.8.3 Condition G seems to be all inclusive for these cases with 12 hours to Mode 3 and 84 hours to Mode 5 for any and all units affected. In contrast, LCO 3.8.8 Condition H imposes 12/48 (sic) hours shutdown completion times for exceeding an AOT, yet Condition I imposes 12/18/37 hours (3.0.3) shutdown completion times for a loss of function. Another contrast is LCO 3.8.1 Condition B that has 12/36 hours shutdown completion times for exceeding an AOT, Condition M imposes 12/84 hours shutdown completion times for exceeding an some AOTs and for some specific loss of safety function conditions, Condition E imposes 12*/48 hours shutdown completion times for exceeding an AOT, *where 12 applies only to one unit and 24 applies for remaining units, yet for some loss of function condition not addressed by specific conditions 3.0.3 imposes 12/18/37 hours shutdown completion times.	3.8.3	All the times are a direct carryover from the CTS.

NRC #	NRC Question	ITS	ONS Response
3.08.03#08 b	While some of these requirements may be a direct carry over from previous (pre 3.7 change) TS requirements, it is not clear that all are. It would help to have some general set of rules that could apply for all these situations. From which one could then determine where it is appropriate to state separate conditions and completion times for items that follow that general set of rules. At the present it is difficult to confirm the proposed requirements make sense from a safety point and are being applied consistently. Duke Power's comments on this matter are very much needed.	3.8.3	When referring to CLB, Oconee is referring to the 3.7 rewrite, not CTS. We consider the 3.7 requirements as those that will be in place when the 3.7 rewrite is approved. The proposed requirements are consistent with the 3.7 rewrite and reflect the safety considerations reflected in CTS 3.7.

NRC #	NRC Question	ITS	ONS Response
3.08.03#09	For SR 3.8.3.3 the NUREG requirement for removing visable terminal corrosion is not adopted in the ITS yet is specific with what is meant by the ITS that specifies that the terminals are clean, which is also a maintenance activity if they are not, thus the latter is not a sufficient basis to not provide that clarification. Item 28 addresses the absence of corrosion as necessary for operability, but the SR in question is not one that says verify the absence of corrosion, it only states how frequently it must be removed. If such, "removing corrosion", is not done on this frequency, what is the standard and how does your definition of "clean" differ from "removing visable corrosion"?	3.8.3	The justification provided by JFD 28 is consistent with the justification provided by TSTF-199 which removes this SR and other maintenance related SRs from NUREG 3.8.4. Oconee chose to retain CLB rather than attempt to fully adopt the TSTF since it is not approved and most likely will not be approved prior to the ONS ITS SE. Oconee prefers to retain its CTS requirements.

NRC #	NRC Question	ITS	ONS Response
3.08.03#10	With regards to NUREG SR 3.8.4.6, item 29 does not provide a satisfactory basis for not adopting this requirement as part of the ITS.	3.8.3	Not currently required by Oconee CTS.

NRC #	NRC Question	ITS	ONS Response
3.08.04#1	1) The title of this LCO should be "Vital I&C DC Sources and Distribution" consistent with the comments on LCO 3.8.3. 2) It is suggested that the LCO state: "The 125VDC Vital I&C panelboards, each aligned to at least one DC source, shall be OPERABLE to support equipment required to be OPERABLE." The clarifies the DC source requirements for each panelboard (which is assumed to be consistent with the design basis).	3.8.4	1) Not really appropriate since this Specification also provides requirements for the 230 kV Switchyard 125 VDC power sources. 2) This Specification is for the DC source, not the panelboards. Requirements for panelboards are addressed by ITS 3.8.8.

NRC #	NRC Question	ITS	ONS Response
3.08.04#2	The Condition should likewise be "One of the unit's required 125VDC panelboards inoperable or not aligned to a 125VDC source. OR Panelboards 1DIC and 1DID inoperable or both not aligned to a power source." It is assumed that need for the latter would be that it support one emergency power source, not necessarily two, and if both were needed for Unit 1 such would be covered by the first statement (preceding the "OR"). (In items 1 and 2 the reference to a or one "125VDC source" could have been stated as "OPERABLE 125VDC source" but such should go with stating it!)	3.8.4	See response to comment 3.08.04#1 above.

NRC #	NRC Question	ITS	ONS Response
3.08.04#3	The note for SR 3.8.4.1 is not appropriate and should be deleted.	3.8.4	The note is consistent with the NUREG. The Bases for the NUREG provides the reason for the note. The SR listed in the note is not required to be performed but must be met.

NRC #	NRC Question	ITS	ONS Response
3.08.04#4	If other DC sources and distributions are broken out as separate LCOs as recommended in comments on LCO 3.8.3, similar shutdown LCOs like this one would need to be developed.	3.8.4	Not broken out.

NRC #	NRC Question	ITS	ONS Response
3.08.05#1	For SR 3.8.5.2, the ITS do not require its performance for two specified conditions, overcharge and discharge, with the justification that for any abnormal situation, discharge or overcharge, is appropriately evaluated under administrative controls and if the battery is found to be inoperable, the SR must be met prior to returning the battery to service. The two specified conditions were explicit with respect to what constituted overcharge and discharge, and within what minimum time interval, the operator would have to confirm that the specified parameters have been returned to within Category B limits, assuming that they were outside these conditions as a result of those conditions. The response in item 41 of Attachment 5 is unacceptable. The frequencies for SR 3.9.6.2 are different, with cause, than other typical STS surveillance but consistency is not an acceptable basis to dismiss them. While Duke Power may feel that you administrative controls are a basis to dismiss the requirements, this has not been demonstrated nor would the staff suggest that you pursue that argument further. The failure to meet the specified surveillance is addressed by appropriate action requirements, that allows 31 days to meet the Category B requirements, hence, your statement that an inoperable battery can not be returned to service in 24 hours is recognized by those action requirements, thus the frequencies are not moot as stated based on that consideration. The fact that a surveillance is to be performed at some time in the future has no bearing on NRC guidance on evaluating degraded or non-conforming conditions, hence there should be no confusion as implied.	3.8.5	Oconee prefers to retain its current licensing basis and will revise JFD 41 to indicate that as the basis for not including the second and third SR frequencies. Not including the second and third frequencies is consistent with TSTF-201. Oconee based its plant specific justification on the justification provided for the TSTF.

NRC #	NRC Question	ITS	ONS Response
3.08.06#1	The condition for an LCO should not have an required action that immediately put you into another LCO. However, the solution would be to put the inverter into a combined inverter distribution LCO, similar as recommended for DC sources and distribution. Again, it makes the conditions and required actions associated with the 120VAC vital power to apply separate from other items currently grouped under LCO 3.8.8. In this case the suggested LCO is: The following 120VAC vital instrumentation power panelboard and their associated static inverters shall be OPERABLE: KVIA, KVIB, KVIC, and KVID. OR Four 120VAC vital instrumentation power panelboards (KVIA, KVIB, KVIC, and KVID) and associated static inverters shall be OPERABLE.	3.8.6	This is consistent with NUREG 3.8.7 RA A.1 Note. The recommended changes appears to be a generic. Oconee prefers to maintain consistency with the NUREG and CTS 3.7 rewrite presentation where possible.

NRC #	NRC Question	ITS	ONS Response
3.08.06#2	When an inverter is inoperable, the first required action should be to align its associated panelboard to the regulated backup power source with a completion time of 4 hours. Thus, Action A.1 would be come A.2.	3.8.6	See response to 3.08.06#1 above.

NRC #	NRC Question	ITS	ONS Response
3.08.06#3	With the above changes, Conditions F and G from LCO 3.8.8 could become Conditions B and C under LCO 3.8.5, and the Note under required action A.1 is no longer required.	3.8.6	See response to 3.08.06#1 above.

NRC #	NRC Question	ITS	ONS Response
3.08.06#4	There should be a Condition D for "More than one vital inverter inoperable" with a required action to "Align each associated panelboard to its regulated backup power source" with a completion time of "4 hours." Required Actions D.2 and D.3 should be added to cover shutdown similar to the actions for the original proposed Condition B.	3.8.6	See response to 3.08.06#1 above. Also, with more than one vital inverter inoperable, the unit would be in 3.0.3.

NRC #	NRC Question	ITS	ONS Response
3.08.06#5	There does not appear to be anything in the SRs for LCO 3.8.8 that would be needed to supplement SR 3.8.6.1 (having removed the inverters panelboards from LCO 3.8.8).	3.8.6	See response to 3.08.06#1 above.

NRC #	NRC Question	ITS	ONS Response
3.08.07#1	1) The title of this LCO should be "Vital I&C AC Sources and Distribution" consistent with the comments on LCO 3.8.3. 2) It is suggested that the LCO state: "The 120VAC Vital I&C panelboards, each aligned to an inverter or regulated power panelboard, shall be OPERABLE to support equipment required to be OPERABLE." The clarifies the AC source requirements for each panelboard (which is assumed to be consistent with the design basis).	3.8.7	1) This is not consistent with the NUREG. The Specification is for the inverters, not the panelboards. 2) Requirements for panelboards are addressed by ITS 3.8.8.

NRC #	NRC Question	ITS	ONS Response
3.08.07#2	The Condition should likewise be "One of the unit's required 120VAC panelboards inoperable or not aligned to an inverter or regulated power panelboard" (In items 1 and 2 the reference to a or one "inverter or regulated power panelboard" could have been stated as "OPERABLE inverter or OPERABLE regulated power panelboard" but such should go with stating it!)	3.8.7	See response for 3.08.07#1

NRC #	NRC Question	ITS	ONS Response
3.08.08#1	Operable buses or power strings should imply that they are energized as other items, c thru f, not described that way. It is recommended that item a state: "4.16kV Main Feeder Buses No. 1 and No. 2, interconnected via one or more 4.16kV ES buses." Likewise, it is recommended that item b state: "4.16kV ES Buses TC, TD and TE, and their associated ES Load Centers and ES MCCs." NOTE: While comments are provided on other items of LCO 3.8.8, overall it is recommended that these items be placed in individual LCOS.	3.8.8	Revise LCO part a and b to remove "energized." The additional detail recommended for Items a and b is provided in the Bases. This is consistent with the NUREG philosophy of keeping the details in the Bases. Prefer to retain presentation consistent with the NUREG and CTS rewrite which addresses these items collectively.

NRC #	NRC Question	ITS	ONS Response
3.08.08#2	Suggestion for item c is "125 VDC Vital I&C power panelboards DIA, DIB, DIC, and DID;" and for item f, the suggestion is: 120 VAC Vital Instrumentation power panelboards KVIA, KVIB, KVIC, and KVID. If equipment numbers (without the unit prefix) are used for one item, why not use them for all items and be consistent. Now the statement of LCO item f is consistent with the statement of Condition F and G.	3.8.8	Only listed where specific panelboard are required. Revised to include detail recommended.

NRC #	NRC Question	ITS	ONS Response
3.08.08#3	Suggestion for Condition B: "One ES Bus, associated ES Load Center or ES MCCs, inoperable." Since item d covers other unit panelboards, a suggestion for Condition C is: "One of the Unit's 125 VDC Vital I&C power panelboard inoperable." with Condition E to state: 1DIC 125 VDC Vital I&C power panelboard inoperable. OR 1DID 125 VDC Vital I&C power panelboard inoperable." similar to the statement of Condition F.	3.8.8	This level of detail is provided in the Bases consistent with the NUREG. The suggestion won't work since the use of "OR" in the condition means one or both are inoperable.

NRC #	NRC Question	ITS	ONS Response
3.08.08#4	Most of Condition I goes without saying, except for the restrictions on 230kV switchyard 125VDC Power Panel Boards, which is overstated in Condition D. The solution is a better statement for Condition D, with the following suggestion: "DYA or DYB 125 VDC power panelboard inoperable. OR 125 VDC power panelboard DYC or DYD inoperable. OR 125 VDC power panelboard DYE or DYF inoperable." with the Note changed to state: "Separate Condition entry is allowed for each of the following sets of 230kV switchyard 125VDC power panelboards". With these changes, Condition I is no longer required.	3.8.8	Since the NUREG does not preclude entry into more than one condition at a time, Conditon I is provided to provide additional assurrance that the appropriate evaluation and action is taken. Condtion I is consistent with the NUREG.

NRC #	NRC Question	ITS	ONS Response
3.08.08#5	The completion time to get to Mode 5 for Condition H.2 is 84 hours. In contrast, the completion time for other actions is 36 hours. The difference is not clear. If a condition applies for multiple units, this might be a reason for a longer time, but if it only affects one unit, then 36 hours seems to be reasonable. Please clarify how the different completion times are applied. (If answered in response to Question 8 on LCO 3.8.3, a response will not be needed here.)	3.8.8	Answered in response to NRC comment 3.08.03#8.

NRC #	NRC Question	ITS	ONS Response
3.08.08#6	The NUREG model for electrical distribution systems is two trains, with each containing three basic components: AC, DC, and AC vital (inverter power) distribution subsystems. In contrast, the Oconee electrical power system is not based upon independent (non-interconnected) trains, but upon multiple power paths from multiple sources to multiple loads. The NUREG model of independent trains is analogous to two chains each of which requires the function of everyone of its links. In contrast, the Oconee electrical system is more analogous to a series of chains that appear as an "H" with a cross link between the vertical legs. Under the provisions of ITS 3.8.8, only one condition may exist at any time without invoking LCO 3.0.3. In contrast, it would appear to make more sense to put items a & b, items c & d, item e, and item f, each into a separate LCOs. Furthermore, for DC power distribution and the 120 VAC vital instrumentation power panelboards, it would make sense to include the associated sources, batteries, chargers, and DC distribution center (3.8.3) or static inverters (3.8.6) with the distribution for those separate LCOs.	3.8.8	Need to discuss the meaning of the following statement from this question: "Under the provisions of ITS 3.8.8, only one condition may exist at any time without invoking LCO 3.0.3." ITS 3.8.8 does not preclude entry into more than one condition provided that a loss of function does not occur (Condition I).

Based on Reviewing ONS Supplement 1, be advised of the status of the following TSTFs.

1. TSTFs 211, 212, 213, 217 are under staff review and not yet approved. This applies to section 3.3.3, 3.3.4, 3.3.5, 3.3.6, 3.3.7, 3.3.11; and the respective Bases and JFDs. ID No. 56.

2. TSTF 216 does not apply to section 3.4. This is ID No. 46.

3. TSTF 257 is under staff review and not yet approved. This applies to section 3.4, ID No. 47.

4. TSTFs 255, 259, 260, 261, 262, 263, and 264 have not been submitted for staff review. These TSTFs affect the following specifications.

- 255 - Bases for 3.7.13
- 259 - SR 3.3.1.3 } under review by TSTF
- 260 - Spec 3.6.5 }
- 261 - Specs 3.4.5, 3.4.6,
- 262 - Spec 3.4.8
- 263 - Spec 3.4.5, 3.4.6, 3.4.7, 3.4.8
- 264 - SR3.3.10.3, Bases of 3.3.9 & 3.3.10

DRAFT

5. ITS section 3.4.7 ID No. 60. Actions A, B, SR 3.4.7.1, TSTF number has been left out.

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Improved STS Change Packages by Status

NRC Action Pending

TSTF-2, Rev. 1	Relocate the 10 year sediment cleaning of the fuel oil storage tank to licensee control
TSTF-21, Rev. 1	Make RHR - Low Water Level Surveillances consistent between PWR NUREGs
TSTF-51, Rev. 0	Revise containment requirements during handling irradiated fuel and core alterations
TSTF-58, Rev. 0	Incorporate CE NPSD-995 recommendations into the ECCS specification
TSTF-59, Rev. 0	Incorporate CE NPSD-994 recommendations into the SITs specification
TSTF-68, Rev. 1	Containment Personnel Airlock Doors Open During Fuel Movement
TSTF-92, Rev. 1	Revise the Containment Purge and Exhaust SR to exempt valves that are locked, sealed or secured
TSTF-96, Rev. 1	Delete the initial performance of the boron concentration measurement with no source range detectors
TSTF-111, Rev. 1	Revise Bases for SRs 3.3.1.16 and 3.3.2.10 to eliminate pressure sensor response time testing
TSTF-113, Rev. 4	Eliminate Shutdown to MODE 4 for inoperable PORVs
TSTF-116, Rev. 2	RCS Inventory Balance SR: Steady State Clarification
TSTF-151, Rev. 1	PORV Operability Clarification
TSTF-160, Rev. 1	LCO 3.2.5, "Power Peaking Factors" Applicability Change to MODE 1 with THERMAL POWER > 20% RTP
TSTF-161, Rev. 1	SI Reference Applicability
TSTF-168, Rev. 0	RTB Maintenance
TSTF-190, Rev. 1	Remove reference to inadvertently bypassing a redundant channel
TSTF-197, Rev. 0	Require containment closure when shutdown cooling requirements are not met.
TSTF-204, Rev. 0	Revise DC Sources - Shutdown and Inverters - Shutdown to Address Specific Subsystem Requirements
TSTF-206, Rev. 0	Applicabilities of Suppression Pool Average Temperature Limits
TSTF-211, Rev. 0	Clarify that remove all power to the CRD system means remove power to CRD trip breakers
TSTF-213, Rev. 0	Eliminate extraneous verbiage from the definition of CONTROL RODS
TSTF-215, Rev. 0	Modify LCO 3.3.6 and LCO 3.3.7 Applicability
TSTF-217, Rev. 0	Provide applicable Required Action when more than one instrumentation channel is inoperable
TSTF-218, Rev. 0	Change 3.3.1 Applicability for Nuclear Overpower High Setpoint and RCS High Pressure functions
TSTF-219, Rev. 0	LCO 3.4.12, Action I, is modified to eliminate unnecessary Required Action and Completion Time
TSTF-223, Rev. 0	Increase Completion Time for HPCI and One ADS Valve Inoperable
TSTF-226, Rev. 0	Fuel loading with control rods withdrawn or removed from defueled core cells
TSTF-227, Rev. 0	Revision to EOC-RPT pump actions
TSTF-228, Rev. 0	Revise RHR applicability
TSTF-229, Rev. 0	Revise SR 3.2.2.2 for consistency with SR 3.1.4.4
TSTF-231, Rev. 0	Reword Bases for Turbine Stop Valve (TSV) Closure function of RPS Instrumentation LCO
TSTF-232, Rev. 0	Refuel Equipment Interlocks Applicability Change
TSTF-233, Rev. 0	Relocate LTOP Arming Temperature to PTLR
TSTF-234, Rev. 0	Add Action for More Than One DRPI Inoperable
TSTF-235, Rev. 0	MSSV Changes
TSTF-237, Rev. 0	Relaxation of Reactor Coolant Pump Flywheel Examinations
TSTF-238, Rev. 0	Correct control bank insertion limits action for applicable mode
TSTF-239, Rev. 0	Correct shutdown bank insertion limits applicability
TSTF-240, Rev. 0	Eliminate unnecessary Actions to restore compliance with the LCO
TSTF-241, Rev. 0	Allow time for stabilization after reducing power due to QPTR out of limit
TSTF-242, Rev. 0	Increase the time to perform a COT on Power Range and Intermediate Range Instruments
TSTF-243, Rev. 0	Correct Applicability for LTOP specifications

