TU ELECTRIC

C. Lance Terry
Group Vice President

Log # TXX-97105
File # 10010
916
Ref. # 10CFR50.90
10CFR50.36a

May 15, 1997

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)
DOCKET NOS. 50-445 AND 50-446
LICENSE AMENDMENT REQUEST 97-001
TECHNICAL SPECIFICATION CONVERSION APPLICATION

REF: 1) TU Electric letter logged, TXX-95292 from C. L. Terry to the NRC dated March 4, 1994
2) NUREG-1431, "Standard Technical Specifications Westinghouse Plants," Revision 1, April 1995

Gentlemen:

Pursuant to 10CFR50.90, TU Electric hereby requests an amendment to the CPSES Unit 1 facility operating license (NPF-87) and Unit 2 facility operating license (NPF-89) by incorporating changes to the CPSES Units 1 and 2 Technical Specifications (TS) as provided in this license amendment request and by adding license conditions to address Surveillance Requirements not previously performed by existing requirements or tests. The purpose of this request is to provide a submittal pursuant to Reference 1 which dockets TU Electric's request for NRC approval of the full conversion of the CPSES Unit 1 and Unit 2 Technical Specifications from the current Technical Specifications to a set of Technical Specifications based upon the improved Standard Technical Specifications (ISTS) [Reference 2].

TU Electric has prepared this submittal to be consistent with 10CFR50.36a and requests that the proposed changes be incorporated into the Technical Specifications. Attachment 1 is an affidavit. Attachment 2 is a general description and assessment of the proposed full conversion (including proposed license condition). Attachment 3 contains a list of the changes within the submittal which are not directly related to the conversion process and a list of other pending or projected License Amendments Requests (LARs) which could potentially impact the review of this conversion application. Attachments 4 through 18 provide the specific changes and the justifications that support the acceptability of the changes and the evaluations that support the conclusion that these changes do not involve a significant hazard consideration. Attachments 19 and 20 provided the Improved Technical Specifications (the ISTS with the proposed changes incorporated) for CPSES. Attachment 19 is the ITS for the specifications and attachment 20 is the ITS Bases.

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TU Electric developed this conversion application in concert with three other utilities: Union Electric Company (UE), Wolf Creek Nuclear Operation Corporation (WCNOC), and Pacific Gas & Electric Company (PG&E). Two enclosures (enclosures 3B and 6B) in Attachments 4 through 18 to this submittal contain conversion comparison tables. These comparison tables reflect how the proposed changes are treated by each of the four utilities. The tables are provided to assist the NRC in performing reviews of the individual submittals of each of these utilities. Only the information related to CPSES and TU Electric on these tables is considered to be part of this license amendment request. The information related to the other utilities is being provided for information only.

UE, WCNOC and PG&E are submitting parallel license amendment requests for their respective plants (Callaway, Wolf Creek Generating Station and Diablo Canyon). Because of the similarities in the attached license amendment request and the submittals of these other three licensees, it is requested that, to the extent possible, the NRC review these four submittals together in order to minimize the required NRC resources, reduce licensee costs and reduce overall review time. Don Woodlan of TU Electric is the chairman of the Joint Licensing Subcommittee, which includes members from each of the four utilities and which coordinated the joint development of the four full conversion applications. Mr. Woodlan (817-897-6887) is the lead utility contact to resolve matters which relate to the NRC's review of these four packages.

In accordance with 10CFR50.91(b), TU Electric is providing the State of Texas with a copy of this proposed amendment.

Because implementation of the Improved Technical Specifications involves significant training and revisions to implementing procedures, TU Electric will interface with the NRC during the review process to establish an appropriate implementation date or period.

Should you have any questions, please contact Mr. B.(Bob) S. Dacko at (817) 897-0122.

Sincerely,

C. L. Terry

DRW/grp

Attachments:

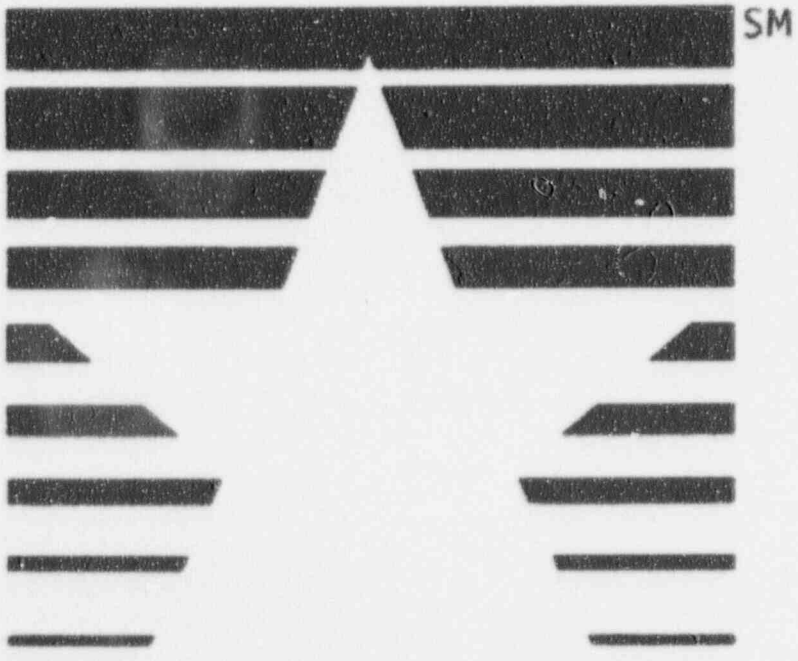
1. Affidavit
2. General Description and Assessment
3. Lists of additional changes and related LARs
4. CTS Section 1.0 / ITS Section 1.0
5. CTS Section 2.0 / ITS Section 2.0
6. CTS Section 3/4.0 / ITS Section 3.0
7. CTS Section 3/4.1 / ITS Section 3.1
8. CTS Section 3/4.2 / ITS Section 3.2
9. CTS Section 3/4.3 / ITS Section 3.3
10. CTS Section 3/4.4 / ITS Section 3.4
11. CTS Section 3/4.5 / ITS Section 3.5
12. CTS Section 3/4.6 / ITS Section 3.6
13. CTS Section 3/4.7 / ITS Section 3.7
14. CTS Section 3/4.8 / ITS Section 3.8
15. CTS Section 3/4.9 / ITS Section 3.9
16. CTS Section 3/4.10 / CTS Section 3/4.11
17. CTS Section 5.0 / ITS Section 4.0
18. CTS Section 6.0 / ITS Section 5.0
19. ITS Specifications with proposed changes incorporated
20. ITS Bases with proposed changes incorporated

c - Mr. E. W. Merschoff, Region IV
Mr. J. I. Tapia, Region IV
Resident Inspectors, CPSES
Mr. T. J. Polich, NRR (4 copies)

Mr. Arthur C. Tate
Bureau of Radiation Control
Texas Department of Public Health
1100 West 49th Street
Austin, Texas 78704

JLS CONVERSION TO IMPROVED TECHNICAL SPECIFICATIONS COMANCHE PEAK STEAM ELECTRIC STATION

COVER LETTER
&
ATTACHMENTS 1 - 3



TU ELECTRIC SM

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)		
	)		
Texas Utilities Electric Company	)	Docket Nos.	50-445
	)		50-446
(Comanche Peak Steam Electric Station,	)	License Nos.	NPF-87
Units 1 & 2)	)		NPF-89

AFFIDAVIT

C. L. Terry being duly sworn, hereby deposes and says that he is Group Vice President, Nuclear Production of TU Electric, the licensee herein; that he is duly authorized to sign and file with the Nuclear Regulatory Commission this License Amendment Request 97-001; that he is familiar with the content thereof; and that the matters set forth therein are true and correct to the best of his knowledge, information and belief.

C. L. Terry
Group Vice President,
Nuclear Production

STATE OF TEXAS)
)
COUNTY OF Somervell)

Subscribed and sworn to before me, on this 13th day of May, 1997.

SUSAN C. GRAVATT
NOTARY PUBLIC
STATE OF TEXAS
My Commission Expires 3-23-2001

Susan C Gravatt
Notary Public

GENERAL DESCRIPTION AND ASSESSMENT

I. BACKGROUND

The nuclear industry and the NRC have been working for several years to improve plant technical specifications. In September 1992, the NRC issued NUREG-1431 (and revision 1 in April of 1995)[1] as the basis for the improved Standard Technical Specification (ISTS) for Westinghouse plants. The improved STS accomplishes the following:

* Provides a new Use and Applications section (Chapter 1) to provide a clear and detailed explanation for use of the improved STS (the format of the improved STS is completely revised to be more user friendly).

* Simplifies the technical specifications by relocating various specifications, surveillance requirements, and much of the current detail to other licensing basis documents.

* Incorporates improvements in the technical specifications such as eliminating unnecessary specifications, extending the time to perform required actions, and reducing the frequency of certain surveillance requirements.

* Provides a greatly expanded Bases section which includes the basis of each Limiting Condition for Operation (LCO), action and surveillance requirement.

The NRC has been strongly encouraging the industry to adopt the NUREG-1431 format.

CPSES Activity

Since mid 1993, CPSES (Regulatory Affairs) has been working toward making a submittal by the end of 1996. In May 1995, CPSES management approved a plan to accelerate the conversion schedule with a new submittal date of April 1996.

A CPSES Tech Spec Conversion Project team was formed in June 1995. The team has been processing the submittal change packages (Licensing Document Change Requests - LDCRs) since late June 1995. Each LDCR requires that changes to the current Technical Specifications (CTS) be identified and justified individually. The change packages go through extensive interdisciplinary technical reviews, culminating in approval by Station Operations Review Committee (SORC) and Operations Review Committee (ORC). The team relies extensively on information contained in other plant submittals that preceded

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[1] Throughout this submittal, any reference to the ISTS or NUREG-1431 specifically is a reference to the version of NUREG-1431 available on the NRC's bulletin board in April 1995.

CPSES (e.g., Vogtle). In addition, TU Electric is a member of the Westinghouse Owners Group Tech Spec Mini-group which provides a forum for sharing information and arriving at a consensus for additional improvements that are generic in nature.

Joint Technical Specification Conversion

In October of 1995, TU Electric joined with Diablo Canyon (Pacific Gas and Electric), Wolf Creek (Wolf Creek Generating Station Nuclear Operating Corp.) and Callaway (Union Electric) in a joint effort to convert the CTS. Mr. Don Woodlan is representing TU Electric and is the chairman of the Joint Licensing Subcommittee (JLS). A meeting was held with the Director of NRR and the NRC staff on November 14, 1995, to discuss the joint effort of those utilities in converting to the Improved STS. A working level meeting was held with the NRC on December 14, 1995. The first joint meeting to review a conversion package was held on January 15 and 16, 1996.

The Joint Licensing Subcommittee (JLS) is attempting to reduce the costs and approval times for the conversion application and for other License Amendment Requests. It is also a goal of the four utilities to make the Improved Technical Specifications (ITS) for all four of the plants as similar as possible. Such commonality should enhance operations and reduce costs in the future.

The conversion application was produced in a cooperative effort involving TU Electric, Pacific Gas and Electric Company, Wolf Creek Nuclear Operating Corporation, and Union Electric Company (hereafter the "Group").

The NRC staff has stressed the value of licensees working together to increase standardization and to reduce the NRC resources needed to act on licensing matters. In response to these recommendations and in recognition of the benefits that result, TU Electric chose to work jointly with the Group in the conversion of the CPSES Technical Specifications. TU Electric believes the benefits, both near term and long term, clearly justify this action.

The Group jointly developed conversion applications based on NUREG-1431 Revision 1 (reference 1). Submittals for all four utilities address the generic features of the Group members' CTS in an identical fashion, include comparison tables to correlate the Group members' conversion applications, and are being docketed at approximately the same time. The Group anticipates an approximate nine month review by the NRC with the resultant review cost savings for each utility as outlined at the previous meetings between the Group and the NRC. This conversion process has been based on the following understandings reached with the NRC:

1. Each plant may maintain its licensing basis as established by its CTS in the conversion process. With appropriate justification, a given utility may optimize their ITS based on another Group member's CTS. The goal is to maximize commonality.

2. Plant specific license amendment requests (LARs) will continue to receive timely consideration during the conversion process and especially during the NRC review cycle. The Group will screen and limit these to the extent possible, yet it must be recognized that LARs in support of reloads and LARs representing either safety issues or significant cost savings will receive due consideration. Where possible, LARs submitted during the next 18 months will be jointly developed and submitted by the Group to conserve NRC review resources.

3. The effective date for new Surveillance Requirements with a fuel cycle frequency, imposed as a result of the conversion, will be the next refueling outage occurring after the implementation of the individual plant's amendment. A specific license condition is proposed below to incorporate this item.

4. Given commitment to conversion, enforcement discretion will not be denied or delayed solely on the basis that a given plant has not yet converted, especially when the basis of the requested discretion is NUREG-1431 Revision 1. Each request for such discretion will be judged on its own merit.

Conversion Application

The proposed amendment represents a conversion from the current Technical Specifications (TS) to a set of improved TS based on NUREG-1431, "Standard Technical Specifications, Westinghouse Plants," Revision 1, dated April 1995. As part of this submittal, the criteria contained in 10 CFR 50.36(c)(2)(ii) to the current TS and using NUREG-1431 as a basis, developed a proposed set of improved TS (ITS).

Enclosure 5A of each attachment provides a list of applicable travelers for that section of the ITS. The list identifies the traveler number (the Technical Specification Task Force (TSTF) number is provided if assigned, otherwise the owners group number is used), the traveler's status with respect to that section (i.e., incorporated, not incorporated), the difference number(s) used to discuss the difference from NUREG-1431 Rev. 1, and comments. The comments are used to explain the manner in which the traveler is being treated when such explanations are deemed to be beneficial.

In general, the JLS members incorporated travelers as they become available. Travelers may not have been incorporated for various reasons including: the traveler is disapproved by the NRC, the traveler is received too late to incorporate into the package, the traveler contains changes which are not consistent with the plant specific design or CTS, etc. October 1996 was the cut off for travelers for this conversion effort. If a traveler has been approved by the Westinghouse Owners Group (WOG) Mini-group (or higher) it was considered and addressed in the conversion application (see Enclosure 5A in each section). Later travelers were only considered if there was a safety impact or a significant operational impact.

In general travelers are designed to reflect a single change and it would not be appropriate to incorporate a portion of the traveler without incorporating the entire traveler. In a few cases, however, multiple changes were rolled into a single traveler. Some of those changes may be appropriate for a given plant while other changes may not. Since travelers are approved by a majority vote, a majority of the owners group members may be served properly by the traveler but some individual plants may not. Travelers were generally incorporated in their entirety or not at all but in a few rare cases, only portions of a traveler were incorporated.

The traveler process is dynamic. Travelers continue to be generated, changed, approved, denied and denied with comment. For those travelers which have change status (e.g., been revised, been denied by the NRC), the JLS members will work with the NRC to properly address the changed status in the conversion applications. It is anticipated that most travelers which are denied by the NRC will be backed out of the applications in a supplement to the applications.

The JLS members used the bulletin board version of NUREG-1431 Revision 1 as of April of 1995. When the NRC made corrections to the bulletin board version, these editorial corrections were incorporated into our conversion without justification.

In order to address new Surveillance Requirements imposed by the Technical Specifications approved and issued as a result of this LAR, the following license condition is proposed:

> For Surveillance Requirements (SRs) not previously performed by existing SRs or other plant tests, the requirement will be considered met on the implementation date and the next required test will be at the interval specified in the Technical Specifications as revised in Amendment No. [ ] for CPSES Unit 1 and Amendment No. [ ] for Unit 2.

II. DESCRIPTION OF PROPOSED TECHNICAL SPECIFICATION REQUESTS

The overall format for the conversion application is as follows:

- Cover letter
- Affidavit (Attachment 1)
- General Description and Assessment (Attachment 2)
- Tables of changes not within the scope of full conversion to the ISTS and of pending or proposed LARs which could impact the conversion application review (Attachment 3)
- Specific change descriptions and evaluations (Attachments 4 through 18)

- Each of these attachments (4 though 18) includes the following:
  - o Cover sheet
  - o Index of Enclosures
  - o Enclosure 1 - Cross-Reference Tables
  - o Enclosure 2 - Mark-up of CTS [NUREG-1468]
  - o Enclosure 3A - Description of changes to CTS
  - o Enclosure 3B - Conversion Comparison Table - CTS
  - o Enclosure 4 - NSHC
  - o Enclosure 5A - Mark-up of NUREG-1431 Specifications
  - o Enclosure 5B - Mark-up NUREG-1431 BASES
  - o Enclosure 6A - Differences from NUREG-1431
  - o Enclosure 6B - Conversion Comparison Table - NUREG-1431
- ITS Specifications and Bases (with proposed changes to the ISTS incorporated) - Attachments 19 and 20.

The conversion application does not contain a separate Criteria Application Report. As previously discussed with the NRC, the same information has been integrated into the application. There will be no matrix of the LCOs versus the 10 CFR 50.36 criteria. A separate Criteria Application Report is not necessary based on the degree to which each of the JLS members have already completed the "split" activity.

The methodologies used to mark-up the CTS and the ISTS are explained in the appropriate enclosures of the attachments. These methodologies explain the techniques used and any abbreviations employed. As described in the methodology for Enclosure 2, the CTS has been marked up to denote the technical changes needed to convert the CTS to the ITS. The exceptions are the notes used to identify MODE change restrictions which are added to selected specifications. These notes retain needed restrictions which are otherwise removed by the change in scope in LCO 3.0.4 from the CTS to the ITS. These notes are not included in the CTS markup for the affected specification but are listed in the "LCO 3.0.4 Evaluation Matrix" which is attached to LS-1 in Enclosure 4 to Attachment 6 (CTS Section 3/4.0 / ITS Section 3.0).

The conversion application identifies the material deleted from the Bases via strikeout. Redline is used to show the material which will be added to the Bases. Identification numbers are not assigned and justifications are

not submitted for these changes. This approach had been discussed with the NRC during previous meetings.

The brackets are used in some descriptions, NSHC (No Significant Hazards Consideration) evaluations or justifications when brackets provide a clear, convenient means of denoting plant specific differences. This was determined to be the most efficient and effective way to identify such differences.

The movement of a requirement from one specification in the CTS to a different specification in the ITS is denoted through the use of an "A" item number and description along with the cross-reference table.

In order to achieve as much consistency in the license requirements as possible, the JLS members adopted the following policy with respect to renumbering Limiting Conditions for Operation (LIMITING CONDITIONS FOR OPERATION (LCOS)), Conditions, Required Actions or Surveillances when converting from the ISTS to the ITS.

> In general, LIMITING CONDITIONS FOR OPERATION (LCOS) will not be renumbered if an LCO is deleted. The JLS members felt that if licensees renumber the LIMITING CONDITIONS FOR OPERATION (LCOS), a strength of the ISTS will be weakened in that it will be more difficult to compare one plant to another. The JLS members may choose to renumber specifications if a traveler is approved by the NRC which does so. The JLS members will encourage the Westinghouse traveler review group to not include the renumbering of LIMITING CONDITIONS FOR OPERATION (LCOS) in future travelers.

> In Conditions and Required Actions, the steps will be relettered. The JLS members felt that the use of "Not Used" for deleted steps was not conducive to clear understanding by the operator especially under the stress of abnormal plant conditions. Specifications 3.3.1 and 3.3.2 are exceptions to this rule. The conditions in these two specifications are not being relettered even though some conditions may have been deleted for some plants.

