50-317/318

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

May 7, 1997

Mr. Charles H. Cruse
Vice President - Nuclear Energy
Baltimore Gas and Electric Company
Calvert Cliffs Nuclear Power Plant
1650 Calvert Cliffs Parkway
Lusby, MD 20657-4702

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING THE TECHNICAL SPECIFICATIONS CHANGE REQUEST TO CONVERT TO THE IMPROVED TECHNICAL SPECIFICATIONS FOR THE CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2 (TAC NO. M97363 AND M97364)

Dear Mr. Cruse:

On December 4, 1996, Baltimore Gas and Electric Energy (BGE), submitted a license amendment to request to convert the Calvert Cliffs Nuclear Power Plant, Units 1 and 2 Current Technical specifications (CTS) to the Improved Technical Specifications (ITS). During the course of our review, we found that we require additional information to complete our evaluation. Please respond to the enclosed request for information (RAI) that seeks to clarify the ITS Chapter 4.0, Design Features and 5.0, Administrative Controls. We anticipate providing you our comments on additional sections the week of May 12, 1997.

We are enclosing for your consideration a copy of the letter, dated April 9, 1997, regarding an NRC proposed change (TSB-011) to the administrative controls section of the STS to better accommodate the staffing requirements in 10 CFR Part 50 and Part 55, and to include a new staff position regarding controls for the working hours of personnel who perform safety-related functions. The NRC recommends adoption of the details in this document.

The staff requests that you prepare your response to the enclosed comments in WordPerfect 5.1 with Universal 11 point font in the format used by the staff. Your revision of the electronic files should be reflected in the filenames suffix as CC2, e.g., TABL50.CC2. The RAI response letter can be prepared with whatever word processing software BGE is accustomed to using (e.g., Microsoft Word).

To support the NRC staff's review schedule, your written and electronic response to this RAI is requested within 15 days of the receipt of this letter. Should you have any questions, please do not hesitate to contact me at (301) 415-3473.

Sincerely,

Alexander W. Dromerick

Alexander W. Dromerick, Senior Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-317
and 50-318

Enclosures: 1. RAI
2. TSB-011

cc w/encls: See next page

To support the NRC staff's review schedule, your written and electronic response to this RAI is requested within 15 days of the receipt of this letter. Should you have any questions. please do not hesitate to contact me at (301) 415-3473.

Sincerely,

/S/

Alexander W. Dromerick, Senior Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-317
and 50-318

Enclosures: 1. RAI
2. TSB-011

cc w/encls: See next page

DISTRIBUTION:
Docket File
PUBLIC
PDI-1 Reading
SVarga
SBajwa
SLittle
ADromerick
OGC
ACRS
LDoerflein, RI

DFO1

DOCUMENT NAME: G:\CC1-2\CCM97363.RAI

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	PM:PDI-1	E	LA:PDI-1		PM:PDI-1					
NAME	ADromerick:dk		SLittle		SBajwa					
DATE	05/7/97		05/7/97		05/7/97		05/ /97		05/ /97	

Official Record Copy

130035

Mr. Charles H. Cruse
Baltimore Gas & Electric Company

Calvert Cliffs Nuclear Power Plant
Unit Nos. 1 and 2

cc:

President
Calvert County Board of
Commissioners
175 Main Street
Prince Frederick, MD 20678

James P. Bennett, Esquire
Counsel
Baltimore Gas and Electric Company
P.O. Box 1475
Baltimore, MD 21203

Jay E. Silberg, Esquire
Shaw, Pittman, Potts, and Trowbridge
2300 N Street, NW
Washington, DC 20037

Mr. Terrence J. Camilleri, Director,
NRM
Calvert Cliffs Nuclear Power Plant
1650 Calvert Cliffs Parkway
Lusby, MD 20657-4702

Resident Inspector
U.S. Nuclear Regulatory
Commission
P.O. Box 287
St. Leonard, MD 20685

Mr. Richard I. McLean
Administrator - Radioecology
Department of Natural Resources
580 Taylor Avenue
Tawes State Office Building, B3
Annapolis, MD 21401

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Mr. Joseph H. Walter, Chief Engineer
Public Service Commission of
Maryland
Engineering Division
6 St. Paul Centre
Baltimore, MD 21202-6806

Kristen A. Burger, Esquire
Maryland People's Counsel
6 St. Paul Centre
Suite 2102
Baltimore, MD 21202-1631

Patricia T. Birnie, Esquire
Co-Director
Maryland Safe Energy Coalition
P.O. Box 33111
Baltimore, MD 21218

Mr. Loren F. Donatell
NRC Technical Training Center
5700 Brainerd Road
Chattanooga, TN 37411-4017