TSTF-244, Rev. 0 Correct invalid SR for Containment Isolation Valve Position
TSTF-245, Rev. 0 AFW train operable when in service
TSTF-246, Rev. 0 RTS Instrumentation, 3.3.1 Condition F Completion Time
TSTF-247, Rev. 0 Provide separate condition entry for each PORV and block valve
TSTF-248, Rev. 0 Revise Shutdown Margin definition for stuck rod exception
TSTF-249, Rev. 0 Physics Tests Exceptions reactivity effects correction.
TSTF-250, Rev. 0 Delete specific FSAR section references
TSTF-251, Rev. 0 Delete TS 5.6.9, Tendon Surveillance Report
TSTF-252, Rev. 0 Provide generic SG tube surveillance reporting requirements
TSTF-253, Rev. 0 Omit Note which indicates that performance of one SR satisfies another
TSTF-254, Rev. 0 Delete accumulated water checks for DG fuel oil.
TSTF-256, Rev. 0 Modify MODE 2 STE Applicability
TSTF-258, Rev. 0 Changes to Section 5.0, Administrative Controls

Total Number of Travelers: 55

NRC Approves

TSTF-5, Rev. 1 Delete safety limit violation notification requirements
TSTF-5, Rev. 0 Delete safety limit violation notification requirements
TSTF-6, Rev. 1 Add Exception for LCO 3.0.7 to LCO 3.0.1
TSTF-8, Rev. 2 Revise the SR 3.0.1 Bases to allow credit for unplanned events to meet any Surveillance
TSTF-9, Rev. 1 Relocate value for shutdown margin to COLR
TSTF-12, Rev. 1 Delete LCO 3.1.9 and 3.1.11 (Physics Tests Exceptions)
TSTF-13, Rev. 1 Move SR for 300 ppm MTC measurement to Frequency Note of SR 3.1.4.3
TSTF-14, Rev. 4 Add an LCO item and SR to Mode 2 Physics Tests Exceptions to verify that Thermal Power <= 5% RTP.
TSTF-14, Rev. 3 Add an LCO item and SR to Mode 2 Physics Tests Exceptions to verify that Thermal Power <= 5% RTP.
TSTF-14, Rev. 0 Add an LCO item and SR to Mode 2 Physics Tests Exceptions to verify that Thermal Power <= 5% RTP.
TSTF-15, Rev. 1 Correct error in Bases for LCO 3.1.5
TSTF-17, Rev. 1 Extension of testing frequency of containment airlock interlock mechanism from 184 days to 24 months
TSTF-19, Rev. 1 Relocate the details of RTD and thermocouple calibration from the Channel Calibration definition
TSTF-20, Rev. 0 Delete extraneous Action from Refueling Cavity Water Level
TSTF-21, Rev. 0 Make RHR - Low Water Level Surveillances consistent between PWR NUREGs
TSTF-23, Rev. 3 Bracket NUREG-1431 LCO 3.9.2, Unborated Water Source Isolation Valves
TSTF-24, Rev. 1 Delete the details on updating the target flux difference.
TSTF-26, Rev. 0 Revise the Action for Minimum Temperature for Criticality to match the Applicability
TSTF-27, Rev. 3 Revise SR frequency for Minimum Temperature for Criticality
TSTF-28, Rev. 0 Delete unnecessary Action to measure gross specific activity
TSTF-30, Rev. 2 Extend the Completion Time for inoperable isolation valve to a closed system to 72 hours
TSTF-30, Rev. 0 Extend the Completion Time for inoperable isolation valve to a closed system to 72 hours
TSTF-32, Rev. 0 Slow/Stuck Control Rod Separation Criteria
TSTF-33, Rev. 0 Specification 3.1.3, Required Action A.2 Completion Time Note
TSTF-34, Rev. 0 Delete Requirements to Disarm the associated CRD when two or more withdrawn control rods are stuck
TSTF-35, Rev. 0 Recirculation pump start RPV temperature limits verification note
TSTF-38, Rev. 0 Revise visual surveillance of batteries to specify inspection is for performance degradation
TSTF-40, Rev. 0 Exempt RCP seal water injection or leakoff from the definition of Unidentified Leakage

Improved STS Change Packages by Status

TSTF-42, Rev. 0	Revise the wording of SR 3.0.2 to be consistent with the other NUREGs
TSTF-43, Rev. 0	Add additional examples to the SR 3.0.1 Bases to provide additional clarification
TSTF-45, Rev. 1	Exempt verification of CIVs that are not locked, sealed or otherwise secured
TSTF-46, Rev. 1	Clarify the CIV surveillance to apply only to automatic isolation valves
TSTF-47, Rev. 0	Eliminate "manipulation" from the definition of Core Alteration
TSTF-53, Rev. 1	Clarify Manual PORVs are capable of mitigating an overpressure event
TSTF-54, Rev. 1	Operational Leakage TS Bases changed to be consistent with the Identified Leakage definition
TSTF-55, Rev. 0	Revise "minimum" to "maximum" in LTOP Bases
TSTF-56, Rev. 0	Delete reference to PORV setpoint operating correctly
TSTF-57, Rev. 0	Delete reference to minimum number of pressurizer safeties needed to be operable in lower modes
TSTF-60, Rev. 0	Make LCO 3.0.4 applicable to all actions of TS 3.4.15
TSTF-61, Rev. 0	Added statement clarifying the intent of the RCS water inventory balance surveillance
TSTF-62, Rev. 0	Delete RCP requirement from SR 3.4.1.3 Note
TSTF-63, Rev. 0	Clarification of Action B when RCS loops are filled in Mode 5
TSTF-65, Rev. 1	Use of generic titles for utility positions
TSTF-66, Rev. 0	Revise RCS specific activity LCO
TSTF-67, Rev. 0	Correction of Shutdown Margin Definition
TSTF-69, Rev. 0	Remove SR 3.3.1.6 from Function 14 and 15 in Table 3.3.1-1 (Digital)
TSTF-70, Rev. 0	Fuel Storage Pool Verification
TSTF-70, Rev. 1	Fuel Storage Pool Verification
TSTF-71, Rev. 1	Add example of SFDP to the 3.0.6 Bases
TSTF-72, Rev. 0	Split Function 12 in Table 3.3.1-1 into Two Functions
TSTF-73, Rev. 0	Indicate that RC Flow - Low, Step Allowable value is <= [7.231] psid
TSTF-74, Rev. 0	ESFAS Automatic Bypass Removal SR
TSTF-75, Rev. 0	Delete SR 3.1.5.4 from LCO 3.3.3, Action B2
TSTF-76, Rev. 0	Remove references to the onsite review function
TSTF-77, Rev. 0	Add an Action for an Adverse Condition for LHR and DNBR
TSTF-78, Rev. 0	Surveillance Requirement for ASME Section XI Pumps
TSTF-79, Rev. 1	Change Specification 3.3.4 SR to agree with CEN-327
TSTF-80, Rev. 1	Added Shutdown Track Action for Loss of Load and APD Trips
TSTF-81, Rev. 0	Add Note to SR 3.3.1.8 and SR 3.3.1.9 excluding neutron detectors
TSTF-82, Rev. 1	Move Allowable Value from LCO 3.3.2 to SR 3.3.2.4
TSTF-83, Rev. 0	Specification 3.3.3 Condition A Note was made into a second Condition
TSTF-84, Rev. 0	LCO 3.0.4 exception added to Condition for two CVCS Isolation channels inoperable
TSTF-85, Rev. 1	Add MODES column to Table 3.3.1-1
TSTF-87, Rev. 2	Revise "RTBs open" & "CRDM de-energized" Actions to "incapable of rod withdrawal"
TSTF-89, Rev. 0	Change to Frequency of SR 3.1.8.1
TSTF-90, Rev. 1	Add a Note to LCO 3.5.3 that allows RHR to be Operable as ECCS when aligned for decay heat removal
TSTF-93, Rev. 3	Change the frequency of pressurizer heater testing from 92 days to [18] months
TSTF-94, Rev. 1	Remove number of required pressurizer heater groups from Pressurizer LCO
TSTF-95, Rev. 0	Revise completion time for reducing Power Range High trip setpoint from 8 to 72 hours
TSTF-96, Rev. 0	Delete the initial performance of the boron concentration measurement with no source range detectors
TSTF-97, Rev. 0	Revise Note to SR 3.2.1.2, Fq measurement
TSTF-98, Rev. 1	Relocate the Fq(z) penalty factor to the COLR

Improved STS Change Packages by Status

TSTF-98, Rev. 2	Relocate the Fq(z) penalty factor to the COLR
TSTF-99, Rev. 0	Extend the Completion Time for Fq(w) not within limits from 2 hours to 4 hours
TSTF-100, Rev. 0	Revise ADV Action B to state "Restore All But One ADV to Operable Status"
TSTF-101, Rev. 0	Change AFW pump testing frequency to be "In accordance with the Inservice Testing Program"
TSTF-104, Rev. 0	Relocates discussion of exceptions from LCO 3.0.4 to the Bases
TSTF-106, Rev. 1	Change to Diesel Fuel Oil Testing Program
TSTF-108, Rev. 1	Eliminate the 12 hour COT on power range and intermediate range channels for Physics Test Exceptions
TSTF-109, Rev. 0	Clarify the QPTR surveillances
TSTF-110, Rev. 2	Delete SR frequencies based on inoperable alarms
TSTF-112, Rev. 1	Revise Condition D in Tech Spec 3.2.3.A
TSTF-114, Rev. 0	Revise Bases for 3.4.7 to address DHR via natural circulation
TSTF-117, Rev. 0	Revise Accumulator Pressure Reference from Pressurizer to RCS
TSTF-118, Rev. 0	Administrative Controls Program Exceptions
TSTF-122, Rev. 0	Revise LCO 3.0.2 Bases to Remove Possible Confusion
TSTF-123, Rev. 1	Revise "Control Rod" assemblies in Design Features to Match Definitions
TSTF-124, Rev. 0	Delete Specific Reference to Bypasses in CFT and Calibration Definitions
TSTF-125, Rev. 1	Delete EFPD Definition
TSTF-126, Rev. 0	Delete extraneous information from Safety Limits
TSTF-127, Rev. 1	Decrease Frequency to 92 days for CMI and CEA Deviation Circuit Functional Test
TSTF-128, Rev. 1	Revise TSP Description
TSTF-129, Rev. 0	RCS Maximum Flowrate
TSTF-130, Rev. 1	Add Note to Exclude Neutron Detectors from Channel Calibration
TSTF-132, Rev. 0	Remove Note (b) from Table 3.3.1-1
TSTF-133, Rev. 1	Add a Criteria Discussion to TSP LCO
TSTF-134, Rev. 1	Add Note Crediting CEA Drop Time SR for CEA Trip from 50% Withdrawn SR
TSTF-136, Rev. 0	Combine LCO 3.1.1 and 3.1.2
TSTF-137, Rev. 0	Relocation of the 3.4.16 Action Note A Bases
TSTF-139, Rev. 1	Incorrect Criteria Defined in B 3.7.16
TSTF-140, Rev. 0	Correct Condensate Storage Tank LCO and Criteria
TSTF-141, Rev. 0	Delete the Mode 2 Applicability for Reactivity Balance
TSTF-142, Rev. 0	Increase the Completion Time When the Core Reactivity Balance is Not Within Limit
TSTF-143, Rev. 0	Consolidate Specification 3.1.5 Actions to Restore Misaligned CEAs
TSTF-144, Rev. 0	Addition of Linear Heat Rate to Safety Limits Section
TSTF-146, Rev. 0	Revise LCO 3.9.4 to Require One SDC Loop Operable and in Operation
TSTF-148, Rev. 0	Allows the Use of Generic Shape Annealing Matrix Elements
TSTF-149, Rev. 0	Revise LHR SR to be Consistent with the LCO
TSTF-150, Rev. 0	Replace DNBR Power Decrease Number with Reference to the COLR
TSTF-152, Rev. 0	Revise Reporting Requirements to be Consistent with 10 CFR 20
TSTF-153, Rev. 0	Clarify Exception Notes to be Consistent with the Requirement Being Excepted
TSTF-154, Rev. 2	Revise Criteria Discussions of Special Test Exceptions
TSTF-156, Rev. 1	LCO 3.1.9.c removal of extraneous detail
TSTF-158, Rev. 1	3.1.5 Safety Rod Insertion Limits, Required Action A.1 Deletion
TSTF-162, Rev. 0	Maximum pressurizer water level limit bases
TSTF-163, Rev. 2	Minimum vs. Steady State Voltage and Frequency

TSTF-164, Rev. 0 AFD Notes Rearranged
TSTF-165, Rev. 0 Revise the LCO 3.0.5 Bases to Refer to Testing and Not SRs
TSTF-166, Rev. 0 Correct Inconsistency Between LCO 3.0.6 and the SFDP Regarding Performance of an Evaluation
TSTF-169, Rev. 0 Delete Condition 3.3.1.N
TSTF-170, Rev. 0 Open only affected RTCBs when a single channel is inoperable
TSTF-172, Rev. 0 Revise SR 3.1.4.1 to correct MTC reference
TSTF-173, Rev. 0 Delete incorrect Bases statement regarding I-131 equilibrium
TSTF-174, Rev. 0 Add missing Bases for 3.7.6, Actions A.1 and A.2
TSTF-175, Rev. 0 Delete incorrect Bases discussion from 3.7.8, Action B
TSTF-176, Rev. 2 Revise SR 3.1.4.1 to delete SR Note
TSTF-177, Rev. 0 Revise LCO 3.4.5 Bases to clarify RCP requirements
TSTF-178, Rev. 0 Remove "trip or bypass removal" from RPS and ESFAS Action Note
TSTF-179, Rev. 0 Replace the phrase "maximum allowed THERMAL POWER level" with "RTP"
TSTF-180, Rev. 0 Add "bypass removal" features to the RPS Instrumentation - Shutdown LCO
TSTF-181, Rev. 0 Move Notes from Conditions to Required Actions
TSTF-182, Rev. 0 Add Manual Trip to Condition for two channels of RPS Logic and Trip Initiation inoperable
TSTF-184, Rev. 0 Change Required Action Reference from 3.6.3 to 3.9.3
TSTF-185, Rev. 0 Change AND to OR in CPIS Condition B
TSTF-186, Rev. 0 Correct SRs which verify setpoints
TSTF-187, Rev. 0 Add Condition for Two Inoperable Actuation Channels
TSTF-188, Rev. 0 Remove incorrect reference from the PAM table
TSTF-189, Rev. 0 Remove uncertainty discussion from the Bases
TSTF-191, Rev. 0 Eliminate reference to Manual Trip in Bases
TSTF-192, Rev. 0 Correct a reference to RTCB channels
TSTF-193, Rev. 0 Revise CE Analog CEA Position Indication Verification
TSTF-194, Rev. 0 Add shutdown CEAs to the SDM Special Test Exception
TSTF-195, Rev. 0 Revise 3.4.6 Action A.1 to be consistent with the Specification
TSTF-207, Rev. 0 Completion Time for Restoration of MSIV Leakage Rate
TSTF-208, Rev. 0 Extension of time to reach Mode 2 in LCO 3.0.3
TSTF-210, Rev. 0 Correct 3.7.16.1 Bases to match the SR
TSTF-214, Rev. 0 Delete LCO 3.9.1, part b
TSTF-216, Rev. 0 Move Applicability Note to LCO to avoid confusion in the application of SR 3.0.4 for MODE changes
TSTF-220, Rev. 0 Revise Actions for inoperable, misaligned APSR
TSTF-221, Rev. 0 Delete Incorrect 3.10.8 Condition C
TSTF-222, Rev. 0 Control Rod Scram Time Testing
TSTF-225, Rev. 0 Fuel movement with inoperable refueling equipment interlocks
TSTF-230, Rev. 0 Add new Condition B to LCO 3.6.2.3, "RHR Suppression Pool Cooling"

Total Number of Travelers: 153

Reviewer Recommends Changes

TSTF-37, Rev. 1 Diesel Generator Surveillance Changes Based on Generic Letter 94-01 and the Maintenance Rule

Total Number of Travelers: 1

NRC Rejects: TSTF Accepts

TSTF-1, Rev. 1	Make LCO 3.0.5 applicable to variables in addition to systems and equipment
TSTF-3, Rev. 1	Relocate references to thyroid dose conversion factors to the Bases
TSTF-4, Rev. 1	Move the PORV lift settings and the enable temperature to the PTLR
TSTF-10, Rev. 1	Revise the Control Rod LCOs Applicability from Mode 2 to Mode 2 with Keff >= 1.0
TSTF-11, Rev. 1	Delete "All" from LCO 3.1.5, "Rod Group Alignment Limits"
TSTF-22, Rev. 0	Bracket the flow rate requirement in the RHR SR as some plants do not assume a specific flow rate.
TSTF-25, Rev. 0	Revise the Actions terminology regarding QPTR to match the Actions being taken
TSTF-29, Rev. 0	Remove Mode 4 when S/Gs are relied upon from the Modes of Applicability
TSTF-31, Rev. 0	Revise the 1.3 examples to match the BWR standard
TSTF-44, Rev. 0	Add a note to the Containment Isolation Valve LCO which exempts MSSVs, MSIVs, MFIV, MFRVs, and ADVs
TSTF-86, Rev. 0	Delete overtime requirements in Section 5.0
TSTF-91, Rev. 1	Relocate the trip setpoints and allowable values for loss of voltage and undervoltage to the Bases
TSTF-102, Rev. 0	Extend the periodic verification of inoperable MSIV and MFIV closure to 31 days
TSTF-103, Rev. 1	Add bracketed information to LCO 3.0.4 inappropriately deleted by Rev. 0 Change BWR-26
TSTF-119, Rev. 0	Delete Fire Protection Program Implementation from Administrative Controls
TSTF-167, Rev. 0	High Radiation Area - Unauthorized Changed to Inadvertent
TSTF-257, Rev. 0	Revise leakage detection instrument Conditions to eliminate requirement to enter LCO 3.0.3

Total Number of Travelers: 17

NRC Requests Changes: TSTF Considering

TSTF-209, Rev. 0	Delete inappropriate Condition entry statement

Total Number of Travelers: 1

NRC Requests Changes: TSTF Will Revise

TSTF-52, Rev. 0	Implement 10 CFR 50, Appendix J, Option B
TSTF-107, Rev. 0	Separate control rods that are untrippable versus inoperable
TSTF-135, Rev. 0	3.3 - RPS and ESFAS Instrumentation
TSTF-198, Rev. 0	Specification 3.8.6 - Unlimited use of battery charging current in lieu of specific gravity
TSTF-199, Rev. 0	3.8.4 - Delete maintenance Surveillances
TSTF-200, Rev. 0	Unlimited use of battery modified performance discharge test
TSTF-201, Rev. 0	Omit battery "conditional evalutations" from SR 3.8.6.2
TSTF-202, Rev. 0	Revise battery Surveillance weekly Frequencies
TSTF-203, Rev. 0	Add Bases for 3.8.6 Actions Note