> Surveillance Requirements (SRs) will not be renumbered. The numbers for deleted surveillances will be retained and labeled "Not used" in the specification. If the SR is the last one in the specification, it will be deleted entirely.

III. ANALYSIS

The proposed changes to the CTS have been categorized into five general groupings. These groupings can be characterized as administrative changes, relocated changes, moved changes, more restrictive changes, and less restrictive changes.

Nontechnical administrative changes ("A" changes) were intended to incorporate human-factors principles into the form and structure of the improved TS so that they would be easier to use for plant operations

personnel. Administrative changes are editorial in nature or involve the reorganization or reformatting of requirements without affecting technical content or operational requirements. The proposed changes include: (a) adopting the form and format of the ISTS and (b) reorganizing the specifications and the information within the specifications in a manner consistent with the ISTS.

Relocated changes ("R" changes), those current TS requirements which do not satisfy or fall within any of the four criteria specified in 10 CFR 50.36(c)(2)(ii) may be relocated to appropriate "licensee controlled documents." In the attachments, the document to which requirements are being relocated is generally identified. The relocated limiting conditions for operation (LCO) portion of the CTS, which includes the system description, design limits, functional capabilities, and performance levels, will be relocated to a licensee controlled document. Changes to these licensee controlled documents will be made pursuant to 10 CFR 50.59 or other appropriate control mechanisms. These changes reduce the number of current TS requirements but the actual commitment to continue to perform the requirement will be unchanged upon implementation of ITS.

Material is relocated to the types of documents (licensee controlled documents) described below:

> Documents which have controls defined by regulations (e.g., the Quality Assurance Program (10 CFR 50.54(a)), the Security Plans (10 CFR 50.54(p)), the Emergency Plan (10 CFR 50.54(q)), and the Final Safety Analysis Report (FSAR) (10 CFR 50.59)).

> Documents which have controls established by License Conditions (e.g., the Fire Protection Report for most plants)

> Documents which have controls established by the Programs and Manuals section of Administrative Controls in the Technical Specifications (5.5 in the ISTS). For example, the Offsite Dose Calculation Manual, Ventilation Filter Testing Program, and TS Bases are documents whose controls are established by the TS.

> Documents which are incorporated into the one of the documents above by reference and, as such, come under the same controls as the document into which it is incorporated (e.g., some licensees have specifically created a document, a Technical Requirements Manual, which contains relocated specifications removed from the technical specifications and which is incorporated into the FSAR by reference, thus falling under 10 CFR 50.59).

Moved changes ("LG" changes) are a subset of the relocated changes. Moved changes are those current TS descriptions or details which do not establish requirements but do provide information on how requirements are satisfied. As such, moved changes do not satisfy or fall within any of the four criteria specified in 10 CFR 50.36(c)(2)(ii) and may be relocated to appropriate "licensee controlled documents." Changes to these licensee

controlled documents will be made pursuant to 10 CFR 50.59 or other appropriate control mechanisms. These changes reduce the complexity and detailed prescriptive nature of the TS but the commitment to satisfy these moved descriptions and details will be unchanged upon implementation of the ITS.

More restrictive changes ("M" changes) are those which either are more conservative than corresponding requirements in the CTS, or are additional restrictions which are contained in NUREG-1431 but are not contained in the CTS. Examples of more restrictive requirements include: planning an LCO for plant equipment which is not required by the current TS to be operable; more restrictive requirements to restore inoperable equipment; and more restrictive Surveillance Requirements (SRS).

Less restrictive changes ("LS" and "TR" changes) are those where current requirements are relaxed or eliminated, or new flexibility is provided. The more significant "less restrictive" requirements are justified on a case-by-case basis. When requirements have been shown to provide little or no safety benefit, their removal from the TS may be appropriate. In most cases, relaxations previously granted to individual plants on a plant-specific basis were the result of (a) generic NRC actions, (b) new NRC staff positions that have evolved from technological advancements and operating experience, or (c) resolution of the Owners Groups' comments on the ISTS. Generic relaxations contained in NUREG-1431 were reviewed by the staff and found to be acceptable because they are consistent with current licensing practices and NRC regulations. The licensee's design was reviewed to determine if the specific design basis and licensing basis are consistent with the technical basis for the model requirements in NUREG-1431 and thus provides a basis for these revised TS. To be conservative, some items have been identified as "less restrictive" even though the revision could be considered compliant with the CTS. Making the item "less restrictive" is not intended to be an admission that the plants may not have been compliant with the CTS in the past but rather an attempt to avoid a potential area for unnecessary debate as the change can be properly addressed as a "less restrictive" change.

These administrative, relocated, moved, more restrictive and less restrictive changes to the requirements of the CTS do not result in operations that will alter assumptions relative to mitigation of an analyzed accident or transient event.

In addition to the changes described above, the licensee proposed certain changes to the CTS that are both less restrictive and are not within the scope of application for conversion to the guidance of NUREG-1431. All of the differences will be reviewed by the NRC staff and a determination will be made regarding the approval or disapproval of each item as a part of this licensing action. Specifically, the licensee identifies the instances where their submittal varied for the provisions of NUREG-1431. See Attachment 3.

IV. SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Separate enclosures have been provided in Attachments 4 through 18 to provide "no significant hazards consideration" evaluations for the changes provided in the associated attachments. The conclusion of each of the evaluations is that a no significant hazard consideration determination is justified.

IV. ENVIRONMENTAL EVALUATION

An evaluation of the proposed changes has determined that these changes do not involve (i) a significant hazard consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increasing individual or cumulative occupational radiation exposure. Accordingly, the proposed changes meet the eligibility criterion for categorical exclusion set forth in 10CFR51.22(c)(9). Therefore, pursuant to 10CFR50.22(b), an environmental assessment of the proposed changes is not required.

VI. REFERENCES

1. NUREG-1431, "Standard Technical Specifications, Westinghouse Plants," Revision 1, April 1995.

2. NUREG-1366, "Improvements to Technical Specification Surveillance Requirements."

3. Generic Letter 93-05, "Line-Item Technical Specification Improvements to Reduce Surveillance Requirements for Testing During Power Operation."

4. NRC letter from Mr. William T. Russell to Messrs. Lee Bush, Blair Wunderly, Brian Woods and Ray Barker dated October 25, 1993.

5. NUREG-1024, "Technical Specification - Enhancing the Safety Impact."

6. NRC Administrative Letter 96-04, "Efficient Adoption of Improved Standard Technical Specifications," dated October 9, 1996.

7. Nuclear Energy Institute (NEI) 96-06, "Improved Technical Specifications Conversion Guidance," dated July 1996.

TABLE OF CHANGES NOT WITHIN THE SCOPE OF FULL CONVERSION TO THE ISTS[2]

ITS Section	Change No.	Description
3.3	3.3-27	Adopts manufacturer's recommendation for calibration of hydrogen monitors.
	3.3-132	Trip Setpoint for EDG start instrumentation moved to Bases per reviewers note for RTS and ESFAS.
3.6	3.6-13	A note is added to delete surveillance requirement to leak test containment ventilation isolation valves with resilient seals if the flow path is isolated by a leak tested blank flange.
3.7	3.7-11	The Required Actions for the Feedwater Isolation Valves is modified to incorporate the isolation capabilities of the Feedwater Control Valves and their associated bypasses. This is not in the CTS but is a plant specific attempt to modify the ISTS, which assumes fully qualified Feedwater Control Valves, to match the CPSES plant specific design, which has valves which are capable of isolation but are not fully qualified (proposed LCO 3.7.3)
	3.7-32	The ISTS action for UHS regarding an inoperable cooling tower fan has been adapted to provide appropriate actions for SSI level less than required, because CPSES relies on an SSI rather than cooling towers.
	3.7-39	An SR (w.7.12.6) is added to require verification that non-ESF PPVS fans stop on actuation signal.
	3.7-46	This changes the TS for Fuel Storage Area Water level from "23 feet over the top of irradiated fuel assemblies seated in the storage racks" to "23 feet over the top of the storage racks."
	3.7-48	The UPS HVAC specification is provided in two versions. 3.7.20 is the conversion of the CTS. 3.7.20P is the conversion of the proposed changes to this LCO as submitted to the NRC in License Amendment Request 95-009.

[2] Changes to the ISTS except those which involve the incorporation of plant specific design information, which were developed as part of the industry traveler process, which are editorial corrections, which correct inconsistencies between specifications, or which incorporate CTS information; and changes to the CTS which do not merit a separate LAR.

ITS Section	Change No.	Description
3.8	CTS 3/4.8	
	01-61-M	Revised acceptable voltage range to match ISTS Bases which says the acceptable values should be based upon acceptable voltages for the class 1E loads (rather than the design range for the EDG itself).
	3.8-10	The minimum fuel levels for the EDGs incorporates the proposed changes in LAR 95-002.
5.0	CTS 3/4.0	
	01-15-A	(See ITS 5.5.9, c.4.a.8).) The definition of "Tube Inspection" is clarified to eliminate potential misunderstanding with regard to the required point of entry.
	CTS 6.0	
	03-15-M	Adds, to the COLR, the refueling boron concentration limits.
	5.5-6	Controls for the Technical Requirements Manual have been added to the Administrative Controls section of the ITS (proposed specification 5.5.16)
	5.7-1	Radiation limits for High Radiation Areas are revised to reflect the requirements of revised 10 CFR 20 (proposed specification 5.7)

Pending or Projected (LARs) Which Could Potentially Impact the Review of this Conversion Application

Pending LARs:

LAR Number	Description	Comment
LAR 96-004	Addition of Fan Coil Units to UPS HVAC System	Duplicate markups provided in Section 3/4.7
LAR 95-002	Diesel Generator Fuel Oil Storage System Minimum Volume	Incorporated in conversion application
LAR 94-020	Main Steam Isolation Valves	This change essentially adopted the ISTS. Additional changes are proposed in the attached conversion LAR.
LAR 96-003	Increase in Allowed Outage Time for a Charging Pump from 72 Hours to 7 Days	Not incorporated in conversion application.
LAR 96-003	Steam Line Pressure-Low Allowable Value	Not incorporated in conversion application.

Projected LARs:

LAR Number	Description	Comment
Not assigned	Change in frequency of slave relay testing.	No submittal schedule
Not assigned	Unit 2 Cycle specific changes	Needed approved to support startup after fall 1997 outage.

ACRONYMS AND ABBREVIATIONS

Below is provided a list of the more broadly used acronyms and abbreviation. The list is not intended to be a complete. Acronyms of abbreviations which have only limited use and which are properly defined where used are not included in this list.

"[ ]"	Brackets which are used in Enclosures 3A, 3B, 4, 6A and 6B to enclosure portions of the application which are specific to the conversion application in which the portions are contained. Other applications may have different in formation in that part of an otherwise generic part of the parallel conversion applications. Empty brackets indicate that one or more of the other parallel applications have plant specific information in that location.
"A"	Change code for an Administrative Change to the CTS
AFD	Axial Flux Difference
AFW	Auxiliary Feedwater
AOT	Allowed outage time
APP	APPLICABILITY
ASP	Alternate or Auxiliary Shutdown Panel
"B"	Change code for "Bracketed" information in the ISTS which indicates that the bracketed information was adopted in the ITS
BDMS	Boron Dilution Mitigation System
"B-PS"	Change code for "Plant Specific" information which has been inserted in a "Bracketed" portion of the ISTS
BOP	Balance of plant
BWOG	Boiling Water Owners Group
BWR	Boiling Water Reactor
CEOG	Combustion Engineering Owners Group
CFR	Code of Federal Regulations
CN	Change number - a number assigned to a change to the CTS or the ISTS in the conversion application
COLR	Core Operating Limits Report
COT	Channel Operational Test
CPSES	Comanche Peak Steam Electric Station
CR	Control Room
CRC	Corporate Review Committee - generic term for the various corporate safety committees
CTS	Current Technical Specifications

ACRONYMS AND ABBREVIATIONS (cont.)

DBA	Design Basis Accident as defined by the plant specific licensing basis
DC	Diablo Canyon
DCPP	Diablo Canyon Power Plant
DG(s)	Diesel Generators
"ED"	Change code used to identify "Editorial" changes made to the ISTS as part of the conversion application
EFPD	Effective Full Power Days
encl.	Enclosure
ESF	Engineered Safety Feature
ESFAS	Engineered Safety Feature Actuation System
FHA	Fuel Handling Accident as defined by the plant specific licensing basis
FSAR	Updated Final Safety Analysis Report per 10 CFR 50.71(e)
FW	Feedwater
Group	The four licensees (PG&E, TU, UE, and WCNOC) which have joined together to convert the CTS and to produce parallel conversion applications
HSP	Hot Shutdown Panel
Improved STS	Improved Standard Technical Specifications, NUREG-1431, Rev. 1, April 1995
Improved TS	Improved Technical Specifications - the proposed plant specific Technical Specifications developed from the ISTS
IR	Intermediate Range
ISTS	Improved Standard Technical Specifications, NUREG-1431, Rev. 1, April 1995
ITS	Improved Technical Specifications - the proposed plant specific Technical Specifications developed from the ISTS
JCRC	Joint Corporate Review Committee - A subcommittee of the CRCs for PG&E, TU, UE, and WCNOC organized to perform an initial joint CRC review for the various licensees
JLS	Joint Licensing Subcommittee - A working group composed of members from PG&E, TU, UE and WCNOC to share resources and to work together in common licensing matters
LA	License Amendment
LAR	License Amendment Request

ACRONYMS AND ABBREVIATIONS (cont.)

LCD	Licensee Controlled Document - A plant specific document which has change controls which include the change criteria established by 10 CFR 50.59 (e.g., the FSAR), similar regulatory requirements (e.g., 10 CFR 50.54a for the QA Plan), or the Administrative Controls Section of the ITS (e.g., the ODCM).
LCO	Limiting Condition for Operation
LDCR	Licensing Document Change Request - the document or form to initiate changes to licensing documents such as the FSAR, TS, etc.
LER	Licensee Event Report
"LG"	Change code for a Less Restrictive Generic Change (moving technical or descriptive information to a licensee controlled document) to the CTS
LOP	Loss of Power
"LS"	Change code for a Less Restrictive change to the CTS
LSSS	Limiting Safety System Setting
"M"	Change code for an More Restrictive change to the CTS
MFIV	Main Feedwater Isolation Valve
mini-group	WOG MERITS Mini-Group - the group of utilities within the WOG that are acting on potential generic changes to the ISTS
MSIV	Main Steam Isolation Valve
MSSV	Main Steam Safety Valve
N/A	Not applicable
NA	Not applicable
NEI	Nuclear Energy Institute
Not Used	Generic term use to hold a place in the numbering system for LCOs, SRs, etc to indicate a generic requirement which does not apply to that specific unit
NRC	U.S. Nuclear Regulatory Commission
NSHC	No Significant Hazards Consideration evaluation per 10 CFR 50.92
NSSS	Nuclear Steam Supply System
NUREG-	Generic designator used to identify reports issued by the NRC or NRC contractors
NUREG-1431	Improved Standard Technical Specifications, NUREG-1431, Rev. 1, April 1995
ODCM	Offsite Dose Calculation Manual
OL	Operating License
OOS	Out of Scope or beyond the scope of an ITS conversion

ACRONYMS AND ABBREVIATIONS (cont.)

PAM	Post Accident Monitoring
PAMS	Post Accident Monitoring System
Para	Paragraph
PG&E	Pacific Gas and Electric Co.
PR	Power Range
"PS"	Change code for a Plant Specific change to the ISTS
PWR	Pressurized Water Reactor
QA	Quality Assurance
QPTR	Quadrant Power Tilt Ratio
"R"	Change code for a Relocation change (relocation to a licensee controlled document outside of TS) to the CTS
RCP	Reactor Coolant Pump
RCS	Reactor Coolant System
RO	Reactor Operator
RSP	Remote Shutdown Panel
RTB	Reactor Trip Breaker
RTP	Rated Thermal Power
RTS	Reactor Trip System
RWST	Refueling Water Storage Tank
SAR	Updated Final Safety Analysis Report per 10 CFR 50.71(e)
SDM	Shutdown Margin
SE	NRC issued Safety Evaluation
SFDP	Safety Function Determination Program
SG	Steam Generator
SI	Safety Injection
SIS	Safety Injection Signal
SL	Safety Limit
SR	Surveillance Requirement
SR	Source Range
SRC	Safety Review Committee - Generic term for the various safety committees for the participating licensees
SRO	Senior Reactor Operator
SSPS	Solid State Protection System
STA	Shift Technical Advisor
STB	Staggered Test Basis
STS	Standard Technical Specifications
TADOT	Trip Actuating Device Operational Test
TRM	Technical Requirements Manual
TS	Technical Specifications
TSTF	Technical Specification Task Force
TU	TU Electric

ACRONYMS AND ABBREVIATIONS (cont.)

UFSAR	Updated Final Safety Analysis Report per 10 CFR 50.71(e)
Updated FSAR	Updated Final Safety Analysis Report per 10 CFR 50.71(e)
USAR	Updated Final Safety Analysis Report per 10 CFR 50.71(e)
UV	Undervoltage
"TR"	Change code for a Technical Change (recurring - less restrictive) to the CTS
UE	Union Electric Co.
WC	Wolf Creek
WCAP-	Generic designator used to identify reports issued by Westinghouse
WCNOC	Wolf Creek Nuclear Operation Corp.
VFTP	Ventilation Filter Testing Program
WOG	Westinghouse Owners Group

JLS CONVERSION TO IMPROVED TECHNICAL SPECIFICATIONS COMANCHE PEAK STEAM ELECTRIC STATION

ATTACHMENT 4

CTS 1.0 - DEFINITIONS

ITS 1.0 - USE AND APPLICATION

TU ELECTRIC SM

IMPROVED TECHNICAL SPECIFICATIONS CONVERSION

CURRENT TS SECTION 1.0

CONTENTS

ENCLOSURE 1

CROSS-REFERENCE TABLES

CONVERSION CROSS-REFERENCE CONTENTS

CROSS-REFERENCE TABLE 1

4/24/97

(Sorted by Current TS)

Current TS			Improved TS		
Item	Code	Para	Item	Code	Para
1.1			1.1		
1.2			1.1		
1.3			1.1		
1.4			1.1		
1.5			1.1		
1.6			1.1		
1.7					Not Used
1.8					Not Used
1.9			1.1		
1.10			1.1		
1.11					Not Used
1.12			1.1		
1.13			1.1		
1.14			1.1		
1.15					Not Used
1.16			1.1		
1.17			1.1		
1.18					Not Used
1.19			5.5.1		
1.20			1.1		
1.21			1.1		
1.22			1.1		
1.23			1.1		
1.24					Not Used
1.25			Relocated	FSAR	
1.26					Not Used
		New	1.1		
1.27			1.1		
1.28			1.1		
1.29			1.1		
1.30					Not Used
1.31		a	1.1		
1.31		New	1.1		
1.32					Not Used
1.33			1.1		
1.34					Not Used
1.35		a	1.1		
1.35		b			Not Used
1.36			1.1		
1.37			1.1		
1.38			1.1		
1.39					Not Used

CROSS-REFERENCE TABLE 1

(Sorted by Current TS)

Current TS			Improved TS		
Item	Code	Para	Item	Code	Para
1.40					Not Used
1.41					Not Used
Table 1.1					Not Used
Table 1.2			Table 1.1-1		
		New	1.2		
		New	1.3		
		New	1.4		

CROSS-REFERENCE TABLE 1

4/24/97

(Sorted by ITS)

Current			Improved TS		
Item	Code	Para	Item	Code	Para
1.1			1.1		
1.2			1.1		
1.4			1.1		
1.5			1.1		
1.6			1.1		
1.3			1.1		
1.9			1.1		
1.10			1.1		
1.12			1.1		
1.13			1.1		
1.14			1.1		
6.8.3		g	1.1		
1.16			1.1		
1.17			1.1		
1.20			1.1		
1.21			1.1		
1.22			1.1		
1.23			1.1		
		New	1.1		
1.27			1.1		
1.28			1.1		
1.29			1.1		
1.31		a	1.1		
1.31		New	1.1		
1.33			1.1		
1.35		a	1.1		
1.36			1.1		
1.37			1.1		
1.38			1.1		
Table 1.2			Table 1.1-1		
		New	1.2		
		New	1.3		
		New	1.4		

Methodology For Cross-Reference Tables

The cross-reference tables provide a guide to location of all current TS LCOs, Actions, Surveillances, Tables and Figures in the improved TS. It also includes the location of items that have been located out of the improved TS.