CCNPP ITS 4.0 DESIGN FEATURES

4.0	DOC	JFD	CHANGE/DIFFERENCE	COMMENT	STATUS
1		2	STS 4.2.2 includes details specifying the control element assembly control material. ITS 4.2.2 deletes this detail, resulting in an STS deviation. Adequate justification is not provided for the deviation.	Provide additional discussion and justification for the STS deviation, based on system design, operational constraints, or current licensing basis.	
BGE Response:					

Enclosure 1

CCNPP ITS 5.0 ADMINISTRATIVE CONTROLS

5.0	DOC	JFD	CHANGE/DIFFERENCE	COMMENT	STATUS
1	A.5		CTS 5.2.1.a requires plant specific titles of personnel fulfilling the responsibilities of the positions delineated in the CTS documented in the Updated Final Safety Analysis Report (UFSAR). ITS 5.2.1.a is consistent with the CTS but also allows this information to be documented in the [illegible] plan. This change to CTS requirements is based on TSTF-65.	Acceptance of this change to CTS requirements is based on the NRC acceptance of TSTF-65.	5/5/97 TSTF-65 still pending.
BGE Response:					
2	A.27		CTS 6.2.2.b requires at least one licensed operator in the Control room when fuel is in the reactor and two licensed operators present in the Control room during reactor STARTUP, schedule reactor shutdown, and during trip recovery. ITS 5.0 does not include this requirement. This deletion of CTS requirements is based on TSTF-121.	Acceptance of this change to CTS requirements is based on the NRC acceptance of TSTF-121.	5/5/97 TSTF-121 modified, not yet approved.
BGE Response:					
2.a	A.3		CTS 6.2.2d states that an individual qualified in radiation protection procedures shall be on site when fuel is in the reactor. The ITS changes this position to a radiation protection technician. The changes to the CTS requirements is based on TSTF-65	Acceptance of this change to the CTS requirements is based on the NRC acceptance of TSTF-65.	5/5/97 TSTF-65 still pending.

CCNPP ITS 5.0 ADMINISTRATIVE CONTROLS

5.0	DOC	JFD	CHANGE/DIFFERENCE	COMMENT	STATUS
BGE Response:					
3			STS 5.2.2.f requires the [operation manager or assistant operations manager] to hold an SRO license. ITS 5.2.2.f requires the operation manager to hold *or have held* an SRO license at CCNPP. There is no discussion or justification for this deviation from the STS requirement.	Provide justification for the STS deviation based on current licensing basis, system design, or operational constraints.	
BGE Response:					
4		5	STS 5.2.2.g lists the Shift Technical Advisor (STA) requirements. ITS 5.2.2.g replaces the requirements entirely with a different list of STA requirements. There is inadequate justification for the deviation from the STS requirements for STAs.	Provide justification for the STS deviation based on current licensing basis, system design, or operational constraints.	
BGE Response:					
5	LA.3		CTS 6.5.1.c.2 requires changes to the Offsite Dose Calculation Manual (ODCM) be reviewed by the onsite review function and the plant manager. ITS 5.5.1.c.2 requires changes to the ODCM be reviewed by the plant manager. The CTS requirement for the onsite review function to review ODCM changes is moved to unspecified plant procedures. This change to the CTS is based on TSTF-65.	Provide discussion for this change to CTS requirements to include the specific procedures that will control the requirement. Acceptance of this change to the CTS requirements is based on the NRC acceptance of TSTF-65.	5/5/97 TSTF-65 is still pending.

CCNPP ITS 5.0 ADMINISTRATIVE CONTROLS

5.0	DOC	JFD	CHANGE/DIFFERENCE	COMMENT	STATUS
BGE Response:					
6, 7, 8, 9, 10, 11, 12		3	The ITS 5.4.4, Radioactive Effluent Controls Program, has been modified in accordance with CTS amendments 197 and 217. Amendment 217 was approved October 18, 1996, and amendment 197 was approved March 7, 1997.	Revise the CTS markups changed by amendments 197 and 217 and replace the pages.	
BGE Response:					
13			CTS 4.7.6.1.e.1 requires verifying that the pressure drop across the combined HEPA filters and charcoal absorber banks is < 4 inches Water Gauge while operating the ventilation system at a flow rate of 2000 cfm ± 10%. ITS 5.5.11.d requires the same verification but adds the prefilters to the HEPA filters and charcoal absorber bank. There is no discussion or justification for the change to CTS requirements.	Provide discussion and justification for the addition of the prefilters to the CTS requirement. Classify this change as a More Restrictive change.	
BGE Response:					