Total Number of Travelers: 9

NRC Rejects: TSTF Considering

TSTF-16, Rev. 1	Add Action to LCO 3.8.9 to require entry into LCO 3.0.3 when there is a loss of function
TSTF-36, Rev. 3	Addition of LCO 3.0.3 N/A to shutdown electrical power specifications
TSTF-41, Rev. 0	Correct BWOG LCO 3.0.7 to refer to Special Exception LCOs
TSTF-48, Rev. 0	Eliminate repeated information from LCO 3.0.7 Bases
TSTF-105, Rev. 1	Remove the details of performing an RCS flow measurement
TSTF-120, Rev. 0	Simplify Fuel Oil Sampling

TSTF-131, Rev. 0 Remove Note (C) from CEOG Digital Table 3.3.1-1
TSTF-135, Rev. 1 3.3 - RPS and ESFAS Instrumentation
TSTF-138, Rev. 0 Addition of Action for Inoperable Steam Generator
TSTF-147, Rev. 0 Clarify that RPS and ESFAS Matrix Logic Testing Does Not Affect Operability
TSTF-196, Rev. 0 Revise isolation devices to include ASME/ANSI equivalent methods
TSTF-224, Rev. 0 Increase Completion Time for One ADS and One Low Pressure ECCS Inoperable
TSTF-236, Rev. 0 Seal Injection Flow 72 Hour Completion Time
Total Number of Travelers: 13

NRC Rejects: TSTF to Pursue

TSTF-18, Rev. 0 Require only one secondary containment access door per access opening to be closed
Total Number of Travelers: 1

Superceded by Revision

TSTF-1, Rev. 0 Make LCO 3.0.5 applicable to variables in addition to systems and equipment
TSTF-2, Rev. 0 Relocate the 10 year sediment cleaning of the fuel oil storage tank to licensee control
TSTF-3, Rev. 0 Relocate references to thyroid dose conversion factors to the Bases
TSTF-4, Rev. 0 Move the PORV lift settings and the enable temperature to the PTLR
TSTF-6, Rev. 0 Add Exception for LCO 3.0.7 to LCO 3.0.1
TSTF-7, Rev. 0 Delete the 1 hour time limit to begin reducing power from LCO 3.0.3
TSTF-8, Rev. 0 Revise the SR 3.0.1 Bases to allow credit for unplanned events to meet any Surveillance
TSTF-8, Rev. 1 Revise the SR 3.0.1 Bases to allow credit for unplanned events to meet any Surveillance
TSTF-9, Rev. 0 Relocate value for shutdown margin to COLR
TSTF-10, Rev. 0 Revise the Control Rod LCOs Applicability from Mode 2 to Mode 2 with Keff >= 1.0
TSTF-11, Rev. 0 Delete "All" from LCO 3.1.5, "Rod Group Alignment Limits"
TSTF-12, Rev. 0 Delete LCO 3.1.9 and 3.1.11 (Physics Tests Exceptions)
TSTF-13, Rev. 0 Move SR for 300 ppm MTC measurement to Frequency Note of SR 3.1.4.3
TSTF-14, Rev. 1 Add an LCO item and SR to Mode 2 Physics Tests Exceptions to verify that Thermal Power <= 5% RTP.
TSTF-14, Rev. 2 Add an LCO item and SR to Mode 2 Physics Tests Exceptions to verify that Thermal Power <= 5% RTP.
TSTF-15, Rev. 0 Correct error in Bases for LCO 3.1.5
TSTF-16, Rev. 0 Add Action to LCO 3.8.9 to require entry into LCO 3.0.3 when there is a loss of function
TSTF-17, Rev. 0 Extension of testing frequency of containment airlock interlock mechanism from 184 days to 24 months
TSTF-19, Rev. 0 Relocate the details of RTD and thermocouple calibration from the Channel Calibration definition
TSTF-23, Rev. 2 Bracket NUREG-1431 LCO 3.9.2, Unborated Water Source Isolation Valves
TSTF-23, Rev. 0 Bracket NUREG-1431 LCO 3.9.2, Unborated Water Source Isolation Valves
TSTF-24, Rev. 0 Delete the details on updating the target flux difference.
TSTF-27, Rev. 2 Revise SR frequency for Minimum Temperature for Criticality
TSTF-27, Rev. 1 Revise SR frequency for Minimum Temperature for Criticality
TSTF-27, Rev. 0 Revise SR frequency for Minimum Temperature for Criticality
TSTF-30, Rev. 1 Extend the Completion Time for inoperable isolation valve to a closed system to 72 hours
TSTF-36, Rev. 2 Addition of LCO 3.0.3 N/A to shutdown electrical power specifications
TSTF-36, Rev. 0 Addition of LCO 3.0.3 N/A to shutdown electrical power specifications
TSTF-36, Rev. 1 Addition of LCO 3.0.3 N/A to shutdown electrical power specifications
TSTF-37, Rev. 0 Diesel Generator Surveillance Changes Based on Generic Letter 94-01 and the Maintenance Rule

TSTF-39, Rev. 0	Allow CFTs to be performed by sequential, overlapping or total channel steps
TSTF-45, Rev. 0	Exempt verification of CIVs that are not locked, sealed or otherwise secured
TSTF-46, Rev. 0	Clarify the CIV surveillance to apply only to automatic isolation valves
TSTF-53, Rev. 0	Clarify Manual PORVs are capable of mitigating an overpressure event
TSTF-54, Rev. 0	Operational Leakage TS Bases changed to be consistent with the Identified Leakage definition
TSTF-65, Rev. 0	Use of generic titles for utility positions
TSTF-68, Rev. 0	Containment Personnel Airlock Doors Open During Fuel Movement
TSTF-71, Rev. 0	Add example of SFDP to the 3.0.6 Bases
TSTF-79, Rev. 0	Change Specification 3.3.4 SR to agree with CEN-327
TSTF-80, Rev. 0	Added Shutdown Track Action for Loss of Load and APD Trips
TSTF-82, Rev. 0	Move Allowable Value from LCO 3.3.2 to SR 3.3.2.4
TSTF-85, Rev. 0	Add MODES column to Table 3.3.1-1
TSTF-87, Rev. 0	Revise "RTBs open" & "CRDM de-energized" Actions to "incapable of rod withdrawal"
TSTF-87, Rev. 0	Revise "RTBs open" & "CRDM de-energized" Actions to "incapable of rod withdrawal"
TSTF-90, Rev. 0	Add a Note to LCO 3.5.3 that allows RHR to be Operable as ECCS when aligned for decay heat removal
TSTF-91, Rev. 0	Relocate the trip setpoints and allowable values for loss of voltage and undervoltage to the Bases
TSTF-92, Rev. 0	Revise the Containment Purge and Exhaust SR to exempt valves that are locked, sealed or secured
TSTF-93, Rev. 1	Change the frequency of pressurizer heater testing from 92 days to [18] months
TSTF-93, Rev. 0	Change the frequency of pressurizer heater testing from 92 days to [18] months
TSTF-93, Rev. 2	Change the frequency of pressurizer heater testing from 92 days to [18] months
TSTF-94, Rev. 0	Remove number of required pressurizer heater groups from Pressurizer LCO
TSTF-98, Rev. 0	Relocate the Fq(z) penalty factor to the COLR
TSTF-103, Rev. 0	Add bracketed information to LCO 3.0.4 inappropriately deleted by Rev. 0 Change BWR-26
TSTF-105, Rev. 0	Remove the details of performing an RCS flow measurement
TSTF-106, Rev. 0	Change to Diesel Fuel Oil Testing Program
TSTF-108, Rev. 0	Eliminate the 12 hour COT on power range and intermediate range channels for Physics Test Exceptions
TSTF-110, Rev. 0	Delete SR frequencies based on inoperable alarms
TSTF-110, Rev. 1	Delete SR frequencies based on inoperable alarms
TSTF-111, Rev. 0	Revise Bases for SRs 3.3.1.16 and 3.3.2.10 to eliminate pressure sensor response time testing
TSTF-112, Rev. 0	Revise Condition D in Tech Spec 3.2.3.A
TSTF-113, Rev. 0	Eliminate Shutdown to MODE 4 for inoperable PORVs
TSTF-113, Rev. 1	Eliminate Shutdown to MODE 4 for inoperable PORVs
TSTF-116, Rev. 0	RCS Inventory Balance SR: Steady State Clarification
TSTF-116, Rev. 1	RCS Inventory Balance SR: Steady State Clarification
TSTF-123, Rev. 0	Revise "Control Rod" assemblies in Design Features to Match Definitions
TSTF-125, Rev. 0	Delete EFPD Definition
TSTF-127, Rev. 0	Decrease Frequency to 92 days for CMI and CEA Deviation Circuit Functional Test
TSTF-128, Rev. 0	Revise TSP Description
TSTF-130, Rev. 0	Add Note to Exclude Neutron Detectors from Channel Calibration
TSTF-133, Rev. 0	Add a Criteria Discussion to TSP LCO
TSTF-134, Rev. 0	Add Note Crediting CEA Drop Time SR for CEA Trip from 50% Withdrawn SR
TSTF-139, Rev. 0	Incorrect Criteria Defined in B 3.7.16
TSTF-145, Rev. 0	Add Action to Verify Flow Path is Isolated When 2 CIVs Inoperable
TSTF-151, Rev. 0	PORV Operability Clarification

TSTF-154, Rev. 1	Revise Criteria Discussions of Special Test Exceptions
TSTF-154, Rev. 0	Revise Criteria Discussions of Special Test Exceptions
TSTF-161, Rev. 0	SI Reference Applicability
TSTF-163, Rev. 0	Minimum vs. Steady State Voltage and Frequency
TSTF-163, Rev. 1	Minimum vs. Steady State Voltage and Frequency
TSTF-176, Rev. 0	Revise SR 3.1.4.1 to delete SR Note
TSTF-190, Rev. 0	Remove reference to inadvertently bypassing a redundant channel

Total Number of Travelers: 81

TSTF Withdraws

TSTF-7, Rev. 1	Delete the 1 hour time limit to begin reducing power from LCO 3.0.3
TSTF-49, Rev. 0	Revise the 1.4 examples to match the CEOG standard
TSTF-50, Rev. 0	Revise the 1.3 examples to match the CEOG standard
TSTF-64, Rev. 0	Clarification of applicability of Channel Calibration and Channel Functional Test
TSTF-88, Rev. 0	Number of Required Reactor Vessel Head Closure Bolts
TSTF-115, Rev. 0	Battery Float Current and Battery Inspection Program
TSTF-121, Rev. 0	Remove Regulatory Duplication from Shift Manning Requirements
TSTF-145, Rev. 1	Add Action to Verify Flow Path is Isolated When 2 CIVs Inoperable
TSTF-155, Rev. 0	3.5.1 Core Flood Tanks- Deletion of Condition D and Modification of Condition C
TSTF-156, Rev. 0	LCO 3.1.9.c removal of extraneous detail
TSTF-157, Rev. 0	Omit duplicate EFW alignment SR
TSTF-158, Rev. 0	3.1.5 Safety Rod Insertion Limits, Required Action A.1 Deletion
TSTF-159, Rev. 0	LCO 3.1.6 Applicability Modification
TSTF-160, Rev. 0	LCO 3.2.5, "Power Peaking Factors" Applicability Change to MODE 1 with THERMAL POWER > 20% RTP
TSTF-171, Rev. 0	Revise Excore Channel Calibration Performance
TSTF-183, Rev. 0	Eliminate incorrect reference to Functions from RPS Logic and Trip Initiation LCO
TSTF-212, Rev. 0	Incorporate approved topical BAW-10167, Supplement 3 in SR 3.3.3.1 and SR 3.3.4.1

Total Number of Travelers: 17

Open Items - Attachments

06-May-98

NRC #: Att5#5

ITS: 3.3.8

DRAFT

NRC Question: ITS No.: T3.3.8-1 Note c

CTS No.: None

Description:
Note c added to specify that position indication requirements apply only to CIVs that are electrically controlled.

CTS DOC:
M26 CTS does not include all Type A and Category I post accident monitoring (PAM) instrumentation identified in the plant specific Regulatory Guide 1.97 response and associated NRC Safety Evaluations. ITS 3.3.8 incorporates all Type A and Category 1 PAM Functions consistent with the NUREG. The following PAM Functions, including the associated LCO, Applicability, ACTIONS, Table entries, and Notes, are added:

2. RCS Hot Leg Temperature
4. RCS Pressure (Wide Range)
8. Containment Isolation Valve Position
11. Pressurizer Level
12. Steam Generator Water Level
13. Steam Generator Pressure
15. Upper Surge Tank Level
18. HPI System Flow
19. LPI System Flow
20. Reactor Building Spray Flow

Surveillance Requirements are added (ITS SRs 3.3.8.1 and 3.3.8.3) for PAM Functions 2, 4, 8, 13, 15, and 20. SR 3.3.8.1 is added for PAM Functions 18 and 19. CTS provides comparable Surveillance requirements for pressurizer level (PAM ll)and steam generator water level (PAM 12) indicators (CTS Table 4.1-1, items 26 and 39 respectively). The addition of SR 3.3.8.1 for the Functions designated above is appropriate since a CHANNEL CHECK provides assurance that gross channel failure will be detected and is key to verifying that the instrumentation continues to operate properly between each CHANNEL CALIBRATION. The

1

addition of SR 3.3.8.3 for the Functions designated above is appropriate since the CHANNEL CALIBRATION verifies the channel responds to measured parameters within the necessary range and accuracy.

Type A variables are included in the ITS because they provide the primary information that permits the control room operator to take specific manually controlled actions that are required when no automatic control is provided and that are required for safety systems to accomplish their safety functions for Design Basis Accidents (DBAs). Additionally, Category 1 variables are the key variables deemed risk significant because they are needed to: a) determine whether systems important to safety are performing their intended functions; b) provide information to the operators that will enable them to determine the potential for causing a gross breach of the barriers to radioactivity release; and c) provide information regarding the release of radioactive materials to allow for early indication of the need to initiate action necessary to protect the public and to estimate the magnitude of any impending threat. Since these PAM Functions are not in the CTS requirements, their addition represents a more restrictive change.

Justification:
12 In the conversion to ITS, NUREG Table 3.3.17-1, Post Accident Monitoring Instrumentation, is modified by Note c which indicates that the containment isolation valve position indication requirements apply only to containment isolation valves that are electrically controlled. This is consistent with ONS Regulatory Guide 1.97 response for CIV position indication and the NRC's Safety Evaluation Report for this response.

DOC/JFD: DOC M26, JFD 12

ONS Response:

Comment:

Action Needed:

Status: open

NRC #: Att5#8

ITS: 3.3.14

NRC Question: ITS No.: 3.3.14 Applic

CTS No.: 3.4.1

Description:
Applicability expanded to include MODE 4 when SG is relied upon for heat removal consistent with LCO 3.7.5 Applicability for EFW.

CTS DOC:
M25 CTS 3.4.1 requires the EFW pump initiation circuitry to be OPERABLE when Reactor Coolant System (RCS) temperature is > 250°F. ITS 3.3.14 APPLICABILITY for EFW pump initiation circuitry is MODES 1, 2, & 3 and MODE 4 when a steam generator is relied upon for heat removal. The ONS design precludes exceeding 246°F except when relying upon the steam generators for heat removal. Requiring the EFW pump initiation circuitry to be OPERABLE at ³ 246°F instead of 250°F is a more restrictive requirement upon unit operation and is consistent with ITS 3.7.5 for the EFW System and the corresponding NUREG Specification.

Justification:
28 NUREG Specification 3.3.11, Emergency Feedwater Initiation and Control (EFIC) System Instrumentation; NUREG Specification 3.3.12, EFIC Manual Initiation; and NUREG Specification 3.3.13, EFIC logic, are modified to address Main Steam Line Break Detection and MFW Isolation Circuitry only. ITS Specifications 3.3.14 and 3.3.15 are added to address Emergency Feedwater System Initiation Circuitry and Main Steam Line Break and Main Feedwater Isolation instrumentation separately. The NUREG Specification combines the EFW System Initiation, MSL Isolation and MFW Isolation functions into one Specification apparently due to common instrumentation and similar initiation circuitry. ONS does not have common instrumentation and similar initiation circuitry for these functions. Consistent with CTS, the ITS addresses these requirements by separate Specifications. The Specification titles, LCOS, ACTIONS, and Surveillance Requirements are appropriately modified to reflect ONS specific terminology and

design requirements. Where appropriate, ITS Required Actions are based on similar NUREG Required Actions. For example, the Completion Time of one hour for ITS 3.3.15, Required Action A.1 is consistent with NUREG Specification 3.3.7, Required Action A.2, which allows one hour to declare an affected component inoperable when the actuation logic is inoperable.

DOC/JFD: DOC M25, JFD 28

ONS Response:

Comment:

Action Needed: ONS needs to strengthen basis for 246F number - design limit for LPI coolers. - 3/26/98 meeting.

Status: open

NRC #: Att5#10

ITS: 3.3.16 & 3.9.3

NRC Question: ITS No.: SR 3.3.16.2

SR 3.9.3.2 FREQ

CTS No.: 3.8.10

3.8.10
4.4.4.5

Description:
Frequency changed from "...immediately prior to refueling operation" to "Once each refueling outage prior to CORE ALTERATIONS or movement of irradiated fuel assemblies within containment."

CTS DOC:
L35 CTS 3.8.10 requires the radiation monitor associated with the purge system valve isolation to be tested and verified OPERABLE immediately prior to refueling operations. CTS Table 4.1-2, Item 4, requires this functional test be performed "Prior to Refueling." ITS 3.3.16 Applicability is during CORE ALTERATIONS and during movement of irradiated fuel assemblies within containment. ITS SR 3.3.16.2 requires the testing be performed once each refueling outage prior to CORE ALTERATIONS or beginning movement of irradiated fuel assemblies within containment. Permitting the specified testing to be conducted prior to beginning movement of irradiated fuel assemblies within containment in lieu of immediately prior to refueling operations is a less restrictive requirement upon unit operation (and is more stringent than the NUREG). Requiring performance of SR 3.3.16.2 once each refueling outage prior to CORE ALTERATIONS or prior to beginning movement of irradiated fuel assemblies within containment represents a reasonable relaxation of the CTS surveillance frequency. This continues to ensure that this function is verified prior to irradiated fuel assembly handling within containment.

LI CTS 3.8.10 requires testing the isolation function of the Reactor Building Purge supply and exhaust valves immediately prior to refueling operations. CTS 4.4.4.5 requires verifying purge isolation valves close per CTS Specification 3.8.10. ITS SR

3.9.3.2 requires this testing be performed once each refueling outage prior to CORE ALTERATIONS or movement of irradiated fuel assemblies inside containment. Permitting the specified testing to be conducted once each refueling outage prior to CORE ALTERATIONS or movement of irradiated fuel assemblies inside containment in lieu of immediately prior to refueling operations is a less restrictive requirement upon unit operation. Requiring performance of SR 3.9.3.2 once each refueling outage prior to CORE ALTERATIONS or movement of irradiated fuel assemblies inside containment represents a reasonable relaxation of the current requirement of " . . . immediately prior to . . . " surveillance frequency and remains within the NUREG specified frequency of 18 months. This continues to ensure that this function is verified prior to CORE ALTERATIONS or movement of irradiated fuel assemblies within containment.