The cross-reference table contains the following columns:

Current TS:

LCO/SR number (Item) -

This column lists the LCO or SR number which applies as listed in the associated technical specification.

Requirement code (Code) -

This column identifies the portion of the specification affected using the following code:

LCO	- The LCO operability requirement
APP	- The APPLICABILITY requirement
CONDITION/ACTION	- The ACTION requirements
SR	- The SURVEILLANCE REQUIREMENTS

Note: The applicability of a current specification is assumed to transfer to the same improved specification as the LCO. The cross reference for the applicability for the specification is only identified in the table by a separate entry if the cross-reference is not clear (e.g., several current specifications with different applicability are moved into the same specification in the improved TS, or a footnote in the applicability of the current TS is moved to a different portion of the specification in the improved TS).

Paragraph (Para) -

This column identifies the affected paragraph. In general, the numbering and lettering used in the current TS will be provided but in some cases it may be appropriate to provide a description. For example in specification 3/4.7.7.1, the actions are arranged by those that apply in Modes 1, 2, 3, & 4 and those that apply in Modes 5, 6 and during movement of irradiated fuel assemblies. Appropriate entries in this column for these respective actions might be "Modes 1-4" and "Modes 5, 6, etc." Multiple paragraphs are not listed in the same row (e.g., "a and b").

New	This item has been added to reflect a requirement in NUREG-1431 that is not addressed in the current TS
NA	This item is not in the current TS because it does not apply.

Note: When a single paragraph in the current TS crosses to multiple locations in the improved TS, a new entry is made for each cross reference. A single entry is not used to identify the multiple paragraphs in the improved TS. Since multiple paragraphs in the current TS may cross reference to the same paragraph in the improved TS, separate entries, each referencing the same location in the improved TS, are made for each such paragraph in the current TS.

Improved TS:

LCO/SR number (Item) -

This column lists the LCO or SR number which applies as listed in the associated specification or uses the following code:

Relocated	This item is relocated to another licensee control document outside the TS (See Code for specific reference location).

Requirement code (Code) -

This column identifies the portion of the specification affected using the following code:

LCO	The LCO operability requirement
APP	The APPLICABILITY requirement
CONDITION/ACTION	The ACTION requirements
SR	The SURVEILLANCE REQUIREMENTS

In addition, specific plant document acronyms are used to list the licensee controlled documents where the item will be relocated to (e.g., FSAR, TRM, or plant procedures)

Note: The applicability of a current specification is assumed to transfer to the same improved specification as the LCO. The

cross reference for the applicability for the specification is only identified in the table by a separate entry if the cross-reference is not clear (e.g., several current specifications with different applicability are moved into the same specification in the improved TS, or a footnote in the applicability of the current TS is moved to a different portion of the specification in the improved TS).

Paragraph (Para) -

This column identifies the affected paragraph. In general the numbering and lettering used in the improved TS is provided but in some cases it may be appropriate to provide a description.

New	This item has been added to the improved TS and was not addressed in the NUREG-1431.
Not Used	This item will not be used in the improved TS, nor relocated to another document (e.g., requirements already adequately addressed by regulations)
NA	This item from NUREG-1431 is not included in the improved TS because it does not apply (e.g., specification unique to Ice Condenser Containments).

Note: The paragraph is only identified to the extent necessary to adequately describe the cross-reference. For example, if the cross-reference applies to the entire condition, it is appropriate to list the "Requirement Code" as "CONDITION" and the "Paragraph" as "A". If the correct cross-reference is only to the required action, an appropriate cross-reference would be to "Requirement Code" as "ACT" and "Paragraph" as "A.1."

Note: When a single paragraph in the current TS crosses to multiple locations in the improved TS, a new entry for each cross reference is made. Since multiple paragraphs in the current TS may cross reference to the same paragraph in the improved TS, separate entries, each referencing the same location in the improved TS, is made for each such paragraph in the current TS. Multiple paragraphs are not listed (e.g. "A.1.1 and A.1.2") although a "higher tier" number is be used to cover all sub-paragraphs (e.g., "A.1" is be used to identify all subparagraphs such as A.1.1, A.1.2, etc.).

ENCLOSURE 2

MARK-UP OF CURRENT TS

Mark-up **(13 Pages)**

Methodology **(2 Pages)**

1.0 USE AND APPLICATION

1.01 DEFINITIONS

The defined terms of this section appear in capitalized type and are applicable throughout these Technical Specifications and Bases. 1-01-A

ACTION

1.1 ACTIONS shall be that part of a Technical Specification which that prescribes remedial measures required Required Actions to be taken under designated eConditions within the specified Completion Times. 1-01-A

ACTUATION LOGIC TEST

1.2 An ACTUATION LOGIC TEST shall be the application of various simulated or actual input combinations in conjunction with each possible interlock logic state and verification of the required logic output. The ACTUATION LOGIC TEST shall, as a minimum, include a continuity check, as a minimum, of output devices. 1-01-A

ANALOG CHANNEL OPERATIONAL TEST (COT)

1.3 An ANALOG CHANNEL OPERATIONAL TEST A COT shall be the injection of a simulated or actual signal into the channel as close to the sensor as practicable to verify OPERABILITY of including all components in the channel, such as alarms, interlocks, displays, and/or trip functions required to perform the specified safety function(s). The COT may be performed by means of any series of sequential, overlapping or total channel steps so that the entire channel is tested. The ANALOG CHANNEL OPERATIONAL TEST COT shall include adjustments, as necessary, of the required alarm, interlock and/or Trip Setpoints such that the setpoints are within the required range and accuracy. 1-02-A 1-32-A 1-30-A

AXIAL FLUX DIFFERENCE (AFD)

1.4 AXIAL FLUX DIFFERENCE AFD shall be the difference in normalized flux signals between the top and bottom halves of a four section an excore neutron detector. 1-01-A

CHANNEL CALIBRATION

1.5 A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel such so that it responds within the required range and accuracy to known values of input. The CHANNEL CALIBRATION shall encompass those components the entire channel, including the required such as sensors, alarms, interlock, displays, and trip functions, required to perform the specified safety functions(s). 1-32-A
Calibration of instrument channels with resistance temperature detector (RTD) or thermocouple sensors may consist of an inplace qualitative assessment of sensor behavior and normal calibration of the remaining adjustable devices in the channel. Whenever a sensing element is replaced, the next required CHANNEL CALIBRATION shall include an inplace cross calibration that compares the other sensing elements with the recently installed sensing element. The CHANNEL CALIBRATION and may be 1-03-M

1.1 DEFINITIONS

performed by any series of sequential, overlapping calibration, or total channel steps such that the entire channel is calibrated.

CHANNEL CHECK

~~1.6~~ A CHANNEL CHECK shall be the qualitative assessment, by observation, of channel behavior during operation ~~by observation~~. This determination shall include, where possible, comparison of the channel indication and~~/or~~ status to ~~with~~ other indications ~~and/~~or status derived from independent instrument channels measuring the same parameter. 1-01-A

~~CONTAINMENT INTEGRITY~~

~~1.7 CONTAINMENT INTEGRITY shall exist when:~~ 1-04-A

~~a. All penetrations required to be closed during accident conditions are either:~~

~~1) Capable of being closed by an OPERABLE containment automatic isolation valve system, or~~

~~2) Closed by manual valves, blind flanges, or deactivated automatic valves secured in their closed positions, except as provided in Table 2.1.1 of the Technical Requirements Manual.~~

~~b. All equipment hatches are closed and sealed.~~

~~c. Each air lock is in compliance with the requirements of Specification 3.6.1.3.~~

~~d. The containment leakage rates are within the limits of Specification 3.6.1.2, and~~

~~e. The sealing mechanism associated with each penetration (e.g., welds, bellows, or O-rings) is OPERABLE.~~

~~CONTROLLED LEAKAGE~~

~~1.8 CONTROLLED LEAKAGE shall be that seal water flow supplied to the reactor coolant pump seals.~~ 1-05-A

1.0 USE AND APPLICATION

1.1 DEFINITIONS

CORE ALTERATIONS

~~1.9~~ CORE ALTERATIONS shall be the movement ~~or manipulation~~ of any fuel, sources, or reactivity control components within the reactor ~~pressure~~ vessel with the vessel head removed and fuel in the vessel. Suspension of CORE ALTERATIONS shall not preclude completion of movement of a component to a safe ~~conservative~~ position. 1-06-LS 1-33-A

CORE OPERATING LIMITS REPORT (COLR)

~~1.10~~ The ~~CORE OPERATING LIMITS REPORT (COLR)~~ is the unit-specific document that provides cycle specific parameter ~~core operating~~ limits for the current ~~operating~~ reload cycle. These cycle-specific parameter ~~core operating~~ limits shall be determined for each reload cycle in accordance with Specification 6.9.1.6. Unit operation within these operating limits is addressed in individual specifications. 1-01-A

~~DIGITAL CHANNEL OPERATIONAL TEST~~

~~1.11 A DIGITAL CHANNEL OPERATIONAL TEST shall consist of exercising the digital computer hardware using data base manipulation and injecting simulated process data to verify OPERABILITY of alarm and/or trip functions.~~ 1-02-A

DOSE EQUIVALENT I-131

1.12 DOSE EQUIVALENT I-131 shall be that concentration of I-131 (microCurie/gram) which alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in Table III of TID-14844, "Calculation of Distance Factors for Power and Test Reactor Sites" or Table E-7 of NRC Regulatory Guide 1.109, Revision 1, October 1977.

$\bar{E}$ - AVERAGE DISINTEGRATION ENERGY

~~1.13~~ $\bar{E}$ shall be the average (weighted in proportion to the concentration of each radionuclide in the reactor coolant at the time of the sampling ~~sample~~) of the sum of the average beta and gamma energies per disintegration (in MeV~~/d~~) for isotopes, other than iodines, ~~the radionuclides~~ with a halflife greater than ten (10) minutes making up at least 95% of the total noniodine activity in the coolant ~~sample~~. 1-01-A

1.0 USE AND APPLICATION

1.1 DEFINITIONS

ENGINEERED SAFETY FEATURES (ESF) RESPONSE TIME

~~1.14~~ The ~~ENGINEERED SAFETY FEATURES (ESF)~~ RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ESF ~~a~~Actuation ~~s~~Setpoint at the channel sensor until the ESF equipment is capable of performing its safety function (i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc.). Times shall include diesel generator starting and sequence loading delays where applicable. The response time may be verified by means of any series of sequential, overlapping, or total steps so that the entire response time is verified. 1-08-A

~~FREQUENCY NOTATION~~

~~1.15 The FREQUENCY NOTATION specified for the performance of Surveillance Requirements shall correspond to the intervals defined in Table 1.1.~~ 1-09-A

(NEW) L_a

The maximum allowable primary containment leakage rate, L_a, shall be 0.10 % of primary containment air weight per day at the calculated peak containment pressure (P_a). 1-10-A

~~IDENTIFIED~~ LEAKAGE

LEAKAGE shall be: 1-11-A

~~1.16~~ a. Identified ~~IDENTIFIED~~ Leakage ~~LEAKAGE shall be~~:

1a. LEAKAGE ~~Leakage (except CONTROLLED LEAKAGE) into closed systems~~, such as that from pump seals or valve packing (except reactor coolant pump (RCP) seal water injection or leakoff), ~~leaks~~ that ~~is~~ ~~are~~ captured and conducted to collection systems or a sump or collecting tank; ~~or~~

2b. LEAKAGE ~~Leakage~~ into the containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of ~~-l~~Leakage ~~d~~Detection ~~s~~Systems or not to be pressure boundary ~~PRESSURE BOUNDARY~~ LEAKAGE; or

3c. Reactor Coolant System (RCS) LEAKAGE ~~leakage~~ through a steam generator (SG) to the Secondary ~~Coolant~~ System;

LEAKAGE - (Continued)

b. Unidentified LEAKAGE

All LEAKAGE (except RCP seal water injection or leakoff) that is not identified LEAKAGE;

c. Pressure Boundary LEAKAGE

LEAKAGE (except SG LEAKAGE) through a nonisolable fault in an RCS component body, pipe wall, or vessel wall.

MASTER RELAY TEST

~~1.17~~ A MASTER RELAY TEST shall consist of ~~be the~~ energizing~~ation of~~ each master relay and verify~~ingication the of~~ OPERABILITY of each relay. The MASTER RELAY TEST shall include a continuity check of each associated slave relay. 1-01-A

~~MEMBER(S) OF THE PUBLIC~~

~~1.18 MEMBER(S) OF THE PUBLIC means an individual in a controlled or UNRESTRICTED AREA. However, an individual is not a member of the public during any period in which the individual receives an occupational dose.~~ 1-12-A

~~OFFSITE DOSE CALCULATION MANUAL~~

1.19 The OFFSITE DOSE CALCULATION MANUAL (ODCM) shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring Alarm/Trip Setpoints, and in the conduct of the Environmental Radiological Monitoring Program. The ODCM shall also contain (1) the Radioactive Effluent Controls and Radiological Environmental Monitoring Programs required by Section 6.8.3 and (2) descriptions of the information that should be included in the Annual Radiological Environmental Operating and Annual Radioactive Effluent Release Reports required by Specifications 6.9.1.3 and 6.9.1.4. 1-13-A

1.0 USE AND APPLICATION

1.1 DEFINITIONS

OPERABLE - OPERABILITY

~~1.20~~ A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified safety function(s), and when all necessary attendant instrumentation, controls, normal or emergency electrical power, cooling and ~~or~~ seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its specified safety function(s) are also capable of performing their related support function(s). 1-01-A

~~OPERATIONAL MODE - MODE~~

~~1.21 An OPERATIONAL~~ MODE ~~(i.e., MODE)~~ shall correspond to any one inclusive combination of core reactivity condition, power level, and average reactor coolant temperature, and reactor vessel head closure bolt tensioning specified in Table 1.2 with fuel in the reactor vessel. 1-14-A

PHYSICS TESTS

~~1.22~~ PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation~~.~~ The tests are: 1-01-A

a. ~~(1)~~ Ddescribed in Chapter 14.0 of the FSAR~~;~~

b. ~~(2)~~ Aauthorized under the provisions of 10CFR50.59~~;~~ or

c. ~~(3)~~ Ootherwise approved by the Nuclear Regulatory Commission.

~~PRESSURE BOUNDARY LEAKAGE~~

~~1.23 PRESSURE BOUNDARY LEAKAGE shall be leakage (except steam generator tube leakage) through a nonisolable fault in a Reactor Coolant System component body, pipe wall, or vessel wall.~~ 1-11-A

~~PRIMARY PLANT VENTILATION SYSTEM~~

~~1.24 A PRIMARY PLANT VENTILATION SYSTEM shall be any system designed and installed to reduce gaseous radioiodine or radioactive material in particulate form in effluents by passing ventilation or vent exhaust gases through charcoal adsorbers and/or HEPA filters for the purpose of removing iodines or particulates from the gaseous exhaust stream prior to the release to the environment. Such a system is not considered to have any effect on noble gas effluents.~~ 1-31-A

1.0 USE AND APPLICATION

1.1 DEFINITIONS

~~PROCESS CONTROL PROGRAM~~

~~1.25 The PROCESS CONTROL PROGRAM (PCP) shall contain the current formulas, sampling, analyses, tests, and determinations to be made to ensure that processing and packaging of solid radioactive wastes based on demonstrated processing of actual or simulated wet solid wastes will be accomplished in such a way as to assure compliance with 10 CFR 20, 61, and 71, State regulations, burial ground requirements, and other requirements governing the disposal of solid radioactive waste.~~ 1-16-LG

~~PURGE - PURGING~~

~~1.26 PURGE or PURGING shall be any controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating condition, in such a manner that replacement air or gas is required to purify the confinement.~~ 1-15-A

(NEW) PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)

The PTLR is the unit specific document that provides the reactor vessel pressure and temperature limits, including heatup and cooldown rates, the power operated relief valve (PORV) lift settings and arming temperature associated with Low Temperature Overpressurization Protection (LTOP) System, for the current reactor vessel fluence period. These pressure and temperature limits shall be determined for each fluence period in accordance with the Administrative Controls section. Unit operation within these operating limits is addressed in individual specifications. 1-17-A

QUADRANT POWER TILT RATIO

~~1.27~~ QUADRANT POWER TILT RATIO shall be the ratio of the maximum upper half excore detector calibrated output to the average of the upper half excore detector calibrated outputs, or the ratio of the maximum lower half excore detector calibrated output to the average of the lower half excore detector calibrated outputs, whichever is greater. With one excore detector inoperable and power $\leq$ 75% of RTP, the remaining three detectors shall be used for computing the average. With one excore detector inoperable and power above 75% RTP or with more than one inoperable excore detector, the movable incore detectors shall be used to determine quadrant power and average power based on the relationship between incore and excore power using the most recent flux maps. 1-18-A 1-29-LS

1.0 USE AND APPLICATION

1.1 DEFINITIONS

RATED THERMAL POWER (RTP)

~~1.28~~ RTP ~~RATED THERMAL POWER~~ shall be a total reactor core heat transfer rate to the reactor coolant of 3411 Mwt. 1-01-A

REACTOR TRIP SYSTEM (RTS) RESPONSE TIME

~~1.29~~ The RTS ~~REACTOR TRIP SYSTEM~~ RESPONSE TIME shall be the time interval from when the monitored parameter exceeds its RTS t~~T~~rip s~~S~~etpoint at the channel sensor until loss of stationary gripper coil voltage. The response time may be verified by means of any series of sequential, overlapping, or total steps so that the entire response time is verified. 1-08-A

~~REPORTABLE EVENT~~

~~1.30 A REPORTABLE EVENT shall be any of those conditions specified in 10CFR50.73.~~ 1-19-A

.N MARGIN (SDM)

~~1.31~~ SDM ~~SHUTDOWN MARGIN~~ shall be the instantaneous amount of reactivity by which the reactor is subcritical or would be subcritical from its present condition assuming all rod cluster control assemblies (RCCAs) ~~(shutdown and control)~~ are fully inserted except for the single RCCA ~~rod cluster assembly~~ of highest reactivity worth which is assumed to be fully withdrawn. With any RCCA not capable of being fully inserted, the reactivity worth of the RCCA must be accounted for in the determination of SDM; and 1-20-M

(NEW) In MODES 1 And 2, the fuel and moderator temperatures are changed to the hot zero power temperatures.