5.0	DOC	JFD	CHANGE/DIFFERENCE	COMMENT	STATUS
14			STS 5.5.11.c requires demonstrating for each of the ESF systems that a laboratory test of a sample of the charcoal absorber, when obtained as described in [Regulatory Guide 1.52, revision 2], shows the methyl iodide penetration less than the value specified below when tested in accordance with [ASTM D3803-1989] at a temperature of $\leq$ [30°C] and greater than or equal to the relative humidity specified as follows. ITS 5.5.1.1.c has the same requirements but adds (elemental iodine for Iodine Removal System (IRS)) and (103°C for IRS). There is no discussion or justification for the deviation to the STS.	Provide justification for the STS deviation based on current licensing basis, system design, or operational constraints.	
BGE Response:					
15			STS 5.5.12 requires determining the liquid radwaste quantities in accordance with [Standard Review Plan, Section 15.7.3, "Postulated Radioactive Release Due to Tank Failures"]. ITS 5.5.12 does not include this STS requirement. There is no discussion or justification for this STS deviation.	Provide justification for the STS deviation based on current licensing basis, system design, or operational constraints.	
BGE Response:					

CCNPP ITS 5.0 ADMINISTRATIVE CONTROLS

5.0	DOC	JFD	CHANGE/DIFFERENCE	COMMENT	STATUS
16		None	STS 5.5.12.b requires a surveillance program to ensure that the quantity of radioactivity contained in [each gas storage tank and fed into the offgas treatment system] is less than the amount that would result in a whole body exposure of $\geq$ 0.5 rem to any individual in an unrestricted area, in the event of [an uncontrolled release of the tanks' contents]. ITS 5.5.12.b requires a surveillance program to ensure that the quantity of radioactivity contained in each gas storage tank is less than or equal to 58,500 curies noble gases (considered Xe-133). There is no discussion or justification for this deviation to the STS requirements.	Provide justification for the STS deviation based on current licensing basis, system design, or operational constraints.	
BGE Response:					
17		12	STS 5.5.13.a.3 requires verifying the fuel oil has a clear and bright appearance with proper color. ITS 5.5.13.a.3 changes this requirement to verifying water and sediment $\leq$0.05%. CCNPP does not utilize a clear and bright test because the diesel fuel oil is dyed, and CCNPP contains a CTS SR which allows the interval for determining particulates in the stored diesel generator fuel oil to be 92 days.	5/5/97 The CCNPP Project Manager confirmed that FSAR Section 8.4.1, page 8.4-8 states that sampling of incoming fuel oil is analyzed for water and sediment. This is in the CCNPP design basis.	5/5/97 Closed

CCNPP ITS 5.0 ADMINISTRATIVE CONTROLS

5.0	DOC	JFD	CHANGE/DIFFERENCE	COMMENT	STATUS
17.a	M.4		Relative to ITS 5.5.13, DOC M.4 could be improved by more completely addressing the additional requirements associated with the Diesel Fuel Oil Program.	Revise DOC M.4 to more completely address the additional requirements associated with the Diesel Fuel Oil Program.	
BGE Response:					
17.b	M.5		Relative to ITS 5.5.13, DOC M.5 could be improved by a more direct discussion of the testing performed on fuel oil and why such testing provides better assurance that the EDGs will function and is, therefore, a safety enhancement. The fact that these tests are currently performed as non-TS activities does not have the impact as the approach discussed above.	Revise DOC M.5 to directly discuss fuel oil testing and why such testing provides better assurance that the EDGs will function.	
BGE Response:					

CCNPP ITS 5.0 ADMINISTRATIVE CONTROLS

5.0	DOC	JFD	CHANGE/DIFFERENCE	COMMENT	STATUS
17.c	A.26		DOC A.26 is not correct. CTS SR 4.8.1.1.2.b requires verifying DG operability "At least once per 92 days by verifying that a sample of diesel fuel from the fuel storage tank is within the acceptable limits specified in Table 1 of SSTM D975-81 when checked for viscosity, water and sediment." The corresponding ITS 5.5.13.b requires, "Within 31 days following addition of the new fuel oil, other than those addressed in a., above are within limits for ASTM 2D fuel oil; and..." The change, which involves deleting the 92 day requirement, is a Less Restrictive change.	Revise DOC A.2€ to include deleting the 92-day requirement as a Less Restrictive change and justification for the 31-day requirement.	
BGE Response:					
18		12	STS 5.5.13.c requires verifying total particulate concentration of the fuel oil is $\leq$ 10 mg/l when tested every 31 days in accordance with ASTM D-2276, Method A-2 or A-3. The corresponding ITS 5.5.13.c requires verifying total particulate concentration of the fuel oil is $\leq$ 10 mg/l when tested every 92 days when determined by gravimetric analysis. JFD 12 contains no justification for this deviation of STS testing methods.	Provide justification for the STS deviation based on current licensing basis, system design or operational constraints.	