Justification:

32 The frequency of 92 days for NUREG SR 3.3.15.2 (ITS SR 3.3.16.2) is modified to partially incorporate the CLB. DPC considers the NUREG frequency of 92 days to be inappropriate for ONS. CTS 3.8.10 requires the radiation monitor that initiates purge isolation to be verified operable immediately prior to beginning refueling operations. For consistency with ITS SR 3.9.3.2, which verifies that the reactor building purge supply and exhaust valve actuates to the correct position on an actual or simulated actuation signal once each refueling outage prior to beginning CORE ALTERATIONS or movement of irradiated fuel assemblies within containment, the same SR Frequency is adopted for ITS SR 3.3.16.2. This is appropriate since the safety function of the radiation monitor is to isolate the purge valves. Requiring performance of SR 3.3.16.2 at this Frequency represents a reasonable relaxation of the current requirement of "immediately prior to beginning refueling operations.

12 The frequency of 18 months for NUREG SR 3.9.3.2 is modified to partially retain the CLB. DPC considers the NUREG frequency of 18 months to be inappropriate for ONS since the purge valves remain isolated for extended periods of time during unit operation. CTS 3.8.10 requires the reactor building purge isolation capability to be verified immediately prior to refueling operations. ITS SR 3.9.3.2 requires verification that each

reactor building purge supply and exhaust valve actuates to the correct position on an actual or simulated actuation signal once each refueling outage prior to CORE ALTERATIONS or movement of irradiated fuel assemblies inside containment. Requiring performance of SR 3.9.3.2 prior to CORE ALTERATIONS or movement of irradiated fuel assemblies within containment represents a reasonable relaxation of the current requirement of " . . . immediately prior to . . . " surveillance frequency and remains within the NUREG specified frequency of 18 months.

DOC/JFD: DOC L35 & L1, JFD 32 & 12

ONS Response:

Comment: Being reviewed by Containment Systems

Action Needed:

Status: open

NRC #: Att5#11

ITS: 3.3.19, 3.3.20

NRC Question: ITS No.: 3.3.19
3.3.20 RA A.1

CTS No.: 3.7.6
3.7.7 RA A.1

Description:
Required Action modified to allow placing the channel in trip for consistency with comparable NUREG 3.3.8 Required Action.

CTS DOC:
L17 CTS 3.7.6 and 3.7.7 both require an inoperable voltage sensing relay to be restored within 72 hours (Required Action A.1). ITS 3.3.19 Required Action A.1 and 3.3.20 Required Action A.1 require the inoperable channel to be placed in trip within 72 hours. This less restrictive change allows operation to continue indefinitely when the channel is placed in trip and continues to allow 72 hours to restore an inoperable channel that cannot be placed in trip. The actuation logic for DGVP is two-out-of-three. Placing the inoperable channel in the tripped condition fulfills the function of the channel (and places the function in a one-out-of-two configuration). Indefinite operation in this configuration is acceptable since the degraded grid voltage function is capable of performing its function in the presence of a single failure. This change is consistent with comparable NUREG 3.3.8 requirements.

Justification:
33 ITS Specifications 3.3.17 through 3.3.22 are added to capture current technical specification requirements for Emergency Power Switching Logic Functions. The EPSL is designed to assure that power is supplied to the unit main feeder buses and, hence to the unit's essential loads. Appropriate LCOS, ACTIONS, and Surveillance Requirements are added.

DOC/JFD: DOC L17, JFD 33

ONS Response:

Comment: Being reviewed by Electrical Power

Action Needed:

Status: open

NRC #: Att5#12

ITS: 3.4.1

NRC Question: ITS No.: LCO 3.4.1

SR 3.4.1.1, 2, 3 & 4

CTS No.: None

Description:
DNBR limits are specified in the COLR rather than in the LCO and SRs since they are subject to change with fuel cycle designs.

CTS DOC:
M1 CTS requirements comparable to ITS 3.4.1 do no exist. ITS LCO 3.4.1 requires RCS DNBR parameters for loop pressure, loop average temperature and RCS total flow to be within the limits specified in the COLR. The Note to the LCO states limits on loop pressure do not apply during specified changes in THERMAL POWER. ITS Specification 3.4.1 specifies an Applicability of MODE 1. The ITS LCO 3.4.1 Actions require restoring DNBR parameters to within limits within 2 hours or exiting the Applicability for the Specification within 12 additional hours. ITS SR 3.4.1.1, SR 3.4.1.2 and SR 3.4.1.3 require verification that each DNBR parameter is within limit at a 12 hour frequency. ITS SR 3.4.1.4 requires verification by measurement that total RCS flow is within limit at an 18 month Frequency. Specification 3.4.1 ensures limits on RCS pressure, temperature, and flow rate are met "to ensure that the core operates within the limits assumed for the plant safety analyses." Operating within these limits will result in meeting departure from nucleate boiling ratio (DNBR) criteria in the event of a DNB limited transient. The addition of ITS 3.4.1 requirements is a more restrictive requirement upon unit operation and is consistent with the NUREG.

Justification:
19 DNB limits are included in the COLR (rather than LCO 3.4.1 and the associated SRs) for each pump combination operating condition. The DNB limits and THERMAL POWER limits are currently controlled administratively. Since they are subject to change with fuel design changes, they are to be controlled in the COLR. Controlling RCS DNBR

limits outside the Technical Specifications is consistent with the CLB.

DOC/JFD: DOC M1, JFD 19

ONS Response:

Comment: 3/26/98 Meeting - Liang did not realize RCS flow not in CTS. He said that flow could not be in COLR since change in flow rate indicates a plant change that must be approved by staff. He is reconsidering his position, based on ONS not having flow in CTS and not having to put flow requirement in ITS.

Action Needed:

Status: open

NRC #: Att5#13

ITS: 3.5.1

NRC Question: ITS No.: SR 3.5.1.4 2nd FREQ

CTS No.: T 4.1-3, Item 3

Description:
NUREG 6 hours changed to 12 hours as time to complete SR after addition to CFT. There is no CTS time limit.

CTS DOC:
M2 CTS Table 4.1-3, Item 3 requires CFT boron concentration to be sampled monthly and after each makeup. ITS SR 3.5.1.4 requires CFT boron concentration be sampled every 31 days and once within 12 hours after each solution volume increase >- 80 gallons that is not the result of addition from a borated water source that meets CFT boron concentration requirements. The CTS frequency of monthly is equivalent to the ITS frequency of 31 days. However, the second ITS sampling frequency is more restrictive than the CTS sampling frequency of "after each makeup" since sampling will be required "once within 12 hours after each solution volume increase..... CTS does not specify a time limit for sampling. This Completion Time is based on the need to clearly establish when the required sampling must be completed while taking into consideration the time necessary to recirculate the tank, obtain the sample and perform the analysis. The proposed change is consistent with the NUREG.

Justification:
9 NUREG SR 3.5.1.4 second Frequency is modified to reflect unit specific system characteristics. The normal source of makeup for the CFT is the boric acid mix tank. Reference to the source of inventory is changed from the "borated water storage tank" to "a source that meets CFT boron concentration requirements." Inventory makeup to the CFTs is sampled to demonstrate an acceptable boron concentration of the makeup water prior to its admittance into the CFT. Non-sampled makeup or makeup from other non-verified sources will continue to require the initiation of sampling in accordance with the intent of the SR 3.5.1.4 second Frequency criteria. The NUREG SR 3.5.1.4 second Frequency is also modified to extend the

NUREG Completion Time of 6 hours to 12 hours. This reflects the time needed at ONS to recirculate the CFT following makeup, obtain the sample and then perform the sample analysis.

DOC/JFD: DOC M2, JFD 9

ONS Response:

Comment:

Action Needed: ONS needs to expand DOC and JFD regarding the need for 12 hours (convection mixing, etc.) - 3/26/98 meeting.

Status: open

NRC #: Att5#14

ITS: 3.5.1

NRC Question: ITS No.: SR 3.5.1.4 2nd FREQ

CTS No.: T 4.1-3, Item 3

Description:
Changed CFT make up source from BWST to a borated water source which meets CFT boron concentration requirements.

CTS DOC:
L3 CTS Table 4.1-3, Item 3 requires CFT boron concentration to be sampled .monthly and after each makeup. ITS SR 3.5.1.4 requires CFT boron concentration be sampled every 31 days and once within 12 hours after each solution volume increase ³ 80 gallons that is not the result of addition from a borated water source that meets CFT boron concentration requirements. The CTS does not establish any qualifiers on sampling Frequency based on the source of the makeup inventory. Therefore, the ITS Frequency is less restrictive than current requirements because sampling will be required once within 12 hours after each solution volume increase of ³ 80 gallons that is not the result of addition from a source of known concentration that meets CFT boron concentration requirements. The decreased sampling Frequency is acceptable because inventory makeup from sources that are of a known boron concentration will be capable of satisfying the boron concentration requirements of the CFTS. When inventory makeup is from a source for which the boron concentration is not established, sampling requirements are unchanged. This change is consistent with the NUREG.

Justification:
9 NUREG SR 3.5.1.4 second Frequency is modified to reflect unit specific system characteristics. The normal source of makeup for the CFT is the boric acid mix tank. Reference to the source of inventory is changed from the "borated water storage tank" to "a source that meets CFT boron concentration requirements." Inventory makeup to the CFTs is sampled to demonstrate an acceptable boron concentration of the makeup water prior to its admittance into the CFT. Non-sampled makeup or makeup from other non-verified sources will continue to require the initiation of sampling in

accordance with the intent of the SR 3.5.1.4 second Frequency criteria. The NUREG SR 3.5.1.4 second Frequency is also modified to extend the NUREG Completion Time of 6 hours to 12 hours. This reflects the time needed at ONS to recirculate the CFT following makeup, obtain the sample and then perform the sample analysis.

DOC/JFD: DOC L3, JFD 9

ONS Response:

Comment:

Action Needed: ONS needs to expand justification to discuss various makeup sources. - 3/26/98 meeting.

Status: open

NRC #: Att5#16

ITS: 3.5.3

NRC Question: ITS No.: 3.5.3 RA E.2 Note

CTS No.: N/A

Description:
Note provides for not entering MODE 5 when a DHR loop is not operable.

CTS DOC:
M8 CTS 3.3.2.a requires the LPI System to be OPERABLE when the RCS, with fuel in the core, is in a condition with pressure equal to or greater than 350 psig or temperature equal to or greater than 250°F and subcritical. Proposed ITS 3.5.3 requires the LPI System to be OPERABLE in MODES 1, 2, 3 and 4. LCO Note 1 is added to specify that only one LPI train is required to be OPERABLE in MODE 4. LCO Note 2 is added to allow an LPI train to be considered OPERABLE during alignment, when aligned or when operating if capable of being manually realigned to the LPI mode of operation. MODE 4 is defined as subcritical with the average cool ant temperature > 200°F and < 250°F. CTS criteria specified as 250°F is considered more limiting than the 350 psig criteria, since the saturation temperature of water at 350 psig is > 435°F. As such, the proposed ITS is slightly more restrictive in that OPERABILITY of one LPI train is required when temperature is > 200°F where none were specified before. This additional requirement ensures that sufficient water is available to the reactor when limited core cooling may be required. Proposed ACTION E is added to require action be initiated immediately to restore the required LPI train to OPERABLE status and to require the reactor to be placed in MODE 5 within 24 hours when the required LPI train cannot be restored to OPERABLE status (provided a decay heat removal loop is available). This action is appropriate since in this condition the unit is not prepared to respond to an event requiring low pressure injection and may not be prepared to continue cooldown using the LPI pumps and LPI heat exchangers. The proposed change is consistent with the NUREG.

Justification:
16 NUREG LCO 3.5.3 Actions were altered, while

retaining the original intent of the Required Actions, in order to properly reflect the corrective actions should the LCO not be met. NUREG Condition B is designated as ITS Condition A. Condition A is entered when one train of LPI is inoperable in MODES 1, 2 or 3. ITS Required Action A.1 allows 72 hours to restore the LPI train to OPERABLE status. This is consistent with the CTS 3.3.2.a(2) restoration time. The 72 hour Completion Time is an acceptable allowance based on the fact that the redundant LPI train can still satisfy the required ECCS safety function for the specified LCO Applicability. Condition C is entered when the Required Action and associated Completion Time of Condition A are not met. ITS Required Action C.1 requires that the unit be in MODE 3 within 12 hours and MODE 4 within 60 hours. This Completion Time in conjunction with the Completion Time of ITS Required Action A.1 (72 hours) is in accordance with CTS 3.3.2(a) requirements for the restoration of operability or completion of compensatory measures for the LPI systems. Further, the combination of ITS Conditions A and C preserves the philosophy of removing the unit from the MODES or other specified conditions for Applicability.

NUREG Condition A is designated as ITS Condition E. Condition E is entered when the required LPI train is inoperable during MODE 4. ITS Required Action E.1 requires that action be immediately initiated to restore the decay heat removal (DHR) loop to an OPERABLE status. This Required Action and its associated Completion Time are premised on the recognition that an ECCS safety function has been lost. Further, this Required Action and its associated Completion Time are structured such that no requirement for a reduction in RCS temperature exists (i.e., LCO 3.0.3 is not entered). If both LPI trains are inoperable, the corrective action is to restore at least one LPI train to an OPERABLE status prior to cooling the unit down and into a MODE that requires operation of the DHR mode of the LPI System. Required Action E.2 is inserted to provide a Required Action to place the unit in MODE 5 if the DHR mode of one LPI train is available despite the inoperability of both of the LPI trains. ONS has a third LPI pump (non ES) that can be used for DHR. This Required Action is conditional based on a NOTE that directs that this action is required only if the DHR mode of one LPI

train is OPERABLE. If the cause of the inoperability for both LPI trains also made the DHR mode inoperable, then no attempt to cool down the unit is required. Required Action E.2 is inserted to ensure that a cooldown to MODE 5 is initiated provided the required DHR capability exists. These changes are consistent with NUREG LCO 3.4.5 and LCO 3.4.6 Actions when a decay heat removal system is unavailable.

DOC/JFD: DOC M8, JFD 16

ONS Response:

Comment:

Action Needed: ONS needs to explain why HPI is not needed during MODE 4. RCS pressure could be above LPI shutoff head. - 3/26/98 meeting.

Will be affected by HPI amendment

Status: open

NRC #: Att5#18

ITS: 3.7.12

NRC Question: ITS No.: SR 3.7.12.1

CTS No.: T4.1-3, Item 4

Description:
Modified FREQ to adopt CLB. 2nd FREQ is modified from CTS to limit time after makeup to perform the SR.

CTS DOC:
M15 CTS Table 4.1-3, Item 4 requires sampling the spent fuel pool boron concentration monthly and after each makeup. No specific limit is placed on the time period to perform the surveillance after the makeup to the spent fuel pool. ITS SR 3.7.12.1 requires sampling the spent fuel pool within 12 hours after completing the makeup. Therefore this additional requirement is a more restrictive requirement upon unit operation. Sampling within 12 hours after the makeup provides reasonable assurance that boron concentration in the spent fuel pool is maintained consistent with the assumptions of the analysis.

Justification:
32 The Applicability for NUREG 3.7.15 and the Frequency for SR 3.7.15.1 are modified to reflect the current licensing basis. Specifically, the NUREG provision regarding the modification of Applicability when a spent fuel pool (SFP) verification has been completed after the last movement of fuel assemblies in the SFP is not adopted. Related NUREG Required Action A.2.2 is also not adopted. The ONS current licensing basis includes consideration of other events such as dropping the shipping cask into the SFP which are not excluded by the SFP verification.

The current licensing basis regarding frequency of verifying the spent fuel pool boron concentration is retained. The periodic frequency of 31 days is considered adequate since the event specific frequency of " . . . once within 12 hours after completion of a makeup to the spent fuel pool . . . " provides reasonable assurance the required boron concentration is maintained for the only expected event that can result in decreasing the boron concentration in the spent fuel pool.

DOC/JFD: DOC M15, JFD 32

ONS Response:

Comment:

Action Needed: ONS needs to strengthen reasoning for 12 hours. - 3/26/98 meeting.

Status: open

NRC #: Att6#1

ITS: 3.5.1

NRC Question: ITS No.: SR 3.5.1.2

CTS No.: 3.3.3

Description:
CFT volume of 1040 ± 30 ft3 (1010 - 1070 ft3) is changed to 975 - 1105 ft3.

DOC:
L7 CTS 3.3.3 requires the CFTs to have a minimum level (volume) of 13 ± .44 ft (1040 ± 30 ft3) and a pressure of 600 ± 25 psig. The limits for level (volume) and pressure are the allowable values based on the uncertainties associated with the instrument channel measuring these parameters. ITS SR 3.5.1.2 requires the CFTs to have a minimum volume of ³ 975 ft3 and £ 1105 ft3. ITS SR 3.5.1.3 requires the CFTs to have a minimum pressure of ³ 550 psig and £ 650 psig. These acceptance criteria are the associated analytical limits. Changing the acceptance criteria from allowable values based on the uncertainties associated with the instrument channel to analytical limits for the parameter being measured is considered less restrictive on plant operations. The ITS SRs specify the actual pressure and volume assumed in the safety analyses without regard to instrument inaccuracies. The proposed change is considered acceptable since instrument uncertainties must be applied in the surveillance procedures to ensure the analytical limits are not exceeded. The ITS consistently uses analytical limits for the SR acceptance criteria. This makes the value in the Technical Specification instrument independent and permits the use of other instruments to confirm the parameter is within limits (although the instrument may have different accuracies). The ITS uses an allowable value only when associated with a measuring device.

DOC/JFD: DOC L7

ONS Response:

Comment: 3/26/98 Meeting - Liang's concern is the use of analytical value, rather than error adjusted in ITS. Liang stated that NRC's position is that error corrected values are to be used. However, backfit will not be used for those CTS values which are

analytical.

Action Needed:

Status: open

NRC #: Att6#2

ITS: 3.5.1

NRC Question: ITS No.: 3.3.3

CTS No.: SR 3.5.1.3

Description:
CFT pressure of 600 ± 25 psig (575 - 625 psig) is changed to 550 - 650 psig.