~~SITE BOUNDARY~~

~~1.32 The SITE BOUNDARY shall be that line as shown in Figure 5.1-3.~~ 1-24-A

SLAVE RELAY TEST

~~1.33~~ A SLAVE RELAY TEST shall consist of ~~be the~~ energizing~~ation of~~ each slave relay and verifying~~ication~~ of OPERABILITY of each slave relay. The SLAVE RELAY TEST shall include, as a minimum, a continuity check~~, as a minimum,~~ of associated testable actuation devices. 1-01-A

1.0 USE AND APPLICATION

1.1 DEFINITIONS

~~SOURCE CHECK~~

~~1.34 A SOURCE CHECK shall be the qualitative assessment of channel response when the channel sensor is exposed to a source of increased radioactivity.~~ 1-22-A

STAGGERED TEST BASIS

~~1.35~~ A STAGGERED TEST BASIS shall consist of~~:~~ the testing of one of the 1-23-A

a. ~~A test schedule for n~~ systems, subsystems, ~~trains~~ channels, or other designated components ~~obtained by dividing the specified test interval into n equal subintervals, and~~ during the interval specified by the Surveillance Frequency, so that all systems, subsystems, channels, or other designated components are tested during *n* Surveillance Frequency intervals, where *n* is the total number of systems, subsystems, channels, or other designated components in the associated function.

b. ~~The testing of one system, subsystem, train, or other designated component at the beginning of each subinterval.~~

THERMAL POWER

~~1.36~~ THERMAL POWER shall be the total core heat transfer rate to the reactor coolant.

TRIP ACTUATING DEVICE OPERATIONAL TEST (TADOT)

~~1.37~~ A TADOT ~~TRIP ACTUATING DEVICE OPERATIONAL TEST~~ shall consist of operating the t~~T~~rip a~~A~~ctuating d~~D~~evice and verifying OPERABILITY ~~of~~ including all components in the channel, such as alarms, interlocks, displays, and~~/or~~ trip functions required to perform the specified safety function(s). The TADOT may be performed by means of any series of sequential, overlapping or total channel steps so that the entire channel is tested. The TADOT ~~TRIP ACTUATING DEVICE OPERATIONAL TEST~~ shall include adjustment, as necessary, of the t~~T~~rip a~~A~~ctuating d~~D~~evice so ~~such~~ that it actuates at the required setpoint within the required accuracy. 1-01-A 1-32-A 1-30-A

~~UNIDENTIFIED LEAKAGE~~

~~1.38 UNIDENTIFIED LEAKAGE shall be all leakage which is not IDENTIFIED LEAKAGE or CONTROLLED LEAKAGE.~~ 1-11-A

1.0 USE AND APPLICATION

1.1 DEFINITIONS

UNRESTRICTED AREA

1.39 An UNRESTRICTED AREA shall be any area at or beyond the SITE BOUNDARY access to which is not controlled by the licensee, for purposes of protection of individuals from exposure to radiation and radioactive materials, or any area within the SITE BOUNDARY used for residential quarters or for industrial, commercial, institutional, and/or recreational purposes. 1-24-A

VENTING

1.40 VENTING shall be the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration, or other operating condition, in such a manner that replacement air or gas is not provided or required during VENTING. Vent, used in system names, does not imply a VENTING process. 1-15-A

WASTE GAS HOLDUP SYSTEM

1.41 A WASTE GAS HOLDUP SYSTEM shall be any system designed and installed to reduce radioactive gaseous effluents by collecting Reactor Coolant System offgases from the Reactor Coolant System and providing for delay or holdup for the purpose of reducing the total radioactivity prior to release to the environment. 1-31-A

1.1 DEFINITION

TABLE 1.1 - Not Used

FREQUENCY NOTATION

1-09-A

NOTATION	FREQUENCY
S	At least once per 12 hours.
D	At least once per 24 hours.
W	At least once per 7 days.
M	At least once per 31 days.
Q	At least once per 92 days.
SA	At least once per 184 days.
SR	At least once per 9 months.
R	At least once per 18 months.
S/U	Prior to each reactor startup.
N.A.	Not applicable.

TABLE ~~1.2~~ 1.1-1

~~OPERATIONAL~~ MODES

1-25-LS

MODE		REACTIVITY CONDITION, K_{eff}	% RATED THERMAL POWER*[a]	AVERAGE REACTOR COOLANT TEMPERATURE (°F)
1.	POWER OPERATION	> 0.99	> 5%	~~≥ 350°F~~ NA
2.	STARTUP	≥ 0.99	≤ 5%	~~≥ 350°F~~ NA
3.	HOT STANDBY	< 0.99	~~0~~ NA	≥ 350°F
4.	HOT SHUTDOWN[b]	< 0.99	~~0~~ NA	350°F > T_{avg} > 200°F
5.	COLD SHUTDOWN[b]	< 0.99	~~0~~ NA	≤ 200°F
6.	REFUELING**[c]	~~≤ 0.95~~ NA	~~0~~ NA	~~≤ 140°F~~ NA

* (a) Excluding decay heat.

~~** Fuel in the reactor vessel with the vessel head closure bolts less than fully tensioned or with the head removed.~~

(b) Required reactor vessel head closure bolts fully tensioned.

(c) Required reactor vessel head closure bolts less than fully tensioned.

1-25-LS

(NEW) NUREG-1431 Sections 1.2, Logical Connectors, 1.3, Completion Times and 1.4, Frequency are new sections which will be incorporated in their entirety. See the corresponding sections in Enclosure 5A.

1-26-A

Methodology For Mark-Up of Current TS

This enclosure contains the electronic (or hand written) mark-up of the current Technical Specifications (TS). The electronic (or hand written) mark-up is performed in accordance with the following guidelines:

- The current specifications are marked-up to reflect what they would look like when the substance of NUREG-1431 Revision 1 is incorporated.
- In general, only technical changes have been identified. However, some non-technical changes have also been included when the changes cannot easily be determined to be non-technical by a reviewer, or if an explanation is required to demonstrate that the change is non-technical.
- Changes are identified by a change number in the right margin. A description/justification for each change is contained in Enclosure 3A.

There are four types of changes:

1. Deletions - Material is no longer in the specifications. (this includes material which is moved to the Bases of the TS).

2. Additions - This includes the addition of new requirements, restrictions, etc. to the specifications which are not in the current TS.

3. Modifications - This includes requirements which exist in the current TS but are being revised in the improved TS.

4. Administrative - These are non-technical changes to the TS. These include adopting the new format of the improved STS, moving the location of material within the specifications, etc.

The methodology of identifying the changes is :

Deletions - The portion of the specification which is being deleted is annotated using the strike-out feature of WordPerfect (or crossed out by hand). The deletion is identified by a change number or a change code in the adjacent right margin.

Additions - The information being added is inserted into the specification in the appropriate location and is annotated using the red-line feature of WordPerfect (or hand written/insert pages). The addition is identified by a change number in the adjacent right margin.

Modifications - The information being revised is annotated in the current TS using the strike-out feature of WordPerfect (or crossed out by hand) and the revised information is inserted into the specification in the appropriate location and is annotated using

the red-line feature of WordPerfect (or hand written/insert pages). The modification is identified by a change number in the adjacent right margin.

Administrative - The text of the current TS is not modified to reflect administrative changes. Where the administrative change might cause confusion to a reviewer, the change is identified by a change number in the right margin. For example, if a requirement is relocated to a specification in the improved TS which does not correspond with the specification in which that requirement is located in the current TS, a change number is provided in the markup of the current TS and an explanation is provided in enclosure 3A which explains where that requirement has been located in the improved TS.

CHANGE NUMBERS:

A change number, located in the right margin adjacent to a technical change mark-up, provides an identifier for its corresponding description/justification and indicates the type of NSHC used. The change number is of the form 4-13-LS. The first number (i.e., 4 in this example) is a number assigned to each LCO (or group of similar LCOs) such that it refers to the same specification for each member utility in the Joint Licensing Subcommittee (JLS) regardless of the actual TS number in their individual Technical Specifications. A table of the change number prefixes versus each plant's specification numbers is provided in enclosure 3A. The next set of numbers (i.e., -13 in this example) is an assigned number to identify changes within a given specification (i.e., having the same prefix number). As a result of differences between the individual JLS member current specifications and because of changes that may occur after initial number assignments, the numbers may not appear sequentially in the TS markup. The letter suffix (i.e., LS in this example) indicates the type NSHC used (e.g., A, M, LG, TR, LS, R).

In summary, changes may be annoted electronically or by using a hand mark-up. For electronic mark-up, "red-line" is used to annotate new information, "strike-out" is used to annotate deleted material (which includes material that is moved out of the specifications), and change numbers are used in the right margin to identify technical changes. All technical changes (i.e., "red-line" or "strike-out" items) require a change number. In addition, certain administrative changes (e.g., requirements moved to another specification) are also assigned a change number to provide additional clarification.

ENCLOSURE 3A

DESCRIPTION OF CHANGES TO CURRENT TS

Description of Changes (6 Pages)

DESCRIPTION OF CHANGES TO CURRENT TS SECTION 1.0

This enclosure contains a brief description/justification for each marked-up change to the current Technical Specifications. The changes are identified by change numbers contained in enclosure 2 (Mark-up of the current Technical Specifications). In addition, the referenced No Significant Hazards Considerations (NSHCs) are contained in enclosure 4. Only technical changes are discussed; administrative changes (i.e., format, presentation, and editorial changes) made to conform to NUREG-1431 Revision 1 are not discussed. For enclosures 3A, 3B, 4, 6A and 6B, text in brackets "[ ]" indicates the information is plant specific and is not common to all the Joint Licensing Subcommittee (JLS) plants. Empty brackets indicate that other JLS plants may have plant specific information in that location.

CHANGE NUMBER	NSHC	DESCRIPTION
1-01	A	These definitions would be reworded to be consistent with NUREG-1431. The proposed rewording included in this category does not involve any changes of a technical nature.
1-02	A	The definitions for Analog Channel Operational Test and Digital Channel Operational Test would be combined into a single definition of Channel Operational Test (COT) to be consistent with NUREG-1431. Separate definitions would no longer be required for the improved STS. The combined definition allows use of actual as well as simulated signals. The proposed rewording does not involve changes of a technical nature.
1-03	M	The definition of channel calibration is reworded to be consistent with NUREG-1431. The revised wording provides additional detail concerning calibration of instrument channels with RTD's or thermocouples.
1-04	A	This definition would no longer be used and the specifications in ITS Section 3.6 and Administrative Controls Section would be revised accordingly. The current TS definition for Containment Integrity would be deleted to be consistent with NUREG-1431. This definition is effectively incorporated into the NUREG-1431 Bases for the new Containment Limiting Condition for Operation (ITS 3.6.1) and the Administrative Controls Section for the Containment Leakage Testing Program [ ].
1-05	A	The current definition for Controlled Leakage would be deleted to be consistent with NUREG-1431. This definition will no longer be required for the improved TS because new LCO 3.5.5 will be created to ensure that seal injection flow remains within limits. Therefore, this change is not technical and has been categorized as administrative.

CHANGE NUMBER	NSHC	DESCRIPTION
1-06	LS-1	The current TS definition for Core Alterations would be modified consistent with NUREG-1431, to qualify a core alteration as movement of fuel, sources, or other reactivity control components. This proposed change is less restrictive since the current TS definition defines the movement of any component within the reactor vessel with fuel in the vessel as a Core Alteration. However, since the proposed definition would limit core alterations to those manipulations that could affect core reactivity, the proposed change is acceptable from the standpoint of the health and safety of the public.
1-07	A	Not applicable to CPSES. See Conversion Comparison Table (enclosure 3B).
1-08	A	The current TS definitions for Engineered Safety Features Response Time and Reactor Trip System Response Time would be modified to be consistent with NUREG-1431. In addition, the term "measured" would be replaced by "verified" to be consistent with the requirements of improved TS SR 3.3.1.16 and SR 3.3.2.10 to verify response time is within limits. The addition of the statement that response time may be verified by means of any series of sequential, overlapping, or total steps so that the entire response time is verified, is administrative in nature. This is consistent with the methodology presently described in the current TS Bases for demonstrating total channel response time.
1-09	A	The current TS definition for Frequency Notation (and Table 1.1, Frequency Notation) would be deleted to be consistent with NUREG-1431. The acronyms defined in Table 1.1, Frequency Notation, are no longer used in NUREG-1431. Surveillance frequencies are spelled out in NUREG-1431, thereby obviating the definition. This is a non-technical change made to conform to NUREG-1431.
1-10	A	The definition for maximum allowable primary containment leakage rate (L_a) would be added to the improved TS to be consistent with NUREG-1431. This addition has been determined to be an administrative change on the basis that this definition has simply been [moved] from [CTS Administrative Controls 6.8.4.g] to the definitions.
1-11	A	The current TS definitions for Identified Leakage, Unidentified Leakage, and Pressure Boundary Leakage have been merged into one definition for Leakage. This is a nontechnical change since it will not alter the manner in

CHANGE NUMBER	NSHC	DESCRIPTION
		which leakage is accounted for and treated from present practice. The definition of unidentified leakage has been expanded to include "except RCP seal water [injection or] leakoff", to be consistent with NUREG-1431.
1-12	A	The current TS definition for Member of the Public, would be deleted to be consistent with NUREG-1431. This definition would be deleted on the basis that it is defined in 10 CFR 20.1003 and 40 CFR 190.
1-13	A	The current TS definition of the Offsite Dose Calculation Manual (ODCM) [ ] would be [ ] incorporated into the Administrative Controls section of the ITS. This change is non technical because the definition of the ODCM [ ] will be [ ] moved to another section of the improved TS.
1-14	A	The current TS definition for Operational Mode would be revised to "Mode" and the wording would be revised to be consistent with NUREG-1431. The changes are nontechnical since they will not affect current practice.
1-15	A	The current TS definitions of HVAC systems and functions would be deleted to be consistent with NUREG-1431. [ ] "Purge - Purging" and "Venting", where used, do not require special definitions.
1-16	LG	The current TS definition of the Process Controls Program (PCP) would be moved outside of the TS along with the Administrative Controls description of this program to be consistent with NUREG-1431. The PCP definition and program description from Administrative Controls are moved into the FSAR. The PCP implements regulatory requirements and need not be restated in the TS. The requirement to comply with applicable Federal and State regulations for the processing of radioactive waste provides sufficient control of future changes to the PCP.
1-17	A	The definition of a Pressure Temperature Limits Report (PTLR) would be added to be consistent with NUREG-1431 and WOG-67, Rev 1. The definition will support the use of a PTLR. Adding the definition is purely administrative in nature.
1-18	A	The portion of the QPTR definition dealing with an inoperable excore detector is addressed in the Conditions and Surveillance Requirements of improved TS 3.2.4.

CHANGE NUMBER	NSHC	DESCRIPTION
1-19	A	The current TS definition of Reportable Event is not used in the improved TS and would be deleted to be consistent with NUREG-1431. This definition would be deleted on the basis that a reportable event is defined by 10 CFR 50.72 and 50.73. This change is administrative in nature because it will have no effect on current reporting practices.
1-20	M	The current TS definition of Shutdown Margin would be revised to be consistent with NUREG-1431. The requirement to account for any RCCAs not capable of being fully inserted was simply moved from current TS Action and Surveillance Requirements. The only substantive technical change to this definition is the addition of the requirement that, in Modes 1 and 2, the fuel and moderator temperatures be changed to the hot zero power temperatures. This ensures that the power defect due to shutting the reactor down from Mode 1 or 2 is accounted for in the shutdown margin. While this requirement is consistent with current practice, it has not been specified in the existing definition. Consequently, it has been categorized as a more restrictive change.
1-21		Not used.
1-22	A	The definition of Source Check can be deleted from the current TS in accordance with NUREG-1431. No surveillances in the improved TS require Source Checks, therefore, this is an administrative change. Where used in licensee controlled documents it will be defined; however it has not been used in the current TS since the implementation of NRC GL 89-01.
1-23	A	The current TS definition for Staggered Test Basis would be revised to be consistent with NUREG-1431, but the test intervals for surveillance requirements throughout the improved TS that are to be performed on a staggered test basis will be revised to be consistent with the new definition so that there will be no net change in current TS implementation of staggered test intervals. For example, under the current TS, if a parameter is monitored by three channels of instrumentation, and the test interval is quarterly, one channel would be tested each month during any given quarter by dividing the test interval into three equal subintervals. Under the new definition, the test interval for that same instrumentation in the improved TS would be specified as monthly so that the net effect is the same. One channel would be tested each month during any given quarter.

CHANGE NUMBER	NSHC	DESCRIPTION
1-24	A	The current TS definitions of Site Boundary and Unrestricted Area are deleted to be consistent with NUREG-1431. These definitions are deleted on the basis that they are defined in 10 CFR 20.1003.
1-25	LS-2	Table 1.2 of the current TS would become Table 1.1-1 in the improved TS. The following changes would be made to conform to NUREG-1431. In ITS table 1.1-1, the notation "NA" would replace "0" under % Rated Thermal Power for Modes 3, 4, 5, and 6. This is a nontechnical change since with K_{eff} less than 0.99, thermal power would be zero anyway. For Mode 6, the temperature has been replaced with NA since there is no safety analysis basis for the value of 140°F specified in the current TS. Also for Mode 6, the reactivity condition has been designated NA since the value of 0.95 is specified in the Bases for improved TS 3.9.1. The temperatures for Modes 1 and 2 are designated as NA on the basis that temperature for these Modes is dictated by the minimum temperature for criticality and the operating program for reactor coolant system Tavg. A new note b has been added to Modes 4 and 5 stating that the required reactor vessel head closure bolts are fully tensioned, and a new note c replaces the note applied to Mode 6. The new note c states that the required reactor vessel head closure bolts are less than fully tensioned. The new note c no longer specifies that fuel is in the vessel because the condition of fuel in the vessel is addressed by the definition of the term Mode. This definition stipulates that fuel be in the vessel in order to be in a "MODE." These changes are administrative, except for the new notes b and c, added per TSTF-88 and addressed in NSHC LS-2.
1-26	A	New sections 1.2, 1.3, and 1.4 would be incorporated into the improved TS to be consistent with NUREG-1431. Section 1.2 provides specific examples of the use of the logical connectors AND and OR and the numbering sequence associated with their use in the improved TS. Section 1.3 deals with the proper use and interpretation of completion times, and specific examples are given that will aid the user in understanding completion times. Section 1.4 deals with the proper use and interpretation of surveillance frequencies. Specific examples are given that will aid the user in understanding surveillance frequencies as they will appear in the improved TS. The proposed changes are administrative in nature and by themselves are not technical changes, incorporating travelers WOG-74 and WOG-90.

CHANGE NUMBER	NSHC	DESCRIPTION
1-27	M	Not applicable to CPSES. See Conversion Comparison Table (enclosure 3B).
1-28	LG	Not applicable to CPSES. See Conversion Comparison Table (enclosure 3B).
1-29	LS-3	This change revises the definition of QPTR to allow measuring QPTR with moveable incore detectors when one or more excore detector channels are inoperable. The change makes the CTS definition of QPTR consistent with ITS SR 3.2.4.2 as modified by TSTF-109.
1-30	A	Consistent with TSTF-30 Rev. 1, the definitions of Channel Operational Test (COT), [ ] and TADOT are expanded to include the details of acceptable performance methodology. Performance of these tests in a series of sequential, overlapping, or total channel steps provides the necessary assurance of appropriate operation of the entire channel. This change also makes the COT, [ ] and TADOT definitions consistent with the current TS and the NUREG-1431 definition of channel calibration which already contains similar wording.
1-31	A	Definitions of specific plant systems which are defined by the plant design are deleted consistent with NUREG-1431. The definitions contained in ITS 1.0 are intended for definitions that are necessary for the understanding of the specifications and can be generically defined for most plants. Definitions of systems that are not used in the specifications, or are specific to a particular plant (or only a few plants) are no longer defined in this section. Where necessary, such terms are defined in the Bases for the applicable specifications.
1-32	A	The definitions of channel calibration, COT, [ ] and TADOT are reworded consistent with TSTF-64 to clarify the phrase 'entire channel" thus reducing the potential for inconsistent interpretation of the phrase as experienced by a number of plants.
1-33	A	This change revises the CTS definition of Core Alterations to delete "or manipulation" and "conservative" consistent with NUREG-1431. The words as used in the definition were redundant and deleting the words does not alter the meaning of the definition.