5.0	DOC	JFD	CHANGE/DIFFERENCE	COMMENT	STATUS
BGE Response:					
19		12	STS 5.5.13.c requires verifying total particulate concentration of the fuel oil is $\leq$ 10 mg/l when tested every 31 days in accordance with ASTM D-2276, Method A-2 or A-3. The corresponding ITS 5.5.13.c requires verifying total particulate concentration of the fuel oil is $\leq$ 10 mg/l when tested every 92 days when determined by gravimetric analysis. This extends the STS STI from 31 days to 92 days.	This justification should be revised to justify the 92 day interval between testing for impurities on its own merits, or retain the STS frequency of every 31 days. Provide justification for the STS deviation based on current licensing basis, system design, or operational constraints.	
BGE Response:					
20	LA.6		CTS Surveillance Requirements 3/4.6.1.1.c requires verifying the equipment hatch is closed and sealed prior to entering MODE 4 by performing a Type B test, and 3/4.6.1.1.d, requires verifying containment purge blind flanges are installed and sealed prior to entering MODE 4 by performing a Type B test. These surveillances are not included in the ITS, but are moved to the Containment Leakage Rate Testing Program. This change to CTS requirements is based on TSTF-52.	Acceptance of this change to CTS requirements is based on the NRC acceptance of TSTF-52.	4/11/97 TSTF plans to submit a revision of TSTF-52. 5/3/97 TSTF-52, R.1 not yet received.
BGE Response:					

5.0	DOC	JFD	CHANGE/DIFFERENCE	COMMENT	STATUS
21	M.1		ITS 5.5.17, Battery Inspection Program (BIP), is added to the CTS requirements. The BIP requires battery tests recommended by IEEE-Std-450-1995, and is implemented by ITS SR 3.8.6.1. This change to CTS requirements is based on TSTF-115.	Acceptance of this change to CTS requirements is based on the NRC acceptance of TSTF-115.	TSTF-115 withdrawn by TSTF and replacaed with TSTF-198, 199, 200, 201, and 203. 5/5/97 these TSTFs are under NRC review.
BGE Response:					
22			CTS 6.6.1, Footnote *, requires reporting occupational dose from the Independent Spent Fuel Storage Installation (ISFSI) separately. The ITS does not include this requirement. There is no justification for this change to CTS requirements.	Provide discussion and justification for deleting the CTS requirement for reporting exposure from the ISFSI separately.	
BGE Response:					

5.0	DOC	JFD	CHANGE/DIFFERENCE	COMMENT	STATUS
23		14	STS 5.6.1 requires, in part, that the dose assignments to various duty functions may be estimated based on pocket dosimeter, thermoluminescent dosimeter (TLD), or film badge measurements. ITS 5.6.1 changes the mechanisms to measure dose rates by adding electronic personal dosimeter and deleting film badge measurements.	This change was made to reflect the actual mechanisms used at CCNPP to measure dose rates.	5/5/97 Closed
BGE Response:					
24		16	STS 5.6.2 contains a bracketed statement that requiring the report shall identify the TLD results that represent collocated dosimeters in relation to the NRC TLD program and the exposure period associated with each result. JFD.16 states that this information is not adopted because the information is not consistent with CCNPP design or current licensing basis. However, this requirement is included in the CTS and ITS. This deviation of requirements requires clarification.	Clarify the deviation from the STS described in JFD.16.	
BGE Response:					

CCNPP ITS 5.0 ADMINISTRATIVE CONTROLS

5.0	DOC	JFD	CHANGE/DIFFERENCE	COMMENT	STATUS
25	LA.8		CTS 6.6.3 includes a parenthetical statement emphasizing that the submittal of the Radioactive Effluent Release Reports must be no longer than 12 months, and footnote **, which allows a supplementary report to be submitted within 120 days. CTS 6.6.3 also includes information for reporting licensee initiated major changes to the Radioactive Waste Systems. The ITS do not contain these requirements which are moved to unspecified plant procedures.	Provide discussion of specific procedures that include the CTS requirements.	
BGE Response:					
26		18	STS 5.6.6 contains the requirements for the Reactor Coolant System (RCS) and Pressure Temperature Limits Report (PTLR). The ITS do not include this requirement.	CCNPP does not anticipate the temperature/pressure values to change from cycle to cycle, which would negate the benefits of the PTLR. Therefore, CCNPP will retain the specific pressure/ temperature limits in the TS. This is part of the CCNPP system design and therefore, the change is acceptable.	5/5/97 Closed
BGE Reponse:					

5.0	DOC	JFD	CHANGE/DIFFERENCE	COMMENT	STATUS
27		19	STS 5.6.7 includes the requirements for reporting Emergency Diesel Generator failures. The ITS do not include this requirement based on TSTF-37.	Acceptance of this change to CTS requirements is based on the NRC acceptance of TSTF-37.	5/5/97 TSTF-37 rejected. TSTF-37, R.1 is pending.
BGE Response:					
28	A.17		CTS 6.6, Reporting Requirements, does not include the Post Accident Monitoring Report. ITS 5.6.7 is added to the CTS requirements, and requires submitting a report within 14 days when required by Condition B or G of ITS 3.3.11, Post Accident Monitoring Instrumentation. This change to CTS requirements is documented as an Administrative change. The change is a More Restrictive change.	Reclassify this change to CTS reporting requirements as a More Restrictive change and justify.	
BGE Response:					
29	A.22		ITS 5.5.15 describes the Safety Function Determination Program. CTS does not include this requirement. This change to CTS requirements is documented as an Administrative change. The change is a More Restrictive change.	Reclassify this change to CTS requirements as a More Restrictive change and provide discussion.	
BGE Response:					