DOC:
L7 CTS 3.3.3 requires the CFTs to have a minimum level (volume) of 13 ± .44 ft (1040 ± 30 ft3) and a pressure of 600 ± 25 psig. The limits for level (volume) and pressure are the allowable values based on the uncertainties associated with the instrument channel measuring these parameters. ITS SR 3.5.1.2 requires the CFTs to have a minimum volume of ³ 975 ft3 and £ 1105 ft3. ITS SR 3.5.1.3 requires the CFTs to have a minimum pressure of ³ 550 psig and £ 650 psig. These acceptance criteria are the associated analytical limits. Changing the acceptance criteria from allowable values based on the uncertainties associated with the instrument channel to analytical limits for the parameter being measured is considered less restrictive on plant operations. The ITS SRs specify the actual pressure and volume assumed in the safety analyses without regard to instrument inaccuracies. The proposed change is considered acceptable since instrument uncertainties must be applied in the surveillance procedures to ensure the analytical limits are not exceeded. The ITS consistently uses analytical limits for the SR acceptance criteria. This makes the value in the Technical Specification instrument independent and permits the use of other instruments to confirm the parameter is within limits (although the instrument may have different accuracies). The ITS uses an allowable value only when associated with a measuring device.

DOC/JFD: DOC L7

ONS Response:

Comment: 3/26/98 Meeting - Liang's concern is the use of analytical value, rather than error adjusted in ITS. Liang stated that NRC's position is that error corrected values are to be used. However, backfit will not be used for those CTS values which are

analytical.

Action Needed:

Status: open

NRC #: Att6#3

ITS: 3.5.4

NRC Question: ITS No.: SR 3.5.4.1

CTS No.: 3.3.4.b

Description:
BWST minimum temp changed from 40OF to 450°F. CTS value is 50°F. BWST maximum temp is changed from IOOOF to 1150°F. There is no CTS maximum value.

DOC:
L8 CTS 3.3.4.b requires the BWST minimum boron concentration to be within the limit specified in the Core Operating Limits Report (COLR) at a minimum temperature of 50°F. The minimum temperature is an allowable value based on the uncertainties associated with the instrument measuring this parameter. The ITS SR 3.5.4.1 acceptance criteria of 45°F is the associated analytical limit. Changing the acceptance criteria from an allowable value based on the uncertainties associated with the instrument channel to an analytical limit for the parameter being measured is considered less restrictive on plant operations. The ITS SR 3.5.4.1 specifies the actual temperature assumed in the safety analyses without regard to instrument inaccuracy. The proposed change is considered acceptable since instrument uncertainties must be applied in the surveillance procedures to ensure the analytical limits are not exceeded. The ITS consistently uses analytical limits for the SR acceptance criteria. This makes the value in the Technical Specification instrument independent and permits the use of other instruments to confirm the parameter is within limits (although the instrument may have different accuracies). The ITS uses an allowable value only when associated with a measuring device.

DOC/JFD: DOC L8

ONS Response:

Comment: 3/26/98 Meeting - Liang's concern is the use of analytical value, rather than error adjusted in ITS. Liang stated that NRC's position is that error corrected values are to be used. However, backfit will not be used for those CTS values which are analytical.

Action Needed:

Status: open

DRAFT

3.8 ELECTRICAL POWER SYSTEMS

3.8.1 AC Sources – Operating

LCO 3.8.1 The following AC electrical power sources shall be OPERABLE:

a. Two offsite sources on separate towers connected to the 230kV switchyard; to the unit's startup transformer and the E breakers

b. One underground emergency power path ~~from one Keowee Hydro Unit (KHU)~~ through the S breakers; Keowee Hydro Unit (KHU) and its associated

c. One overhead emergency power path ~~from a second KHU~~ through the E breakers; KHU and its associated

d. One underground emergency power path ~~from a second KHU~~ through the S breakers; and KHU in a standby mode and its associated

e. One ~~Lee~~ combustion turbine (LCT). associated with the other KHU that is aligned to

----------NOTES----------

1. The underground emergency power path specified ~~in LCO 3.8.1.d~~ is not required to be OPERABLE when overhead electrical disconnects ~~for~~ the underground emergency power path specified in LCO 3.8.1.b are open. KHU in a standby mode to the

2. LCT is only required to be OPERABLE when:

   a. Underground emergency power path is inoperable ≥ 24 hours,

   b. Overhead KHU is inoperable ≥ 72 hours,

   c. Keowee Main Step up transformer is inoperable ≥ 72 hours,

   d. Both emergency power paths are inoperable for planned reasons,

   e. Both emergency power paths are inoperable ≥ 1 hour for unplanned reasons, or

   f. One or more required offsite sources are inoperable ≥ 1 hour.

APPLICABILITY: MODES 1, 2, 3, and 4

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. ~~One or more~~ Both required offsite sources and the KHU and its associated overhead emergency power path inoperable due to inoperable startup transformer.	A.1 Perform SR 3.8.1.5.	1 hour if not performed in previous 12 hours AND Once per 12 hours thereafter
	AND	
	A.2 ~~Share~~ Align to another Unit's startup transformer.	12 hours
	AND	
	A.3 Designate shared startup transformer to one Unit.	36 hours
B. ~~Shared~~ Both required offsite sources and the KHU and it associated overhead emergency power path inoperable due to a startup transformer being designated to another Unit. OR Required Action and associated Completion Time not met for Condition A.	B.1 Be in MODE 3.	12 hours
	AND	
	B.2 Be in MODE 5.	36 hours

(continued)

KHU and its associated

– – – NOTES – – – –
1. Get from RAJ N3 & RA K Note
2. Get from RAJ N1
– – – – – – – – –

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Overhead emergency power path inoperable due to reasons other than Condition A or B.	C.1 Perform SR 3.8.1.5.	1 hour if not performed in previous 12 hours
AND		AND
Underground emergency power path OPERABLE.	– – – Note – – – Not required when KHU and its associated underground emergency power path are inoperable. – – – – – –	Once per 12 hours thereafter unless two standby buses are energized by an OPERABLE LCT
	AND	from RAJ.4 & K.4
– – – – NOTES – – – – 1. Replace COND K 2. Replace COND J – – – – – – – –	----------NOTE---------- Required Actions must be completed prior to or immediately upon entering applicable Conditions. ----------	AND Once per 7 days thereafter when both standby buses are energized by an OPERABLE LCT
Restore KHU and its associated overhead emergency power path to OPERABLE status.	C.2 Enter applicable Conditions and Required Actions for overhead emergency power path inoperable for > 72 hours.	72 hours

(continued)

AND
C.3 <Get from RAJ.1 & K.1>
AND
C.4 <Get from RAJ.2 & K.2>
AND
C.5 <Get from [redacted] K.2>
AND
C.6 <Get from J.2>
AND
C.7 <Get from K.5>
AND
C.8 <Get from J.5>

KHU and its associated

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. Underground emergency power path inoperable. AND Overhead emergency power path OPERABLE.	D.1 Perform SR 3.8.1.6. ---- NOTE ---- Not required when KHU and its associated overhead emergency power path are inoperable ----------	1 hour if not performed during preceding 12 hours AND Once per 12 hours thereafter unless two standby buses are energized by an OPERABLE LCT
	AND D.2 Energize either standby bus by an OPERABLE LCT.	24 hours AND 1 hour from subsequent discovery of deenergized standby buses required
	AND D.3 Restore KHU and its associated underground emergency power path to OPERABLE status.	72 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. Required Action and associated Completion Time for Required Action D.2 not met. standby bus not energized from OPERABLE LCT when specified by Both KHUs and their associated emergency power paths inoperable due to	E.1 Be in MODE 3.	12 hours for the first one Oconee unit
		AND
		24 hours for subsequent Oconee unit(s)
	AND	
	E.2 Be in MODE 5.	84 hours
F. One inoperable E breaker and one inoperable S breaker on the same main feeder bus.	F.1 Declare associated main feeder bus inoperable.	Immediately
G. Both emergency power paths inoperable for planned reason other than Condition F. KHUs and their associated	----------NOTE---------- LCO 3.0.4 is not applicable when both standby buses are energized by OPERABLE LCT. ----------	
	G.1 Energize both two standby buses from an OPERABLE LCT.	Immediately
		AND
		1 hour from subsequent discovery of either deenergized standby buses
	AND	

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
G. (continued)	G.2 Verify by administrative means the OPERABILITY that status of: Two offsite sources ~~(LCO 3.8.1)~~, Distribution Systems ~~(LCO 3.8.8)~~ ~~Emergency Power Switching Logic~~ (EPSL) ~~(LCO 3.3.17 – LCO 3.3.19)~~, DC Sources ~~(LCO 3.8.3)~~, and Inverters are OPERABLE. ~~(LCO 3.8.6).~~	Immediately
	AND	
	G.3 Restore inoperable components listed in Required Action G.2 to OPERABLE status.	4 hours from discovery of inoperable component
	AND	
	G.~~4~~3 Restore one emergency power path to OPERABLE status.	60 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
H. Both emergency power paths inoperable for unplanned reasons other than Condition F.	----------NOTE---------- LCO 3.0.4 is not applicable when both standby buses are energized by OPERABLE LCT. ----------	
	H.1 Energize ~~two~~ both standby buses from an OPERABLE LCT.	1 hour AND 1 hour from subsequent discovery of either deenergized standby ~~buses~~ bus
	AND	
	H.2 Verify by administrative means the OPERABILITY status of: ~~Two~~ offsite sources ~~(LCO 3.8.1)~~, required AC and DC Distribution Systems ~~(LCO 3.8.8)~~ ~~Emergency Power Switching Logic (EPSL) (LCO 3.3.17 LCO 3.3.19)~~, required DC Sources ~~(LCO 3.8.3)~~, and Inverters ~~(LCO 3.8.6)~~.	1 hour
	AND	
	H.3 Restore inoperable components listed in Required Action H.2 to OPERABLE status.	4 hours from discovery of inoperable component
	AND	

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
H. (continued)	H.~~4~~3 Restore one emergency power path to OPERABLE status.	12 hours
I. One or more required offsite sources inoperable due to reasons other than Condition A or B.	----------NOTE---------- LCO 3.0.4 is not applicable when both standby buses are energized by OPERABLE LCT. ---------- I.1 Energize ~~two~~ both standby buses by an OPERABLE LCT. AND I.2 Verify by administrative means the OPERABILITY status of: ~~Two~~ emergency power paths ~~(LCO 3.8.1)~~, Distribution Systems ~~(LCO 3.8.8)~~, EPSL ~~(LCO 3.3.17 - LCO 3.3.19 and LCO 3.3.21)~~, DC Sources ~~(LCO 3.8.3)~~, and Inverters ~~(LCO 3.8.6)~~. AND	1 hour AND 1 hour from subsequent discovery of either deenergized standby ~~bus~~es 1 hour

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
I. (continued)	I.3 Restore inoperable components listed in Required Action I.2 to OPERABLE status.	4 hours from subsequent discovery of inoperable component
	AND	
	I.~~4~~3 Restore required offsite sources to OPERABLE status.	24 hours
J. Note 2 to RA C.2 --- NOTE --- Entry into this Condition is allowed once in a three year period for each KHU.	NOTES 1. KHU generation to the system grid prohibited except for testing. (Note 2 to RA C)	
Overhead power path inoperable > 72 hours due to inoperable KHU.	2. The OPERABLE KHU may be made inoperable for ~~24~~ 72 hours if required to restore both KHUs to OPERABLE status. (Note to RA J)	
	3. LCO 3.0.4 is not applicable when both standby buses are energized by OPERABLE LCT. (Note 1 to RA C)	
RA C.3	J.1 Energize ~~two~~ both standby buses by an OPERABLE LCT.	~~Immediately~~ 72 hours
	AND	
		1 hour from subsequent discovery of either deenergized standby bus~~es~~
	AND	

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
~~J.~~ (continued)	RA C.4 ~~J.2~~ Verify by administrative means ~~the OPERABILITY~~ status of:	~~Immediately~~ 72 hours
	~~Two~~ offsite sources, ~~and~~ underground emergency power path ~~(LCO 3.8.1)~~,	
	~~overhead~~ emergency power path excluding KHU ~~(LCO 3.8.1)~~	
	required AC + DC Distribution Systems ~~(LCO 3.8.8)~~,	
	required EPSL ~~(LCO 3.3.17 - LCO 3.3.19 and LCO 3.3.21)~~,	
	DC Sources ~~(LCO 3.8.3)~~, and	
	Inverters ~~(LCO 3.8.6)~~ are OPERABLE	
	AND J.3 Restore inoperable components required by Required Action J.2 to OPERABLE status.	4 hours from subsequent discovery of inoperable component
	AND J.4 Perform SR 3.8.1.5.	Once per 7 days
	AND RA C.8 ~~J.5~~ Restore KHU to OPERABLE status.	45 ~~42~~ days

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
K. Overhead power path inoperable > 72 hours due to inoperable Keowee main step-up transformer.	----------NOTE---------- LCO 3.0.4 is not applicable when both standby buses are energized by OPERABLE LCT. ----------	Note 1 to RA C
Note 1 to RA C.2	RA C.3 K.1 Energize ~~two~~ both standby buses by an OPERABLE LCT.	~~Immediately~~ 72 hrs. AND 1 hour from subsequent discovery of either deenergized standby buses
	AND	
RA C.4	~~K.2~~ Verify by administrative means the OPERABILITY ~~that status of:~~	~~Immediately~~ 72 hrs
the remaining KHU and its associated	Two offsite sources, ~~and~~ underground emergency power path ~~(LCO 3.8.1)~~,	
RA C.5	Overhead KHU ~~(LCO 3.8.1)~~	
required AC and DC	Distribution Systems ~~(LCO 3.8.8)~~,	
required	EPSL ~~(LCO 3.3.17 - LCO 3.3.19 and LCO 3.3.21)~~,	
	DC Sources ~~(LCO 3.8.3)~~, and	
	Inverters ~~(LCO 3.8.6)~~ are OPERABLE	
	AND	Move to J.1
	K.3 Restore inoperable components listed in Required Action K.2 to OPERABLE status.	4 hours from subsequent discovery of inoperable component
	AND	

(continued)

(3rd CT 4 RA C.1)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
~~K.~~ (continued)	K.4 Perform SR 3.8.1.5.	Once per 7 days
KHU and its associated overhead emergency power path	AND RA C.7 / ~~K.5~~ Restore Keowee main step-up transformer to OPERABLE status.	28 ~~25~~ days --NOTE-- Only applicable when CondC entered due to an inop Keowee main step-up transformer
K.L. --------NOTE-------- Separate Condition entry is allowed for each breaker. ----------	K L.1 Restore each trip circuit to OPERABLE status.	24 hours
One trip circuit in one or both closed N breakers inoperable. OR One trip circuit in one or both closed SL breakers inoperable.		

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
L M. Required Action and associated Completion Time for Condition C, F, G, H, I, J, K, or E not met. OR Required Action and associated Completion Time not met for Required Action D.1 or D.3. OR Overhead emergency power path inoperable > 72 hours for reasons other than Condition J or K.	L M.1 Be in MODE 3. AND L M.2 Be in MODE 5.	12 hours 84 hours

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.8.1.1	Verify correct breaker alignment and indicated power availability for each required offsite source.	7 days
SR 3.8.1.2	Verify battery terminal voltage is $\geq$ 125 V on float charge for each KHU's battery.	7 days
SR 3.8.1.3	----------NOTES---------- 1. Energizing standby buses is not required to be performed when standby buses are energized by OPERABLE LCT. 2. Not required to be met for the KHU associated with the overhead emergency power path when the overhead electrical disconnects for the KHU associated with the underground emergency power path are open. ---------- Verify each KHU starts automatically and energizes the underground emergency power path.	31 days
SR 3.8.1.4	----------NOTE---------- Only required to be met for KHU associated with overhead emergency power path. ---------- Verify each KHU starts automatically and synchronizes with Yellow bus in 230 kV switchyard.	31 days

(continued)

SURVEILLANCE REQUIREMENTS (continued)

	SURVEILLANCE	FREQUENCY
SR 3.8.1.5	----------NOTES---------- 1. SR 3.8.1.3 may be performed in lieu of SR 3.8.1.5. 2. Energizing standby buses is not required to be performed when standby buses are energized by OPERABLE LCT. ---------- Verify KHU associated with underground emergency power path starts automatically and energizes both standby buses through underground emergency power path.	31 days
SR 3.8.1.6	----------NOTE---------- SR 3.8.1.4 may be performed in lieu of SR 3.8.1.6. ---------- Verify KHU associated with overhead emergency power path starts automatically and synchronizes with Yellow bus in 230 kV switchyard.	As specified for the applicable Required Action 31 days
SR 3.8.1.7	----------NOTE---------- 1. Only required to be met when the associated breaker is closed. 2. Not required to be performed for SL breakers when overhead emergency power path is inoperable ≥ 72 hours. ---------- Verify each SL and each N breaker opens manually or on an actual or simulated actuation signal.	31 days

(continued)

3.8 ELECTRICAL POWER SYSTEMS

3.8.2 AC Sources – Shutdown

LCO 3.8.2 The following AC electrical power sources shall be OPERABLE:

a. One offsite source supplying the onsite AC electrical power distribution system(s) required by LCO 3.8.9, "Distribution Systems – Shutdown"; and

b. One emergency power path capable of supplying the onsite AC electrical power distribution system(s) required by LCO 3.8.9.

emergency power source and its associated

APPLICABILITY: MODES 5 and 6,
During movement of irradiated fuel assemblies.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.8.2.1 ----------NOTE---------- 1. SR requirements to energize both standby buses may be reduced to require energizing only one standby bus, when only one main feeder bus is required by LCO 3.8.9, "Distribution Systems - Shutdown." ---------- For AC sources required to be OPERABLE, the SRs of Specification 3.8.1, "AC Sources – Operating," except ~~SR 3.8.1.3, SR 3.8.1.4~~, SR 3.8.1.9, SR 3.8.1.10, ~~SR 3.8.1.15~~, SR 3.8.1.16, SR 3.8.1.17, SR 3.8.1.18 and SR 3.8.1.22 are applicable.	In accordance with applicable SRs

2. SR 3.8.1.3 and SR 3.8.1.4 requirements to verify each kitu starts may be reduced to verify the required kitu starts.

3.8 ELECTRICAL POWER SYSTEMS

3.8.3 DC Sources – Operating

LCO 3.8.3 DC Sources shall be OPERABLE as follows:

a. Three of four 125 VDC Vital I&C power sources;

b. Five of six 125 VDC Vital I&C power sources for two or more units;

c. Four of six 125 VDC Vital I&C power sources for one unit;

d. No single 125 VDC Vital I&C power source shall be the only source supplying power to two or more 125 VDC Vital I&C panelboards;

e. For Units 2 and 3, no single 125 VDC Vital I&C power source shall be the only source supplying power to 125 VDC Vital I&C panelboard 1DIC and 1DID; and

f. Two 230 kV Switchyard 125 VDC power sources.

NOTES

1. The additional 125 VDC Vital I&C sources required by LCO 3.8.3 part b, or part c are not required to be connected to the Unit's Distribution System.