ENCLOSURE 3B

CONVERSION COMPARISON TABLE - CURRENT TS

Conversion Comparison Table (4 Pages)

CONVERSION COMPARISON TABLE - CURRENT TS 1.0

TECH SPEC CHANGE		APPLICABILITY			
NUMBER	DESCRIPTION	DIABLO CANYON	COMANCHE PEAK	WOLF CREEK	CALLAWAY
1-01 A	These definitions would be reworded to be consistent with NUREG-1431. The proposed rewording included in this category does not involve any changes of a technical nature.	Yes	Yes	Yes	Yes
1-02 A	The CPSES definitions for Analog Channel Operational Test and Digital Channel Operational Test would be combined into a single definition of Channel Operational Test (COT).	No - do not have the Digital Channel Operational test definition.	Yes	No - do not have the Digital Channel Operational test definition.	No - "Digital" is not included in current TS.
1-03 M	The definition of channel calibration is reworded. The revised wording provides additional detail concerning calibration of instrument channels with RTDs or thermocouples.	Yes	Yes	Yes	Yes
1-04 A	This definition would no longer be used and the specifications in Section 3.6 would be revised accordingly. The current TS definition for Containment Integrity would be deleted.	Yes	Yes	Yes	Yes; See also improved TS 5.5.6 and 5.5.16.
1-05 A	The current TS definition for Controlled Leakage would be deleted.	Yes	Yes	No. See Change Number 1-28-LG.	No. See Change Number 1-28-LG.
1-06 LS-1	The current TS definition for Core Alterations would be modified to qualify a core alteration as movement of fuel, sources, or other reactivity control components.	No - Already in CTS.	Yes	Yes	Yes
1-07 A	The location of the thyroid dose conversion factors used for DOSE EQUIVALENT I-131 have been added.	Yes	No - Already in CTS.	No - Already in CTS.	No - Already in CTS.
1-08 A	The current TS definitions for Engineered Safety Features Response Time and Reactor Trip System Response Time would be modified. In addition, the term "measured" would be replace by "verified" to be consistent with the requirements of improved TS SR 3.3.1.16 and SR 3.3.2.10 to verify response time is within limits.	Yes	Yes	Yes	Yes

TECH SPEC CHANGE		APPLICABILITY			
NUMBER	DESCRIPTION	DIABLO CANYON	COMANCHE PEAK	WOLF CREEK	CALLAWAY
1-09 A	The current TS definition for Frequency Notation (and Table 1.1, Frequency Notation) would be deleted. The acronyms defined in Table 1.1, Frequency Notation, are no longer used in NUREG-1431.	Yes	Yes	Yes	Yes
1-10 A	The CTS Administrative Controls section definition for maximum allowable primary containment leakage rate (L_a) would be added to the improved TS.	Yes	Yes	Yes	Yes
1-11 A	The current TS definitions for Identified Leakage, Unidentified Leakage, and Pressure Boundary Leakage have been merged into one definition for Leakage and reworded.	Yes	Yes	Yes	Yes
1-12 A	The current TS definition for Member of the Public would be deleted.	Yes	Yes	Yes	Yes
1-13 A	The current TS definition of the Offsite Dose Calculation Manual (ODCM) [ ] would be moved to the Administrative Controls section of the ITS.	Yes	Yes	Yes	Yes
1-14 A	The current TS definition of 'Operational Mode' would be revised to 'Mode' and reworded.	Yes	Yes	Yes	Yes
1-15 A	The current TS definitions of HVAC systems and functions would be deleted. [ ] "Purge - Purging" and "Venting", where used, do not require special definitions.	Yes	Yes	Yes	Yes
1-16 LG	The current TS definition of the Process Controls Program (PCP) would be moved outside of the TS along with the Administrative Controls description of this program.	Yes - Moved to FSAR.	Yes - Moved to FSAR.	Yes - Moved to USAR.	Yes - Moved to FSAR Section 16.25.
1-17 A	The definition of a Pressure Temperature Limits Report (PTLR) would be added to support the use of a PTLR.	Yes	Yes	Yes	Yes
1-18 A	The portion of the QPTR definition dealing with an inoperable excore detector is addressed in the Conditions and Surveillance Requirements of improved TS 3.2.4.	Yes	Yes	Yes	Yes

TECH SPEC CHANGE		APPLICABILITY			
NUMBER	DESCRIPTION	DIABLO CANYON	COMANCHE PEAK	WOLF CREEK	CALLAWAY
1-19 A	The current TS definition of Reportable Event is not used in the improved TS and is deleted.	Yes	Yes	Yes	Yes
1-20 M	The current TS definition of Shutdown Margin is revised. The requirement to account for any RCCAs not capable of being fully inserted was simply moved from current TS Action and surveillance requirements. The only substantive technical change to this definition is the addition of the requirement that, in Modes 1 and 2, the fuel and moderator temperatures be changed to the hot zero power temperatures.	Yes	Yes	Yes	Yes
1-21	Not used.	N/A	N/A	N/A	N/A
1-22 A	The definition of Source Check is deleted.	Yes	Yes	Yes	Yes
1-23 A	The current TS definition for Staggered Test Basis would be revised. The test intervals for surveillance requirements throughout the improved TS that are to be performed on a staggered test basis will be revised to be consistent with the new definition.	Yes	Yes	Yes	Yes
1-24 A	The current TS definitions of Site Boundary and Unrestricted Area would be deleted.	Yes	Yes	Yes	Yes
1-25 LS-2	Table 1.2 of the current TS would become Table 1.1-1 in the improved TS. Several changes would be made to conform to NUREG-1431 (e.g., ITS Table 1.1-1, the notation "NA" would replace "0" under % Rated Thermal Power for Modes 3, 4, 5, and 6). Reactor vessel head closure bolt tensioning is revised per TSTF-88 and discussed further in NSHC LS-2.	Yes	Yes	Yes	Yes
1-26 A	New sections 1.2, 1.3, and 1.4 would be incorporated into the improved TS.	Yes	Yes	Yes	Yes

TECH SPEC CHANGE		APPLICABILITY			
NUMBER	DESCRIPTION	DIABLO CANYON	COMANCHE PEAK	WOLF CREEK	CALLAWAY
1-27 M	The definition of Restricted AFD Operation (RAFDO) is deleted.	No	No	No	Yes - Definition only in Callaway CTS.
1-28 LG	The definition of CONTROLLED LEAKAGE is deleted. The RCP seal water return flow limit is moved to a licensee controlled document.	No - See change number 1-05-A.	No. See Change Number 1-05-A.	Yes - Moved to USAR Section 16.	Yes - Moved to FSAR Section 16.4.
1-29 LS-3	Allows measuring QPTR when one or more excore detector channels are inoperable with moveable incore detectors.	No	Yes - Portion of definition being changed is only in CPSES CTS.	No	No
1-30 A	The definitions of Channel Operational Test (COT), [ ] and TADOT are expanded to include the details of acceptable performance methodology. Performance of these tests in a series of sequential, overlapping, or total channel steps provides the necessary assurance of appropriate operation of the entire channel.	Yes	Yes	Yes	Yes
1-31 A	Definitions of specific plant systems which are defined by the plant design are deleted.	Yes	Yes	No - Not in CTS.	No - Not in CTS.
1-32 A	The definitions of channel calibration, COT, [ ] and TADOT are reworded to be consistent with TSTF-64. The revised wording clarifies what is meant by "entire channel."	Yes	Yes	Yes	Yes
1-33 A	This change revises the CTS definition of Core Alterations to delete "or manipulation" and "conservative".	Yes	Yes	Yes	Yes

ENCLOSURE 4

NO SIGNIFICANT HAZARDS CONSIDERATIONS

NO SIGNIFICANT HAZARDS CONSIDERATIONS (NSHC)
CONTENTS

I. NO SIGNIFICANT HAZARDS CONSIDERATIONS ORGANIZATION

In accordance with the provisions of 10 CFR 50.90, this License Amendment Request proposes to revise the current Technical Specifications. The proposed revision includes converting the current Technical Specifications to the improved Standard Technical Specifications of NUREG-1431 Revision 1. The conversion to the improved Standard Technical Specifications (also referred to as the improved STS or ISTS) has generated a large number of changes. Evaluations pursuant to 10 CFR 50.92 showing that the proposed changes do not involve significant hazards considerations are provided for each Technical Specification (TS) chapter. However, due to the volume of changes, similar changes have been grouped in categories to facilitate the no significant hazards considerations (NSHCs) required by 10 CFR 50.92.

Generic NSHCs have been developed that correspond to each category of changes. In addition, since each TS chapter has been evaluated individually, chapters may contain chapter-specific generic NSHCs. NSHCs for changes that cannot be grouped into a category have also been developed. Typically, less restrictive technical changes must be evaluated individually. Each TS chapter will therefore contain "change-specific" NSHCs for less restrictive technical changes as well as generic NSHCs.

Each change to the current Technical Specifications is marked-up on the appropriate page and technical changes are assigned a change number. Obvious editorial or administrative changes are not marked-up. The change number in the right margin of the marked-up page is used in the Description of Change (enclosure 3A) which provides a detailed basis for each change and a reference to the applicable NSHC. For enclosures 3A, 3B, 4, 6A and 6B, text in brackets "[ ]" indicates the information is plant specific and is not common to all the Joint Licensing Subcommittee (JLS) plants. Empty brackets indicate that other JLS plants may have plant specific information in that location.

II. DESCRIPTION OF NSHC EVALUATIONS

GENERIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

The following are brief descriptions of the generic NSHCs contained within this TS chapter. The reference symbols are used in the Discussion of Changes to index the applicable NSHC for each change described and are incorporated into the change numbers. Additional generic subcategories may be developed and will be referenced by adding a numeric designator to the existing alpha reference symbol (i.e., LG1, LG2, A1, A2, etc).

Administrative

Reference symbol "A" (Administrative)

This category consists of changes which are editorial in nature, involve the movement of requirements within the TS without affecting their technical content, simply reformat a requirement, or clarify the TS (such as deleting a footnote no longer applicable due to a technical change to a requirement). It also includes nontechnical changes made to conform to the Writer's Guide or the improved Standard Technical Specifications in NUREG-1431. Most administrative changes have not been marked-up on the current TS, and thus are not specifically referenced to a discussion of change or NSHC. If no discussion of change or NSHC is referenced for a change it is considered administrative in nature and this Generic NSHC applies. This NSHC may also be referenced in a discussion of change for an administrative change that is not obvious and requires an explanation.

Relocation of Technical Specification Requirements

Reference symbol "R" (Relocation)

This category applies to TS requirements that do not meet the criteria in 10CFR50.36(c)(2)(ii). TS requirements affected by the application of the criteria are annotated with an "R" in the description of the change (enclosure 3A). The "R" designation and the description of the relocation direct the reviewer to this NSHC for a description and evaluation of the change.

Moving information out of Technical Specifications

Reference symbol "LG" (Less restrictive, generic)

In some cases, information will be moved out of the TS while the underlying

GENERIC NO SIGNIFICANT HAZARDS CONSIDERATIONS
(continued)

requirement remains (e.g., the requirement for equipment operability is retained in the LCO but the definition of operability is moved to the Bases). The affected information maybe moved to the Bases, the FSAR, or other licensee controlled documents. This category of change is considered to be less restrictive (no longer controlled by TS) and usually involves moving information of a descriptive nature. These changes are generally made in order to conform with NUREG-1431 format and content.

Technical change, more restrictive

Reference symbol "M" (More restrictive, generic)

This category consists of changes that add new requirements to the TS or revise existing requirements to be more stringent. These are changes are typically made to conform to applicable requirements of NUREG-1431.

SPECIFIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

Those TS changes that must be evaluated individually are typically the less restrictive technical changes. Each NSHC for less restrictive technical changes in this TS chapter will be numbered sequentially. The applicable NSHC for each less restrictive change will be referenced in the Description of Change (enclosure 3A) for this chapter. The Description of Change contains the basis for the change.

Technical change, less restrictive

Reference symbol "LS" (Less restrictive, specific)

This category consists of changes which revise existing requirements such that more restoration time is provided, fewer compensatory measures are needed, or fewer or less restrictive surveillance requirements are required. This would also include requirements which are deleted from the TS (not relocated or moved to other documents).

Technical change, recurring - less restrictive

Reference symbol "TR-1, 2, 3...." (technical recurring)

This category consists of the same kind of changes as LS above except that they are generic to several specifications.

III. GENERIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

"A"

10 CFR 50.92 EVALUATION
FOR
ADMINISTRATIVE REFORMATTING AND REWORDING

This proposed TS revision includes reformatting and rewording the remaining requirements in accordance with the NUMARC Technical Specification Writer's Guide and the improved Standard Technical Specifications in NUREG-1431. This is intended to make the TS more readily understandable to plant operators and other users. Application of the Writer's Guide will also assure consistency between specifications. During this reformatting and rewording process, no technical changes (either actual or interpretational) were made to the TS unless they were identified and justified.

This proposed TS change has been evaluated and it has been determined that it involves no significant hazards consideration. This determination has been performed in accordance with the criteria set forth in 10 CFR 50.92(c) as quoted below:

> *"The Commission may make a final determination, pursuant to the procedures in 50.91, that a proposed amendment to an operating license for a facility licensed under 50.21(b) or 50.22 or for a testing facility involves no significant hazards consideration, if operation of the facility in accordance with the proposed amendment would not:*
>
> *1. Involve a significant increase in the probability or consequences of an accident previously evaluated; or*
>
> *2. Create the possibility of a new or different kind of accident from any accident previously evaluated; or*
>
> *3. Involve a significant reduction in a margin of safety."*

The following evaluation is provided for the three categories of the significant hazards consideration standards:

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

   The proposed change involves reformatting and rewording of the current Technical Specifications. The reformatting and rewording process involves no technical changes to the current Technical Specifications. As such, this

III. GENERIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

"A"
(continued)

change is administrative in nature and does not impact initiators of analyzed events or assumed mitigation of accidents or transient events. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in controlling parameters . The proposed change will not impose any different requirements. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The proposed change will not reduce a margin of safety because it has no impact on the design basis or safety analysis. This change is administrative in nature. As such, no question of safety is involved.

NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Based on the above evaluation, it is concluded that the activities associated with NSHC "A" resulting from the conversion to the improved TS format satisfy the no significant hazards consideration standards of 10 CFR 50.92(c); and accordingly, a no significant hazards consideration finding is justified.

III. GENERIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

"R"

10 CFR 50.92 EVALUATION FOR RELOCATING TECHNICAL SPECIFICATION REQUIREMENTS TO OTHER LICENSEE CONTROLLED DOCUMENTS

This proposed TS revision includes relocating requirements, which do not meet the TS criteria, to documents with established control programs. Relocation of these requirements allows the TS to be reserved only for those conditions or limitations upon reactor operation which are necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety thereby focusing the scope of the TS.

Therefore, requirements which do not meet the TS criteria in 10CFR50.36(c)(2)(ii) have been relocated to other licensee controlled documents. This regulation addresses the scope and purpose of TS. In doing so, it sets forth a specific set of objective criteria for determining which regulatory requirements and operating restrictions should be included in the TS. These criteria are as follows:

Criterion 1: Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary;

Criterion 2: A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident or Transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier;

Criterion 3: A structure, system or component that is part of the primary success path and which functions or actuates to mitigate a Design Basis Accident or Transient that either assumes the failure of or presents a challenge to the integrity of a fission barrier; and

Criterion 4: A structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety.

This proposed change has been evaluated and it is concluded that the change does not meet the criteria listed above. The Conversion Comparison Table (enclosure 3B) specifies the proposed location of these relocated requirements.

III. GENERIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

"R"
(continued)

TS requirements that do not meet the NRC's criteria are being relocated to other licensee controlled documents. Some of these requirements will be relocated to documents that are subject to the provisions of 10 CFR 50.59. This will ensure that changes to these relocated requirements will be limited to those that do not involve an unreviewed safety question. Other requirements will be relocated to other licensee documents which have similar regulatory controls (e.g., the Quality Assurance Plan, as described in the FSAR, which is controlled by 10CFR50.54a). The remainder of the requirements that do not meet the NRC criteria will be relocated to programs that are controlled via the Administrative Controls section of the improved TS. This will ensure an appropriate level of control over changes to these requirements. The TS change to relocate requirements has been reviewed by a multi-disciplinary group of responsible, technical supervisory personnel, including onsite operations personnel.

Compliance with the relocated requirements will not be affected by this proposed change to the current Technical Specifications. The required periodic surveillances will continue to be performed to ensure that limits on parameters are maintained. Therefore, relocation of these requirements will have no impact on system operability or the maintenance of controlled parameters within limits.

This proposed TS change has been evaluated and it has been determined that it involves no significant hazards consideration. This determination has been performed in accordance with the criteria set forth in 10 CFR 50.92(c) as quoted below:

> *"The Commission may make a final determination, pursuant to the procedures in 50.91, that a proposed amendment to an operating license for a facility licensed under 50.21(b) or 50.22 or for a testing facility involves no significant hazards consideration, if operation of the facility in accordance with the proposed amendment would not:*
>
> *1. Involve a significant increase in the probability or consequences of an accident previously evaluated; or*
>
> *2. Create the possibility of a new or different kind of accident from any accident previously evaluated; or*
>
> *3. Involve a significant reduction in a margin of safety."*

The following evaluation is provided for the three categories of the significant hazards consideration standards:

III. GENERIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

"R"
(continued)

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change relocates requirements and surveillances for structures, systems, components or variables which did not meet the criteria for inclusion in the improved TS. The affected structures, systems, components or variables are not assumed to be initiators of analyzed events and are not assumed to mitigate accident or transient events. These relocated operability requirements and surveillances will continue to be maintained pursuant to 10 CFR 50.59, other regulatory requirements (as applicable for the document to which the requirement is relocated), and/or the Administrative Controls section of the improved TS. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in controlling parameters . The proposed change will not impose any different requirements and adequate control of information will be maintained. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The proposed change will not reduce a margin of safety because it has no impact on the design basis or safety analysis. In addition, the relocated requirements and surveillances for the affected structure, system, component or variables are the same as the current Technical Specifications. Since any future changes to these requirements and the associated surveillance procedures will be evaluated per the requirements of 10 CFR 50.59, other regulatory requirements (as applicable for the document to which the requirement is relocated), and/or the Administrative Controls section of the improved TS, proper controls are in place to maintain an appropriate margin of safety. Therefore, this change does not involve a significant reduction in a margin of safety.

NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Based on the above evaluation, it is concluded that the activities associated with NSHC "R" resulting from the conversion to the improved TS format satisfy the no significant hazards consideration standards of 10 CFR 50.92(c); and accordingly, a no significant hazards consideration finding is justified.

III. GENERIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

"LG"

10 CFR 50.92 EVALUATION FOR MOVING INFORMATION FROM TECHNICAL SPECIFICATIONS TO TECHNICAL SPECIFICATION BASES, FSAR OR OTHER LICENSEE CONTROLLED DOCUMENTS

Some information that is descriptive in nature regarding the equipment, system(s), actions or surveillances identified by the specification has been removed from the proposed specification and included in the proposed Bases, FSAR, other licensee controlled document. The NRC has previously approved moving this type of detailed information or specific requirement to a licensee controlled document, maintained in accordance with applicable regulatory requirements, since its inclusion in the improved TS is not necessary to adequately protect the health and safety of the public. Therefore, the descriptive information that has been moved continues to be maintained in an appropriately controlled manner due to the controls which presently exist on the documents where the information is being moved.