CCNPP ITS 5.0 ADMINISTRATIVE CONTROLS

5.0	DOC	JFD	CHANGE/DIFFERENCE	COMMENT	STATUS
30	LA.5 LA.6 LA.7 LA.8		The referenced DOCS justify moving information outside the ITS by referring to the plant change control process. There is no description of this program or how changes to the program, or procedures governed by the program, are controlled.	Provide additional discussion and justification including a complete description of the Plant Change Control Process and how changes are controlled.	
BGE Response:					
31	L.2		ITS 5.5.8.c, Inservice Testing Program, adds a requirement allowing ITS SR 3.0.3 to be applicable to inservice testing activities. This requirement allows 24 hours or up to the limit of the Frequency, whichever is less, to perform Inservice Testing upon discovery that Inservice Testing requirements were not performed. CTS 4.0.5 requires declaring the component Inoperable if the Inservice Testing is not performed. This change is a relaxation from the CTS requirements.	Change confirmed with the CCNPP Project Manager.	5/5/97 Closed

5.0	DOC	JFD	CHANGE/DIFFERENCE	COMMENT	STATUS
34	A.8		CTS 3/4.6.1.6 includes surveillance requirements for monitoring tendon degradation. These requirements are moved outside the ITS to the Concrete Containment Tendon Surveillance Program. ITS 5.5.6 describes the Concrete Containment Tendon Surveillance Program but has no requirements or description of how changes are controlled. This change is listed as an Administrative Change but is a Less Restrictive Change.	Provide additional discussion and justification reclassifying this change from an Administrative to a Less Restrictive Change including how changes to the Concrete Containment Tendon Surveillance Program are controlled.	
BGE Response:					

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

April 9, 1997

Mr. James Davis
Nuclear Energy Institute
1776 Eye Street, N. W.
Suite 300
Washington, DC 20006-2496

Dear Mr. Davis:

As you know, the NRC cancelled its plans to issue a Generic Letter for a line-item improvement to the technical specification administrative controls section, to devote more resources to conversion reviews and additional improvements to the improved standard technical specifications (STS). However, the proposed Generic Letter would have included several changes to the administrative controls to accomodate changes to 10 CFR 20 and 10 CFR 50.36a. In addition, since the issuance of Administrative Letter 95-06 on the relocation of administrative controls related to quality assurance, the staff has identified additional changes to the administrative controls to better accomodate the staffing requirements in 10 CFR Part 50 and Part 55, and to include a new staff position regarding controls for the working hours of personnel who perform safety-related functions.

Enclosure 1 is an NRC proposed change, TSB-011, to the administrative controls section of the STS to reflect the changes described above. In addition, the Technical Specifications Task Force (TSTF) has proposed similar changes to the STS in TSTF-86 and TSTF-121. We request that the TSTF modify their proposals in these travelers, or withdraw those changes and submit a new traveler, to reflect consistent changes to the administrative controls for all versions of the STS. Should you have any questions regarding this matter, please contact Bob Tjader at 301-415-1187.

Sincerely,

Christopher I. Grimes, Chief
Technical Specifications Branch
Associate Director for Projects
Office of Nuclear Reactor Regulation

Enclosure: as stated

cc: C. Szabo, BWOG
L. Bush, WOG
B. Mann, CEOG
A. Marion, BWROG
B. Ford, BWROG
D. Hoffman, EXCEL

Enclosure 2

TSB FORM 2	U.S. NUCLEAR REGULATORY COMMISSION	PACKAGE NO.	DATE
	NRC Proposed Change to the STS	TSB-011	04/02/97

Originator:	R. Tjader	Mgr Approved:	Date:	11/07/96

Purpose of Change: Update STS to Reflect 10 CFR 20 and 10 CFR 50.36a Changes

NUREGs Changed		
1430: X	1431: X	1432: X
1433: X	1434: X	

Technical Specifications Changed:

1) Change Admin Controls Sections 5.2 and 5.3 on unit staffing requirements
2) Change Admin Controls Section 5.5.4, Radioactive Effluent Controls Program
3) Replace Admin Controls Section 5.7, High Radiation Area

Description of Change:

Revise STS Admin Controls Sections 5.2 on Unit Staff and 5.3 on Unit Staff Qualifications to remove requirements redundant with regulations. Change/replace STS Admin Controls Sections 5.5.4 and 5.7, respectively, to reflect 10 CFR 20 and 10 CFR 50.36a changes, to maintain consistency between the STS and regulation.