2. The 125 VDC Vital I&C power sources required by LCO 3.8.3 part c shall include one 125 VDC Vital I&C power source belonging to each unit not in MODES 1, 2, 3, or 4.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. One 230 kV switchyard 125 VDC power source inoperable to perform equalization charge after performance test or service test.	E.1 Restore 230 kV switchyard 125 VDC power source to OPERABLE status.	72 hours
F. One 230 kV switchyard 125 VDC power source inoperable for reasons other than Condition E.	F.1 Restore 230 kV switchyard 125 VDC power source to OPERABLE status.	24 hours
G. Required Action and Associated Completion Time not met. ~~OR~~	G.1 Be in MODE 3. AND G.2 Be in MODE 5.	12 hours 84 hours
H. Two or more required 125 VDC Vital I&C power sources inoperable. OR Two 230 kV switchyard 125 VDC power sources inoperable.	H.1 Enter LCO 3.0.3	Immediately

3.8 ELECTRICAL POWER SYSTEMS

3.8.8 Distribution Systems – Operating

LCO 3.8.8 AC, DC, and AC vital electrical power distribution systems shall be OPERABLE as follows:

a. Two energized main feeder buses each connected to two or more ES power strings;

b. Three energized ES power strings;

c. ~~Four~~ 125 VDC Vital I&C power panelboards;

d. For Units 2 or 3, 125 VDC Vital I&C power panelboards 1DIC and 1DID;

e. 230 kV switchyard 125 VDC panelboards DYA, DYB, DYC, DYE, DYF, and DYG shall be OPERABLE; and

f. ~~Four~~ 120 VAC Vital Instrumentation power panelboards.

D1A, D1B, D1C, and D1B

KVIA, KVIB, KVIC and KVID

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One main feeder bus inoperable.	A.1 Restore main feeder bus to OPERABLE status.	24 hours
B. One ES power string inoperable.	B.1 Restore ES power string to OPERABLE status.	24 hours
C. One 125 VDC Vital I&C power panelboard inoperable.	C.1 Restore 125 VDC Vital I&C power panelboard to OPERABLE status.	24 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. ----------NOTE------- Separate Condition entry is allowed for each 230 kV switchyard 125 VDC power panelboard. ---------- One or more required 230 kV switchyard DC power panelboards inoperable.	D.1 Restore required 230 kV switchyard 125 VDC power panelboards to OPERABLE status.	24 hours
E. ---------NOTE--------- Condition E is not applicable to Unit 1. ---------- One 125 VDC Vital I&C power panelboard required by LCO 3.8.8.d inoperable.	E.1 Restore 125 VDC Vital I&C power panelboard to OPERABLE status.	24 hours
F. One ~~KVIA~~ 120 VAC Vital Instrumentation power panelboard inoperable. OR KVIB 120 VAC Vital Instrumentation power panelboard inoperable.	F.1 Restore 120 VAC Vital Instrumentation power panelboard to OPERABLE status. AND	4 hours

(continued)

Note - only applicable to KVIC and KVID.

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
G. KVIC 120 VAC Vital Instrumentation power panelboard inoperable OR KVID 120 VAC Vital Instrumentation power panelboard inoperable.	F.2 ~~G.1~~ Restore 120 VAC Vital Instrumentation power panelboard to OPERABLE status.	24 hours
G ~~H.~~ Required Action and associated Completion Time not met.	G ~~H.1~~ Be in MODE 3. AND	12 hours
	G.2 ~~H.1~~ Be in MODE 5.	84 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
I. Two or more inoperable main feeder buses, ES power strings, 125 VDC Vital I&C power panelboards, or 120 VAC Vital Instrumentation power panelboards that result in a loss of function. OR 230 kV switchyard 125 VDC panelboards DYA and DYE inoperable. OR 230 kV switchyard 125 VDC panelboards DYB and DYF inoperable. OR 230 kV switchyard 125 VDC panelboards DYC and DYG inoperable.	I.1 Enter LCO 3.0.3	Immediately

Entry into two or more Conditions

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IMPROVED TECHNICAL SPECIFICATION CONVERSION

SECTION 3.8 - ELECTRICAL POWER SYSTEMS

ATTACHMENT 1

TECHNICAL SPECIFICATIONS

3.8 ELECTRICAL POWER SYSTEMS

3.8.1 AC Sources – Operating

LCO 3.8.1 The following AC electrical power sources shall be OPERABLE:

a. Two offsite sources on separate towers connected to the 230 kV switchyard to the units startup transformer and the E breakers;

b. One Keowee Hydro Unit (KHU) and its associated underground emergency power path through the S breakers;

c. One KHU and its associated overhead emergency power path through the E breakers; and

d. One KHU in a standby mode and its associated underground emergency power path through the S breakers.

----------NOTES----------

The KHU in the standby mode to the underground emergency power path is not required to be OPERABLE when overhead electrical disconnects associated with the other KHU that is aligned to the underground emergency power path are open.

APPLICABILITY: MODES 1, 2, 3, and 4

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
2 A. Both required offsite sources and the KHU and its associated overhead emergency power path inoperable due to inoperable unit startup transformer.	A.1 Perform SR 3.8.1.5.	1 hour if not performed in previous 12 hours AND Once per 12 hours thereafter
	AND	
2	A.2 Align to share another Unit's startup transformer.	12 hours
	AND	
	A.3 Designate shared startup transformer to one Unit.	36 hours
2 B. Both required offsite sources and the KHU and its associated overhead emergency power path inoperable due to a shared startup transformer being designated to another Unit. OR Required Action and associated Completion Time not met for Condition A.	B.1 Be in MODE 3.	12 hours
	AND	
	B.2 Be in MODE 5.	36 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. KHU and its associated overhead emergency power path inoperable due to reasons other than Condition A or B.	----------NOTE---------- 1. LCO 3.0.4 is not applicable when both standby buses are energized by OPERABLE LCT. 2. KHU generation to the system grid prohibited except for test when in Condition C for > 72 hours. ---------- C.1 ---------NOTE-------- Not required when KHU and its associated underground emergency power path are inoperable. ---------- Perform SR 3.8.1.5. AND	1 hour if not performed in previous 12 hours AND Once per 12 hours thereafter unless both standby buses are energized by an OPERABLE LCT AND Once per 7 days thereafter when both standby buses are energized by an OPERABLE LCT

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. (continued)	C.2 --------NOTES------- 1. Not required when Condition C is entered due to an inoperable Keowee main step-up transformer. 2. Not required when Condition C is entered due to an inoperable KHU and the KHU has not been inoperable for > 72 hours in any one continuous time period in the previous 3 years. ---------- Restore KHU and its associated overhead emergency power path to OPERABLE status.	72 hours
	AND	
	C.3 Energize both standby buses using an OPERABLE LCT	72 hours AND 1 hour from subsequent discovery of either standby bus deenergized
	AND	(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. (continued)	C.4 Verify by administrative means that two offsite sources, the remaining KHU and its associated underground emergency power path, required AC and DC Distribution Systems, required Emergency Power Switching Logic (EPSL), required DC Sources, and required Inverters are OPERABLE.	72 hours
	AND	
	C.5 ---------NOTE------- Only applicable when Condition C is entered due to an inoperable Keowee main step-up transformer. ---------- Verify by administrative means that the KHU associated with the overhead emergency power path is OPERABLE.	72 hours
	AND	
		(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. (continued)	C.6 ---------NOTE------- Only applicable when Condition C is entered due to an inoperable KHU. ---------- Verify by administrative means that the overhead emergency power path excluding the KHU is OPERABLE.	72 hours
	AND	
	C.7 ---------NOTE------- Only applicble when Condition C is entered due to an inoperable Keowee main step-up transformer. ---------- Restore KHU and its associated overhead emergency power path to OPERABLE status.	28 days
	AND	
	C.8 ---------NOTE------- Only applicable when Condition C is entered due to an inoperable KHU. ---------- Restore KHU and its associated overhead emergency power path to OPERABLE status.	45 days

(continued)

ACTIONS (continued)

	CONDITION		REQUIRED ACTION	COMPLETION TIME
2 2 2 2 2 2 2	D. KHU and its associated underground emergency power path inoperable.	D.1	---------NOTE-------- Not required when KHU and its associated overhead emergency power path are inoperable. ----------	
			Perform SR 3.8.1.6.	1 hour if not performed during preceding 12 hours AND Once per 12 hours thereafter unless two standby buses are energized by an OPERABLE LCT
		AND		
2		D.2	Energize either standby bus by an OPERABLE LCT.	24 hours AND 1 hour from subsequent discovery of deenergized required standby bus
2		AND	KHU and its associated	
		D.3	Restore underground emergency power path to OPERABLE status.	72 hours

(continued)

ACTIONS (continued)

	CONDITION	REQUIRED ACTION	COMPLETION TIME
2 E.	Required standby bus not energized from OPERABLE LCT when specified by Required Action D.2.	E.1 Be in MODE 3.	12 hour for one Oconee unit AND 24 hours for subsequent Oconee unit(s)
		AND	
		E.2 Be in MODE 5.	84 hours
2 2 2 2 F.	Both KHUs and their associated emergency power paths inoperable due to one inoperable E breaker and one inoperable S breaker on the same main feeder bus.	F.1 Declare associated main feeder bus inoperable.	Immediately

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
2 G. Both KHUs and their 2 associated emergency power paths inoperable for planned reasons other than Condition F.	----------NOTE---------- LCO 3.0.4 is not applicable when both standby buses are energized by OPERABLE LCT. ----------	
2	G.1 Energize both standby buses from an OPERABLE LCT.	Immediately AND 1 hour from subsequent discovery of 2 either standby 2 bus deenergized
	AND	
2 2 2 2 2 2 2 2	G.2 Verify by administrative means that two offsite sources, required AC and DC Distribution Systems, required EPSL, required DC Sources, and required Inverters are OPERABLE.	Immediately
	AND	
2 2 2	G.3 Restore one KHU and its associated emergency power path to OPERABLE status.	60 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
2 H. Both KHUs and their 2 associated emergency power paths inoperable for unplanned reasons 2 other than Condition F.	----------NOTE---------- LCO 3.0.4 is not applicable when both standby buses are energized by OPERABLE LCT. ----------	
	H.1 Energize both standby buses from an OPERABLE LCT.	1 hour AND 1 hour from subsequent discovery of 2 either standby 2 bus deenergized
	AND	
	H.2 Verify by administrative means the OPERABILITY status of:	1 hour
	2 two offsite sources, 2 required AC and DC 2 Distribution Systems, 2 required EPSL, 2 required DC Sources, 2 and required 2 Inverters.	
	AND	
	2 H.3 Restore one KHU and 2 its associated emergency power path to OPERABLE status.	12 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
I. One or both required offsite sources inoperable due to reasons other than Condition A or B.	----------NOTE---------- LCO 3.0.4 is not applicable when both standby buses are energized by OPERABLE LCT. ----------	
2	I.1 Energize both standby buses by an OPERABLE LCT.	1 hour AND 1 hour from subsequent discovery of either standby bus deenergized
2 2	AND	
	I.2 Verify by administrative means the OPERABILITY status of:	1 hour
2 2 2 2 2 2 2 2 2	Both KHUs and their associated emergency power paths, required AC and DC Distribution Systems, required EPSL, required DC Sources, and required Inverters.	
	AND	
	I.3 Restore both offsite sources to OPERABLE status.	24 hours

(continued)

ACTIONS (continued)

	CONDITION	REQUIRED ACTION	COMPLETION TIME
2 J.	---------- Separate Condition entry is permitted for each inoperable component. ---------- Unit in Condition C for ≥ 72 hours, or in Condition G, H or I. AND One or more components specified in Required Action C.4, C.5, C.6, G.2, H.2 or I.2 inoperable.	----------NOTES---------- Not required when the OPERABLE KHU and its associated power path are made inoperable for ≤ 12 hours for the purpose of restoring both KHUs to OPERABLE status. ---------- J.1 Restore inoperable components to OPERABLE status.	4 hours
K.	--------NOTE--------- Separate Condition entry is allowed for each breaker. ---------- One trip circuit in one or both closed N breakers inoperable. OR One trip circuit in one or both closed SL breakers inoperable.	K.1 Restore each trip circuit to OPERABLE status.	24 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
L. Required Action and associated Completion Time for Condition C, F, G, H, I, J or K not met. OR Required Action and associated Completion Time not met for Required Action D.1 or D.3.	L.1 Be in MODE 3. AND L.2 Be in MODE 5.	12 hours 84 hours

2

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.8.1.1	Verify correct breaker alignment and indicated power availability for each required offsite source.	7 days
SR 3.8.1.2	Verify battery terminal voltage is ≥ 125 V on float charge for each KHU's battery.	7 days
SR 3.8.1.3	----------NOTES---------- 1. Energizing standby buses is not required to be performed when standby buses are energized by OPERABLE LCT. 2. Not required to be met for the KHU associated with the overhead emergency power path when the overhead electrical disconnects for the KHU associated with the underground emergency power path are open. ---------- Verify each KHU starts automatically and energizes both standby buses through underground emergency power path.	31 days
SR 3.8.1.4	----------NOTE---------- Only required to be met for KHU associated with overhead emergency power path. ---------- Verify each KHU starts automatically and synchronizes with Yellow bus in 230 kV switchyard.	31 days

(continued)

SURVEILLANCE REQUIREMENTS (continued)

	SURVEILLANCE	FREQUENCY
SR 3.8.1.5	----------NOTES---------- 1. SR 3.8.1.3 may be performed in lieu of SR 3.8.1.5. 2. Energizing standby buses is not required to be performed when standby buses are energized by OPERABLE LCT. ----------	
2 2 2 2	Verify KHU associated with underground emergency power path starts automatically and energizes both standby buses through underground emergency power path.	As specified for the applicable Required Action
SR 3.8.1.6	----------NOTE---------- SR 3.8.1.4 may be performed in lieu of SR 3.8.1.6. ----------	
2 2 2 2	Verify KHU associated with overhead emergency power path starts automatically and synchronizes with Yellow bus in 230 kV switchyard.	As specified for the applicable Required Action
SR 3.8.1.7	----------NOTE---------- 1. Only required to be met when the associated breaker is closed. 2. Not required to be performed for SL breakers when overhead emergency power path is inoperable $\geq$ 72 hours. ----------	
	Verify each SL and each N breaker opens manually or on an actual or simulated actuation signal.	31 days

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.8.1.8	----------NOTE---------- Not required to be performed for S breakers when overhead emergency power path is inoperable ≥ 72 hours. ---------- Operate each S and each E breaker through a full cycle.	31 days
SR 3.8.1.9	Verify both KHU's underground tie breakers cannot be closed simultaneously.	12 months
SR 3.8.1.10	Verify each KHU's overhead emergency power path tie breaker cannot be closed when tie breaker to underground emergency power path is closed.	12 months
SR 3.8.1.11	Verify on an actual or simulated emergency actuation signal each KHU auto starts and: a. Achieves rated speed and voltage in ≤ 23 seconds; and b. Supplies the equivalent of one Unit's maximum safeguard loads plus two Unit's hot shutdown loads when synchronized to system grid and loaded at maximum practical rate.	12 months

(continued)

SURVEILLANCE REQUIREMENTS (continued)

	SURVEILLANCE	FREQUENCY
SR 3.8.1.12	Verify each KHU's battery capacity is adequate to supply, and maintain in OPERABLE status, required emergency loads for design duty cycle when subjected to a battery service test.	12 months
SR 3.8.1.13	Verify each KHU's battery cells, cell end plates, and racks show no visual indication of physical damage or abnormal deterioration that could degrade battery performance.	12 months
SR 3.8.1.14	Verify each KHU's battery cell to cell and terminal connections are clean and tight, and are coated with anti-corrosion material.	12 months
SR 3.8.1.15	----------NOTE---------- Only required to be met when an LCT is energizing standby buses. ---------- Verify an LCT can energize both standby buses using 100 kV line electrically separated from system grid and offsite loads.	12 months

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.8.1.16	----------NOTE---------- Only required to be met when an LCT is energizing standby buses. ---------- Verify an LCT can supply equivalent of one Unit's maximum safeguard loads plus two Unit's MODE 3 loads when connected to system grid.	12 months
SR 3.8.1.17	----------NOTE---------- Not required to be met when the overhead electrical disconnects for the KHU associated with the underground emergency power path are open. ---------- Verify on an actual or simulated zone overlap fault signal each KHU's overhead tie breaker and underground tie breaker actuate to the correct position.	12 months
SR 3.8.1.18	----------NOTE---------- Only required to be met when an LCT is energizing standby buses. ---------- Verify an LCT can provide equivalent of one Unit's maximum safeguard loads within one hour through 100 kV line electrically separated from system grid and offsite loads.	18 months

(continued)

SURVEILLANCE REQUIREMENTS (continued)

	SURVEILLANCE	FREQUENCY
SR 3.8.1.19	----------NOTE---------- Only required to be met during periods of commercial power generation using KHUs. ---------- Verify upon an actual or simulated actuation signal, each KHU's overhead tie breaker and underground tie breaker actuate to the correct position from an initial condition of commercial power generation.	18 months
SR 3.8.1.20	----------NOTE---------- Only required to be met during periods of commercial power generation using KHUs. ---------- Verify upon an actual or simulated actuation signal, each KHU's frequency is $\leq$ 66 Hz in $\leq$ 23 seconds from an initial condition of commercial power generation.	18 months
SR 3.8.1.21	----------NOTES---------- 1. Only required to be met when the associated breaker is closed. 2. Not required to be performed for SL breakers when overhead emergency power path is inoperable $\geq$ 72 hours. ---------- Verify each SL and N breaker opens on an actual or simulated actuation signal to each breaker trip circuit.	18 months

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.8.1.22	----------NOTE---------- Redundant breaker trip coils will be verified on a STAGGERED TEST BASIS. ----------	
	Verify each 230 kV switchyard circuit breaker actuates to the correct position on an actual or simulated switchyard isolation actuation signal.	18 months

3.8 ELECTRICAL POWER SYSTEMS

3.8.2 AC Sources – Shutdown

LCO 3.8.2 The following AC electrical power sources shall be OPERABLE:

a. One offsite source supplying the onsite AC electrical power distribution system(s) required by LCO 3.8.9, "Distribution Systems – Shutdown"; and

2 b. One emergency power source and its associated emergency power path capable of supplying the onsite AC electrical power distribution system(s) required by LCO 3.8.9.

APPLICABILITY: MODES 5 and 6,
During movement of irradiated fuel assemblies.