This proposed TS change has been evaluated and it has been determined that it involves no significant hazards consideration. This determination has been performed in accordance with the criteria set forth in 10 CFR 50.92(c) as quoted below:

> *"The Commission may make a final determination, pursuant to the procedures in 50.91, that a proposed amendment to an operating license for a facility licensed under 50.2 1 (b) or 50.22 or for a testing facility involves no significant hazards consideration, if operation of the facility in accordance with the proposed amendment would not:*
>
> *1. Involve a significant increase in the probability or consequences of an accident previously evaluated; or*
>
> *2. Create the possibility of a new or different kind of accident from any accident previously evaluated; or*
>
> *3. Involve a significant reduction in a margin of safety."*

The following evaluation is provided for the three categories of the significant hazards consideration standards:

III. GENERIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

"LG"
(continued)

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change moves requirements from the TS to the Bases, FSAR, other licensee controlled documents. The Bases, FSAR, or other licensee controlled documents containing the moved requirements will be maintained using the provisions of 10 CFR 50.59 or other appropriate controls.

Since any changes to the Bases, FSAR, or other licensee controlled documents will be evaluated per the requirements of 10 CFR 50.59 or other appropriate regulatory controls, proper controls are in place to adequately limit the probability or consequences of an accident previously evaluated. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in controlling parameters . The proposed change will not impose any different requirements and adequate control of the information will be maintained. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The proposed change will not reduce a margin of safety because it has no impact on the design basis or safety analysis. In addition, the requirements to be transposed from the TS to the Bases, FSAR, or other licensee controlled documents are the same as the current TS. Since any future changes to these requirements in the Bases, FSAR, or other licensee controlled documents will be evaluated per the requirements of 10 CFR 50.59 or other appropriate regulatory controls, proper controls are in place to maintain an appropriate margin of safety Therefore, this change does not involve a significant reduction in a margin of safety.

NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Based on the above evaluation, it is concluded that the activities associated with NSHC "LG" resulting from the conversion to the improved TS format satisfy the no significant hazards consideration standards of 10 CFR 50.92(c); and accordingly, a no significant hazards consideration finding is justified.

III. GENERIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

"M"

10 CFR 50.92 EVALUATION FOR TECHNICAL CHANGES THAT IMPOSE MORE RESTRICTIVE REQUIREMENTS WITHIN THE TECHNICAL SPECIFICATIONS

This proposed revision involves modifying the current Technical Specifications to impose more stringent requirements and achieves consistency with the improved Standard Technical Specifications (NUREG-1431).

The current Technical Specifications have been modified in some areas to impose more stringent guidelines than previously required. These more restrictive modifications are being imposed to be consistent with the improved Standard Technical Specifications (NUREG-1431). Such changes have been made after ensuring the previously evaluated safety analysis was not affected. Also, other more restrictive technical changes have been made to achieve consistency, correct discrepancies, and remove ambiguities from the specification.

This proposed TS change has been evaluated and it has been determined that it involves no significant hazards consideration. This determination has been performed in accordance with the criteria set forth in 10 CFR 50.92(c) as quoted below:

> *"The Commission may make a final determination, pursuant to the procedures in 50.91, that a proposed amendment to an operating license for a facility licensed under 50.21 (b) or 50.22 or for a testing facility involves no significant hazards consideration, if operation of the facility in accordance with the proposed amendment would not:*
>
> *1. Involve a significant increase in the probability or consequences of an accident previously evaluated; or*
>
> *2. Create the possibility of a new or different kind of accident from any accident previously evaluated; or*
>
> *3. Involve a significant reduction in a margin of safety."*

The following evaluation is provided for the three categories of the significant hazards consideration standards:

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

III. GENERIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

"M"
(continued)

The proposed change imposes more stringent requirements for the improved TS. The change has been reviewed to ensure no previously evaluated accident has been adversely affected. The more stringent requirements are imposed to ensure process variables, structures, systems and components are maintained consistent with the safety analysis and licensing basis. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or changes in controlling parameters . The proposed change does impose different requirements. However, these changes are consistent with assumptions made in the safety analysis and licensing basis. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The imposition of more stringent requirements either has no impact on or increases the margin of plant safety by:

a) Increasing the analytical or safety limit,

b) Increasing the scope of the specification to include additional plant equipment or to add additional requirements,

c) Increasing the applicability of the specification,

d) Providing additional actions,

e) Decreasing restoration times,

f) Imposing new surveillances, or

g) Decreasing surveillance intervals.

The change is consistent with the safety analysis and licensing basis. Therefore, this change does not involve a reduction in a margin of safety.

III. GENERIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

"M"
(continued)

NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Based on the above evaluation, it is concluded that the activities associated with NSHC "M" resulting from the conversion to the improved TS format satisfy the no significant hazards consideration standards of 10 CFR 50.92(c); and accordingly, a no significant hazards consideration finding is justified.

IV. SPECIFIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

NSHC LS-1
10 CFR 50.92 EVALUATION
FOR
TECHNICAL CHANGES THAT IMPOSE LESS RESTRICTIVE REQUIREMENTS WITHIN THE TECHNICAL SPECIFICATIONS

The current TS definition of Core Alterations would be modified to conform to NUREG-1431 by qualifying a core alteration as a movement of fuel, sources, or other reactivity control components. Other reactivity control components include items such as shutdown and control rods and neutron absorbers. This would allow movement of other components within the reactor vessel (with fuel in the vessel) that would have no effect on core reactivity. The proposed change would continue to maintain the required level of safety while eliminating unnecessary restrictions on the movement of items such as cameras, etc.

This proposed TS change has been evaluated and it has been determined that it involves no significant hazards consideration. This determination has been performed in accordance with the criteria set forth in 10 CFR 50.92(c) as quoted below:

> *"The Commission may make a final determination, pursuant to the procedures in 50.91, that a proposed amendment to an operating license for a facility licensed under 50.21 (b) or 50.22 or for a testing facility involves no significant hazards consideration, if operation of the facility in accordance with the proposed amendment would not:*
>
> *1. Involve a significant increase in the probability or consequences of an accident previously evaluated; or*
>
> *2. Create the possibility of a new or different kind of accident from any accident previously evaluated; or*
>
> *3. Involve a significant reduction in a margin of safety."*

The following evaluation is provided for the three categories of the significant hazards consideration standards:

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed change would continue to allow the application of appropriate limits to the movement of components that could affect core reactivity. The proposed change would not affect the initiators of any analyzed events and will not alter assumptions relative to mitigation of accident or transient events. The probability of any core reactivity accident is not increased since the proposed change ensures control of those components having the potential for impact on the accident analyses. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

IV. SPECIFIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

NSHC LS-1
(continued)

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not necessitate a physical alteration of the plant (no new or different type of equipment will be installed) or changes in parameters governing normal plant operation. The proposed change does impose different requirements. However, these changes are consistent with assumptions made in the safety analysis and licensing basis. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

Since the proposed change will continue to allow the application of appropriate limits to the movement of components within the reactor vessel (with fuel in the vessel) that could affect core reactivity, the proposed change will not result in a significant reduction in a margin of safety.

NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Based on the above evaluation, it is concluded that the activities associated with NSHC "LS-1" resulting from the conversion to the improved TS format satisfy the no significant hazards consideration standards of 10 CFR 50.92(c); and accordingly, a no significant hazards consideration finding is justified.

IV. SPECIFIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

NSHC LS-2
10 CFR 50.92 EVALUATION
FOR
TECHNICAL CHANGES THAT IMPOSE LESS RESTRICTIVE REQUIREMENTS WITHIN THE TECHNICAL SPECIFICATIONS

Current TS Table 1.2 (improved TS Table 1.1-1) is revised such that the required reactor vessel head closure bolt requirements for MODES 4, 5 and 6 are clarified. Currently a footnote applicable only to MODE 6 defines that Mode, in part, by reference to "vessel head closure bolts less than fully tensioned." That footnote does not specify the transition point between MODES 5 and 6 with regard to the number of vessel head closure bolts that must be fully tensioned, leaving the issue open to interpretation. The proposed change provides the necessary clarification by adding a footnote to MODES 4 and 5, consistent with the approach used in NUREG-1431 Rev. 1, to define those Modes as having the required number of reactor vessel head closure bolts fully tensioned. The transition point between MODES 5 and 6 would also be clarified as occurring when the required reactor vessel head closure bolts are less than fully tensioned. The required number of closure bolts, which may be less than the total number, is established by analysis that demonstrates adequate O-ring compression to prevent leakage and ensures that ASME Section III stress limits for affected components are not exceeded. This change is consistent with traveler TSTF-88.

This proposed TS change has been evaluated and it has been determined that it involves no significant hazards consideration. This determination has been performed in accordance with the criteria set forth in 10 CFR 50.92(c) as quoted below:

> *"The Commission may make a final determination, pursuant to the procedures in 50.91, that a proposed amendment to an operating license for a facility licensed under 50.21 (b) or 50.22 or for a testing facility involves no significant hazards consideration, if operation of the facility in accordance with the proposed amendment would not:*
>
> *1. Involve a significant increase in the probability or consequences of an accident previously evaluated; or*
>
> *2. Create the possibility of a new or different kind of accident from any accident previously evaluated; or*
>
> *3. Involve a significant reduction in a margin of safety."*

The following evaluation is provided for the three categories of the significant hazards consideration standards:

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

IV. SPECIFIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

NSHC LS-2
(continued)

Overall protection system performance will remain within the bounds of the accident analyses, since no hardware changes are proposed. The proposed change will not affect the probability of any event initiators nor will the proposed change affect the ability of any safety related equipment to perform its intended function. There will be no degradation in the performance of nor an increase in the number of challenges imposed on safety-related equipment assumed to function during an accident situation. Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

There are no hardware changes nor are there any changes in the method by which any safety-related plant system performs its safety function. The method of plant operation is unaffected. Leakage would be precluded by the analysis; however, if leakage were to result from having less than the total number of closure bolts fully tensioned it would be detected by an increase in the temperature on the leak-off line from the annular space between the inner and outer vessel head O-rings. That temperature increase would be detected by installed temperature indicators and alarmed in the control room. Any leakage would be detected as an increase in RCS identified LEAKAGE. No new accident scenarios, transient precursors, failure mechanisms, or limiting single failures are introduced as a result of this change. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. Does this change involve a significant reduction in a margin of safety?

The proposed change does not affect the acceptance criteria for any analyzed event. There will be no effect on the manner in which safety limits or limiting safety system settings are determined nor will there be any effect on those plant systems necessary to assure the accomplishment of protection functions. There will be no impact on any margin of safety.

NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Based on the above evaluation, it is concluded that the activities associated with NSHC "LS-2" resulting from the conversion to the improved TS format satisfy the no significant hazards consideration standards of 10 CFR 50.92(c); and accordingly, a no significant hazards consideration finding is justified.

IV. SPECIFIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

NSHC LS-3
10 CFR 50.92 EVALUATION
FOR
TECHNICAL CHANGES THAT IMPOSE LESS RESTRICTIVE
REQUIREMENTS WITHIN THE TECHNICAL SPECIFICATIONS

The Quadrant Power Tilt Ratio (QPTR) is defined as the ratio of the maximum of the four excore detector calibrated output to the average of the four excore detector calibrated outputs for the upper half of the detectors and the lower half of the detectors. If, while above 75% Rated Thermal Power (RTP), one of the excore detector inputs to the QPTR calculation becomes inoperable, the current Technical Specifications allow the use of the movable incore detector system to determine an equivalent QPTR. The current Technical Specifications do not contain any provisions for determining QPTR with more than one inoperable input; thus, LCO 3.0.3 would be entered and the plant would be shut down.

The proposed change would allow for the use of the movable incore detector system to determine an equivalent QPTR with one or more inoperable excore detector inputs to the QPTR calculation. If the movable incore detector system is used to determine an equivalent QPTR, the QPTR calculation is not based on information gained from any operable excore indications and, therefore, is independent of the number of operable excore detectors.

This proposed TS change has been evaluated and it has been determined that it involves no significant hazards consideration. This determination has been performed in accordance with the criteria set forth in 10 CFR 50.92(c) as quoted below:

> *"The Commission may make a final determination, pursuant to the procedures in 50.91, that a proposed amendment to an operating license for a facility licensed under 50.21 (b) or 50.22 or for a testing facility involves no significant hazards consideration, if operation of the facility in accordance with the proposed amendment would not:*
>
> *1. Involve a significant increase in the probability or consequences of an accident previously evaluated; or*
>
> *2. Create the possibility of a new or different kind of accident from any accident previously evaluated; or*
>
> *3. Involve a significant reduction in a margin of safety."*

The following evaluation is provided for the three categories of the significant hazards considerations standards:

IV. SPECIFIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

NSHC LS-3
(continued)

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

   The proposed change does not involve any new operating activities or hardware changes; thus, the proposed change has no effect on the probability of an accident.

   This change makes available an option to ensure that continued plant operation (quadrant power tilt) is within the assumptions of the accident analyses without imposing an unnecessary transient on the plant. The limits on the quadrant power tilt ratio Limiting Conditions for Operation (LCO) are unchanged. Because the accident analyses are initiated from within the conditions defined by the Technical Specification LCOs, and these LCOs are unchanged, the accident analyses are unaffected. Therefore, there will be no effect on any of the accident analysis assumptions and the consequences of the accident analyses are unaffected by this change.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

   The assumptions of the accident analyses are unaffected by the proposed change. No new permutations or event initiators are introduced by the proposed alternate method of determining an equivalent QPTR with more than one inoperable excore detector inputs. Therefore, there is no possibility for a new or different kind of accident.

3. Does this change involve a significant reduction in a margin of safety?

   The accident analyses are assumed to be initiated from conditions which are consistent with the Technical Specifications Limiting Conditions for Operation. The proposed change does not affect any LCO. Therefore, there is no change in the accident analyses and all relevant event acceptance criteria remain valid. Further, the proposed change has no affect on any actual or regulated failure point which is protected by an event acceptance criterion. Because there is no change in any failure point nor in any event acceptance criteria, there is no reduction in a margin of safety.

Based upon the preceding information, it has been determined that the proposed change to the Technical Specification does not involve a significant increase in the probability or consequences of an accident previously evaluated, create the possibility of a new or different kind of accident from any accident previously evaluated, or involve a significant reduction in a margin of safety. Therefore, it is concluded that the proposed change meets the requirements of 10 CFR 50.92 (c) and does not involve a significant hazards consideration.

IV. SPECIFIC NO SIGNIFICANT HAZARDS CONSIDERATIONS

NSHC LS-3
(continued)

NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Based on the above evaluation, it is concluded that the activities associated with NSHC "LS-3" resulting from the conversion to the improved TS format satisfy the no significant hazards consideration standards of 10 CFR 50.92(c); and accordingly, a no significant hazards consideration finding is justified.

ENCLOSURE 5A

MARK-UP OF NUREG-1431 SPECIFICATIONS

MARK-UP OF NUREG-1431 SPECIFICATIONS CONTENTS

INDUSTRY TRAVELERS APPLICABLE TO SECTION 1.0

TRAVELER #	STATUS	DIFFERENCE #	COMMENTS
TSTF-19, Rev 1	Not incorporated	NA	Not NRC approved as of traveler cut-off date.
TSTF-[illegible]9, Rev 1	Incorporated	1.1-9	
TSTF-64	Incorporated	1.1-1	
TSTF-88	Incorporated	1.1-8	
TSTF-111, Rev 1	Incorporated	1.1-5	
WOG-67, Rev 1	Incorporated	1.1-6	
WOG-74, Rev 1	Incorporated	1.1-3	
WOG-90 [illegible]1	Incorporated	1.1-11	

NUREG-1431 SPECIFICATIONS THAT ARE NOT APPLICABLE

None

1.0 USE AND APPLICATION

1.1 Definitions

----------NOTE----------
The defined terms of this section appear in capitalized type and are applicable throughout these Technical Specifications and Bases.

Term	Definition
ACTIONS	ACTIONS shall be that part of a Specification that prescribes Required Actions to be taken under designated Conditions within specified Completion Times.
ACTUATION LOGIC TEST	An ACTUATION LOGIC TEST shall be the application of various simulated or actual input combinations in conjunction with each possible interlock logic state and the verification of the required logic output. The ACTUATION LOGIC TEST, as a minimum, shall include a continuity check of output devices.
AXIAL FLUX DIFFERENCE (AFD)	AFD shall be the difference in normalized flux signals between the top and bottom halves of a ~~two section~~ an excore neutron detector. B-PS
CHANNEL CALIBRATION	A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel so that it responds within the required range and accuracy to known input. The CHANNEL CALIBRATION shall encompass those components ~~the entire channel, including the required~~ such as sensors, alarms, ~~interlock,~~ displays, and trip functions, required to perform the specified safety functions(s). 1.1-1 Calibration of instrument channels with resistance temperature detector (RTD) or thermocouple sensors may consist of an inplace qualitative assessment of sensor behavior and normal calibration of the remaining adjustable devices in the channel. Whenever a sensing element is replaced, the next required CHANNEL CALIBRATION shall include an inplace cross calibration that compares the other sensing elements with the recently installed sensing element. The CHANNEL CALIBRATION may be performed by means of any series of sequential, overlapping calibrations or total channel steps so that the entire channel is calibrated.

(continued)

1.1 Definitions (continued)

CHANNEL CHECK	A CHANNEL CHECK shall be the qualitative assessment, by observation, of channel behavior during operation. This determination shall include, where possible, comparison of the channel indication and status to other indications or status derived from independent instrument channels measuring the same parameter.
CHANNEL OPERATIONAL TEST (COT)	A COT shall be the injection of a simulated or actual signal into the channel as close to the sensor as practicable to verify ~~the~~ OPERABILITY ~~of required~~ including all components in the channel, such as alarms, interlocks, displays, and trip functions required to perform the specified safety function(s). The COT may be performed by means of any series of sequential, overlapping or total channel steps so that the entire channel is tested. The COT shall include adjustments, as necessary, of the required alarm, interlock, and trip setpoints so that the setpoints are within the required range and accuracy.
CORE ALTERATION	CORE ALTERATION shall be the movement of any fuel, sources, or reactivity control components, within the reactor vessel with the vessel head removed and fuel in the vessel. Suspension of CORE ALTERATIONS shall not preclude completion of movement of a component to a safe position.
CORE OPERATING LIMITS REPORT (COLR)	The COLR is the unit specific document that provides cycle specific parameter limits for the current reload cycle. These cycle specific parameter limits shall be determined for each reload cycle in accordance with Specification 5.6.5. Plant operation within these limits is addressed in individual Specifications.
DOSE EQUIVALENT I-131	DOSE EQUIVALENT I-131 shall be that concentration of I-131 (microcuries/gram) that alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in Table III of TID-14844, AEC, 1962, "Calculation of Distance Factors for Power and Test Reactor Sites," or those listed in Table E-7 of Regulatory Guide 1.109, Rev. 1, NRC, 1977 ~~, or ICRP-30, Supplement to Part 1, page 192-212, Table titled, "Committed Dose Equivalent in Target Organs or Tissues per Intake of Unit Activity"~~.