Justification of Change:

Revision of TS 5.2.2.e on unit staff working hours reflects recent CRGR-approved changes to the STS. Revision of TS 5.3 on staffing requirements removes requirements redundant to regulations while retaining elements required in TS by regulations. Revisions of 10 CFR Part 20 and 10 CFR 50.36a have superseded related information in the TS and other regulations, thereby prompting NRC to propose this generic change traveller to update the STS. The model STS provided in this package are specifically intended to eliminate possible confusion or improper implementation of the revised 10 CFR Part 20 requirements. (See attached justification.)

Entered Database	Date: 11/7/96	Filename: g:\forms\changes.mdb

NRC REVIEW OF PROPOSED STS CHANGE

TSB Reviewer: R. Tjader	Tech Reviewer: S. Klementowicz (If review required)
Recommendation Date: 11/7/96	Recommendation: Date: 11/8/96
[X] APPROVE [ ] MODIFY [ ] REJECT	[X] APPROVE [ ] MODIFY [ ] REJECT
Comments: See above Justification as attachments to traveller. 3/3/97 pkg was incorporated as an enclosure to a letter to NEI and provided to C. Grimes for signature. This change was to have been provided under a Generic Letter, which was cancelled. 4/2/97 TS 5.2 and 5.3 added to package; package forwarded to C. Grimes for disposition.	Comments:

PROPOSED STS CHANGE DISPOSITION

TSB Action Date: 4/9/97	TSTF Action (If applicable) Date:
[✓] APPROVED [ ] MODIFIED [ ] REJECTED	[ ] APPROVED [ ] REVISED [ ] APPEALED
Comments:	Comments:

STS FILE AND RECORD DATA CHANGES

ACTION	BY	DATE	ACTION	BY	DATE
WP Files Updated			Changes Certified		
Changes Proofed			Access Database Updated		
Returned for Corrections			Comment Resolution Database Updated		
Control Books Updated			Close-out Letter Sent to TSTF		
BBS Files Updated			Package Filed		

G:\FORMS\TSB-NO.011

Justification of Changes:

Revision of TS 5.2 and TS 5.3 on staff work hours and staffing requirements removes requirements redundant to regulations while retaining elements required in TS by regulations. Revisions of 10 CFR Part 20 and 10 CFR 50.36a have superseded related information in the TS and other regulations, thereby prompting NRC to propose this generic change traveller to update the STS. The model STS provided in this package are specifically intended to eliminate possible confusion or improper implementation of the revised 10 CFR Part 20 requirements.

Staffing Requirements and Working Hours TS Changes (TS 5.2 & TS 5.3)

Revision of TS 5.2.2.e on unit staff working hours reflects recent CRGR-approved changes to the STS. This change, to existing STS paragraph 5.2.2.e, from specific working hour limits to administrative procedures to control working hours will provide reasonable assurance that impaired performance caused by excessive working hours will not jeopardize safe plant operation. Specific working hour limits are not otherwise required to be in the technical specifications under 10 CFR 50.36(c)(5). Specific controls for working hours of reactor plant staff can be described in a licensee procedure that requires a deliberate decision making process to minimize the potential for impaired personnel performance, and that a licensee's established procedure control processes will provide sufficient control for changes to that procedure. These programs have a level of detail necessary to satisfy the policy statement (SECY-93-067) guidance and are retained in the Administrative Controls section of the TS. Therefore, the procedures and details can be relocated outside the TS.

Existing STS paragraph 5.2.2.b is deleted because it is redundant to 10 CFR 50.54(m)(2)(iii).

Existing STS paragraphs 5.2.2.c is revised and a new STS paragraph 5.3.2 is added to ensure that there is no misunderstanding when complying with 10 CFR 55.4 requirements.

Changes to TS resulting from 10 CFR 20 Changes (TS 5.5.4 & TS 5.7)

Revisions of 10 CFR Part 20 and 10 CFR 50.36a have superseded related information in the TS and other regulations, thereby prompting NRC to propose this generic change traveler to update the STS. While 10 CFR Part 20 allows licensees to implement the rule without having to make any changes to their approved TS, the NRC has crafted the enclosed model STS sections to provide acceptable language that correlates with the wording in the revised 10 CFR Part 20 and 10 CFR 50.36a. Additionally, in accordance with 10 CFR 20.1601(c), the proposed model STS for high radiation areas contain updated acceptable alternate controls to those given in 10 CFR 20.1601 and Regulatory Guide 8.38. Licensees may propose other alternate high radiation area controls based on their plant specific needs.

In the case of gaseous and liquid effluent release rates, the model STS were crafted to allow licensees to maintain their same overall level of effluent control while retaining the operational flexibility that exists with current STS under the previous 10 CFR Part 20. The model STS continue to require that radiation doses to members of the public from gaseous and liquid effluent releases from nuclear power plants be within the values given in Appendix I to 10 CFR Part 50 and the limits in 10 CFR Part 20.