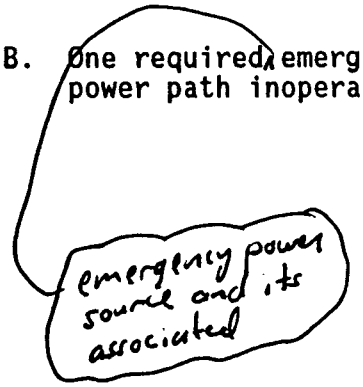
ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One required offsite source inoperable.	----------NOTE---------- Enter applicable Conditions and Required Actions of LCO 3.8.9, with required equipment de-energized as a result of Condition A. ----------	
	A.1 Declare affected required feature(s) with no offsite power available inoperable.	Immediately
	OR	
	A.2.1 Suspend CORE ALTERATIONS.	Immediately
	AND	
	A.2.2 Suspend movement of irradiated fuel assemblies.	Immediately
	AND	
	A.2.3 Initiate action to suspend operations involving positive reactivity additions.	Immediately
	AND	
	A.2.4 Initiate action to restore required offsite power source to OPERABLE status.	Immediately

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. One required emergency power path inoperable.	B.1 Suspend CORE ALTERATIONS.	Immediately
	AND	
	B.2 Suspend movement of irradiated fuel assemblies.	Immediately
	AND	
	B.3 Initiate action to suspend operations involving positive reactivity additions.	Immediately
	AND	
	B.4 Initiate action to restore required emergency power path to OPERABLE status.	Immediately



SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.8.2.1	----------NOTE---------- 1. SR requirements to energize both standby buses may be reduced to require energizing only one standby bus, when only one main feeder bus is required by LCO 3.8.9, "Distribution Systems - Shutdown." 2. SR 3.8.1.3 and SR 3.8.1.4 requirements to verify each KHU starts may be reduced to verify the required KHU starts. ----------	
	For AC sources required to be OPERABLE, the SRs of Specification 3.8.1, "AC Sources – Operating," except SR 3.8.1.9, SR 3.8.1.10, SR 3.8.1.16, SR 3.8.1.17, SR 3.8.1.18 and SR 3.8.1.22 are applicable.	In accordance with applicable SRs

3.8 ELECTRICAL POWER SYSTEMS

3.8.3 DC Sources – Operating

LCO 3.8.3 DC Sources shall be OPERABLE as follows:

a. Three of four 125 VDC Vital I&C power sources;

2 b. Five of six 125 VDC Vital I&C power sources when
2 applicable to two or three Oconee units;

2 c. Four of six 125 VDC Vital I&C power sources when
2 applicable to one Oconee unit;

d. No single 125 VDC Vital I&C power source shall be the only source supplying power to two or more 125 VDC Vital I&C panelboards;

e. For Units 2 and 3, no single 125 VDC Vital I&C power source shall be the only source supplying power to 125 VDC Vital I&C panelboard 1DIC and 1DID; and

f. Two 230 kV Switchyard 125 VDC power sources.

----------NOTES----------

1. The additional 125 VDC Vital I&C sources required by LCO 3.8.3 part b, or part c are not required to be connected to the Unit's Distribution System.

2. The 125 VDC Vital I&C power sources required by LCO 3.8.3 part c shall include one 125 VDC Vital I&C power source belonging to each unit not in MODES 1, 2, 3, or 4.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One required 125 VDC Vital I&C power source inoperable to perform equalization charge after performance test or service test.	A.1 Restore required 125 VDC Vital I&C power source to OPERABLE status.	72 hours
B. One required 125 VDC Vital I&C power source inoperable for reasons other than Condition A.	B.1 Restore required 125 VDC Vital I&C power source to OPERABLE status.	24 hours
C. Single 125 VDC Vital I&C power source supplying only source of power to two or more 125 VDC Vital I&C panelboards.	C.1 Align 125 VDC Vital I&C sources such that no one 125 VDC source is serving as only power source to two or more 125 VDC Vital I&C power panelboards.	24 hours
D. --------NOTE-------- Condition D is not applicable to Unit 1. ---------- Single 125 VDC Vital I&C power source supplying only source of power to 125 VDC Vital I&C panelboards 1DIC and 1DID.	D.1 Align 125 VDC Vital I&C sources such that no one 125 VDC source is serving as only power source to 125 VDC Vital I&C power panelboards 1DIC and 1DID.	24 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. One 230 kV switchyard 125 VDC power source inoperable to perform equalization charge after performance test or service test.	E.1 Restore 230 kV switchyard 125 VDC power source to OPERABLE status.	72 hours
F. One 230 kV switchyard 125 VDC power source inoperable for reasons other than Condition E.	F.1 Restore 230 kV switchyard 125 VDC power source to OPERABLE status.	24 hours
G. Required Action and Associated Completion Time not met.	G.1 Be in MODE 3. AND G.2 Be in MODE 5.	12 hours 84 hours
2 H. Two or more required 125 VDC Vital I&C power sources inoperable. OR Two 230 kV switchyard 125 VDC power sources inoperable.	H.1 Enter LCO 3.0.3	Immediately

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.8.3.1	Verify battery terminal voltage is ≥ 125V on float charge.	7 days
SR 3.8.3.2	Verify battery cells, cell plates, and racks show no visual indication of physical damage or abnormal deterioration that could degrade battery performance.	12 months
SR 3.8.3.3	Verify battery cell to cell and terminal connections are clean and tight, and are coated with anti-corrosion material.	12 months
SR 3.8.3.4	Verify battery capacity is adequate to supply, and maintain in OPERABLE status, the required emergency loads for the design duty cycle when subjected to a battery service test.	12 months

3.8 ELECTRICAL POWER SYSTEMS

3.8.8 Distribution Systems – Operating

LCO 3.8.8 AC, DC, and AC vital electrical power distribution systems shall be OPERABLE as follows:

a. Two main feeder buses each connected to two or more ES power strings;

b. Three ES power strings;

2 c. 125 VDC Vital I&C power panelboards DIA, DIB, DIC, and
2 DID;

d. For Units 2 or 3, 125 VDC Vital I&C power panelboards 1DIC and 1DID;

e. 230 kV switchyard 125 VDC panelboards DYA, DYB, DYC, DYE, DYF, and DYG; and

2 f. 120 VAC Vital Instrumentation power panelboards KVIA,
2 KVIB, KVIC, and KVID.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. One main feeder bus inoperable.	A.1	Restore main feeder bus to OPERABLE status.	24 hours
B. One ES power string inoperable.	B.1	Restore ES power string to OPERABLE status.	24 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. One 125 VDC Vital I&C power panelboard inoperable.	C.1 Restore 125 VDC Vital I&C power panelboard to OPERABLE status.	24 hours
D. ----------NOTE------- Separate Condition entry is allowed for each 230 kV switchyard 125 VDC power panelboard. ---------- One or more required 230 kV switchyard DC power panelboards inoperable.	D.1 Restore required 230 kV switchyard 125 VDC power panelboards to OPERABLE status.	24 hours
E. ---------NOTE--------- Condition E is not applicable to Unit 1. ---------- One 125 VDC Vital I&C power panelboard required by LCO 3.8.8.d inoperable.	E.1 Restore 125 VDC Vital I&C power panelboard to OPERABLE status.	24 hours

2

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
F. One 120 VAC Vital Instrumentation power panelboard inoperable.	F.1	--------NOTE-------- Only applicable to KVIA and KVIB. ---------- Restore 120 VAC Vital Instrumentation power panelboard to OPERABLE status.	4 hours
	AND		
	F.2	--------NOTE-------- Only applicable to KVIC and KVID. ---------- Restore 120 VAC Vital Instrumentation power panelboard to OPERABLE status.	24 hours
G. Required Action and associated Completion Time not met.	G.1	Be in MODE 3.	12 hours
	AND		
	G.2	Be in MODE 5.	84 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
2 H. Entry into two or more 2 Conditions that result 2 in a loss of function. OR 230 kV switchyard 125 VDC panelboards DYA and DYE inoperable. OR 230 kV switchyard 125 VDC panelboards DYB and DYF inoperable. OR 230 kV switchyard 125 VDC panelboards DYC and DYG inoperable.	H.1 Enter LCO 3.0.3	Immediately

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
3.8.8.1	Verify correct breaker alignments and voltage to required main feeder buses.	7 days
3.8.8.2	Verify correct breaker alignments and voltage availability to required ES power strings, 125 VDC Vital I&C power panelboards, 230 kV Switchyard 125 VDC power panelboards and 120 VAC Vital Instrumentation power panelboards.	7 days

2 LCO (continued)

For operation of any Oconee unit, 3 of the 4 125 VDC Vital I&C Sources capable of supplying the unit's DC distribution system are required to be OPERABLE. The four DC sources for a particular Oconee unit are as follows:

Unit 1: 1CA, 1CB, 2CA, 2CB
Unit 2: 2CA, 2CB, 3CA, 3CB
Unit 3: 3CA, 3CB, 1CA, 1CB

This requirement ensures that a single failure will not result in a loss of power to more than one 125 VDC Vital I&C panelboard. This requirement ensures supported safety functions are not vulnerable to a single failure.

When applicable to two or three Oconee units, 5 of the 6 station 125 VDC Vital I&C Sources are required to be OPERABLE. In addition to ensuring that each Oconee unit in MODES 1, 2, 3, or 4 has 3 of the 4 125 VDC Vital I&C Sources capable of supplying the units' DC distribution system OPERABLE, the additional requirement ensures sufficient capacity and voltage for supported DC loads assuming a single failure. When applicable to only one Oconee unit, 4 of the six station batteries are necessary to ensure sufficient capacity and voltage for supported DC loads assuming a single failure.

No single 125 VDC Vital I&C source can be the only source energizing more than one Vital I&C panelboard. Additionally, for Units 2 and 3 only, Vital I&C panelboards 1DIC and 1DID shall be OPERABLE. No single 125 VDC Vital I&C source can be the only source energizing 1DIC and 1DID. Vital I&C panelboards 1DIC and 1DID supply power for SK and SL breaker control, protective relaying for both standby buses, breaker control for both standby breakers for the three Oconee units, and retransfer to startup source logic circuits for the three Oconee units. The requirements that no single 125 VDC source be the only source of power to two or more 125 VDC Vital I&C panelboards ensures than a single failure will not result in a loss of power to more than one 125 VDC Vital I&C panelboard. This requirement ensures supported safety functions are not vulnerable to a single failure.

(continued)

Open Items - Attachments

06-May-98

NRC #: Att5#5

ITS: 3.3.8

NRC Question: ITS No.: T3.3.8-1 Note c

CTS No.: None

Description:
Note c added to specify that position indication requirements apply only to CIVs that are electrically controlled.

CTS DOC:
M26 CTS does not include all Type A and Category I post accident monitoring (PAM) instrumentation identified in the plant specific Regulatory Guide 1.97 response and associated NRC Safety Evaluations. ITS 3.3.8 incorporates all Type A and Category 1 PAM Functions consistent with the NUREG. The following PAM Functions, including the associated LCO, Applicability, ACTIONS, Table entries, and Notes, are added:

2. RCS Hot Leg Temperature
4. RCS Pressure (Wide Range)
8. Containment Isolation Valve Position
11. Pressurizer Level
12. Steam Generator Water Level
13. Steam Generator Pressure
15. Upper Surge Tank Level
18. HPI System Flow
19. LPI System Flow
20. Reactor Building Spray Flow

Surveillance Requirements are added (ITS SRs 3.3.8.1 and 3.3.8.3) for PAM Functions 2, 4, 8, 13, 15, and 20. SR 3.3.8.1 is added for PAM Functions 18 and 19. CTS provides comparable Surveillance requirements for pressurizer level (PAM ll)and steam generator water level (PAM 12) indicators (CTS Table 4.1-1, items 26 and 39 respectively). The addition of SR 3.3.8.1 for the Functions designated above is appropriate since a CHANNEL CHECK provides assurance that gross channel failure will be detected and is key to verifying that the instrumentation continues to operate properly between each CHANNEL CALIBRATION. The

addition of SR 3.3.8.3 for the Functions designated above is appropriate since the CHANNEL CALIBRATION verifies the channel responds to measured parameters within the necessary range and accuracy.

Type A variables are included in the ITS because they provide the primary information that permits the control room operator to take specific manually controlled actions that are required when no automatic control is provided and that are required for safety systems to accomplish their safety functions for Design Basis Accidents (DBAs). Additionally, Category 1 variables are the key variables deemed risk significant because they are needed to: a) determine whether systems important to safety are performing their intended functions; b) provide information to the operators that will enable them to determine the potential for causing a gross breach of the barriers to radioactivity release; and c) provide information regarding the release of radioactive materials to allow for early indication of the need to initiate action necessary to protect the public and to estimate the magnitude of any impending threat. Since these PAM Functions are not in the CTS requirements, their addition represents a more restrictive change.

Justification:
12 In the conversion to ITS, NUREG Table 3.3.17-1, Post Accident Monitoring Instrumentation, is modified by Note c which indicates that the containment isolation valve position indication requirements apply only to containment isolation valves that are electrically controlled. This is consistent with ONS Regulatory Guide 1.97 response for CIV position indication and the NRC's Safety Evaluation Report for this response.

DOC/JFD: DOC M26, JFD 12

ONS Response:

Comment:

Action Needed:

Status: open

NRC #: Att5#8

ITS: 3.3.14

NRC Question: ITS No.: 3.3.14 Applic

CTS No.: 3.4.1

Description:
Applicability expanded to include MODE 4 when SG is relied upon for heat removal consistent with LCO 3.7.5 Applicability for EFW.

CTS DOC:
M25 CTS 3.4.1 requires the EFW pump initiation circuitry to be OPERABLE when Reactor Coolant System (RCS) temperature is > 250°F. ITS 3.3.14 APPLICABILITY for EFW pump initiation circuitry is MODES 1, 2, & 3 and MODE 4 when a steam generator is relied upon for heat removal. The ONS design precludes exceeding 246°F except when relying upon the steam generators for heat removal. Requiring the EFW pump initiation circuitry to be OPERABLE at ³ 246°F instead of 250°F is a more restrictive requirement upon unit operation and is consistent with ITS 3.7.5 for the EFW System and the corresponding NUREG Specification.

Justification:
28 NUREG Specification 3.3.11, Emergency Feedwater Initiation and Control (EFIC) System Instrumentation; NUREG Specification 3.3.12, EFIC Manual Initiation; and NUREG Specification 3.3.13, EFIC logic, are modified to address Main Steam Line Break Detection and MFW Isolation Circuitry only. ITS Specifications 3.3.14 and 3.3.15 are added to address Emergency Feedwater System Initiation Circuitry and Main Steam Line Break and Main Feedwater Isolation instrumentation separately. The NUREG Specification combines the EFW System Initiation, MSL Isolation and MFW Isolation functions into one Specification apparently due to common instrumentation and similar initiation circuitry. ONS does not have common instrumentation and similar initiation circuitry for these functions. Consistent with CTS, the ITS addresses these requirements by separate Specifications. The Specification titles, LCOS, ACTIONS, and Surveillance Requirements are appropriately modified to reflect ONS specific terminology and

design requirements. Where appropriate, ITS Required Actions are based on similar NUREG Required Actions. For example, the Completion Time of one hour for ITS 3.3.15, Required Action A.1 is consistent with NUREG Specification 3.3.7, Required Action A.2, which allows one hour to declare an affected component inoperable when the actuation logic is inoperable.

DOC/JFD: DOC M25, JFD 28

ONS Response:

Comment:

Action Needed: ONS needs to strengthen basis for 246F number - design limit for LPI coolers. - 3/26/98 meeting.

Status: open

NRC #: Att5#10

ITS: 3.3.16 & 3.9.3

NRC Question: ITS No.: SR 3.3.16.2

SR 3.9.3.2 FREQ

CTS No.: 3.8.10

3.8.10
4.4.4.5

Description:
Frequency changed from "...immediately prior to refueling operation" to "Once each refueling outage prior to CORE ALTERATIONS or movement of irradiated fuel assemblies within containment."

CTS DOC:
L35 CTS 3.8.10 requires the radiation monitor associated with the purge system valve isolation to be tested and verified OPERABLE immediately prior to refueling operations. CTS Table 4.1-2, Item 4, requires this functional test be performed "Prior to Refueling." ITS 3.3.16 Applicability is during CORE ALTERATIONS and during movement of irradiated fuel assemblies within containment. ITS SR 3.3.16.2 requires the testing be performed once each refueling outage prior to CORE ALTERATIONS or beginning movement of irradiated fuel assemblies within containment. Permitting the specified testing to be conducted prior to beginning movement of irradiated fuel assemblies within containment in lieu of immediately prior to refueling operations is a less restrictive requirement upon unit operation (and is more stringent than the NUREG). Requiring performance of SR 3.3.16.2 once each refueling outage prior to CORE ALTERATIONS or prior to beginning movement of irradiated fuel assemblies within containment represents a reasonable relaxation of the CTS surveillance frequency. This continues to ensure that this function is verified prior to irradiated fuel assembly handling within containment.

LI CTS 3.8.10 requires testing the isolation function of the Reactor Building Purge supply and exhaust valves immediately prior to refueling operations. CTS 4.4.4.5 requires verifying purge isolation valves close per CTS Specification 3.8.10. ITS SR

3.9.3.2 requires this testing be performed once each refueling outage prior to CORE ALTERATIONS or movement of irradiated fuel assemblies inside containment. Permitting the specified testing to be conducted once each refueling outage prior to CORE ALTERATIONS or movement of irradiated fuel assemblies inside containment in lieu of immediately prior to refueling operations is a less restrictive requirement upon unit operation. Requiring performance of SR 3.9.3.2 once each refueling outage prior to CORE ALTERATIONS or movement of irradiated fuel assemblies inside containment represents a reasonable relaxation of the current requirement of " . . . immediately prior to . . . " surveillance frequency and remains within the NUREG specified frequency of 18 months. This continues to ensure that this function is verified prior to CORE ALTERATIONS or movement of irradiated fuel assemblies within containment.

Justification:

32 The frequency of 92 days for NUREG SR 3.3.15.2 (ITS SR 3.3.16.2) is modified to partially incorporate the CLB. DPC considers the NUREG frequency of 92 days to be inappropriate for ONS. CTS 3.8.10 requires the radiation monitor that initiates purge isolation to be verified operable immediately prior to beginning refueling operations. For consistency with ITS SR 3.9.3.2, which verifies that the reactor building purge supply and exhaust valve actuates to the correct position on an actual or simulated actuation signal once each refueling outage prior to beginning CORE ALTERATIONS or movement of irradiated fuel assemblies within containment, the same SR Frequency is adopted for ITS SR 3.3.16.2. This is appropriate since the safety function of the radiation monitor is to isolate the purge valves. Requiring performance of SR 3.3.16.2 at this Frequency represents a reasonable relaxation of the current requirement of "immediately prior to beginning refueling operations.

12 The frequency of 18 months for NUREG SR 3.9.3.2 is modified to partially retain the CLB. DPC considers the NUREG frequency of 18 months to be inappropriate for ONS since the purge valves remain isolated for extended periods of time during unit operation. CTS 3.8.10 requires the reactor building purge isolation capability to be verified immediately prior to refueling operations. ITS SR 3.9.3.2 requires verification that each

reactor building purge supply and exhaust valve actuates to the correct position on an actual or simulated actuation signal once each refueling outage prior to CORE ALTERATIONS or movement of irradiated fuel assemblies inside containment. Requiring performance of SR 3.9.3.2 prior to CORE ALTERATIONS or movement of irradiated fuel assemblies within containment represents a reasonable relaxation of the current requirement of " . . . immediately prior to . . . " surveillance frequency and remains within the NUREG specified frequency of 18 months.

DOC/JFD: DOC L35 & L1, JFD 32 & 12

ONS Response:

Comment: Being reviewed by Containment Systems

Action Needed:

Status: open

NRC #: Att5#11

ITS: 3.3.19, 3.3.20

NRC Question: ITS No.: 3.3.19
3.3.20 RA A.1

CTS No.: 3.7.6
3.7.7 RA A.1

Description:
Required Action modified to allow placing the channel in trip for consistency with comparable NUREG 3.3.8 Required Action.