1.1-1

1.1-9

B

(continued)

1.1 Definitions (continued)

$\bar{E}$ – AVERAGE DISINTEGRATION ENERGY	$\bar{E}$ shall be the average (weighted in proportion to the concentration of each radionuclide in the reactor coolant at the time of sampling) of the sum of the average beta and gamma energies per disintegration (in MeV) for isotopes, other than iodines, with half lives > ~~15~~ 10 minutes, making up at least 95% of the total noniodine activity in the coolant. B-PS
ENGINEERED SAFETY FEATURE (ESF) RESPONSE TIME	The ESF RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ESF actuation setpoint at the channel sensor until the ESF equipment is capable of performing its safety function (i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc.). Times shall include diesel generator starting and sequence loading delays, where applicable. The response time may be ~~measured~~ verified by means of any series of sequential, overlapping, or total steps so that the entire response time is ~~measured~~ verified. 1.1-5
L_a	The maximum allowable primary containment leakage rate, L_a, shall be 0.10 % of primary containment air weight per day at the calculated peak containment pressure (P_a).
LEAKAGE	LEAKAGE shall be: a. Identified LEAKAGE 1. LEAKAGE, such as that from pump seals or valve packing (except reactor coolant pump (RCP) seal water injection or leakoff), that is captured and conducted to collection systems or a sump or collecting tank; 2. LEAKAGE into the containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of leakage detection systems or not to be pressure boundary LEAKAGE; or 3. Reactor Coolant System (RCS) LEAKAGE through a steam generator (SG) to the Secondary System;

(continued)

1.1 Definitions (continued)

LEAKAGE (continued)	b. Unidentified LEAKAGE All LEAKAGE (except RCP seal water injection or leakoff) that is not identified LEAKAGE;
	c. Pressure Boundary LEAKAGE LEAKAGE (except SG LEAKAGE) through a nonisolable fault in an RCS component body, pipe wall, or vessel wall.
MASTER RELAY TEST	A MASTER RELAY TEST shall consist of energizing each master relay and verifying the OPERABILITY of each relay. The MASTER RELAY TEST shall include a continuity check of each associated slave relay.
MODE	A MODE shall correspond to any one inclusive combination of core reactivity condition, power level, average reactor coolant temperature, and reactor vessel head closure bolt tensioning specified in Table 1.1-1 with fuel in the reactor vessel.
OPERABLE – OPERABILITY	A system, subsystem, train, component, or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified safety function(s) and when all necessary attendant instrumentation, controls, normal or emergency electrical power, cooling and seal water, lubrication, and other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its specified safety function(s) are also capable of performing their related support function(s).
PHYSICS TESTS	PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation. These tests are: a. Described in Chapter 14, ~~Initial Test Program~~ of the FSAR; B-PS b. Authorized under the provisions of 10 CFR 50.59; or c. Otherwise approved by the Nuclear Regulatory Commission.

(continued)

1.1 Definitions (continued)

PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)	The PTLR is the unit specific document that provides the reactor vessel pressure and temperature limits, including heatup and cooldown rates, the power operated relief valve (PORV) lift settings and arming temperature associated with the Low Temperature Overpressurization Protection (LTOP) System, for the current reactor vessel fluence period. These pressure and temperature limits shall be determined for each fluence period in accordance with Specification 5.6.6. Plant operation within these ~~operating~~ limits is addressed in individual specifications. ~~LCO 3.4.3, "RCS Pressure and Temperature (P/T) Limits," and LCO 3.4.12, "Low Temperature Overpressure Protection (LTOP) System."~~	1.1-6 1.1-6
QUADRANT POWER TILT RATIO (QPTR)	QPTR shall be the ratio of the maximum upper excore detector calibrated output to the average of the upper excore detector calibrated outputs, or the ratio of the maximum lower excore detector calibrated output to the average of the lower excore detector calibrated outputs, whichever is greater.	
RATED THERMAL POWER (RTP)	RTP shall be a total reactor core heat transfer rate to the reactor coolant of ~~2893~~ 3411 MWt.	B-PS
REACTOR TRIP SYSTEM (RTS) RESPONSE TIME	The RTS RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its RTS trip setpoint at the channel sensor until loss of stationary gripper coil voltage. The response time may be ~~measured~~ verified by means of any series of sequential, overlapping, or total steps so that the entire response time is ~~measured~~ verified.	1.1-5
SHUTDOWN MARGIN (SDM)	SDM shall be the instantaneous amount of reactivity by which the reactor is subcritical or would be subcritical from its present condition assuming: a. All rod cluster control assemblies (RCCAs) are fully inserted except for the single RCCA of highest reactivity worth, which is assumed to be fully withdrawn. With any RCCA not capable of being fully inserted, the reactivity worth of the RCCA must be accounted for in the determination of SDM; and b. In MODES 1 and 2, the fuel and moderator temperatures are changed to the ~~nominal zero power design level~~ hot zero power temperatures.	B-PS

1.1 Definitions (continued)

SLAVE RELAY TEST	A SLAVE RELAY TEST shall consist of energizing each slave relay and verifying the OPERABILITY of each slave relay. The SLAVE RELAY TEST shall include, as a minimum, a continuity check of associated testable actuation devices.
STAGGERED TEST BASIS	A STAGGERED TEST BASIS shall consist of the testing of one of the systems, subsystems, channels, or other designated components during the interval specified by the Surveillance Frequency, so that all systems, subsystems, channels, or other designated components are tested during *n* Surveillance Frequency intervals, where *n* is the total number of systems, subsystems, channels, or other designated components in the associated function.
THERMAL POWER	THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.
TRIP ACTUATING DEVICE OPERATIONAL TEST (TADOT)	A TADOT shall consist of operating the trip actuating device and verifying ~~the~~ OPERABILITY ~~of required~~ including all components in the channel, such as alarms, interlocks, displays, and trip functions required to perform the specified safety function(s). The TADOT may be performed by means of any series of sequential, overlapping or total channel steps so that the entire channel is tested. The TADOT shall include adjustment, as necessary, of the trip actuating device so that it actuates at the required setpoint within the required accuracy.

1.1-1

1.1-9

Table 1.1-1 (page 1 of 1)
MODES

MODE	TITLE	REACTIVITY CONDITION (k_{eff})	% RATED THERMAL POWER[a]	AVERAGE REACTOR COOLANT TEMPERATURE (°F)
1	Power Operation	≥ 0.99	> 5	NA
2	Startup	≥ 0.99	≤ 5	NA
3	Hot Standby	< 0.99	NA	≥ 350
4	Hot Shutdown[b]	< 0.99	NA	350 > T_{avg} > 200
5	Cold Shutdown[b]	< 0.99	NA	≤ 200
6	Refueling[c]	NA	NA	NA

B
B
B

(a) Excluding decay heat.

(b) ~~ALL~~Required reactor vessel head closure bolts fully tensioned.

1.1-8

(c) ~~One or more~~Required reactor vessel head closure bolts less than fully tensioned.

1.0 USE AND APPLICATION

1.2 Logical Connectors

PURPOSE

The purpose of this section is to explain the meaning of logical connectors.

Logical connectors are used in Technical Specifications (TS) to discriminate between, and yet connect, discrete Conditions, Required Actions, Completion Times, Surveillances, and Frequencies. The only logical connectors that appear in TS are AND and OR. The physical arrangement of these connectors constitutes logical conventions with specific meanings.

BACKGROUND

Several levels of logic may be used to state Required Actions. These levels are identified by the placement (or nesting) of the logical connectors and by the number assigned to each Required Action. The first level of logic is identified by the first digit of the number assigned to a Required Action and the placement of the logical connector in the first level of nesting (i.e., left justified with the number of the Required Action). The successive levels of logic are identified by additional digits of the Required Action number and by successive indentations of the logical connectors.

When logical connectors are used to state a Condition, Completion Time, Surveillance, or Frequency, only the first level of logic is used, and the logical connector is left justified with the statement of the Condition, Completion Time, Surveillance, or Frequency.

EXAMPLES

The following examples illustrate the use of logical connectors.

EXAMPLES

EXAMPLE 1.2-1
(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. LCO not met.	A.1 Verify . . . AND A.2 Restore . . .	

In this example the logical connector AND is used to indicate that when in Condition A, both Required Actions A.1 and A.2 must be completed.

(continued)

1.2 Logical Connectors

EXAMPLES (continued)

EXAMPLE 1.2-2

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. LCO not met.	A.1 Trip . . . OR A.2.1 Verify . . . AND A.2.2.1 Reduce . . . OR A.2.2.2 Perform . . . OR A.3 Align . . .	

This example represents a more complicated use of logical connectors. Required Actions A.1, A.2, and A.3 are alternative choices, only one of which must be performed as indicated by the use of the logical connector OR and the left justified placement. Any one of these three Actions may be chosen. If A.2 is chosen, then both A.2.1 and A.2.2 must be performed as indicated by the logical connector AND. Required Action A.2.2 is met by performing A.2.2.1 or A.2.2.2. The indented position of the logical connector OR indicates that A.2.2.1 and A.2.2.2 are alternative choices, only one of which must be performed.

1.0 USE AND APPLICATION

1.3 Completion Times

PURPOSE

The purpose of this section is to establish the Completion Time convention and to provide guidance for its use.

BACKGROUND

Limiting Conditions for Operation (LCOs) specify minimum requirements for ensuring safe operation of the unit. The ACTIONS associated with an LCO state Conditions that typically describe the ways in which the requirements of the LCO can fail to be met. Specified with each stated Condition are Required Action(s) and Completion Time(s).

DESCRIPTION

The Completion Time is the amount of time allowed for completing a Required Action. It is referenced to the time of discovery of a situation (e.g., inoperable equipment or variable not within limits) that requires entering an ACTIONS Condition unless otherwise specified, providing the unit is in a MODE or specified condition stated in the Applicability of the LCO. Required Actions must be completed prior to the expiration of the specified Completion Time. An ACTIONS Condition remains in effect and the Required Actions apply until the Condition no longer exists or the unit is not within the LCO Applicability.

If situations are discovered that require entry into more than one Condition at a time within a single LCO (multiple Conditions), the Required Actions for each Condition must be performed within the associated Completion Time. When in multiple Conditions, separate Completion Times are tracked for each Condition starting from the time of discovery of the situation that required entry into the Condition.

Once a Condition has been entered, subsequent trains, subsystems, components, or variables expressed in the Condition, discovered to be inoperable or not within limits, will not result in separate entry into the Condition, unless specifically stated. The Required Actions of the Condition continue to apply to each additional failure, with Completion Times based on initial entry into the Condition.

1.3 Completion Times

DESCRIPTION (continued)

However, when a subsequent train, subsystem, component, or variable expressed in the Condition is discovered to be inoperable or not within limits, the Completion Time(s) may be extended. To apply this Completion Time extension, two criteria must first be met. The subsequent inoperability:

a. Must exist concurrent with the first inoperability; and

b. Must remain inoperable or not within limits after the first inoperability is resolved.

The total Completion Time allowed for completing a Required Action to address the subsequent inoperability shall be limited to the more restrictive of either:

a. The stated Completion Time, as measured from the initial entry into the Condition, plus an additional 24 hours; or

b. The stated Completion Time as measured from discovery of the subsequent inoperability.

The above Completion Time extensions do not apply to those Specifications that have exceptions that allow completely separate re-entry into the Condition (for each train, subsystem, component, or variable expressed in the Condition) and separate tracking of Completion Times based on this re-entry. These exceptions are stated in individual Specifications.

The above Completion Time extension does not apply to a Completion Time with a modified "time zero." This modified "time zero" may be expressed as a repetitive time (i.e., "once per 8 hours," where the Completion Time is referenced from a previous completion of the Required Action versus the time of Condition entry) or as a time modified by the phrase "from discovery . . ." Example 1.3-3 illustrates one use of this type of Completion Time. The 10 day Completion Time specified for Conditions A and B in Example 1.3-3 may not be extended.

(continued)

1.3 Completion Times (continued)

EXAMPLES

The following examples illustrate the use of Completion Times with different types of Conditions and changing Conditions.

EXAMPLE 1.3-1

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 5.	6 hours 36 hours

Condition B has two Required Actions. Each Required Action has its own separate Completion Time. Each Completion Time is referenced to the time that Condition B is entered.

The Required Actions of Condition B are to be in MODE 3 within 6 hours AND in MODE 5 within 36 hours. A total of 6 hours is allowed for reaching MODE 3 and a total of 36 hours (not 42 hours) is allowed for reaching MODE 5 from the time that Condition B was entered. If MODE 3 is reached within 3 hours, the time allowed for reaching MODE 5 is the next 33 hours because the total time allowed for reaching MODE 5 is 36 hours.

If Condition B is entered while in MODE 3, the time allowed for reaching MODE 5 is the next 36 hours.

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-2

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One pump inoperable.	A.1 Restore pump to OPERABLE status.	7 days
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 5.	6 hours 36 hours

When a pump is declared inoperable, Condition A is entered. If the pump is not restored to OPERABLE status within 7 days, Condition B is also entered and the Completion Time clocks for Required Actions B.1 and B.2 start. If the inoperable pump is restored to OPERABLE status after Condition B is entered, Condition A and B are exited, and therefore, the Required Actions of Condition B may be terminated.

When a second pump is declared inoperable while the first pump is still inoperable, Condition A is not re-entered for the second pump. LCO 3.0.3 is entered, since the ACTIONS do not include a Condition for more than one inoperable pump. The Completion Time clock for Condition A does not stop after LCO 3.0.3 is entered, but continues to be tracked from the time Condition A was initially entered.

While in LCO 3.0.3, if one of the inoperable pumps is restored to OPERABLE status and the Completion Time for Condition A has not expired, LCO 3.0.3 may be exited and operation continued in accordance with Condition A.

While in LCO 3.0.3, if one of the inoperable pumps is restored to OPERABLE status and the Completion Time for

(continued)

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-2 (continued)

Condition A has expired, LCO 3.0.3 may be exited and operation continued in accordance with Condition B. The Completion Time for Condition B is tracked from the time the Condition A Completion Time expired.

On restoring one of the pumps to OPERABLE status, the Condition A Completion Time is not reset, but continues from the time the first pump was declared inoperable. This Completion Time may be extended if the pump restored to OPERABLE status was the first inoperable pump. A 24 hour extension to the stated 7 days is allowed, provided this does not result in the second pump being inoperable for > 7 days.

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-3

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One Function X train inoperable.	A.1 Restore Function X train to OPERABLE status.	7 days AND 10 days from discovery of failure to meet the LCO
B. One Function Y train inoperable.	B.1 Restore Function Y train to OPERABLE status.	72 hours AND 10 days from discovery of failure to meet the LCO
C. One Function X train inoperable. AND One Function Y train inoperable.	C.1 Restore Function X train to OPERABLE status. OR C.2 Restore Function Y train to OPERABLE status.	72 hours 72 hours

(continued)

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-3 (continued)

When one Function X train and one Function Y train are inoperable, Condition A and Condition B are concurrently applicable. The Completion Times for Condition A and Condition B are tracked separately for each train starting from the time each train was declared inoperable and the Condition was entered. A separate Completion Time is established for Condition C and tracked from the time the second train was declared inoperable (i.e., the time the situation described in Condition C was discovered).

If Required Action C.2 is completed within the specified Completion Time, Conditions B and C are exited. If the Completion Time for Required Action A.1 has not expired, operation may continue in accordance with Condition A. The remaining Completion Time in Condition A is measured from the time the affected train was declared inoperable (i.e., initial entry into Condition A).

The Completion Times of Conditions A and B are modified by a logical connector with a separate 10 day Completion Time measured from the time it was discovered the LCO was not met. In this example, without the separate Completion Time, it would be possible to alternate between Conditions A, B, and C in such a manner that operation could continue indefinitely without ever restoring systems to meet the LCO. The separate Completion Time modified by the phrase "from discovery of failure to meet the LCO" is designed to prevent indefinite continued operation while not meeting the LCO. This Completion Time allows for an exception to the normal "time zero" for beginning the Completion Time "clock". In this instance, the Completion Time "time zero" is specified as commencing at the time the LCO was initially not met, instead of at the time the associated Condition was entered.

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-4

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more valves inoperable.	A.1 Restore valve(s) to OPERABLE status.	4 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 4.	6 hours 12 hours

A single Completion Time is used for any number of valves inoperable at the same time. The Completion Time associated with Condition A is based on the initial entry into Condition A and is not tracked on a per valve basis. Declaring subsequent valves inoperable, while Condition A is still in effect, does not trigger the tracking of separate Completion Times.

Once one of the valves has been restored to OPERABLE status, the Condition A Completion Time is not reset, but continues from the time the first valve was declared inoperable. The Completion Time may be extended if the valve restored to OPERABLE status was the first inoperable valve. The Condition A Completion Time may be extended for up to 4 hours provided this does not result in any subsequent valve being inoperable for > 4 hours.

If the Completion Time of 4 hours (including the extension) expires while one or more valves are still inoperable, Condition B is entered.

(continued)

1.3 Completion Times

EXAMPLES
(continued)

EXAMPLE 1.3-5

ACTIONS

----------NOTE----------
Separate Condition entry is allowed for each inoperable valve.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more valves inoperable.	A.1 Restore valve to OPERABLE status.	4 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 4.	6 hours 12 hours

The Note above the ACTIONS Table is a method of modifying how the Completion Time is tracked. If this method of modifying how the Completion Time is tracked was applicable only to a specific Condition, the Note would appear in that Condition rather than at the top of the ACTIONS Table.

The Note allows Condition A to be entered separately for each inoperable valve, and Completion Times tracked on a per valve basis. When a valve is declared inoperable, Condition A is entered and its Completion Time starts. If subsequent valves are declared inoperable, Condition A is entered for each valve and separate Completion Times start and are tracked for each valve.

(continued)

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-5 (continued)

If the Completion Time associated with a valve in Condition A expires, Condition B is entered for that valve. If the Completion Times associated with subsequent valves in Condition A expire, Condition B is entered separately for each valve and separate Completion Times start and are tracked for each valve. If a valve that caused entry into Condition B is restored to OPERABLE status, Condition B is exited for that valve.

Since the Note in this example allows multiple Condition entry and tracking of separate Completion Times, Completion Time extensions do not apply.

EXAMPLE 1.3-6

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One channel inoperable.	A.1 Perform SR 3.x.x.x. OR A.2 Reduce THERMAL POWER to ≤ 50% RTP.	Once per 8 hours 8 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	6 hours

(continued)

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-6 (continued)

Entry into Condition A offers a choice between Required Action A.1 or A.2. Required Action A.1 has a "once per" Completion Time, which qualifies for the 25% extension, per SR 3.0.2, to each performance after the initial performance. The initial 8 hour interval of Required Action A.1 begins when Condition A is entered and the initial performance of Required Action A.1 must be complete within the first 8 hour interval. If Required Action A.1 is followed, and the Required Action is not met within the Completion Time (plus the extension allowed by SR 3.0.2), Condition B is entered. If Required Action A.2 is followed and the Completion Time of 8 hours is not met, Condition B is entered.

If after entry into Condition B, Required Action A.1 or A.2 is met, Condition B is exited and operation may then continue in Condition A.

(continued)

1.3 Completion Times

EXAMPLES (continued)

EXAMPLE 1.3-7

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One subsystem inoperable.	A.1 Verify affected subsystem isolated. AND A.2 Restore subsystem to OPERABLE status.	1 hour AND Once per 8 hours thereafter 72 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 5.	6 hours 36 hours

Required Action A.1 has two Completion Times. The 1 hour Completion Time begins at the time the Condition is entered and each "Once per 8 hours thereafter" interval begins upon performance of Required Action A.1.