The model STS provided in this letter are specifically intended to eliminate possible confusion or improper implementation of the revised 10 CFR Part 20 requirements.

5.2.2 Unit Staff

The unit staff organization shall include the following:

a. A non-Licensed Operator shall be assigned to each reactor containing fuel and an additional non-Licensed Operator shall be assigned for each unit when a reactor is operating in MODES 1.2.3. or 4.

[Two unit sites with both units shutdown or defueled, a total of three non-Licensed operators are required for the two units.]

~~b. At least one licensed Reactor Operator (RO) shall be in the Control Room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3 or 4, at least one licensed Senior Reactor Operator (SRO) shall be in the Control Room Area.~~

eb. Shift crew composition shall meet the requirements stipulated herein and in 10 CFR 50.54(m). Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.

dc. A [Health Physics Technician] shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

ed. Administrative procedures shall be developed and implemented to limit the working hours of personnel who perform safety-related functions (e.g., licensed Senior Reactor Operators [SROs], licensed Reactor Operators (ROs), health physicists, auxiliary operators, and key maintenance personnel).

The controls shall include guidelines on working hours that ensure adequate shift coverage shall be maintained without routine heavy use of overtime.

Any deviation from the working hour guidelines shall be authorized in advance by the [Plant Superintendent] or the [Plant Superintendent's] designee, in accordance with approved administrative procedures, and with documentation of the basis for granting the deviation.

Continued

5.2.2 Unit Staff (Continued)

controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the [Plant Superintendent] or the [Plant Superintendent's] designee to ensure that excessive hours have not been assigned. Routine deviation from the working hour guidelines shall not be authorized.

~~f~~e. The [Operations Manager or Assistant Operations Manager] shall hold an SRO license.

~~g~~f. The Shift Technical Advisor (STA) shall provide advisory technical support to the Shift Supervisor (SS) in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.

5.0 ADMINISTRATIVE CONTROLS

5.3 Unit Staff Qualifications

[Reviewer's Note: Minimum qualifications for members of the unit staff shall be specified by use of an overall qualification statement referencing an ANSI Standard acceptable to the NRC staff or by specifying individual position qualifications. Generally, the first method is preferable; however, the second method is adaptable to those unit staffs requiring special qualification statements because of unique organizational structures.]

5.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of [Regulatory Guide 1.8, Revision 2, 1987, or more recent revisions, or ANSI Standard acceptable to the NRC staff]. The staff not covered by [Regulatory Guide 1.8] shall meet or exceed the minimum qualifications of [Regulations, Regulatory Guides, or ANSI Standards acceptable to NRC staff]

5.3.2 For the purpose of 10 CFR 55.4, a licensed senior reactor operator (SRO) and a licensed reactor operator (RO) are those individuals who, in addition to meeting the requirements of TS 5.3.1, perform the functions described in 10 CFR 50.54(m).
[Reviewer's Note: The minimum staffing requirements stipulated in 10 CFR 50.54(m), for unit members actively performing the functions of an operator or senior operator, can be exceeded by stipulating the enhanced staffing requirements in paragraph 5.3.2.]

5.5.4 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;

b. Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to ~~10 CFR 20,~~ Appendix B, Table 2, Column 2, to 10 CFR 20.1001 - 20.2402 (10 times the concentration values in

c. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.1302 and with the methodology and parameters in the ODCM;

d. Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from each unit to unrestricted areas, conforming to 10 CFR 50, Appendix I;

e. Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days;

f. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of 31 days would exceed 2% of the guidelines for the annual dose or dose commitment, conforming to 10 CFR 50, Appendix I;

g. Limitations on the dose rate resulting from (from the site) (also) radioactive material released in gaseous effluents to areas beyond the site boundary ~~conforming to the dose associated with 10 CFR 20, Appendix B, Table 2, Column 1;~~ (limit compliance group)

h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;

i. Limitations on the annual and quarterly doses to a member of the public from Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and

beyond the site boundary,

3. Limitations on the annual dose or dose commitment to any member of the public due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.

insert to preceding para 3.g.

shall be limited to the following:

1. For noble gases: less than or equal to a dose rate of 500 mrems/yr to the total body and less than or equal to a dose of 3000 mrems/yr to the skin, and
2. For iodine-131, iodine 133, tritium, and for all radionuclides in particulate form with half-lives greater than 8 days: less than or equal to a dose rate of 1500 mrems/yr to any organ.