CTS DOC:
L17 CTS 3.7.6 and 3.7.7 both require an inoperable voltage sensing relay to be restored within 72 hours (Required Action A.1). ITS 3.3.19 Required Action A.1 and 3.3.20 Required Action A.1 require the inoperable channel to be placed in trip within 72 hours. This less restrictive change allows operation to continue indefinitely when the channel is placed in trip and continues to allow 72 hours to restore an inoperable channel that cannot be placed in trip. The actuation logic for DGVP is two-out-of-three. Placing the inoperable channel in the tripped condition fulfills the function of the channel (and places the function in a one-out-of-two configuration). Indefinite operation in this configuration is acceptable since the degraded grid voltage function is capable of performing its function in the presence of a single failure. This change is consistent with comparable NUREG 3.3.8 requirements.

Justification:
33 ITS Specifications 3.3.17 through 3.3.22 are added to capture current technical specification requirements for Emergency Power Switching Logic Functions. The EPSL is designed to assure that power is supplied to the unit main feeder buses and, hence to the unit's essential loads. Appropriate LCOS, ACTIONS, and Surveillance Requirements are added.

DOC/JFD: DOC L17, JFD 33

ONS Response:

Comment: Being reviewed by Electrical Power

Action Needed:

Status: open

NRC #: Att5#12

ITS: 3.4.1

NRC Question: ITS No.: LCO 3.4.1

SR 3.4.1.1, 2, 3 & 4

CTS No.: None

Description:
DNBR limits are specified in the COLR rather than in the LCO and SRs since they are subject to change with fuel cycle designs.

CTS DOC:
M1 CTS requirements comparable to ITS 3.4.1 do no exist. ITS LCO 3.4.1 requires RCS DNBR parameters for loop pressure, loop average temperature and RCS total flow to be within the limits specified in the COLR. The Note to the LCO states limits on loop pressure do not apply during specified changes in THERMAL POWER. ITS Specification 3.4.1 specifies an Applicability of MODE 1. The ITS LCO 3.4.1 Actions require restoring DNBR parameters to within limits within 2 hours or exiting the Applicability for the Specification within 12 additional hours. ITS SR 3.4.1.1, SR 3.4.1.2 and SR 3.4.1.3 require verification that each DNBR parameter is within limit at a 12 hour frequency. ITS SR 3.4.1.4 requires verification by measurement that total RCS flow is within limit at an 18 month Frequency. Specification 3.4.1 ensures limits on RCS pressure, temperature, and flow rate are met "to ensure that the core operates within the limits assumed for the plant safety analyses." Operating within these limits will result in meeting departure from nucleate boiling ratio (DNBR) criteria in the event of a DNB limited transient. The addition of ITS 3.4.1 requirements is a more restrictive requirement upon unit operation and is consistent with the NUREG.

Justification:
19 DNB limits are included in the COLR (rather than LCO 3.4.1 and the associated SRs) for each pump combination operating condition. The DNB limits and THERMAL POWER limits are currently controlled administratively. Since they are subject to change with fuel design changes, they are to be controlled in the COLR. Controlling RCS DNBR

limits outside the Technical Specifications is consistent with the CLB.

DOC/JFD: DOC M1, JFD 19

ONS Response:

Comment: 3/26/98 Meeting - Liang did not realize RCS flow not in CTS. He said that flow could not be in COLR since change in flow rate indicates a plant change that must be approved by staff. He is reconsidering his position, based on ONS not having flow in CTS and not having to put flow requirement in ITS.

Action Needed:

Status: open

NRC #: Att5#13

ITS: 3.5.1

NRC Question: ITS No.: SR 3.5.1.4 2nd FREQ

CTS No.: T 4.1-3, Item 3

Description:
NUREG 6 hours changed to 12 hours as time to complete SR after addition to CFT. There is no CTS time limit.

CTS DOC:
M2 CTS Table 4.1-3, Item 3 requires CFT boron concentration to be sampled monthly and after each makeup. ITS SR 3.5.1.4 requires CFT boron concentration be sampled every 31 days and once within 12 hours after each solution volume increase >- 80 gallons that is not the result of addition from a borated water source that meets CFT boron concentration requirements. The CTS frequency of monthly is equivalent to the ITS frequency of 31 days. However, the second ITS sampling frequency is more restrictive than the CTS sampling frequency of "after each makeup" since sampling will be required "once within 12 hours after each solution volume increase..... CTS does not specify a time limit for sampling. This Completion Time is based on the need to clearly establish when the required sampling must be completed while taking into consideration the time necessary to recirculate the tank, obtain the sample and perform the analysis. The proposed change is consistent with the NUREG.

Justification:
9 NUREG SR 3.5.1.4 second Frequency is modified to reflect unit specific system characteristics. The normal source of makeup for the CFT is the boric acid mix tank. Reference to the source of inventory is changed from the "borated water storage tank" to "a source that meets CFT boron concentration requirements." Inventory makeup to the CFTs is sampled to demonstrate an acceptable boron concentration of the makeup water prior to its admittance into the CFT. Non-sampled makeup or makeup from other non-verified sources will continue to require the initiation of sampling in accordance with the intent of the SR 3.5.1.4 second Frequency criteria. The NUREG SR 3.5.1.4 second Frequency is also modified to extend the

NUREG Completion Time of 6 hours to 12 hours. This reflects the time needed at ONS to recirculate the CFT following makeup, obtain the sample and then perform the sample analysis.

DOC/JFD: DOC M2, JFD 9

ONS Response:

Comment:

Action Needed: ONS needs to expand DOC and JFD regarding the need for 12 hours (convection mixing, etc.) - 3/26/98 meeting.

Status: open

NRC #: Att5#14

ITS: 3.5.1

NRC Question: ITS No.: SR 3.5.1.4 2nd FREQ

CTS No.: T 4.1-3, Item 3

Description:
Changed CFT make up source from BWST to a borated water source which meets CFT boron concentration requirements.

CTS DOC:
L3 CTS Table 4.1-3, Item 3 requires CFT boron concentration to be sampled .monthly and after each makeup. ITS SR 3.5.1.4 requires CFT boron concentration be sampled every 31 days and once within 12 hours after each solution volume increase ³ 80 gallons that is not the result of addition from a borated water source that meets CFT boron concentration requirements. The CTS does not establish any qualifiers on sampling Frequency based on the source of the makeup inventory. Therefore, the ITS Frequency is less restrictive than current requirements because sampling will be required once within 12 hours after each solution volume increase of ³ 80 gallons that is not the result of addition from a source of known concentration that meets CFT boron concentration requirements. The decreased sampling Frequency is acceptable because inventory makeup from sources that are of a known boron concentration will be capable of satisfying the boron concentration requirements of the CFTS. When inventory makeup is from a source for which the boron concentration is not established, sampling requirements are unchanged. This change is consistent with the NUREG.

Justification:
9 NUREG SR 3.5.1.4 second Frequency is modified to reflect unit specific system characteristics. The normal source of makeup for the CFT is the boric acid mix tank. Reference to the source of inventory is changed from the "borated water storage tank" to "a source that meets CFT boron concentration requirements." Inventory makeup to the CFTs is sampled to demonstrate an acceptable boron concentration of the makeup water prior to its admittance into the CFT. Non-sampled makeup or makeup from other non-verified sources will continue to require the initiation of sampling in

accordance with the intent of the SR 3.5.1.4 second Frequency criteria. The NUREG SR 3.5.1.4 second Frequency is also modified to extend the NUREG Completion Time of 6 hours to 12 hours. This reflects the time needed at ONS to recirculate the CFT following makeup, obtain the sample and then perform the sample analysis.

DOC/JFD: DOC L3, JFD 9

ONS Response:

Comment:

Action Needed: ONS needs to expand justification to discuss various makeup sources. - 3/26/98 meeting.

Status: open

NRC #: Att5#16

ITS: 3.5.3

NRC Question: ITS No.: 3.5.3 RA E.2 Note

CTS No.: N/A

Description:
Note provides for not entering MODE 5 when a DHR loop is not operable.

CTS DOC:
M8 CTS 3.3.2.a requires the LPI System to be OPERABLE when the RCS, with fuel in the core, is in a condition with pressure equal to or greater than 350 psig or temperature equal to or greater than 250°F and subcritical. Proposed ITS 3.5.3 requires the LPI System to be OPERABLE in MODES 1, 2, 3 and 4. LCO Note 1 is added to specify that only one LPI train is required to be OPERABLE in MODE 4. LCO Note 2 is added to allow an LPI train to be considered OPERABLE during alignment, when aligned or when operating if capable of being manually realigned to the LPI mode of operation. MODE 4 is defined as subcritical with the average cool ant temperature > 200°F and < 250°F. CTS criteria specified as 250°F is considered more limiting than the 350 psig criteria, since the saturation temperature of water at 350 psig is > 435°F. As such, the proposed ITS is slightly more restrictive in that OPERABILITY of one LPI train is required when temperature is > 200°F where none were specified before. This additional requirement ensures that sufficient water is available to the reactor when limited core cooling may be required. Proposed ACTION E is added to require action be initiated immediately to restore the required LPI train to OPERABLE status and to require the reactor to be placed in MODE 5 within 24 hours when the required LPI train cannot be restored to OPERABLE status (provided a decay heat removal loop is available). This action is appropriate since in this condition the unit is not prepared to respond to an event requiring low pressure injection and may not be prepared to continue cooldown using the LPI pumps and LPI heat exchangers. The proposed change is consistent with the NUREG.

Justification:
16 NUREG LCO 3.5.3 Actions were altered, while

retaining the original intent of the Required Actions, in order to properly reflect the corrective actions should the LCO not be met. NUREG Condition B is designated as ITS Condition A. Condition A is entered when one train of LPI is inoperable in MODES 1, 2 or 3. ITS Required Action A.1 allows 72 hours to restore the LPI train to OPERABLE status. This is consistent with the CTS 3.3.2.a(2) restoration time. The 72 hour Completion Time is an acceptable allowance based on the fact that the redundant LPI train can still satisfy the required ECCS safety function for the specified LCO Applicability. Condition C is entered when the Required Action and associated Completion Time of Condition A are not met. ITS Required Action C.1 requires that the unit be in MODE 3 within 12 hours and MODE 4 within 60 hours. This Completion Time in conjunction with the Completion Time of ITS Required Action A.1 (72 hours) is in accordance with CTS 3.3.2(a) requirements for the restoration of operability or completion of compensatory measures for the LPI systems. Further, the combination of ITS Conditions A and C preserves the philosophy of removing the unit from the MODES or other specified conditions for Applicability.

NUREG Condition A is designated as ITS Condition E. Condition E is entered when the required LPI train is inoperable during MODE 4. ITS Required Action E.1 requires that action be immediately initiated to restore the decay heat removal (DHR) loop to an OPERABLE status. This Required Action and its associated Completion Time are premised on the recognition that an ECCS safety function has been lost. Further, this Required Action and its associated Completion Time are structured such that no requirement for a reduction in RCS temperature exists (i.e., LCO 3.0.3 is not entered). If both LPI trains are inoperable, the corrective action is to restore at least one LPI train to an OPERABLE status prior to cooling the unit down and into a MODE that requires operation of the DHR mode of the LPI System. Required Action E.2 is inserted to provide a Required Action to place the unit in MODE 5 if the DHR mode of one LPI train is available despite the inoperability of both of the LPI trains. ONS has a third LPI pump (non ES) that can be used for DHR. This Required Action is conditional based on a NOTE that directs that this action is required only if the DHR mode of one LPI

train is OPERABLE. If the cause of the inoperability for both LPI trains also made the DHR mode inoperable, then no attempt to cool down the unit is required. Required Action E.2 is inserted to ensure that a cooldown to MODE 5 is initiated provided the required DHR capability exists. These changes are consistent with NUREG LCO 3.4.5 and LCO 3.4.6 Actions when a decay heat removal system is unavailable.

DOC/JFD: DOC M8, JFD 16

ONS Response:

Comment:

Action Needed: ONS needs to explain why HPI is not needed during MODE 4. RCS pressure could be above LPI shutoff head. - 3/26/98 meeting.

Status: open

NRC #: Att5#18

ITS: 3.7.12

NRC Question: ITS No.: SR 3.7.12.1

CTS No.: T4.1-3, Item 4

Description:
Modified FREQ to adopt CLB. 2nd FREQ is modified from CTS to limit time after makeup to perform the SR.

CTS DOC:
M15 CTS Table 4.1-3, Item 4 requires sampling the spent fuel pool boron concentration monthly and after each makeup. No specific limit is placed on the time period to perform the surveillance after the makeup to the spent fuel pool. ITS SR 3.7.12.1 requires sampling the spent fuel pool within 12 hours after completing the makeup. Therefore this additional requirement is a more restrictive requirement upon unit operation. Sampling within 12 hours after the makeup provides reasonable assurance that boron concentration in the spent fuel pool is maintained consistent with the assumptions of the analysis.

Justification:
32 The Applicability for NUREG 3.7.15 and the Frequency for SR 3.7.15.1 are modified to reflect the current licensing basis. Specifically, the NUREG provision regarding the modification of Applicability when a spent fuel pool (SFP) verification has been completed after the last movement of fuel assemblies in the SFP is not adopted. Related NUREG Required Action A.2.2 is also not adopted. The ONS current licensing basis includes consideration of other events such as dropping the shipping cask into the SFP which are not excluded by the SFP verification.

The current licensing basis regarding frequency of verifying the spent fuel pool boron concentration is retained. The periodic frequency of 31 days is considered adequate since the event specific frequency of " . . . once within 12 hours after completion of a makeup to the spent fuel pool . . . " provides reasonable assurance the required boron concentration is maintained for the only expected event that can result in decreasing the boron concentration in the spent fuel pool.

DOC/JFD: DOC M15, JFD 32

ONS Response:

Comment:

Action Needed: ONS needs to strengthen reasoning for 12 hours. - 3/26/98 meeting.

Status: open

NRC #: Att6#1

ITS: 3.5.1

NRC Question: ITS No.: SR 3.5.1.2

CTS No.: 3.3.3

Description:
CFT volume of 1040 ± 30 ft3 (1010 - 1070 ft3) is changed to 975 - 1105 ft3.

DOC:
L7 CTS 3.3.3 requires the CFTs to have a minimum level (volume) of 13 ± .44 ft (1040 ± 30 ft3) and a pressure of 600 ± 25 psig. The limits for level (volume) and pressure are the allowable values based on the uncertainties associated with the instrument channel measuring these parameters. ITS SR 3.5.1.2 requires the CFTs to have a minimum volume of ³ 975 ft3 and £ 1105 ft3. ITS SR 3.5.1.3 requires the CFTs to have a minimum pressure of ³ 550 psig and £ 650 psig. These acceptance criteria are the associated analytical limits. Changing the acceptance criteria from allowable values based on the uncertainties associated with the instrument channel to analytical limits for the parameter being measured is considered less restrictive on plant operations. The ITS SRs specify the actual pressure and volume assumed in the safety analyses without regard to instrument inaccuracies. The proposed change is considered acceptable since instrument uncertainties must be applied in the surveillance procedures to ensure the analytical limits are not exceeded. The ITS consistently uses analytical limits for the SR acceptance criteria. This makes the value in the Technical Specification instrument independent and permits the use of other instruments to confirm the parameter is within limits (although the instrument may have different accuracies). The ITS uses an allowable value only when associated with a measuring device.

DOC/JFD: DOC L7

ONS Response:

Comment: 3/26/98 Meeting - Liang's concern is the use of analytical value, rather than error adjusted in ITS. Liang stated that NRC's position is that error corrected values are to be used. However, backfit will not be used for those CTS values which are

analytical.

Action Needed:

Status: open

NRC #: Att6#2

ITS: 3.5.1

NRC Question: ITS No.: 3.3.3

CTS No.: SR 3.5.1.3

Description:
CFT pressure of 600 ± 25 psig (575 - 625 psig) is changed to 550 - 650 psig.

DOC:
L7 CTS 3.3.3 requires the CFTs to have a minimum level (volume) of 13 ± .44 ft (1040 ± 30 ft3) and a pressure of 600 ± 25 psig. The limits for level (volume) and pressure are the allowable values based on the uncertainties associated with the instrument channel measuring these parameters. ITS SR 3.5.1.2 requires the CFTs to have a minimum volume of ³ 975 ft3 and £ 1105 ft3. ITS SR 3.5.1.3 requires the CFTs to have a minimum pressure of ³ 550 psig and £ 650 psig. These acceptance criteria are the associated analytical limits. Changing the acceptance criteria from allowable values based on the uncertainties associated with the instrument channel to analytical limits for the parameter being measured is considered less restrictive on plant operations. The ITS SRs specify the actual pressure and volume assumed in the safety analyses without regard to instrument inaccuracies. The proposed change is considered acceptable since instrument uncertainties must be applied in the surveillance procedures to ensure the analytical limits are not exceeded. The ITS consistently uses analytical limits for the SR acceptance criteria. This makes the value in the Technical Specification instrument independent and permits the use of other instruments to confirm the parameter is within limits (although the instrument may have different accuracies). The ITS uses an allowable value only when associated with a measuring device.

DOC/JFD: DOC L7

ONS Response:

Comment: 3/26/98 Meeting - Liang's concern is the use of analytical value, rather than error adjusted in ITS. Liang stated that NRC's position is that error corrected values are to be used. However, backfit will not be used for those CTS values which are

analytical.

Action Needed:

Status: open

NRC #: Att6#3

ITS: 3.5.4

NRC Question: ITS No.: SR 3.5.4.1

CTS No.: 3.3.4.b

Description:
BWST minimum temp changed from 40OF to 450°F. CTS value is 50°F. BWST maximum temp is changed from IOOOF to 1150°F. There is no CTS maximum value.

DOC:
L8 CTS 3.3.4.b requires the BWST minimum boron concentration to be within the limit specified in the Core Operating Limits Report (COLR) at a minimum temperature of 50°F. The minimum temperature is an allowable value based on the uncertainties associated with the instrument measuring this parameter. The ITS SR 3.5.4.1 acceptance criteria of 45°F is the associated analytical limit. Changing the acceptance criteria from an allowable value based on the uncertainties associated with the instrument channel to an analytical limit for the parameter being measured is considered less restrictive on plant operations. The ITS SR 3.5.4.1 specifies the actual temperature assumed in the safety analyses without regard to instrument inaccuracy. The proposed change is considered acceptable since instrument uncertainties must be applied in the surveillance procedures to ensure the analytical limits are not exceeded. The ITS consistently uses analytical limits for the SR acceptance criteria. This makes the value in the Technical Specification instrument independent and permits the use of other instruments to confirm the parameter is within limits (although the instrument may have different accuracies). The ITS uses an allowable value only when associated with a measuring device.

DOC/JFD: DOC L8

ONS Response:

Comment: 3/26/98 Meeting - Liang's concern is the use of analytical value, rather than error adjusted in ITS. Liang stated that NRC's position is that error corrected values are to be used. However, backfit will not be used for those CTS values which are analytical.

Action Needed:

Status: open