If after Condition A is entered, Required Action A.1 is not met within either the initial 1 hour or any subsequent 8 hour interval from the previous performance (plus the extension allowed by SR 3.0.2), Condition B is entered. The Completion Time clock for Condition A does not stop after Condition B is entered, but continues from the time

(continued)

1.3 Completion Times

EXAMPLES

EXAMPLE 1.3-7 (continued)

Condition A was initially entered. If Required Action A.1 is met after Condition B is entered, Condition B is exited and operation may continue in accordance with Condition A, provided the Completion Time for Required Action A.2 has not expired.

IMMEDIATE COMPLETION TIME

When "Immediately" is used as a Completion Time, the Required Action should be pursued without delay and in a controlled manner.

1.0 USE AND APPLICATION

1.4 Frequency

PURPOSE

The purpose of this section is to define the proper use and application of Frequency requirements.

DESCRIPTION

Each Surveillance Requirement (SR) has a specified Frequency in which the Surveillance must be met in order to meet the associated LCO. An understanding of the correct application of the specified Frequency is necessary for compliance with the SR.

The "specified Frequency" is referred to throughout this section and each of the Specifications of Section 3.0, Surveillance Requirement (SR) Applicability. The "specified Frequency" consists of the requirements of the Frequency column of each SR as well as certain Notes in the Surveillance column that modify performance requirements.

Situations where a Surveillance could be required (i.e., its Frequency could expire), but where it is not possible or not desired that it be performed until sometime after the associated LCO is within its Applicability, represent potential SR 3.0.4 conflicts. To avoid these conflicts, the SR (i.e., the Surveillance or the Frequency) is stated such that it is only "required" when it can be and should be performed. With an SR satisfied, SR 3.0.4 imposes no restriction.

EXAMPLES

The following examples illustrate the various ways that Frequencies are specified. In these examples, the Applicability of the LCO (LCO not shown) is MODES 1, 2, and 3.

1.4 Frequency

EXAMPLES
(continued)

EXAMPLE 1.4-1

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
Perform CHANNEL CHECK.	12 hours

Example 1.4-1 contains the type of SR most often encountered in the Technical Specifications (TS). The Frequency specifies an interval (12 hours) during which the associated Surveillance must be performed at least one time. Performance of the Surveillance initiates the subsequent interval. Although the Frequency is stated as 12 hours, an extension of the time interval to 1.25 times the stated Frequency is allowed by SR 3.0.2 for operational flexibility. The measurement of this interval continues at all times, even when the SR is not required to be met per SR 3.0.1 (such as when the equipment is inoperable, a variable is outside specified limits, or the unit is outside the Applicability of the LCO). If the interval specified by SR 3.0.2 is exceeded while the unit is in a MODE or other specified condition in the Applicability of the LCO, and the performance of the Surveillance is not otherwise modified (refer to Example 1.4-3), then SR 3.0.3 becomes applicable.

If the interval as specified by SR 3.0.2 is exceeded while the unit is not in a MODE or other specified condition in the Applicability of the LCO for which performance of the SR is required, the Surveillance must be performed within the Frequency requirements of SR 3.0.2 prior to entry into the MODE or other specified condition. Failure to do so would result in a violation of SR 3.0.4.

EXAMPLES
(continued)

EXAMPLE 1.4-2

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
Verify flow is within limits.	Once within 12 hours after ≥ 25% RTP AND 24 hours thereafter

Example 1.4-2 has two Frequencies. The first is a one time performance Frequency, and the second is of the type shown in Example 1.4-1. The logical connector "AND" indicates that both Frequency requirements must be met. Each time reactor power is increased from a power level < 25% RTP to ≥ 25% RTP, the Surveillance must be performed within 12 hours.

The use of "once" indicates a single performance will satisfy the specified Frequency (assuming no other Frequencies are connected by "AND"). This type of Frequency does not qualify for the 25% extension allowed by SR 3.0.2. "Thereafter" indicates future performances must be established per SR 3.0.2, but only after a specified condition is first met (i.e., the "once" performance in this example). If reactor power decreases to < 25% RTP, the measurement of both intervals stops. New intervals start upon reactor power reaching 25% RTP.

EXAMPLES
(continued)

EXAMPLE 1.4-3

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
----------NOTE---------- Not required to be performed until 12 hours after ≥ 25% RTP. ----------	
Perform channel adjustment.	7 days

The interval continues, whether or not the unit operation is < 25% RTP between performances.

As the Note modifies the required performance of the Surveillance, it is construed to be part of the "specified Frequency." Should the 7 day interval be exceeded while operation is < 25% RTP, this Note allows 12 hours after power reaches ≥ 25% RTP to perform the Surveillance. The Surveillance is still considered to be performed within the "specified Frequency." Therefore, if the Surveillance were not performed within the 7 day (plus the extension allowed by SR 3.0.2) interval, but operation was < 25% RTP, it would not constitute a failure of the SR or failure to meet the LCO. Also, no violation of SR 3.0.4 occurs when changing MODES, even with the 7 day Frequency not met, provided operation does not exceed 12 hours with power ≥ 25% RTP.

Once the unit reaches 25% RTP, 12 hours would be allowed for completing the Surveillance. If the Surveillance were not performed within this 12 hour interval, there would then be a failure to perform a Surveillance within the specified Frequency, and the provisions of SR 3.0.3 would apply.

1.4 Frequency

EXAMPLES (continued)

EXAMPLE 1.4-4

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
----------NOTE---------- Only required to be performed in MODE 1. ----------	
Perform complete cycle of the valve.	7 days

1.1-3

The interval continues, whether or not the unit operation is in MODE 1, 2, or 3 (the assumed Applicability of the associated LCO) between performances.

As the Note modifies the required performance of the Surveillance, the Note is construed to be part of the "specified Frequency." Should the 7 day interval be exceeded while operation is not in MODE 1, this note allows entry into and operation in MODES 2 and 3 to perform the Surveillance. The Surveillance is still considered to be performed within the "specified Frequency" if completed prior to entering MODE 1. Therefore, if the Surveillance were not performed within the 7 day (plus the extension allowed by SR 3.0.2) interval, but operation was not in MODE 1, it would not constitute a failure of the SR or failure to meet the LCO. Also, no violation of SR 3.0.4 occurs when changing MODES, even with the 7 day Frequency not met, provided operation does not result in entry into MODE 1.

Once the unit reaches MODE 1, the requirement for the Surveillance to be performed within its specified Frequency applies and would require that the Surveillance have been performed. If the Surveillance were not performed prior to MODE 1, there would then be a failure to perform a Surveillance within the specified Frequency, and the provisions of SR 3.0.3 would apply (as well as having had a violation of SR 3.0.4).

EXAMPLES
(continued)

EXAMPLE 1.4-5

1.1-11

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
Verify each containment isolation manual valve is closed.	Prior to entering MODE 4 from MODE 5 if not performed within the previous 92 days.

In Example 1.4-5, the "specified Frequency" is measured from when the Surveillance was last performed. Should the interval be exceeded, the Surveillance is not required to be performed until certain conditions are met. The Surveillance is allowed to be delayed until prior to entering MODE 4 from MODE 5 if the 92 day "specified Frequency" has expired. The 92 day interval may be extended to 1.25 times the stated interval as allowed by SR 3.0.2 for operational flexibility. Therefore, if the Surveillance were not performed within the 92 day (plus the extension allowed by SR 3.0.2) interval, but operation was not transitioning from MODE 5 to MODE 4, it would not constitute a failure of the SR or a failure to meet the LCO. The next time the unit proceeds from MODE 5 to MODE 4, the surveillance would be required to be performed prior to the transition.

The measurement of this interval continues at all times, even when the SR is not required to be met per SR 3.0.1 (such as when the equipment is inoperable, a variable is outside specified limits, or the unit is outside the Applicability of the LCO). If the conditions in the Frequency are met and the interval specified by SR 3.0.2 is exceeded without the Surveillance having been performed and the performance of the surveillance is not otherwise modified (refer to Example 1.4-3), then SR 3.0.3 becomes applicable.

Methodology For Mark-up of NUREG-1431 Specifications

Enclosure 5A contains an electronic (or hand written) mark-up of NUREG-1431 Revision 1. The purpose of the mark-up is to identify those changes necessary to create a plant specific improved TS (by incorporating plant specific values in bracketed areas) and to identify any other changes with a cross-reference to a justification or explanation for the change. Descriptions/justifications for changes are contained in Enclosure 6A.

There are four types of changes:

1. Deletions - Material which is removed from NUREG-1431, Rev. 1.

2. Additions - This includes material which is added to NUREG-1431, Rev. 1.

3. Modifications - This includes material which exist in NUREG-1431, Rev. 1 but is being revised for the improved TS.

4. Bracket Inserts - These changes involve the insertion of plant specific information which is presently located in the current TS into a bracketed portion of NUREG-1431, Rev. 1.

The methodology of identifying the changes is :

Deletions - The portion of the specification which is being deleted in non-bracketed areas of NUREG-1431, Rev. 1 is annotated using the strike-out feature of WordPerfect (or crossed out by hand). The deletions are identified by a change number or a change code in the adjacent right margin.

Additions - The information being added to the non-bracketed portions of NUREG-1431, Rev. 1 is inserted into the specification in the appropriate location and is annotated using the red-line feature of WordPerfect (or hand written/insert pages). The addition is identified by a change number or a change code in the adjacent right margin.

Modifications - The information being revised in the non-bracketed portions of NUREG-1431, Rev. 1 is annotated using the strike-out feature of WordPerfect (or crossed out by hand) and the revised information is inserted into the specification in the appropriate location and is annotated using the red-line feature of WordPerfect (or hand written/insert pages). The modification is identified by a change number or a change code in the adjacent right margin. A change code of "PS" indicates an obvious plant specific change and is usually reserved for plant specific names of systems and components.

Editorial Changes- Changes/corrections which are obviously editorial are annotated using the redline/strike-out feature of WordPerfect and

identified by a change code of "Ed" in the adjacent margin. All such changes will be submitted for incorporation into the generic traveler for editorial changes.

Bracket Inserts - The plant specific information is entered into the bracketed area. If "generic" information had been provided in the bracketed area and that information is not correct for this plant, the "generic" information is "struck-out" and the correct informatin inserted using the "redline" feature. The brackets provided in NUREG-1431, Rev. 1 are deleted. "Red-line", "strike-out" and margin codes are as follows:

1. If the bracketed wording or parameter values remain unchanged, the bracketed information is "red-lined" and 'B' (for bracketed information) is used as the margin code.

2. If the bracketed wording or parameter values are changed to the plant specific wording/values in the current specifications, the old bracketed information is "struck-out", the new information is "red-lined" and 'B-PS' (for plant specific bracketed information) is used as a margin code.

3. If the entire Condition, Action, or Surveillance is bracketed and is applicable, the letter/number designator for the item is redlined. The text included within the brackets is not redlined unless plant specific changes are made. The 'B' or 'B-PS' margin code is used depending on whether plant specific changes were made.

   If the entirely bracketed Condition/Action/Surveillance is not applicable, the entire contents are struck-out, redlined words "Not Used" are inserted, and a 'B-PS' margin code is used.

Changes which have margin identifiers of letters instead of numbers (i.e., B, B-PS, Ed or PS) do not have descriptions/justifications in enclosure 6A.

Note: All brackets are removed as part of the mark-up process. Reviewer notes may be "struck-out" or deleted as preferred.

In summary, in the non-bracketed portions of NUREG-1431, Rev. 1, "red-line" is used to annotate new material, "strike-out" is used to annotate deleted material, and change numbers or change codes are used in the right margin to identify these changes. All changes (i.e., "red-line" or "strike-out" items) have a change number or a change code.

Note, NUREG-1431, Rev. 1 is used for all markups. Industry Travelers which are incorporated are indicated using the "redlines", "strike-outs" and margin codes discussed above.

ENCLOSURE 5B

MARK-UP OF NUREG-1431 BASES

(NONE)

ENCLOSURE 6A

DIFFERENCES FROM NUREG-1431

Descriptions of NUREG-1431 Differences (3 Pages)

JUSTIFICATIONS FOR DIFFERENCES FROM NUREG-1431
Section 1.0

This enclosure contains a brief discussion/justification for each marked-up technical change to NUREG-1431, Revision 1, to make them plant-specific or to incorporate generic changes resulting from the Industry/NRC generic change process. The change numbers are referenced directly from the NUREG-1431 mark-ups. For enclosures 3A, 3B, 4, 6A and 6B, text in brackets "[ ]" indicates the information is plant specific and is not common to all the Joint Licensing Subcommittee (JLS) plants. Empty brackets indicate that other JLS plants may have plant specific information in that location.

CHANGE NUMBER	JUSTIFICATION
1.1-1	The NUREG-1431 Rev. 1 definition of Channel Calibration states, "The CHANNEL CALIBRATION shall encompass the entire channel, including the required sensor, alarm, interlock, display, and trip functions." This change clarifies what encompasses the entire channel by rewording the definition to state, "The CHANNEL CALIBRATION shall encompass those components, such as sensors, alarms, displays, and trip functions, required to perform the specified safety function(s)." The Channel Operational Test and Trip Actuating Device Operational Test definitions are similarly revised. This change is consistent with TSTF-64.
1.1-2	Not used.
1.1-3	Adds new example to ITS 1.4 to clarify meaning of SR notes of the type "Only required to be performed in MODE..." This change is consistent with traveler WOG-74, Rev 1.
1.1-4	Not used.
1.1-5	The definitions for ESF Response Time and RTS Response Time would be revised to substitute the word "verified" in lieu of "measured" consistent with the requirements of NUREG-1431 SR 3.3.1.16 and SR 3.3.2.10. This change would ensure consistency between the definitions for Response Time and the requirements to periodically verify Response Time is within limits. This change is consistent with TSTF-111, Rev 1.
1.1-6	The definition of the Pressure and Temperature Limits Report would be revised to include the maximum allowable PORV lift settings and arming temperature associated with the [Low Temperature Overpressurization Protection (LTOP)] System, and to be consistent with the COLR definition. Improved Technical Specification 3.4.12 states that the PORV lift settings are specified in the PTLR. The current definition for PTLR does not identify these lift settings as being contained in the PTLR. The [LTOP] arming temperature was added to the PTLR, since changes in the heatup/cooldown figures could change the arming temperature. This change corrects the PTLR definition to be consistent with all of

CHANGE NUMBER	JUSTIFICATION
	the requirements contained in the PTLR. Referenced methodologies for the PTLR would contain the methodology used to develop the heatup and cooldown figures, as well as the methodology for developing the [LTOP] setpoints. This change is consistent with Traveler WOG 67, Rev 1.
1.1-7	Not applicable to CPSES. See Conversion Comparison Table (enclosure 6B).
1.1-8	The reactor vessel head closure bolt requirements for MODES 4, 5 and 6 are clarified. The proposed change revises footnote b for MODES 4 and 5 to refer to "Required reactor vessel head closure bolts fully tensioned" and note c for MODE 6 is revised to read "Required reactor vessel head closure bolts less than fully tensioned." The transition point between MODES 5 and 6 would also be clarified as occurring when the required reactor vessel head closure bolts are less than fully tensioned. The required number of closure bolts, which may be less than the total number, is established by analysis that demonstrates adequate O-ring compression to prevent leakage and ensures that ASME Section III stress limits for affected components are not exceeded. This change is consistent with TSTF-88.
1.1-9	Consistent with TSTF-39 Rev. 1, the definitions of Channel Operational Test (COT), [ ] and Trip Actuating Device Operational Test (TADOT) are expanded to include the details of acceptable performance methodology. Performance of these tests in a series of sequential, overlapping, or total channel steps provides the necessary assurance of appropriate operation of the entire channel. This change also makes the COT and TADOT definitions consistent with the definition of channel calibration which already contains similar wording.
1.1-10	Not applicable to CPSES. See conversion comparison table (enclosure 6B).
1.1-11	Adds new example to ITS Section 1.4 to clarify surveillance frequencies that are contingent on both a specified frequency and plant conditions. The ITS contains many Surveillance Frequencies that are contingent on both a "specified Frequency" and plant conditions. For example, "Within 7 days prior to the initiation of Physics Tests," and "Prior to entering MODE 4 from MODE 5 if not performed within the previous 92 days." These Frequencies do not fall clearly under any of the existing Section 1.4 examples. The proposed example is needed to make clear that 1) the SR 3.0.2 extension of 1.25 times the specified frequency applies to the specified Frequency, and 2) that the interval allowed to perform a missed Surveillance by SR 3.0.3 applies. SR 3.0.2 is clear that the 1.25 extension may be applied to "the interval specified in the Frequency", so the proposed change does not change the intent of the Specifications. SR 3.0.2 applies if a

CHANGE NUMBER

JUSTIFICATION

Surveillance is not performed within the "specified Frequency". Again, the example does not change the intent of the Specifications but only makes clear the application of SR 3.0.2 and 3.0.3 to Surveillances with Frequencies tied to plant conditions. This change will eliminate confusion and misapplication of the ITS and will ensure consistent application of SR 3.0.2 and 3.0.3 to these types of Surveillance Frequencies. This change is consistent with traveler WOG-90.

ENCLOSURE 6B

CONVERSION COMPARISON TABLE - NUREG-1431

Conversion Comparison Table (2 Pages)

DIFFERENCE FROM NUREG-1431		APPLICABILITY			
NUMBER	DESCRIPTION	DIABLO CANYON	COMANCHE PEAK	WOLF CREEK	CALLAWAY
1.1-1	This change would clarify what encompasses the entire channel by rewording the definition to state, "The CHANNEL CALIBRATION shall encompass those components, such as sensors, alarms, displays, and trip functions, required to perform the specified safety function(s)". The COT and TADOT definitions are similarly revised.	Yes	Yes	Yes	Yes
1.1-2	Not used	NA	NA	NA	NA
1.1-3	Adds new example to ITS 1.4 to clarify meaning of SR notes of the type "Only required to be performed in MODE..".	Yes	Yes	Yes	Yes
1.1-4	Not used	N/A	N/A	N/A	N/A
1.1-5	The definitions for ESF Response Time and RTS Response Time would be revised to substitue the word "verified" in lieu of "measured" consistent with the requirements of NUREG-1431 SR 3.3.1.16 and SR 3.3.2.10.	Yes	Yes	Yes	Yes
1.1-6	The definition of the Pressure and Temperature Limits Report would be revised to include the maximum allowable PORV lift settings and the arming temperature associated with the system, and to be consistent with the COLR definition.	Yes	Yes	Yes	Yes
1.1-7	The definition of Channel Functional Test in the current TS will be retained in the improved TS. This definition is not in NUREG-1431 Rev 1.	Yes	No - Not part of current TS.	No - Not part of current TS.	No - Not part of current TS.

NUMBER	DESCRIPTION	DIABLO CANYON	COMANCH PEAK	WOLF CREEK	CALLAWAY
1.1-8	Note b is revised to refer to the "Required reactor vessel head closure bolts fully tensioned" and note c is revised to read "Required reactor vessel head closure bolts less than fully tensioned."	Yes	Yes	Yes	Yes
1.1-9	The definitions of Channel Operational Test (COT), [ ] and Trip Actuating Device Operational Test (TADOT) are expanded to include the details of acceptable performance methodology. Performance of these tests in a series of sequential, overlapping, or total channel steps provides the necessary assurance of appropriate operation of the entire channel.	Yes	Yes	Yes	Yes
1.1-10	This change is based on the current TS definition of CONTROLLED LEAKAGE. This change is a clarification only and does not affect the way RCS water inventory balances are performed.	No - Not part of CTS.	No - Not part of CTS.	No - Maintaining ISTS wording.	Yes
1.1-11	Adds new example to ITS Section 1.4 to clarify surveillance frequencies that are contingent on both specified frequency and plant conditions.	Yes	Yes	Yes	Yes