5.5.4 Radioactive Effluent Controls Program

This program conforming to 10 CFR 50.36a provides for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by operating procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;

b. Limitations on the concentrations of radioactive material released in liquid effluents from the site to UNRESTRICTED AREAS, conforming to 10 times the concentration values in Appendix B, Table 2, Column 2 to 10 CFR 20.1001-20.2402;

c. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents pursuant to 10 CFR 20.1302 and with the methodology and parameters in the ODCM;

d. Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from each unit to unrestricted areas, conforming to 10 CFR 50, Appendix I;

e. Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days;

f. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of 31 days would exceed 2 percent of the guidelines for the annual dose or dose commitment, conforming to 10 CFR 50, Appendix I;

g. Limitations on the dose rate resulting from radioactive material released in gaseous effluents from the site to areas at or beyond the SITE BOUNDARY shall be limited to the following:

1. For noble gases: less than or equal to a dose rate of 500 mrems/yr to the total body and less than or equal to a dose rate of 3000 mrems/yr to the skin, and

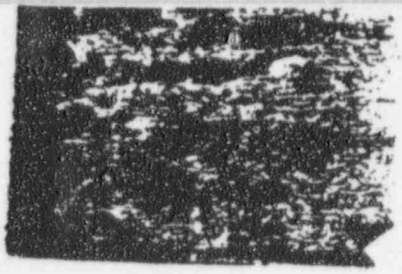
2. For iodine-131, iodine-133, tritium, and for all radionuclides in particulate form with half-lives greater than 8 days: less than or equal to a dose rate

of 1500 mrems/yr to any organ;

h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas at or beyond the site boundary, conforming to 10 CFR 50, Appendix I;

i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and

j. Limitations on the annual dose or dose commitment to any member of the public, beyond the SITE BOUNDARY, due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.



5.0
ADMINISTRATIVE CONTROLS

5.7
High Radiation Area

As provided in paragraph 20.1601(c) of 10 CFR Part 20, the following controls shall be applied to high radiation areas in place of the controls required by paragraph 20.1601(a) and (b) of 10 CFR Part 20:

5.7.1
High Radiation Areas with Dose Rates Not Exceeding 1.0 rem/hour at 30 Centimeters from the Radiation Source or from Any Surface Penetrated by the Radiation:

a. Each entryway to such an area shall be barricaded and conspicuously posted as a high radiation area. Such barricades may be opened as necessary to permit entry or exit of personnel or equipment.

b. Access to, and activities in, each such area shall be controlled by means of Radiation Work Permit (RWP) or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.

c. Individuals qualified in radiation protection procedures (e.g., health physics technicians) and personnel continuously escorted by such individuals may be exempted from the requirement for an RWP or equivalent while performing their assigned duties provided that they are following plant radiation protection procedures for entry to, exit from, and work in such areas.

d. Each individual or group entering such an area shall possess:

1. A radiation monitoring device that continuously displays radiation dose rates in the area; or

Continued

5.7 High Radiation Area

5.7.1 (continued)

2. A radiation monitoring device that continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate alarm setpoint, or

3. A radiation monitoring device that continuously transmits dose rate and cumulative dose to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area, or

4. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and,

   (i) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel exposure within the area, or

   (ii) Be under the surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with and control every individual in the area.

e. Except for individuals qualified in radiation protection procedures, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them.

5.7.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour at 30 Centimeters from the Radiation Source or from Any Surface Penetrated by the Radiation, but Less than 500 rads/hour at 1 Meter from the Radiation Source or from Any Surface Penetrated by the Radiation:

a. Each entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked

Continued

5.7 High Radiation Area

5.7.2 (continued) door or gate that prevents unauthorized entry, and, in addition:

1. All such door and gate keys shall be maintained under the administrative control of the shift supervisor, radiation protection manager, or his or her designee.

2. Doors and gates shall remain locked except during periods of personnel or equipment entry or exit.

b. Access to, and activities in, each such area shall be controlled by means of an RWP or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.

c. Individuals qualified in radiation protection procedures may be exempted from the requirement for an RWP or equivalent while performing radiation surveys in such areas provided that they are following plant radiation protection procedures for entry to, exit from, and work in such areas.

d. Each individual or group entering such an area shall possess:

1. A radiation monitoring device that continuously integrates the radiation rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate alarm setpoint, or

2. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area with the means to communicate with and control every individual in the area, or

Continued

5.7 High Radiation Area

5.7.2 (continued)

3. A self-reading dosimeter (e.g., pocket ionization chamber or electronic dosimeter) and,

   (i) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel exposure within the area, or

   (ii) Be under the surveillance as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with and control every individual in the area, or

4. In those cases where options (2) and (3), above, are impractical or determined to be inconsistent with the "As Low As is Reasonably Achievable" principle, a radiation monitoring device that continuously displays radiation dose rates in the area.

e. Except for individual qualified in radiation protection procedures, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them.

f. Such individual areas that are within a larger area that is controlled as a high radiation area, where no enclosure exists for the purpose of locking and where no enclosure can reasonable be constructed around the individual area need not be controlled by a locked door or gate, but shall be barricaded and conspicuous, clearly visible flashing light shall be activated at the area as a warning device.